Building Leadership Capacity: How One Massachusetts School District Facilitates and Sustains Teacher Growth

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BUILDING LEADERSHIP CAPACITY: HOW ONE MASSACHUSETTS SCHOOL
DISTRICT FACILITATES AND SUSTAINS TEACHER GROWTH

Dissertation in Practice

By

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ABSTRACT

District leadership has been found to have a measurable effect on student achievement by creating conditions within which teachers and administrators frame their daily work with children. The superintendent is uniquely poised to build the needed infrastructure of support and assure its alignment with the philosophy and mission of the district and, in turn, with the work of the school. By attending to the habits and conditions that allow a staff to work as a unit, superintendents are able to contribute to the development of a community of professional learners within and among district schools.

This qualitative case study analyzed district leadership practices that support ongoing teacher growth in a Massachusetts school district by examining the work of the superintendent and the impact of his leadership on the ongoing development of a community of professional learners at the district and school level. Data included interviews with teachers and administrators, artifact analyses, and observations of district meetings. Findings reveal the superintendent's use of a PLC process to model and provide support to school-level leaders by encouraging broad-based participation in the skillful work of leadership; establishing a clear vision which resulted in program coherence; fostering a system of inquiry-based accountability that informed decision making and practice; and nurturing organizational relationships that

involved high district engagement and low bureaucratization which supported school-based

collaborative teacher growth.

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DEDICATION

I dedicate this work to my loving husband and best friend, Bob Palmer, who supported my work at home through thick and through thin, so that completion of my dissertation could become a reality. Without your partnership I would not have been able to complete this journey, and from you I have gained strength and wisdom at each signpost along the way. I share this accomplishment with you. Thank you!

I devote the work of this project to my children, Ryan and Keryn Palmer, and through it I hope to share my dedication to lifelong learning and a deep and sincere passion to follow your dreams, no matter how hard the work or how long the journey.

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Executive Summary

Context and Background

Research identifies teacher quality as one of the most influential factors impacting student achievement (Darling-Hammond, 1997; Ganley, Quintanar, & Loop, 2007; Marzano, 2003; Marzano, Pickering, & Pollock, 2005; Stronge, 2002; 2010). Yet a critical challenge for those committed to improving teacher effectiveness is that researchers, policymakers, and practitioners continue to struggle to define teacher quality (Robertson, 2006; Stigler & Hiebert, 1999; Tsui, 2009; NCLB, 2001). Additionally, teachers and leaders often lack a collective capacity to sustain teacher development that is continuous from day-to-day and year-to-year (Day, 2000; Drago-Severson, 2007; Robinson, Lloyd, & Rowe, 2008; Saunders, Goldenberg, & Gallimore, 2009; Stigler & Hiebert, 1999; Stronge, 2010).

Teacher quality is essential to continuous student growth (Darling-Hammond, 1997; Ganley, Quintanar, & Loop, 2007; Marzano, 2003; Marzano, Pickering, & Pollock, 2005; Stronge, 2002; 2010). Research on the cumulative effects of teachers on student achievement (Sanders & Rivers, 1996) show them to be "additive and cumulative over grade levels, with little or no compensatory effects" (p. 1). As Stronge (2010) points out, "…it is imperative that we place quality teachers in classrooms with all students every day for thirteen years, kindergarten to high school graduation" (p. 94).

While teacher quality is widely identified as the variable having the strongest impact on student learning, the term "teacher quality" is difficult to define (Goe, 2007; Hodgman, 2012; Kennedy, 2010; Stronge, 2002). Lewis et al. (1999) define teacher quality within two broad categories: teacher qualifications and teaching practices. Teacher qualifications refer to pre-service learning (e.g., postsecondary education, certification) and continued learning (e.g.,

professional development, mentoring). Teaching practices refer to the actual behaviors and

practices that teachers exhibit in their classrooms. In this study, teacher quality is defined as

teaching practices both in the classroom through direct instruction to students and in work

outside of the classroom that involves continuous cycles of examination of practice across grade

levels, school, and district that enhance individual and collective instructional quality. This study

employed a limited definition of teacher quality: daily teaching practice. This permitted a more

narrow focus for examining factors perceived to enhance teacher quality from within schools and

the district.

It is vital for educational leaders to accommodate for a growth mindset, in order to

continuously and consistently improve teacher efficacy over their professional lifespan. This is

key to organizational improvement. Teachers and administrators need ongoing opportunities to

expand their breadth of professional knowledge, to improve instructional practice, and to build

and strengthen their capacity to facilitate the quality instruction that leads to enhanced student

learning. In *Leaders of Learning: How District, School and Classroom Leaders Improve Student*

Achievement, DuFour and Marzano (2011) contend that the current problems in public education

do not stem from an unwillingness of educators to improve. Rather, they claim it is a "lack of

collective capacity to promote learning for all students in the existing structures and cultures in

which they work" (p. 15). A culture of trust and respect is a prerequisite for educators to engage

in reflection that improves performance (Cochran- Smith & Lytle, 1999; Friedman, Galligan,

Albano, & O'Connor, 2009). Providing the conditions under which the ongoing development of

teacher capacity is sustainable is an important responsibility for school leaders.

Additional research must explore the relationship between teachers and administrators in

deciding what types of support are effective in professional practice to help teachers and leaders

become more reflective, knowledgeable, and skilled practitioners. We acknowledge the importance of highlighting teacher voice because it demonstrates how teachers perceive the effectiveness of the professional growth opportunities in which they participate in their school and district. Therefore, we highlight educators' voices in our findings, to provide an important perspective to the current literature on how schools and districts attend to the professional growth needs of the practitioners in the field today. As teachers' success is often measured by student academic performance (Goe, 2007), there is an urgent need to understand the role that school leaders play in supporting and facilitating teacher growth. This is not only a professional need but also an ethical responsibility.

Purpose

The purpose of this study was to explore the important structures within a school or district that foster professional growth. A review of the research regarding the role of leadership in teacher improvement indicates that effective leaders create structures that empower educators (Blasé & Blasé, 2000; Jacobson & Bezzina, 2008; Robinson et al., 2008, Saunders et al., 2009; York-Barr, Ghere, & Sommerness, 2007).

Such structures are grounded in collaborative learning and engaging educators in ongoing cycles of improvement that include reflection, feedback, specific supports for novice teachers and leadership that is shared between administrators and teachers. Our aim is to provide insights into the factors that transform schools and districts into communities of professional inquiry and practice, that not only meet the needs of teachers throughout their careers, but also afford opportunities to assume leadership roles in shaping professional growth, focused on continual student learning. This study sought to answer one main question and two sub questions:

- o How are teachers' professional growth supported by their school and district?

- o What district and school-based supports do teachers and leaders perceive to enable teachers to improve teaching practice and professional growth?

- o What leadership behaviors and structures at the school and district levels do teachers and leaders perceive as most beneficial to improvement in teacher practice and professional development?

Additionally, each research team member individually examined specific attributes that research suggested or found to impact teacher growth. The individual questions guiding investigation examined the following:

- In what ways do the structures and resources provided by district leaders support school-based collaborative teacher growth?

- What actions do school leaders take to engage teachers in a reflective process?

- How is feedback used to support individual and collective educator development?

- What supports new teacher growth?

This study examined the promotion of professional growth in one Massachusetts district selected for study because of its reputation for both valuing and fostering the continuous improvement of its educators. We hope the outcome of this study offers school leaders insight into ways in which they can foster the ongoing professional learning of educators both individually and collectively within their schools. Through the perceptions of teachers and leaders and the examination of current district structures and professional growth initiatives, researchers sought to identify leadership practices and supports that facilitate both the individual and the collective capacity of educators to create a community of professional learners who share a common focus on student achievement.

Methodology

This research employed a case study design using qualitative methodology. In qualitative research, the focus is on what meaning and understanding participants attribute to their experiences. Data sources included semi-structured interviews, observations and field notes, and district artifacts. Semi-structured interviews lasted for approximately one hour. Participants were asked to complete a participant check to validate transcriptions. Observations were conducted at the Leadership Team Meeting, New Teacher Orientation, and Grade Level Meeting. Data was continually analyzed through an inductive process as research data was gathered. Raw data consisted of interview recordings and transcriptions, field notes from observations, and district artifacts pertaining to communities of practice, new teacher induction, and leadership team meetings. All interviews were recorded by the research team and were transcribed verbatim and coded for further data analysis. Transcripts were then sent to interview participants as a form of "participant verification" to ensure the accuracy of participant responses (Harper & Cole, 2012). The research team used "check-coding" by breaking into pairs and dividing the transcripts between the two teams allowing for discussion which resulted in consensus on data interpretation (Miles & Huberman, 1994, p. 64).

In selecting our research site, the research team considered school districts in Massachusetts matching a predetermined set of criteria. The research team reviewed the sites recommended by our committee. Suggested districts included middle class to upper middle class and suburban to urban cities and towns with a reputation for supporting teacher growth. Our superintendent mentor reached out to the superintendents of these nominated districts to ascertain interest in our study. Based on the information gleaned through this process, the research team selected a district that met the criteria and given it the name Cordova (pseudonym). Once

preliminary interest was established, the research team met with the superintendent to share our proposed study and to secure agreement to conduct research within the district.

When determining our sample group, researchers asked the superintendent to identify potential participants who had demonstrated openness to growth in their professional practice, including teachers from each level (elementary, middle and high) who displayed the characteristics outlined in the participant selection protocol (See Table 1 for list of participants). From this sampling, the research team selected participants to fulfill the stated criteria. We acknowledge the limitations of asking district leadership and principals for recommendations. The resulting participant group represented a cross section of the district's professional staff that allowed for generalization in analysis.

Table 1
Participant chart by level and role

	Central Office	High School	Middle School	Elementary
Administrator	• Superintendent • Asst. Superintendent	• Principal	• Principal • Asst. Principal	• Principal
Teacher		• ELA • Special Ed. *	• Art • Science • Special Ed.* • ELA	• Music • Kindergarten • Special Ed.

* This teacher is shared between two levels.

Technology, including the online software program Dedoose, was used to assist in the coding, storage, organization, management, and analysis during the coding and examination stages of the study. Predetermined codes were applied to elicit the themes or categories in the data. These initial codes provided a starting point for the management of the data. This secondary coding process was conducted using the predetermined codes helped to identify and describe the themes that emerged from the data, and highlight and categorize similar attitudes, beliefs, and perceptions among all study participants.

Findings and Discussion

The research team's findings highlight the Cordova School District's system-wide vision, culture of psychological safety, work in collaboration, prioritization of time and resources, and emphasis on protocols and facilitation.

A district vision that is articulated through clear expectations and modeling. Research is clear that it is important for district leaders to develop a vision of excellence about teaching, learning, and leading that is shared with all constituents in the learning organization, and that they model the importance of making collaborative decisions that are consistent with that vision (Carter, Glass, & Hord, 1993; DuFour & Marzano, 2011; Huffman & Hipp, 2003; Marzano & Waters, 2009; Ovando & Owen, 2000; Schlechty, 2009). Such a shared vision provides a touchstone from which all other district actions flow (Lambert, 2003). The research team found that the superintendent of Cordova Public Schools effectively communicates a clear vision for the district in his strategic plan. This plan calls for educators to work collaboratively to utilize data gathered from frequent formative and summative assessments in order to examine their instructional practices through the lens of student work and to adjust their teaching accordingly to meet the needs of all learners.

The vision of Cordova is clearly articulated in a one-page, strategic plan, setting forth a theory of action that is shared with all members of the learning community. This vision is consistently communicated and modeled by the superintendent in his work with the leadership team, continually increasing their collective capacity to extend the work in schools and classrooms across the district. Through his consistent use of norms and protocols in leadership team meetings, the superintendent models the strategies that bring the work to life in the district schools. As a result, school level administrators are better able to make meaningful connections

between teacher practice and student learning, as they model the collaborative cycle of inquiry they are fostering among district teachers.

Culture of psychological safety. The research team found that the Cordova School District leaders recognize the importance inherent in their role to foster the conditions necessary for the establishment of a culture of safety throughout the district. Administrators interviewed conveyed their responsibility to facilitate educator inquires into teaching and learning that lead to teachers' professional growth and greater student achievement in a manner that fosters relational trust among all stakeholders.

The success of the Cordova Schools in creating and maintaining a culture of safety was repeatedly validated from the data. There was significant evidence that supported that administrators' actions are consistent with the monitoring of the school or district culture for the elements of safety and trust to ensure that the collaborative practices that foster educator growth and improved student achievement are not interrupted.

Since collaboration is a main focus in Cordova, the district's work to establish and maintain a culture of psychological safety and relational trust to foster open, honest discussion and inquiry into teaching and learning is to be commended. This finding was supported through the triangulation of data collected from educators, artifacts and observations that were conducted during this research investigation.

Collaboration as the focus for improved instruction. When the research team set out to study the Cordova School District, it was anticipated that collaboration would be evident in the district. However, collaboration quickly emerged as a key focus and initiative in the district, starting with the first observations conducted. The superintendent discussed the importance of collaboration at the new teacher orientation and specifically focused on the four levels of

collaboration described by Judith Warren Little (1990). As the focus for the school district and vision of the superintendent, collaboration is regarded as a "non-negotiable" and means of improving educator practice and ultimately student achievement. Consequently, collaboration in the district exists at all levels and is something that district and building leadership work to promote and facilitate.

In Cordova, organizational change is based on collaboration under the new superintendent. Because working in isolation has been a constant practice within American teaching culture, the shift to a more collaborative professional culture has been difficult for organizations to embrace, but one that Cordova has embraced. The researchers found Communities of Practice (Wenger, 2011) existed at every level and supported collaboration. Structures that allow for collaboration and reflective conversations are seen as "viable way(s) to develop teachers because they are school-based and arise from teachers' daily concerns in the classroom and school" (Ashraf & Rarieya, 2008, p. 278). In Cordova, the structures include time for grade level and departmental meetings, professional development opportunities, and scheduled time to review data or look at student work.

As collaborative "Communities of Practice" (Wenger, 2011) form naturally, an assumption was made that the district selected for our case study had numerous and varied communities of practice. We found communities of practices that were as varied as each individual in the district. There were many formal communities of practice created at each level of the district, specifically grade level and departmental teams and district and building-based leadership teams. While many communities of practice existed, the level of functioning and collaboration in each varied. Additional informal "communities of practice" based on

alliances and interests (e.g. teachers with the same lunch period, teachers newer to the building, or those who have had similar students and have created a support system) also existed in the Cordova School District.

The importance of collaboration in Cordova is a top-down vision and initiative, but one that is shared at all levels. Multiple teachers and administrators discussed the importance of collaborative work in their daily practice, and discussed the structures in place to allow them to collaborate. New teachers discussed working in grade level teams to discuss student work and common assessments. Other teachers examined student achievement data to identify areas of growth to inform curriculum and instruction. Consequently, while teachers are expected to collaborate, principals are the ones responsible to ensure that collaboration is taking place at a level that improves instruction and student learning.

Among the three participant schools, the researchers found that collaboration is occurring most frequently and at its highest level in the middle school. Not far behind, the high school instituted structures to enable collaboration. At more of a developmental level, the target elementary school is working towards more frequent and high-level collaboration.

Prioritizing time and resources for collaboration and professional growth. Data gathered consistently reflected that district and school leaders made a concerted effort to prioritize limited time and resources in order to enhance the district's collaborative structures to drive individual and institutional growth. The district prioritized time and resources in three specific ways. They maximized use of existing structures; a specific example was how the middle school schedule has been maintained to provide for regular collaboration within teacher's weekly schedule. The middle school's collaborative time shifted focus from collaborating in cross-subject teams to a more focused and strategic use of the time working in content area

teams. This shift was in response to a district expectation that collaborative time be utilized to improve instructional practice leading to improved student outcomes. The second way was by enhancing structures within the district. An example of which was the increased number of district-wide early release days, which was viewed as enhancing the opportunities educators have to collaborate for sustained periods of time on the district initiatives of developing and refining standards-based units and common assessments. The third way was by creating new structures within the system. The example most often identified was the compromise made by teachers, building principals, and the superintendent to create a new structure for regular collaboration by department at the high school. While this new structure provided less time for collaboration than the previous structure, some participants felt that the compromise created time that could be more meaningfully used to collaborate and examine their practice. Cordova's prioritization of time and resources to enhance collaboration shows the district has embraced the belief of Stigler and Hiebert (1999) and others that one of the organization's highest priorities should be to restructure the schedule to provide collaborative time, with targeted professional development (Elmore, 2004; Proefriedt & Raywid, 1994).

Cordova has incorporated the beliefs and practices recommended by Stigler and Hiebert (1999) and made the growth of its teachers the core of district and school improvement efforts. Time, resources, and district efforts have focused on supporting the expectation that both teachers and administrators engage in continuous learning in order to provide students increased opportunities for learning and achievement.

Use of protocols and facilitation to increase effectiveness of collaboration. Several teachers and administrators discussed the use of protocols to help frame their collaborative conversations and come to consensus during meeting time. The most prevalent protocol focused

on an inquiry process designed to frame collaborative examination of student work. This implies that the superintendent has made progress towards attaining district reform initiatives. The importance of the use of protocols in the Cordova Public School District can best be explained as the mechanism of choice for providing embedded supports for staff inquiry into teaching and learning, to facilitate collaborative group work around topics, to ensure reflective discussion among educators, to create avenues for communication between teachers and administrators, and ensure efficient use of educators' time.

While protocols and facilitation were found to be valued across all levels, their use varied by level with the elementary school we studied as the least evolved of the three schools. From the data gathered from the three participating schools, we found the middle school to be the most evolved in their use of protocols and the high school to be making steady progress. For the elementary schools to make similar gains, the district needs to provide opportunities for teacher leaders to become skilled facilitators. Since collaboration is a main focus in Cordova, the use of protocols to facilitate discussion and aid in the decision making process is to be commended because it provides key elements for the structure of grade level teams, departments, and groups to work together effectively.

Recommendations

The Cordova School District has many conditions and structures in place, which foster teacher growth, but this case study has uncovered room for improvement through the following recommendations, which address leadership capacity, reflection, feedback, and new teacher support.

Leadership capacity. While the researchers found that the Cordova district prioritizes time and resources for collaboration and professional growth, educators in Cordova consistently

identified a lack of time and resources at the elementary level as an obstacle to effectuating a community of professional learners in an equitable way across the district. DuFour and Marzano (2013) remind us that in order for the PLC process to impact education beyond individual schools, the process must be the driving force behind the entire system. As a system-level PLC, the Cordova District should explore opportunities to increase the frequency, facilitation, and structure of collaborative time at the elementary level so that it aligns with opportunities available to middle and high school teachers. It is recommended that this be accomplished by establishing an inclusive think tank that represents all constituencies in the learning community, with the goal of collaboratively investigating opportunities to develop structural strategies that address the limited amount of collaborative opportunity afforded elementary school teams (DuFour & Eaker, 1998; DuFour et al., 2010).

- Look at the elementary level as a whole, allowing separate elementary schools to work together to develop more effective scheduling of specialists and sharing of scheduling strategies.
- Consider the mutual efforts of all staff members - classroom teachers, specialists, interventionists, and support staff - in creating a schedule that supports a structure of collaborative inquiry.
- Consider creating the schedule from a template organized in small increments (5 minute increments as opposed to 30 minute increments) to allow for flexible blocks of time.
- Prioritize the inclusion of an intervention block for all grade levels, allowing a schedule that provides support staff within the intervention block that allows students

who need more support to gain proficiency to get that support without missing important classroom content.

- Determine the additional staff needed to implement such a schedule.

- Calculate the cost of this staffing.

- Look across the district for existing resources that can potentially contribute to the effort.

Participants across the district identified the development of trained facilitators at each level as significant in the development of effective professional learning teams. At the elementary level, however, training of teachers as facilitators has not taken place, resulting in the need for principals to act as facilitators in this process. DuFour and Marzano (2011) assert that without effective leadership at the team level, the collaborative process is likely to stray away from the issues that are most critical to student learning. Therefore, the researchers recommend that the Cordova district trains facilitators at the elementary level who can skillfully guide the work of collaborative teacher teams in developing their collective capacity to use protocols that focus the examination of student work toward targeted planning of instructional practices that increase student learning. This team level leadership further allows the PLC process to create opportunities for shared leadership across the district, enabling people throughout the organization to take the lead in identifying and solving problems.

Reflective process. Participants acknowledged the importance of reflection but found it challenging to specify how their school or district has supported their reflective development. It is recommended that school and district leaders explicitly teach and utilize the language of reflection in their work. Specifically it is recommended that educators understand: a) that reflective thought is viewed as a continuum from technical or skills based reflective thought to

critical reflection that considers the impact of education beyond their classroom with specific consideration for ethics and equity in education (Larrivee, 2008b); b) research suggests that reflection done with others, termed reflective dialogue, enhances learning and that there are specific tools that help facilitate reflection for people working in pairs or groups (e.g. collaboration, use of protocols, peer observation, and text based discussions) (Larrivee, 2008b; York-Barr et al., 2006); and, c) the reflective process in many ways mirrors action research with the critical element of reflection being that action results (Day, 2000; Leitch & Day, 2000).

- Many participants identified a desire to increase the number of peer observations, making it a regular part of the reflective process within the district. One building level administrator explained, that peer observation is a "growth area" for the district and stated, "It's (peer observation) not an embedded norm in our school." Research identifies peer observation as an approach, which positively impacts teachers' abilities to reflect on instructional practice (Ashraf & Rarieya, 2008; Collet, 2012).

- Because participants expressed differing thoughts on whether peer observation was a tool to which they had access, it is recommended that district leaders review with school leaders how to utilize substitute teachers or other staff to enhance use of peer observations.

- Several teacher participants expressed a concern about limited opportunities to collaborate vertically with subject area teachers; this was especially true for teachers from small departments. It is recommended that the district review the opportunities and structures that allow "non-core" subject area teachers to collaborate with their peers and develop structures that increase opportunities for vertical collaboration and curriculum alignment. This type of structure would empower teachers to work

together in professional communities of inquiry and practice and increase

opportunities to develop reflective judgment to monitor and assess current practices

and foster collaborative decision-making, resulting in enhanced future practices

(Barnett & O'Mahoney, 2005; Darling-Hammond & McLaughlin, 1995; Killeavy &

Moloney, 2010; Friedman & Schoen, 2009; Stigler & Hiebert, 1999).

Educator feedback. Many of the District's teacher and administrator participants

provided researchers with detailed descriptions of the delivery and use of effective feedback in

the form of instructional observations, student achievement data, surveys, or student feedback.

The district, in using feedback as a catalyst for igniting individual and collaborative educator

reflection that will lead to change in practices and beliefs, has created a culture of ongoing

learning in some schools (Mory, 1992; Hattie & Timperley, 2007; Mayfield & Mayfield, 2012).

This type of school climate of collective educator learning around the use of feedback supports

the concepts outlined in Wenger's concept of Communities of Practice (1998a). However, for

the District to fully benefit from the effective use of feedback as a means for district-wide

educator growth, it is critical that every school leader allocate the necessary time to not only

become the instructional leader in their organization, but also model the behavior of continuous

learner as well. Therefore, it is suggested that the superintendent place a mandatory, minimum

allocated time of two hours each week for instructional observation and feedback for each of the

district's administrators. In this way, the school district can continue to develop their positive use

of the feedback processes as well as to expand upon the collaborative examination of

instructional practices and the development of the collective instructional improvement goals

that will lead to increased student achievement across the district.

- Data collected at some of the district sites indicated supervisory use of coaching after

the delivery of feedback to assist in educator understanding of the information and corrective actions that would ensure growth. Coaching can "refine and boost" individual performance (Lemov, Woolway & Yezzi, 2012, p. 16). Because the district appears to have established supportive conditions for this practice in some of the schools, it is probable that the district-wide adoption of instructional supervisor coaching with the delivery of educator feedback will help to facilitate the continual examination and improvement in teaching and learning (Killion, Harrison, Bryan, & Clifton, 2012). To circumvent any potential barriers for the effective use of feedback at the Cordova School District, the superintendent should consider developing a method that would ensure the consistent use of supervisory coaching along with the delivery of formal and informal educator feedback. To ensure that teachers are receptive to the feedback and have the available supports needed to improve their instructional practices, all supervisors of instruction should be trained in effective coaching methods and the positive use of collaborative dialogue prior to the pairing this support with the delivery of educator feedback.

- Data collected did not indicate that the district was using a feedback resource provided by the Massachusetts Department of Education, EDWIN Analytics, either at the teacher or school leader level (MADESE, 2013). The delivery of feedback to teachers in the form of state assessment data is currently in control of central office administrators. In order for teachers to focus on feedback and become pro-active in their behavior to seek feedback as well as use student data effectively, they must have access to the data source (Feeney, 2007). Therefore, it is suggested that the district consider widening the access and use of EDWIN Analytics through opportunities to

train all building leaders in the use of this system. The district should also develop an individual professional development plan that would allow for each administrator to become the EDWIN System "go to" person for their building as well as the embedded staff trainer for this feedback data resource.

New teacher support. The Cordova School District provides important supports for new teachers including informal and formal feedback, grade level or department meetings, and discussions between new teachers and more veteran teachers. They also have district-level mentor coordinators who hold bi-weekly meetings for new teachers and act as mentors for all new teachers. This case study has found areas for improvement and makes the following recommendations to improve new teacher support:

- Given research that supports one-on-one mentor programs, Cordova should establish a formal mentoring program. Assigning a mentor teacher to a new teacher provides an immediate "go to" person for questions, feedback, and support. This can be accomplished in the context of the collaborative atmosphere and joint work already present because mentors and protégés will still participate in all regular meetings such as department and grade level teams. While retaining the district-based mentor coordinators to mentor new teachers and plan the district-wide induction program is somewhat effective, assigning a one-on-one mentor to each new teacher would ensure that teachers have a formally recognized mentor in place.

- Formalized meeting times should be built into the schedule to provide more structure to allow for exchanges between new teachers and a mentor. As new teachers are not assigned to mentor teachers currently, mentor coordinators serve as mentors for multiple new teachers and other teachers take on the role organically and informally

as relationships develop at the beginning of the school year through collaboration and discussion. The elementary level experiences some structural conflicts in assigning only one mentor coordinator, as there are multiple elementary schools in the district.

- If the mentor coordinator model is continued, coordinators should have a lighter teaching load so they can travel between schools to check in with one-on-one mentors and new teachers. Otherwise, the district should assign a mentor coordinator to each school where new teachers work. This assignment should remain fluid, as not every school will have a new teacher each year.

- The district's new teacher support protocol does not formally involve principals, and currently principals can decide when and how much to be involved in supporting new teachers. Although concerns are brought to the mentor/coordinator who then addresses the concerns with the new teacher, a formal expectation should require principals to work with new teachers and function as an instructional leader. This could involve instructional modeling, occasional check-in meetings, or informal observations. This will help the principal to better support new teachers and ensure their growth as practitioners.

Moving forward in Cordova.

- One area that the data collection did not illuminate was when and how the district monitors and evaluates implementation of district expectations at the building level through a mechanism, which allows for continuous cycles of review for each initiative. This review process should provide for the immediate needs of those implementing the initiative based on feedback and also validate the progress and effectiveness of district initiatives. If there are no such mechanisms currently in place,

it is recommended that structures be established to examine the district initiatives by

establishing a committee that includes stakeholders from all levels of the district.

- Finally, it is recommended that district leaders attend to issues of succession planning

    as participants perceived that those schools in the district with stable school

    leadership provided greater opportunities for teachers to engage in the reflective

    process. Fullan (2001) and others have identified leadership succession as a critical

    factor in initiative sustainability (Hargreaves & Fink, 2003; Jacobson & Bezzina,

    2008). A comprehensive succession plan would include training and mentoring for

    individuals who would have the social and leadership capacity to carry on the vision

    and mission of the district as well as build and maintain the healthy culture that has

    already been established.

Conclusion

Interested in the collaborative process that takes place in high performing districts that

foster and support educator growth, the research team embarked on the study in Cordova to

determine the perceptions among district personnel regarding teacher growth in the district. The

study's findings highlight the importance of a district vision that provides the support and

structures for collaboration, which in turn leads to educator growth. Although creating a

psychologically safe environment to foster and support collaboration through relationship

building and joint work served as the major group finding, individual studies drilled down more

deeply into the data to examine specific functions, structures, and supports for professional

growth in the district. Individual sections examined the relationships, structures, and modeling

that supports new teachers; the type of reflective questions and processes employed by district

leaders with teachers; the leadership vision and use of professional learning communities (PLC)

to build the culture of collaboration; and the feedback processes employed to encourage teacher growth. As the study's findings highlight, the Cordova School District has created a safe collaborative environment with strong leadership and a reflective stance that uses various forms of feedback to support teachers, including those new to the procession. The goal of this study was to inform practice with knowledge and insight with the hope that school districts and leaders can make improvements to foster teacher professional growth through the implementation of a cohesive vision, structures, and leadership behaviors.

CHAPTER 1

INTRODUCTION[1]

Research identifies teacher quality as one of the most influential factors affecting student achievement (Darling-Hammond, 1997; Ganley, Quintanar, & Loop, 2007; Marzano, 2003; Marzano, Pickering, & Pollock, 2005; Stronge, 2002; 2010). Yet, a critical challenge for those committed to improving teacher effectiveness is that researchers, policymakers, and practitioners continue to struggle to define teacher quality (Robertson, 2006; Stigler & Hiebert, 1999; Tsui, 2009; NCLB, 2001). Additionally, teachers and leaders often lack a collective capacity to sustain teacher development that is continuous from day-to-day and year-to-year (Day 2000; Drago-Severson, 2007; Robinson, Lloyd, & Rowe, 2008; Saunders, Goldenberg, & Gallimore, 2009; Stigler & Hiebert, 1999; Stronge, 2010).

Teacher quality is essential to continuous student growth. (Darling-Hammond, 1997; Ganley, Quintanar, & Loop, 2007; Marzano, 2003; Marzano, Pickering, & Pollock, 2005; Stronge, 2002; 2010). Based on findings derived from several studies of teachers' measurable impact on student achievement, James Stronge (2010) asserts "…the bottom-line findings of all these value-added studies are that teachers matter, and teacher quality is the most significant schooling factor impacting student learning" (p. 5). Research on the cumulative effects of teachers on student achievement (Sanders & Rivers, 1996) show them to be both "additive and cumulative over grade levels, with little or no compensatory effects" (p. 1). As Stronge (2010) points out, "…it is imperative that we place quality teachers in classrooms with all students every day for thirteen years, kindergarten to high school graduation" (p. 94).

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[1] This chapter was jointly written by the authors listed and reflects the team approach of this project: Telena S. Imel, Philip McManus II, Maryanne Ryan-Palmer and Christine M. Panarese

While teacher quality is widely identified as the variable having the strongest impact on student learning, the term "teacher quality" is difficult to define (Goe, 2007; Hodgman, 2012; Kennedy, 2010; Stronge, 2002). Lewis et al. (1999) define teacher quality within two broad categories: teacher qualifications and teaching practices. Teacher qualifications refer to pre-service learning (e.g., postsecondary education, certification) and continued learning (e.g., professional development, mentoring). Teaching practices refers to the actual behaviors and practices that teachers exhibit in their classrooms. Goe (2007) describes teacher quality as "…a complex phenomenon for which no general and absolute agreement exists concerning an appropriate and comprehensive definition" (p. 8). She distinguishes between *teacher* quality, which connotes how inputs such as teacher certification, level of education, and performance on teacher tests predict success in the classroom; and *teaching* quality, which refers to the behaviors of classroom teachers that intimate quality. She asserts that, "[often] the two definitions are linked or even conflated, so that there is an assumption that *teacher* quality equates *teaching* quality, or that teaching *quality* is an outcome of teacher *quality"* (p. 8). In this study, teacher quality is defined as teaching practices both in the classroom through direct instruction to students, and work outside of the classroom that involves continuous cycles of examination of practice across grade levels, school and district that enhance individual and collective instructional quality. A limited definition of teacher quality, which focuses on daily teaching practice, was selected to allow for a narrowly focused examination of which factors are perceived to enhance teacher quality from within their own school and district.

It is vital for educational leaders to accommodate for a growth mindset, providing for an ever-evolving effectiveness of teachers in a continuous and consistent manner. This is key to organizational improvement. Teachers and administrators need consistent opportunities to

expand their breadth of professional knowledge, while continuously improving their instructional practice, and building and strengthening their capacity to facilitate the quality instruction that leads to improved student learning. In *Leaders of Learning: How District, School and Classroom Leaders Improve Student Achievement,* DuFour and Marzano (2011) contend that the current problems in public education do not stem from an unwillingness of educators to improve. Rather, they claim it is a "lack of collective capacity to promote learning for all students in the existing structures and cultures in which they work" (p. 15). These authors highlight the importance of school leaders and policymakers understanding that "school improvement means people improvement" (DuFour & Marzano, 2011, p. 15). In Stigler and Hiebert's (1999) international study of mathematics teachers, they concluded that "the professional teacher is not someone who simply copies what others have done, but is, rather, one who reflects on and improves on what others have done, working to understand the basis of these improvements" (p. 166). A culture of trust and respect is a prerequisite for educators to engage in reflection that improves performance (Cochran- Smith, & Lytle, 1999; Friedman, Galligan, Albano, & O'Connor, 2009). Providing the conditions under which the ongoing development of teacher capacity is sustainable is an important responsibility for school leaders.

Research on the role of educational leaders, specifically the school principal's role in teacher growth, is compelling. McLaughlin and Talbert (2006) observe that the principal is "in a key strategic position to promote or inhibit the development of a teacher learning community in their school...school administrators set the stage and conditions for starting and sustaining the community development process" (p. 56). The principal plays a major role in any change initiative within a school. Hord and Sommers (2008) emphasize that, "…it is clear that the role of principal is paramount in any endeavor to change pedagogical practice, adopt new curricula,

reshape the school's culture and climate, or take on other improvements" (p. 6). With this in mind, it is evident that school and district leaders must possess the capacity to create a collaborative school culture, in which collective and individual educator learning leads to continual cycles of instructional improvement that results in student success (Cranston, 2009; Hipp & Huffman, 2000; Hord, 1997; Huffman, 2001; Lambert, 1998; Louis et al., 2010; Reeves, 2006; Spillane, Halverson, & Diamond, 2001). The principal is a critical factor in developing the capacity of staff to engage effectively in their work as a community of professional learners.

However, school leaders do not work alone. District leadership has also been linked to teacher and school improvement as reflected by student achievement (DuFour & Marzano, 2011; Marzano & Waters, 2009; Schlechty, 2009; Spillane, 2005; Spillane & Reginer, 1998). The superintendent has been found to make an important impact on the potential for ongoing, student improvement by setting district-wide expectations for change and improvement in educational practice (Marzano & Waters, 2009). In their study into the "secrets of successful superintendents," Ovando & Owen (2000) found that, "[b]y virtue of their visibility and positional power…superintendents use[d] their platform to espouse the importance of academic excellence, provide resources, and create a framework" that develops and provides tools and methods to directly impact instruction (p. 80).

The purpose of this study was to examine how one district supports and facilitates teacher growth and the role of leadership in the process. While a body of literature exists that speaks to the role of leadership in school improvement, a critical need exists for school leaders to understand more deeply the structures and supports that facilitate teacher growth. Additional research must explore the relationship between teachers and administrators in deciding which types of support are effective in professional practice and help them become more reflective,

knowledgeable, and skilled practitioners. Researchers acknowledge the importance of highlighting teacher voice because it demonstrates how teachers perceive the professional growth opportunities in which they participate in their school and district. Researchers will highlight educators' voices in our findings, providing an important perspective to the current literature on how schools and districts attend to the professional growth needs of the practitioners in the field today. As a teacher's success is often measured against student academic performance (Goe & Stickler, 2008), there is an urgent need to understand the role that school leaders play in supporting and facilitating teacher growth. This is not only a professional need but also an ethical responsibility.

Conceptual Framework

Wenger's scholarship espouses the belief that "communities of practice" (Lave & Wenger 1991), in which community members utilize a social process to engage in new learning, are important to any organization's functioning, especially where knowledge attainment is a critical asset. School districts are complex organizations that rely significantly on relationships to improve practice and effectively meet the social and academic needs of students. Wenger (1998b) states, "as a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of enterprises, communities hold the key to real transformation-the kind that has real effects on people's lives" (p. 85). As facilitating and supporting teacher growth is both social and cyclical, Wenger's scholarship on communities of practice and learning creates a framework through which the research team's collective and individual studies can be examined.

A community of practice is defined in three dimensions: (1) what it is about; (2) how it functions; and, (3) what capabilities it has produced (Wenger, 1998a, 1998b). A school or district can be defined as a community of practice that has the "joint enterprise" (1998b, p. 77) of

educating children. How a school or district functions relies on the quality of relationships of the members at all levels within the organization and the willingness of these members to engage in their work collectively. Individual and organizational functioning (or practice) can be enhanced or hindered by these relationships and the culture of the community as demonstrated through its norms and values and effective communities of practice are recognized by a shared repertoire of recourses, routines and practices. Wenger (2000) defines this iterative process of learning as the "interplay of learning and experience" (p. 3). Therefore, school districts, as communities of practice, must live in a cycle of inquiry that leads to reflective judgment producing and improving organizational routines, structures, and resources.

Based on this understanding of social learning, collaboration and communities of practice provided by these scholars, this qualitative case study (Yin, 2009) was conducted with the following assumptions: a) teachers' beliefs about continuous growth and improvement have a strong connection to the effectiveness of their instructional practices; b) teaching practice can and should improve throughout an educator's career; and, c) effective school leaders are those who have both the personal, relational competence, and political will to build capacity in their staff by providing the conditions and structures needed to allow for teachers to engage in cycles of learning that result in teacher growth. Recognizing that this work is complex and labor intensive, researchers argue that these assumptions are more likely to be realized in schools or districts that function as communities of practice, where structures and routines result in educators coming together regularly to collectively reflect upon and develop their practice.

This study examined the promotion of professional growth in one Massachusetts district, which was selected for study because of its reputation of both valuing and fostering the continuous improvement of its educators. The researchers hope the outcomes of this study offer

school leaders insight into ways in which they can foster the ongoing professional learning of educators both individually and collectively within their schools. Through analyzing the perceptions of teachers and leaders and the examination of current district structures and professional growth initiatives, researchers sought to identify the leadership practices and supports that facilitate both the individual and the collective capacity of educators to create a community of professional learners who share a common focus on student achievement. This inquiry was designed to answer the central research question: How are teachers' professional growth supported by their school and district? The sub-questions serve to look deeper into what promotes or hinders teachers' continuous growth:

1. What district and school-based supports do teachers and leaders perceive to enable teachers to improve teaching practice and professional growth?

2. What leadership behaviors and structures at the school and district levels do teachers and leaders perceive as most beneficial to improvement in teacher practice and professional development?

In this instrumental qualitative case study (Creswell, 2012; Merriam, 2009) the research team utilized common methodology to answer research questions. Additionally, each research team member individually examined specific attributes that research either suggested or found to have an impact on teacher growth. The individual questions guiding investigation examined:

- In what ways do the structures and resources provided by district leaders support school-based collaborative teacher growth?

- What actions do school leaders take to engage teachers in a reflective process?

- How is feedback used to support individual and collective educator development?

- What supports new teacher growth?

As researchers, the purpose of this study was to explore the important structures within a school or district that foster professional growth. A review of the research regarding the role of leadership in teacher improvement indicates that effective leaders create structures that empower educators (Blasé & Blasé, 2000; Jacobson & Bezzina, 2008; Robinson et al., 2008; Saunders et al., 2009; York-Barr, Ghere & Sommerness, 2007). Such structures are grounded in collaborative learning, engaging educators in ongoing cycles of improvement that include reflection, feedback, specific supports for novice teachers and leadership that is shared between administrators and teachers. The researcher's aim in this study was to provide insights into the factors that transform schools and districts into communities of professional inquiry and practice that meet the needs of teachers throughout their careers, by affording them opportunities to assume a leading role in shaping their own professional growth.

Definitions of Important Terms

Terms associated with teacher quality and professional growth can vary greatly when defined or understood by practitioners and researchers. The research team posed the following working definitions of important terms and phrases to provide clarity, consistency, and a common language throughout the study.

Teacher growth/teacher improvement: Teacher growth refers to the ongoing, positive development of teacher practices in three areas: 1) content and context knowledge; 2) pedagogical skills; and, 3) dispositions that impact teaching quality.

Teacher Quality: Teacher quality encompasses two key elements. The first is related to teacher certification, level of education, and performance on teacher tests, and the second relates to teacher behaviors and practices in the classroom. This study will focus on the second element or daily teacher practice.

Community of Professional Learners and Professional Learning Community (PLC): These terms will be used interchangeably for this study. The working definition for this research is taken from a review of the literature conducted by Stoll et al. (2006). In proposing this definition, Stoll et al. (2006) describe a broad international consensus regarding the meaning of PLC as "…a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way; operating as a collective enterprise" (p. 223).

Reflection: A way of thinking in which an individual and/or group focused on growth and improvement works to understand a behavior, event, or response through inquiry and review of internal and external evidence resulting in action (Blase & Blase, 2000; Schön, 1983, 1987; York-Barr, Sommers, Ghere, & Montie, 2006).

Reflective Process: A learning process in which an individual and/or group focused on growth and improvement utilizes a purposive way of thinking to understand a past or current behavior, event, or response through systematic inquiry and evaluation of internal and external evidence resulting in action and learning (Barnett & O'Mahoney, 2006; Blase & Blase, 2000; York-Barr et al., 2006).

Reflective Stance: A professional self-awareness in which a person regularly and systematically interrogates and weighs evidence and clarifies goals (Collet, 2012).

Induction: A program of activities designed to help orient new teachers to the classroom and the district. One of the goals of induction is teacher formation and retention.

Mentor: St. George and Robinson (2011) define "*mentor* as an experienced teacher who assists, coaches, consults with, collaborates with, and guides new teachers to support their transition from novices to successful educators committed to the profession" (p. 25).

New Teacher Support: Programs and structures focused on encouraging and backing new teachers (in their first one to three years) through professional development, mentor relationships, district level courses, feedback from the coordinating mentor and principal, as well as co-planning time, critical reflection and collaboration.

Retention: The ability of schools and school districts to keep new teachers from straying to other schools or leaving the profession as a whole.

Feedback: For the purpose of this research, feedback is defined as any type of information about performance or progress towards a goal that is transferred from one individual or group to another individual or group (Hattie & Timperley, 2007).

In order for educational leaders to afford educators consistent opportunities essential to expand breadth of professional knowledge, while continuously improving instructional practice and building capacity to facilitate the quality instruction that leads to improved student learning, they must be clear about the ways that promote a perpetual cycle of learning within their schools that leads to student success. The aim of this study is to provide insights into the factors that transform schools and districts into communities of professional inquiry and practice that meet the needs of teachers throughout their careers, by examining the ways in which one district supports and facilitates such teacher growth, and the role of leadership in the process.

This review of the literature begins with a brief conceptual and theoretical orientation section and is then divided into three sections. The first section of the literature review examines the need for, importance of, and challenges of defining teacher quality. The second and largest section of the literature review details research about effective professional development and the ways professional development may facilitate teacher growth. This section begins with a broad overview of what may enhance or hinder professional growth. The overview is followed by an examination of specific research-based practices and structures, which have been selected by the research team to be examined collectively or individually. The selected practices and structures are professional learning communities, reflection, feedback, and new teacher supports. The final section of the literature review looks at the role of leaders in supporting teacher growth and the role the Massachusetts Educator Evaluation System plays in the state and local context of this study.

Conceptual Overview

This group investigation into teacher quality is framed by Wenger's (1998b) "Communities of Practice." Because it was found that the Cordova superintendent used the levels of collaboration proposed by Judith Warren Little (1990) to frame district improvement initiatives, an understanding of this work became interwoven within this study.

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[2] This chapter was jointly written by the authors listed and reflects the team approach of this project: Telena S. Imel, Philip McManus II, Maryanne Ryan-Palmer and Christine M. Panarese

Wenger's (2011) concept regarding communities of practice focuses on the abilities of organizations to work collectively toward a common goal, and it encompasses multiple practices. Wenger (2011) emphasizes ways in which communities of practice function and collaborate:

Figure 1. Qualities Found in Communities of Practice

Problem solving	"Can we work on this design and brainstorm some ideas; I'm stuck."
Requests for information	"Where can I find the code to connect to the server?"
Seeking experience	"Has anyone dealt with a customer in this situation?"
Reusing assets	"I have a proposal for a local area network I wrote for a client last year. I can send it to you and you can easily tweak it for this new client."
Coordination and synergy	"Can we combine our purchases of solvent to achieve bulk discounts?"
Discussing developments	"What do you think of the new CAD system? Does it really help?"
Documentation projects	"We have faced this problem five times now. Let us write it down once and for all."
Visits	"Can we come and see your after-school program? We need to establish one in our city."
Mapping knowledge and identifying gaps	"Who knows what, and what are we missing? What other groups should we connect with?"

Figure 1. What Do Communities of Practice Look Like? Communities of practice: A brief introduction. Wenger (2011) p. 1. Retrieved from: http://wenger-trayner.com/theory/

As a basis for the study, the research team looked at Wenger's concept about how large organizations form a community that can work together to accomplish a broad goal, but also important daily tasks. Wenger (2011) describes a community of practice this way: "Members of a community of practice are practitioners. They develop a shared repertoire of resources, tools experiences, stories, ways of addressing recurring problems—in short a shared practice" (p. 2).

Judith Warren Little's work on collaboration was introduced to the research group by administrators in the case study district "Cordova" (a pseudonym). Little (1990) discusses the importance of collaboration in schools. She examined the degrees of collaboration between teachers, specifically looking at teachers moving from independence to interdependence. Little found that forms of collaboration varied "in the degree to which they induce mutual obligation, expose the work of each person to the scrutiny of others, and call for, tolerate, or reward initiative in matters of curriculum and instruction" (p. 512). Little outlines fours levels of collaboration: (a) scanning and storytelling; (b) helping and assisting; (c) sharing; and, (d) participating in joint work. At the highest level, Little (1990) found that joint work among teachers improved instruction and fostered true understanding and collegiality among colleagues. She argues that joint work rests "on shared responsibility for the work of the teaching" and involves "truly collective action… to decide on a set of basic priorities that in turn guide the independent choices of individual teachers" (p. 519). Little (1990) maintains that "the greater the prospect for mutual influence among teachers, the more consequential becomes the substance of teachers' joint work: the beliefs teachers hold and their substantive knowledge of subject and student" (p. 523). Little's findings maintain that joint work, where all participants decide on a set of priorities to guide their teaching, is the goal for collaboration, and that teachers should work toward that goal.

Little's research focuses on educator "professional development and professional community as the foundation for a learning-centered school" (Little, 2006, p. 1). The work on collaboration completed by Little (2006) focuses and frames the goals for educator learning:

(a) Making headway on the school's central goals, priorities or problems; (b) building knowledge, skill, and disposition to teach to high standards; (c) cultivating strong professional community conductive to learning and improvement; and, (d) sustaining teachers' commitment to teaching (Little, 2006, p. 2).

By integrating Little's progression of effective collaborative behaviors with Wenger's concept of communities of practice for institutional learning and growth, researchers were able to analyze and frame this study. The researchers focused specifically on the characteristics of the social learning of educators that would have the most impact on positive student achievement outcomes (Timperley, Wilson, Barrar & Fung, 2007).

Need for and Importance of Ongoing Teacher Improvement

Teacher quality is one of the most influential factors affecting student achievement (Darling-Hammond, 1997; Ganley et al., 2007; Marzano, 2003; Marzano et al., 2005; Stronge, 2002). Sanders, Wright, and Horn (1997) observed that the most important factor that impacts student learning is the teacher. Furthermore, Sanders and Rivers (1996) found that the impact of teacher effectiveness on student achievement is both additive and cumulative across grade levels. As Robert Marzano (2003) points out, "…seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor" (p. 72).

Developing and maintaining effectiveness in teaching is a complex, integrated, ongoing process. Teachers are called to be lifelong learners, who consistently increase their knowledge and skills in order to assure a positive impact on social, emotional, and academic student

achievement. To meet this challenge, teachers need consistent opportunities to expand their breadth of professional knowledge, while continuously improving their instructional practice, which builds and strengthens their capacity to improve student outcomes. While teaching lies within the control of teachers, the systems within which they teach often work against them. Research indicates that effective teaching is best supported by critical inquiry and reflective practice that is embedded within the culture of the school and linked to classroom instructional practices. This requires a structure and school culture that empowers teachers to work together in professional communities of inquiry and practice, utilizing reflective judgment to monitor and assess their past and present practices in order to make better future decisions (Barnett & O'Mahoney, 2005; Darling-Hammond & McLaughlin, 1995; Killeavy & Moloney, 2010; Friedman & Schoen, 2009; Stigler & Hiebert, 1999). Rather than focusing on controlling or fixing teachers, policy and professional development that supports teachers in developing the capacity to take responsibility for student learning must provide opportunities for learning that engages teachers as learners as well as teachers, allowing them to struggle with the uncertainties that accompany each role (Darling-Hammond & McLaughlin, 1995). Thus, developing a culture of continuous inquiry for all educators will facilitate the ongoing improvement of the organization and support of individual and collective teacher growth.

The No Child Left Behind Act of 2001 (NCLB) addressed the importance of teacher quality as a means to address issues of student achievement, school accountability, and school reform. Improved student achievement is promoted through quality initiatives such as school reform models that engage teachers as well as school leaders in improving practice, and "*capacity-building through on-going professional development*" (NCLB, 2001). Building capacity is more than teaching a set of skills or providing the proper materials for a lesson –

although both are important. The development of teacher capacity connotes a broader empowerment among teachers to continually expand their own knowledge and pedagogical skills toward increased effectiveness.

> Capacity is a complex blend of motivation, skill, positive learning, organizational (*sic)* conditions and culture, and infrastructure of support. Capacity gives individuals, groups, whole school communities, and school systems the power to get involved in and sustain learning over time. (Stoll et al., 2006, p. 221)

Individual capacity refers to the knowledge, skills, and dispositions of individual teachers in a school, while collective or interpersonal capacity is associated with the quality of collaboration among members of the teaching staff (Williams, Brien, Sprague, & Sullivan, 2008). Building individual and collective capacity of teachers to continuously improve practice toward increased student learning is a critical responsibility of teachers and educational leaders, public policy advisors, and legislators.

Challenge of defining teacher quality. Although researchers agree that teacher quality greatly impacts student learning (Darling-Hammond, 1997; Ganley, Quintanar, & Loop, 2007; Marzano, 2003; Marzano et al., 2005; Stronge, 2002; 2010), the term *teacher quality* has become so widely used that it lacks specific meaning. There is a growing concern that some research in leadership views teacher quality through a deficit lens, assuming that the quality of our teaching force needs improvement. In this study, teacher quality is situated within the context of teacher learning across the professional lifespan, recognizing that teachers, like other professionals, must continue to expand and deepen the breadth and depth of subject matter, pedagogical, pedagogical content, and pedagogical context knowledge in order to serve an increasingly diverse population of students in a global society. It is important to note that professional learning across the

lifespan also applies to leadership. Educational leaders can enhance leadership practice in order to increase teachers' capacity to engage in a professional life that fosters lifelong learning and ongoing improvement of practice, by providing continued opportunities and resources for professional growth that are embedded within the structure of all educators' daily work. Researchers in this study seek to illustrate the ways in which educational leaders do this effectively.

Researchers use the term teacher quality to refer to teaching practices (the actual teaching that occurs in classrooms) (Lewis et al., 1999; Kennedy, 2010), teacher preparation and qualifications, including pre-service learning, teaching assignment, continued learning, and general background (Lewis et al., 1999; Goldhaber, 2002; Stronge, 2007, 2010); and the environments in which teachers work (Goldhaber, 2002; Kennedy, 2010; Rice, 2003). Stronge (2007, 2010) situates teacher quality within a framework of six teacher behaviors that include: 1) prerequisites for effective teaching; 2) teacher dispositions; 3) classroom management; 4) planning for instruction; 5) implementing instruction; and, 6) assessing student progress. As shown in figure 2, these variables are combined into two major categories: teacher background qualities and teacher skills and practices:

Figure 2. A Framework for Teacher Effectiveness

Figure 2: Stronge uses the two major categories, teacher background qualities and teacher skills and practices, as the organizing framework for summarizing literature on the connection between teacher quality and student achievement. (Stronge, 2010, p. 48).
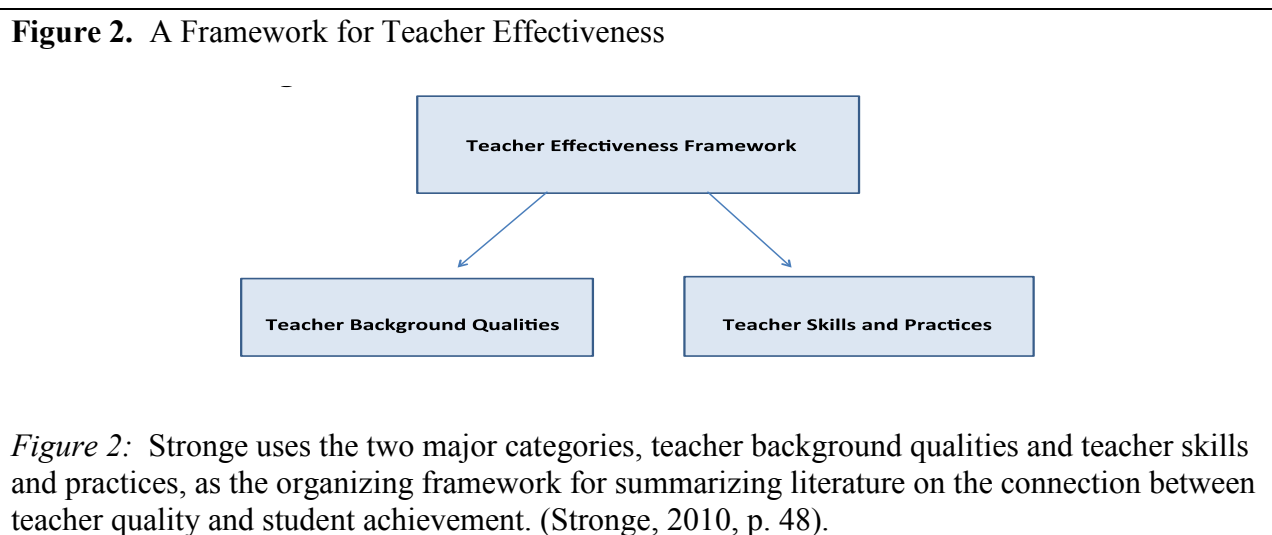
Researchers (Goldhaber, 2002; Lewis et al., 1999; Kennedy, 2010; Rice, 2003; Stronge, 2007, 2010) agree that little of the variation in teachers' ability to improve student achievement can be attributed to observable characteristics, such as academic degree or teaching experience; but rather that unobserved aspects of teacher quality such as dispositions, attitudes, and classroom practices were factors to be considered. While individual characteristics of teacher disposition such as a respectful and caring nature, teacher efficacy, and motivation and enthusiasm to teach did not predict teacher effectiveness, the combination of teacher professional background qualities and teacher disposition allowed for more informative and accurate correlation to student achievement (Jacob, Kane, Rockoff & Staiger, 2009 as cited by Stronge, 2010). Rice (2003) emphasizes the interactive nature of teacher qualities and qualifications, adding complexity to the measurement of specific qualities of teacher effectiveness. Novice teachers experience a variety of pre-service training backgrounds, therefore strong teacher induction programs serve to develop a shared understand of professional practice within an organization. Professional development programs within an organization function to enhance teaching and contribute to teacher growth.

Impact of professional development on teacher practice. Most practitioners and researchers agree that there are no simple scenarios or programs that result in drastically increased teacher improvement as measured by increased student achievement (Darling-Hammond, 2010; Elmore, 2004; Saunders et al., 2009). There is a growing body of research that supports the belief that "organizational change begins with individuals" (Osterman & Kottkamp, 2004, p. 1). While change begins with individuals, these individuals are more likely to change in meaningful and lasting ways when they work and learn collaboratively in communities of

practice (Blasé & Blasé, 2000; Chi Keung, 2009; Darling-Hammond, 2010; Wenger, 1998b). York-Barr et al. (2006) observe that, "learning is the foundation of individual and organizational improvement" (p. 1). Spillane (2005) explains that utilizing the leadership practices (not necessarily utilized by administrators) of "structures, routines and tools" (p. 147) within the context of a specific situation allows people to take action in improving individual and collective growth.

In *The Teaching Gap*, Stigler and Hiebert (1999) state that teaching is not just a skill, it's "a complex, cultural activity" (p. 109). Because working in isolation has been a constant practice within American teaching culture, the shift to a more collaborative professional culture has been difficult for organizations to embrace, which may explain why many school reform initiatives (i.e. professional development) have been unsuccessful in significantly impacting teacher practice or student achievement. Stigler and Hiebert recommend that teacher improvement efforts in the United States learn from Japan's lesson study model, which focuses on job-embedded, collaborative work where the "team" works on improving one lesson at a time over a period of weeks and up to a year. The authors explain that in the United States, teachers are assumed to be competent once they have completed their teacher training, whereas Japan does not make this assumption. Professional development is considered a critical component of the vocation and is scheduled into the teacher workday. They observe, "if you want to improve teaching, the most effective place to do so is in the context of classroom lessons" (p. 111).

A number of researchers have found that collaboration is essential to organizational change and improvement (Blasé & Blasé, 2000; Chi Keung; 2009; Frederiksen & White; 1997; Gallimore, Ermeling, Saunders, & Goldenberg, 2009; Jacobson & Bezzina; 2008; Saunders et al., 2009; York-Barr et al., 2007). "Collaboration includes continuing interactions about effective

teaching methods, plus observation of one another's classrooms. These activities help teachers reflect on their own practice and in identifying things that can be improved" (Stigler & Hiebert, 1999, p. 124). Leaders are important to ensuring that effective structures are in place to support teachers in these endeavors and fostering and nurturing a culture that allows educators to learn in a safe, supportive environment. Stigler and Hiebert argue that, "we must empower teachers to be the leaders in this process" (p. 127). Just as teachers model the gradual release of responsibility with their students to foster independent learning, skillful leaders employ the same strategies to build teacher capacity and efficacy.

Elmore (2004) speaks to both the importance and challenge of transforming American schools; he suggests school leaders empower and create structures of shared accountability for educators through the development of professional learning communities of critical inquiry and practice, thus fostering the growth of educators in our nation's schools. A challenge for many teachers and leaders working in today's schools is that they were not hired or prepared to do this type of collaborative work. Elmore argues that the structures of schools are often not designed for teachers and leaders to engage in professional dialogue with colleagues based on student achievement; therefore leaders must create a culture of trust where critical reflection and feedback are seen as essential to enhancing the overall organization.

Structures that allow for collaboration and reflective conversations are seen as "viable way(s) to develop teachers because they are school-based and arise from teachers' daily concerns in the classroom and school" (Ashraf & Rarieya, 2008, p. 278). Researchers caution that both learning and change of instructional practice are "gradual process(es) and labor intensive as (they) revolve around teachers' knowledge, skills, and attitudes" (Ashraraf & Rarieya, 2008, p. 278; Stigler & Hiebert, 1999; Valli, 1997).

Stigler and Hiebert (1999) claim that "the star teachers of the 21st century will be teachers who work every day to improve teaching – not only their own, but that of the whole profession" (p. 179). This is a fundamental change to how most schools currently operate and will require district and school leaders to examine and restructure their current schedule in order to provide collaborative time, with targeted professional development as one of the organization's highest priorities. This research team examined the ways in which one Massachusetts school district is responding to these challenges.

Elements of effective professional development. Effective professional development is sustained, in-depth, and embedded in the daily work of educators (Blankstein, 2011; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Garet, Porter, Desimone, Berman, & Yoon, 2001; Stronge, 2010). Archibald, Coggshall, Croft, and Goe (2011) identify five characteristics that high-quality professional development exhibits: (a) alignment with school goals, state and district standards and assessments; (b) focus on core content and modeling teaching strategies; (c) opportunities for learning new teaching strategies; (d) collaboration among teachers; and, (e) embedded follow-up and feedback. Elmore (2004) recommends that professional development be designed to build the capacity of teachers by working "collectively on problems of practice" (p. 96). Elmore makes this recommendation based on the assumption that "learning is essentially a collaborative rather than an individual activity – that educators learn more powerfully in concert with others who are struggling with the same problems" (p. 96). He believes that this type of shift in practice from working and learning in isolation to working and learning collaboratively requires the administrators to "play a much more active role in the provision and improvement of instruction" (p. 107). The role and importance of administrators in teacher growth will be addressed in latter sections of this review.

Proefriedt and Raywid (1994) advocate for teachers not only to work collaboratively in teams but also to enhance personal growth by visiting each other's classrooms. "Teachers must find colleagues from whom they can learn, whom they can trust to be supportive and honestly critical, and who themselves are open to new perspectives on their teaching" (p. 129). Osterman and Kottkamp (2004) make the case that professional development designed to enhance reflective practice can result in substantial changes in teacher practice. They note that, "reflective practice engages individuals and groups in a critical analysis of problems and examines how individual and collective ideas and action patterns help to cause or maintain these patterns. To engage in reflective practice requires trust and openness of communication" (p. 66). A number of other researchers have also found that trust and school culture enhance or hinder the effectiveness of school-based professional development efforts (Darling-Hammond et al., 2009; Elmore, 2004; Hargreaves & Fink, 2003; York-Barr et al., 2006).

Challenges to teacher growth. Policymakers, researchers, and practitioners struggle with questions of how to improve teacher quality because of the complexity and time needed to change teacher practice. Research supports that collaborative efforts by educators to examine practice are more likely to succeed (Proefriedt & Raywid, 1994). Elmore (2004) elaborates on some of the challenges that face teachers and administrators in America's public schools. "The workday of teachers is still designed around the expectation that teachers' work is composed exclusively of delivering content to students, not among other things, to cultivate knowledge and skill about how to improve their work" (p. 92). Additionally, "the learning that is expected of teachers and administrators as a condition of their work also tends to be predicated on the model of solo practice" (p. 92). Finally, workplace learning is heavily dependent on the culture of the organization (Elmore, 2004).

Research-Based Practices and Structures in Teacher Development

Communities of professional practice. The development of site-based professional learning communities (PLCs) offers school leaders a reform approach that meets the challenge of providing consistent opportunities for teachers to collectively expand their breadth of professional knowledge and to continuously improve their instructional practice. "A community of practice is not a new way to organize learning within the organization. It is a way of viewing how learning takes place and it emphasizes that every practice is dependent on social processes through which it is sustained and perpetuated, and that learning takes place through the engagement in that practice" (Ng & Tan, 2009, p. 38). Within this collaborative culture, school leaders are able to build and strengthen the capacity of teachers – both individually and collectively—to drive improved student learning, meeting NCLB's demands for school reform (Schmoker, 2006). In their review of the literature on professional learning communities, Stoll et al. (2006) link professional learning communities and enhanced student outcomes. They credit Rosenholtz's (1989) assertion that a learning-enriched, teachers' workplace appears to be linked to better student academic progress and Louis and Marks' (1998) finding that students achieved at higher levels in schools with positive professional communities. Ng &Tan (2009) believe that communities of practice utilize sense making, which they define as "a process that is largely technical in nature and confined to immediate practice concerns" (p.42). They challenge educators to broaden their thinking beyond sense making, in order to "enable and empower teachers to become creators of new knowledge and teaching practices" (p. 42). Ng & Tan maintain that, "encouraging teachers to engage in critical reflective learning where reflection is implicit and intuitive in nature, and general and contextual in scope and object will significantly enhance the quality of learning" (p. 38).

Professional learning communities (PLCs) build the professional capacity of teachers to address the challenges that exist regarding student learning, through ongoing collective professional learning (Eaker, DuFour, & Burnette, 2002). For this study, the working definition of professional learning communities is "…a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way; operating as a collective enterprise" (Stoll et al., 2006, p. 223). By reflecting collaboratively on their own individual and collective practice, teachers continually increase their skills to enhance students' learning. Developing a school staff to function as a professional learning community offers enormous promise for meaningful and substantive improvements (DuFour & Eaker, 1998; DuFour & Marzano, 2011; Nelson, 2008; Vescio, 2008), by providing opportunities for ongoing professional development that is driven by the needs of teachers as they naturally engage in efforts to consistently improve student learning (Vescio, 2008). Professional learning communities (PLCs) provide a structure within which the professional development needs of teachers are actualized through collaborative, ongoing, job-embedded staff development that is designed to improve classroom instruction and student learning (DuFour & Eaker, 1998; DuFour & Marzano, 2011; Easton, 2010; Hord & Tobia, 2011; Stronge, 2002). Professional learning communities have the potential to provide substantial benefits as a school improvement approach (Fullan, 2001; Hord, 1997; Senge, McCabe, Lucas, Kleiner, Dutton, & Smith, 2000). As Schmoker (2006) states, "In both education and industry, there has been a prolonged, collective cry for such collaborative communities for more than a generation now. Such communities hold out immense, unprecedented hope for schools and the improvement of teaching" (p. 137-138). Yet, as Saunders, Goldenberg & Gallimore (2009) observe, "effective implementation of learning teams will require district leadership to improve coherence and

alignment of professional development initiatives" (p. 1029). Another essential element for communities of practice to become meaningful and valuable to the school community is for individuals to be open to considering changes to their individual and collective practice. In the next section, literature will be examined that reflects the importance of purposefully cultivating reflective practice as a teacher growth strategy.

Reflective practice. Literature on reflective practice supports the following theoretical concepts: (a) a teacher's level of reflective practice has a strong correlation with the effectiveness of their instructional practice; (b) reflective practice can be learned; and, (c) school leaders can build reflective practice capacity in their staff as reflection is both a solitary and collaborative act (Blase & Blase, 2000; Chi Keung, 2009; Larrivee, 2008a; York-Barr et al., 2006). The importance of a reflective stance: a professional self-awareness in which educators weigh evidence and clarify goals (Collet, 2012), pause and question the status quo, and view their role as one of continual problem solving, is widely accepted as critical to a teacher's capacity to improve instructional practices within their classroom (Brookfield, 1995; Larrivee, 2000). Researchers also agree that educators' progress along a continuum of reflective development with the ultimate goal for all educators to become critically reflective (Figure 3).

Figure 3. The Reflective Continuum
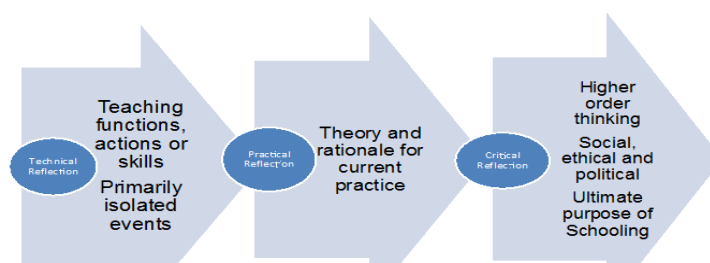
Figure 3. Represents the Reflective Continuum as synthesized by Barbara Larrivee, 2008. Researchers agree that reflection is complex and that an educator 's skills must be developed in order for them to achieve the ultimate goal of critical reflection.

Many researchers have grappled with the importance placed on reflection or reflective practice within the field of K-12 education, as well as reflection's role in the overall process of learning (Akbari, 2007; Barnett & O'Mahony, 2006; Brookfield, 1995; Houston & Clift, 1990; Danielson, 2009; DuFour, DuFour, Eaker and Many, 2010; Friedman & Schoen, 2009; King & Kitchener, 1994; Larrivee, 2000; Larrivee, 2008b; Leitch & Day, 2000; Valli, 1997). Cole and Knowles (2000) posit that reflection has the potential to be experienced across classrooms and schools: "Through systematic reflection on and analysis of practice, teachers take charge of their own professional development, and they have the potential to substantially contribute to institutional problems and issues" (p. 2). Reflective practice "encourages the possibility of deep change in assumptions, thoughts, and actions" (Osterman & Kottcamp, 2004, p. xi).

Just as teaching is a complex task, engaging in reflection necessitates an environment that is safe for sharing both thinking and practice; it must also be acknowledged that people have varied aptitudes for engaging in and developing reflective judgment (Friedman & Schoen, 2009; King & Kitchener, 1994). In a society that expects teachers to believe that all students can learn and achieve at high levels, it is only logical for educational theorists and researchers to approach the work of improving teacher effectiveness and school improvement with a deep commitment to the belief that the adults working within schools can develop the skills, attitudes and behaviors of reflective practitioners. One approach researchers and practitioners promote as beneficial to adult learning is utilization of the reflective process, a learning process in which an individual and/or group focused on growth and improvement utilizes a purposive way of thinking to understand a past or current behavior, event, or response through inquiry and review of internal and external evidence resulting in action and learning (Barnett & O'Mahoney, 2006; Blase & Blase, 2000; York-Barr et al., 2006).

The reflective process. Many researchers suggest that teachers and administrators develop the skills and attitudes to engage in the reflective process both through and in order to improve individual and collaborative practice within schools (Barth, 1990; DuFour & Marzano, 2011; DuFour et al., 2010; Harford & MacRuairc, 2008; Schön, 1987). Reflective practice is widely recognized as a key component of the teaching and learning process (Brookfield, 1995; Harford & MacRuairc, 2008; Zeichner & Liston, 1987). Reflective teaching, therefore, demonstrates a commitment to inquiry and metacognition (Cochran-Smith, Barnett, Friedman & Pine, 2009). As a result, teachers and administrators fully engaged in the reflective process are more attuned and responsive to "what is going on in their minds and hearts" (Valli, 1997, p, 67). Day (1999) agrees that continuous reflection on practice is essential to maintaining professional health and competence. Without opportunities for teachers to regularly engage in the reflective process, Loughran (2002) is concerned that teachers will rationalize and justify their teaching practices, instead of investigating alternatives or new opportunities that may better meet the needs of the students in their classrooms. In their study of teachers in urban and suburban schools, Friedman et al. (2009) found that when asked to negotiate how to implement and reconcile "mandated pedagogy and their personal beliefs about teaching and learning" (p. 252) teachers' responses were situated in four subcultures: compliance, noncompliance, subversion and democratic inquiry and practice. The first three of these four subcultures limit the advancement of the school. These researchers acknowledge the complexity and tensions of negotiating subcultures and mandates yet charge those in the field to embrace "systematic and rigorous inquiry and critical and collaborative discourse toward providing the greatest good toward *all* children" (pp. 273-274, emphasis in original). In response to these concerns there is a growing field of evidence-based literature (e.g., Ashraf & Rarieya, 2008; Blase & Blase, 2000;

Chi Keung, 2009; DeMulder & Rigsby, 2003; Harford & MacRuairc, 2008; York-Barr et al., 2007) that supports the belief that teachers who meet together as peers in order to make their reflections public and receive feedback can provide each other mutual support and promote collective growth which results in increased teacher effectiveness (Larrivee, 2008b; Loughran, 2002). This effectiveness is measured by teachers' ability to make meaning of complex situations and "understand the practice from a variety of viewpoints" (Loughran, 2002, p. 36).

Teachers who engage in the reflective process are more likely to question school policies, procedures and instructional changes and are less likely to engage in the change being enacted without understanding and believing in the change itself (Valli, 1997; Zeichner & Liston, 1987). It is for this reason that school leaders must understand the reflective process and develop opportunities that allow teachers to explore school initiatives and school policies in a manner that will result in practices that are finely tuned to advance the work of the school.

Engaging in the reflective process is cyclical and incremental (Argyris, 1982; Brookfield, 1995; Larrivee, 2000; Larrivee, 2008b; Leitch & Day, 2000; Loughran, 2002). Additionally, how practitioners engage in the reflective process varies at different stages of the career cycle (Killeavy & Moloney, 2010; Senge, 1990; York-Barr et al., 2006). Killeavey and Malloney (2010), researchers who examined whether the use of a blog would enhance a new teacher's level of reflection, based their theoretical framework on the work of Forde et al. (2006) which suggests that for beginning teachers especially, individual reflection may be of little value to making lasting, complex changes within schools as the "culture of the school has a more significant influence on the teacher's practice than personally held beliefs or values" (Forde et al., 2006 as cited by Killeavy & Moloney, 2010, p. 1071). This is one example of why school principals need to examine and foster both the cultural and specific staff needs when developing

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opportunities for teachers to engage in the reflective process. If the school culture is found to be ailing and prohibitive of staff growth, leadership must work to change the school culture and must support all teachers' pedagogical context knowledge.

Reflection: An individual and collaborative process. Dewey (1933) and others have identified the individual abilities and attitudes that must be developed for reflective practice to occur. These include introspection, open-mindedness, whole heartedness and a willingness to accept responsibility for decisions and actions (Dewey, 1933; Farrell, 2004; Larrivee, 2008b; Ross, 1990). The power of reflection is that it is also an instance of "social action that needs to be understood in the day-to-day context" (Cinnamond & Zimpher, 1990, pp. 70-71). Akbari (2007) views Schön's "reflection-in-action" as an individual reflective process and "reflection-on action," as the reflective process that teachers most often experience as a collective process. Yet he argues individual reflection is the most widely experienced type of reflection pre-service teachers engage in at higher education institutions. If this is the case, the school principal's role in developing teachers' understanding and abilities to engage in the reflective process collaboratively is greatly heightened.

The reflective process as a cycle. Whether engaging in the reflective process as a solitary or collaborative endeavor, the practitioner makes a deliberate decision to examine thinking, actions or a problem (Leitch & Day, 2000; Loughran, 2002) and requires a deliberate pause to allow the practitioner to consider past action and results in conscious and purposive future action (York-Barr et al., 2006). "A reflective teacher is one who, given particular circumstances, is able to distance herself from the world in which she is in everyday and open herself to influences by others, believing that the distancing is an essential first step towards improvement (Mezirow, 1981, p.105 as cited by Day, 1999, p. 218). According to Larrivee (2000), for a teacher to step

outside of her typical reflective cycle and experience a deeper understanding of herself as a practitioner, she must be willing to experience a "sense of uncertainty" (p. 304). This requires a setting that is safe and a school culture that embraces risk-taking and continual learning for all members within the community. In addition, "reflective practitioners operate in a perpetual learning spiral in which dilemmas surface, constantly initiating a new cycle of acting, observing, reflecting and adapting" (Larrivee, 2006 as cited by Larrivee, 2008a, p. 88). The importance of structured and scaffolded professional learning opportunities for teachers and administrators to effectively engage in the reflective process which leads to professional growth will be discussed in the following section.

Reflection and professional growth. If reflection is so important, why aren't all educators more skilled at critical reflection? A number of researchers (e.g., Ashraf & Rarieya, 2008; Collet, 2012; Larrivee, 2008b) have pointed out that developing educators' abilities to be reflective practitioners is "labor-intensive" (Pugach & Johnson, 1990, p. 204) and many of our most effective teachers "find it difficult to verbalize the conceptual basis of their teaching" (Noordhoff & Kleinfeld, 1990, p. 182). Larrivee (2008b) explains an additional challenge: "the route to becoming a reflective practitioner is plagued by incremental fluctuations of irregular progress, often marked by two steps forward one step backward" (p. 93). Finally, research has also shown that an educator's ability to effectively engage in cycles of inquiry and critical reflection hinge on the person's predisposition and willingness to reflect, as well as daily environmental factors of trust and support (Friedman et al., 2009; Friedman & Schoen, 2009; King & Kitchener, 1994).

As Zeichner and Liston (1996) note, "one of the distinguishing characteristics of reflective educators is a high level of commitment to their own professional development" (as

cited by York-Barr et al., 2006, p. 15). In order for the adults working in schools to better serve

their students, established structures and allocated times are needed for individual and

collaborative reflection to occur (Dana & Yendol-Hoppey, 2008; Danielson, 2009; Drago-

Severson, 2004; DuFour & Marzano, 2011; DuFour et al., 2010; Frederiksen & White, 1997;

Glazer, Abbott, & Harris, 2004; Larrivee, 2008b). According to Larrivee (2008b),

> There is an emerging consensus developing on the kinds of mediation structures that have
>
> the potential to promote higher order reflection. The generally accepted position is that
>
> without carefully constructed guidance, novices seem unable to integrate and apply
>
> learned pedagogy to enhance their practice. However, focusing on what they already
>
> know and believe about the profession has proven to be a useful starting point.
>
> Establishing self-monitoring and self-reflective activities early on in teacher education
>
> programs can promote the kind of self-awareness that allows prospective teachers to hear
>
> and listen to their own voices (p. 96).

A significant body of literature exists that supports the belief that for reflection to be of

value it must be in a context that supports and creates an expectation for action (Dana & Yendol-

Hoppey, 2008; DuFour et al., 2010; Killion & Todnem, 1991; York-Barr et al., 2006). This

speaks to the need for principals and teachers to engage in reflective practices collaboratively

both in pairs and as teams at the school level (York-Barr et al., 2006). By working together to

examine current problems of practice educators can increase the opportunities students have to

learn which results in higher levels of academic achievement.

Early scholarship often referred to journaling as the tool for developing reflective practice

(Bourner, 2003; Larrivee, 2000; Larrivee, 2008a; Larrivee, 2008b; Valli, 1997; Valli, 1992).

With the refinement of the definition of reflective practice to include an action orientation, new

tools have been developed or identified as being beneficial for practitioners to enhance their reflective abilities. These tools subsequently provide a structure for engaging in reflection either individually, in pairs or in larger group settings.

Action research as a reflective tool. One promising tool for teaching reflection is action research. Action research is believed to play a key role in encouraging reflective practice (Day, 1999; Leitch & Day, 2000; Valli, 1997). The self-reflective cycle (Day, 2000) or reflective inquiry process (Leitch & Day, 2000) is seen as nearly mirroring the steps taken through action research. Action research can be conducted individually or collaboratively.

Tools that support reflective growth for pairs. Studies on the use of peer observation (Ashraf & Rarieya, 2008; Collet, 2012), peer coaching (DeMulder & Rigsby, 2003;Vidmar, 2005), videotaping of lessons (Harford & MacRuairc, 2008; McCullagh, 2012; Song & Catapano, 2008), or the use of an instructional coach paired with reflective conversations (Ashraf & Rarieya, 2008; Collet, 2012; Tsui, 2009) have found all these approaches to have a positive impact on teachers' growth and their ability to reflect on instructional practice. This is also supported by theorists (Larrivee, 2008b; York-Barr et al., 2006) who promote reflective conversations and reflective collaboration as constructs that, when institutionalized within a school, will increase teachers' engagement in critical reflection, leading to changes in their practice and increased academic achievement for the students they serve (Ayas & Zeniuk, 2001; Barnett & O'Mahony, 2006; Glazer et al., 2004; Helterbran, 2008; Lavié, 2006; McCarthy & Garavan, 2008). In a case study of two teachers who worked with a reflective coach, Ashraf and Rarieya (2008) found that reflective conversations and the teacher's existing level of content knowledge both contributed to enhanced development. In addition, reflective conversations with

a coach helped the teachers "identify gaps in their knowledge, as well as skills and attitudes that hinder improvement of their practice" (p. 276).

Tools that support collaborative reflective growth. Tools that foster collaborative reflection can be general school structures such as grade level meetings that focus on student learning where student work or achievement data is examined; text-based discussions (Nehring, Laboy, & Catarius, 2010) such as book groups; the use of protocols; and project-based learning. Communities of practice or professional learning communities may vary in teacher make-up, purpose, structure and how long the group or team exists. Collaborative reflective tools that are associated with specific structures, countries or organizations include: Learning Walks (Bloom, 2007); Japanese Lesson Study (Steigler & Hiebert, 1999); Learning Study (Chi Keung, 2009); Cognitive Facilitation (Frederiksen & White, 1997); and Initiatives in Educational Transformation (DeMulder & Rigsby, 2003). Each of these tools is distinctive, yet they share a number of similar features. All were developed based on the belief that reflective practice needs to be developed over time, should be done in the everyday context in which a teacher works, and requires a continuous effort. Additionally, each has incorporated into its design sufficient time for reflection and a safe supportive atmosphere for teachers by either providing skilled facilitators or structured protocols.

Reflective tools that support the professional growth of groups or teams have received significant attention from K-12 educational practitioners. The challenge for researchers seeking to identify the development of in-service teachers' reflective practice is that these structures do not always name reflection as the outcome; instead reflection is often a critical element to engaging in the group process. Killeavy & Moloney (2010), citing Harris and Johnson's work (1998), state that "research on effective teaching over the past two decades indicates that

effective practice is linked to inquiry, reflection and continuous professional growth" (p. 1071). Barnett and O'Mahoney (2006) advocate "embedding reflective practice in the school culture" where teams work together to monitor and assess their past and present practices in order to make better future decisions (p. 506). When reflection is a cultural norm in a school, it becomes difficult for teachers and administrators to tease out when and how they reflect. While this is likely an indicator of a highly effective school (Killeavy & Moloney, 2010), it makes developing an evidence base challenging as the practices of reflection are complex and may be hidden within other more easily identifiable school structures or initiatives. Two examples would be professional learning communities (PLCs) and literacy initiatives. They often have a reflective process embedded in the implementation of the new initiative; yet, studies that examine them often do not highlight this component or name it reflection.

Reflection as a professional development strategy. Larrivee (2008b) notes that "Becoming a reflective practitioner means perpetually growing and expanding, opening up to a greater range of possible choices and responses" (p. 88). For reflection to be an effective professional development strategy, teachers must be willing to take responsibility for their actions, exercise professional judgment, and be open to alternative methods of instruction throughout their career (Day, 1999; Larrivee, 2008b). Having a reflective approach to examining practice is now seen as a key factor in the development of a teacher's knowledge and skills (Killeavy & Moloney, 2010). As highlighted previously, Larrivee (2008b) contends that developing self-monitoring and self-assessment in pre-service teachers can help in the long-term development of teachers. Alternatively, Akbari (2007) cautions that teachers progress through developmental growth stages, with the first stage focused on developing the skills of classroom management and control. He argues that introducing reflective practice too soon can be

counterproductive and have a negative impact on a teacher's need to develop survival skills early in their career. Akbari's (2007) stance of refraining from introducing reflective practices to novice teachers is extreme, though his caution has merit as noted by one new teacher who participated in the study entitled *A Teacher-Developed Reflection Process for Professional Collaborative Reflection* (Glazer et al., 2004). She found that the "global issues" being considered were not as valuable to new teachers stating, "there are some things you don't want (or need) to know yet" (Glazer et al., 2004, p. 44).

Reflection with teams of teachers. "Education is about learning - not only student learning but also staff learning" (York-Barr et al., 2006, p.27). Reflection as a professional development strategy for teams of teachers provides teachers the mechanism to learn, grow and renew throughout their careers (Ghaye, 2011; York-Barr et al., 2006). For reflection to be meaningful for teacher growth, teachers must assess their dilemmas based on both experience and interrogated evidence (Day, 1999; Larrivee, 2008b; Valli, 1997). York-Barr, Ghere, Sommers & Montie (2006) give an example of why this is critical: "10 years of teaching can be 10 years learning from experience with continuous improvement, or it can be one year with no learning repeated 10 times" (p. 27). Killeavey and Moloney (2010) suggest that due to the power of school cultures, individual reflection may have minimal value to school improvement and that for schools to engage in lasting, complex change only on-going reflective conversations and collaborative learning of all professionals within the school community is likely to bring about the desired level of change. For schools to provide powerful, on-going collaborative learning there must be an established culture that embraces open communication, critical dialogue, and risk-taking (Ashraf & Rarieya, 2008; Osterman & Kottkamp, 2004). Valli (1997) maintains that many different voices are needed to help teachers to continue to gain effectiveness. She believes

that reflection accomplishes this and can also "serve the broader goal of improving schools, human relations and educational policy"; for this to occur, however, reflection must be a "collective undertaking" (p. 86).

The importance of supporting teachers as they move along the reflective continuum towards critical reflection is unchallenged. School leaders who view reflective practice as a professional development strategy to increase the effectiveness and professionalism of the teachers they supervise will foster a supportive environment and provide time for individuals and groups to engage in the examination of instructional practices and school problems (Osterman & Kottkamp, 2004). School leaders must be committed to seeking out and then developing all teachers; yet research suggests that some practitioners are more open to critique and see themselves as perpetual learners and therefore will be more responsive to these efforts (Larrivee, 2000). For schools to become the learning environments we desire for our children, we must be "routinely engaging in reflective practice [as] it is unlikely that we will be able to understand the effects of our motivations, prejudices and aspirations upon the ways in which we create, manage, receive, sift and evaluate knowledge; and, as importantly, the ways in which we are influencing the lives, directions and achievements of those whom we nurture and teach" (Day, 1999, p. 229).

While most educators believe that they are the catalysts for students' learning and social emotional growth, the learning and developmental needs of adults in schools must also be nurtured by building structures and relationships that foster ongoing whole school learning. Often democratic conversations and collaborative practices are initiated inside schools. Collaborative conversations around individual and group teaching are facilitated by the delivery of feedback. School structures and conditions must continually be attended to in order to keep

the delicate balance required for teachers to be receptive of feedback, and maintain a reflective stance, which allows professional learning in communities of practice.

Feedback to Support Educator Growth

The Wallace Foundation's (2004) investigation into the factors that most impact student achievement provides clear direction for the second most powerful influence on student achievement in schools, the principal. School leaders who evaluate the quality of instruction in their schools must constantly monitor classroom instruction using effective feedback processes to direct teachers' professional learning and growth (Knight, 2007).

Schmoker (2011) asserts that to ensure implementation of quality classroom lessons, administrators must focus their attention and actions on directing educators to "ensure sound, ever-improving instruction and lessons" (p. 23). To effectively monitor teaching and learning, school and district leaders must be relentless in creating and sustaining a culture of ongoing, collective educator growth (Leithwood, Louis, Anderson, & Wahlstrom, 2004).

Based on research in efforts to develop high quality teachers, the Massachusetts Teacher Evaluation Task Force developed a new educator evaluation system and an evaluation tool. This comprehensive evaluation system places strong and immediate emphasis on supervisors' delivery of educator feedback. The feedback evaluation standard mandates that the supervisor deliver frequent, actionable, goal-referenced feedback to ensure educators receive the information they need to improve their practice. (MADESE, 2013; Wiggins, 2012). This change in the way teachers and administrators are evaluated calls for Massachusetts' superintendents and principals to adjust their focus and priorities toward becoming instructional leaders for their schools and districts.

The role of feedback. Based on a synthesis of data collected on teacher evaluations for

strategic choices in professional growth opportunities, Goe, Biggers and Croft (2012) found that effective evaluation included "multiple measures of teacher effectiveness" (p. 5). Such measures can include student assessment data, classroom walkthrough observation data, peer observations, surveys, student views, and collaborative investigations into curriculum. Feedback that includes these measures can serve as effective structures to improve educator reflection and action. Effective delivery of helpful feedback, regardless of the content, is intended to "push [others] in the right direction" so that all meet performance goals (Price, Handley, Millar, & Donovan, 2010, p. 283).

The use of teacher evaluation, vis-à-vis the delivery of educator feedback, is a systematic strategy that can enhance the instructional capacity of educators and resides at the core district goals to increase student achievement (Brandt, Mathers, Oliva, Brown-Sims, & Hess, 2007; Tucker & Stronge, 2005). Research cites that educators' "evaluation in the form of regular, consistent feedback around instruction is valuable to new and veteran teacher" learning (Bransford, Brown, & Cocking, 2000; Oliva, Mathers & Laine, 2009, p. 1). Therefore, when teachers do not receive ongoing, multi-sourced feedback, the opportunity for districts to take advantage of in-house, low cost, collaborative, professional development is lost.

The role of feedback in changing behavior. Teacher or educator feedback has been proven to ignite the change processes needed for improving teacher quality and student instruction (Brandt, Mathers, Oliva, Brown-Sims, & Hess, 2007). Not all feedback, however, improves educator skill sets. One noted study focusing on the use of *360-Degree Appraisals* (DeNisi and Kluger, 2000) explored factors that influence the effects of feedback. Their research encourages supervisors to create the right conditions that will foster successful delivery and reception of feedback (DeNisi & Kluger, 2000). For example, researchers found that supervisor

coaching with collaborative goal-setting positively impacted the delivery of feedback to employees, thus increasing its effectiveness to activate improvement changes in performance. This study emphasizes that for feedback to be effective, it must be presented in a nonthreatening manner (DeNisi & Kluger, 2000).

In addition to providing frequent, accurate, and descriptive performance feedback, school leaders must use care in selecting the types of feedback most appropriate for teacher collaborative discussion and reflection. The use of multiple forms of feedback, if not delivered expeditiously or supported with a positive, full understanding of the content of the data, can complicate and stall the productive use of the feedback processes aimed at improving an individual's performance and skill set.

Feedback, especially if it contains corrective information, can be "loaded with emotions" (Ramani & Krackov, 2012, p. 789). Therefore, in order for the educator to accept the feedback it is suggested that it be individualized according to the recipient's capacity to understand the content of the feedback and that there is ready support in assisting the individual in acknowledging the feedback. To accomplish this, Ramani & Krackov (2012) suggest anyone who delivers feedback to consider the use of the "ECO Model (Emotions, Content, and Outcome)" for delivering feedback to individuals (p. 789). This model consists of three steps to ensure the effective delivery and use of critical performance feedback. The first step is specific to the recipient and involves some preplanning on the part of the person who is delivering the feedback. This allows the feedback deliverer to examine how this individual might react to the information that is contained in the feedback and to strategize ways to facilitate its acceptance. The second step in this process calls on the deliverer of feedback to assist the recipient in understanding the content of the feedback to ensure clarity of the information. The final step in

this "ECO model" process involves the use of assistive coaching on the part of the feedback deliverer to verify the identified area in need of improvement and to collaboratively assist the recipient to develop the steps needed to improve and increase their skill capacity.

One study investigating teachers' use of "feedback from external evaluations (FEE)" (i.e., student achievement data) found that in order for teachers to develop appropriate action steps or goals leading to instructional change, they must first clearly understand the information they are receiving (Hellrung & Hartig, 2013, p. 1). This finding is important for any district and school leader who is mandated to use external performance feedback data such as student summative test scores as part of the teacher evaluation process. For example, in Massachusetts, the new educator evaluation tool contains teacher evaluation standards that will incorporate the use of external feedback data obtained from annual parent/guardian surveys, student surveys and results from the State benchmark, the Massachusetts Comprehensive Assessment System (MCAS) to assist in judging overall educator performance (MADESE, 2013).

Educators who examine student data from the previous year's MCAS assessments to identify instructional areas in need of improvement, goal development, and creation of the action steps that will lead to improved student achievement, must be provided with assistance to understand their role in student achievement and satisfaction outcome. In this way, educators can develop the accurate goal and action steps needed for improvement.

Hellrung and Hartig (2013) illustrate the processes involved when external feedback is delivered to individuals (see Figure 4). In their cycle of external feedback, Step 3 indicates the understanding of the use of feedback. Using student achievement MCAS data (the example of feedback in this cycle), individuals who deliver feedback must ensure that this information is not overwhelming or directed in a personal way to the educator who is receiving it (DeNisi &

Kluger, 2000). Hellrung and Hartig (2013) also assert that if the content of the feedback is not entirely understood by the recipient, it can be problematic and stall the completion of the EER cycle that leads to changes in individual instruction and improved student achievement. Cavanaugh (2013) cites Kluger and DeNisi (1996) by referring to this type of educator understanding as "knowledge of results (KR)" (p. 113). Without full understanding and clarification of the data contained in feedback, there is risk that this information will be rejected by the recipient, as it is probable that it will be perceived as negative. Supervisors or others who assume teacher competency in understanding student achievement data and omit the precondition of assisting staff to understand student achievement data, will encounter "strong risks that [teacher] evaluation results will be under-utilized" as a result of educator denial of the feedback and the subsequent delay of the reflective thinking that activates changes in instructional practices (Hellrung & Hartig, 2013, p. 1).

Figure 4. Hellrung & Hartig External Feedback Performance
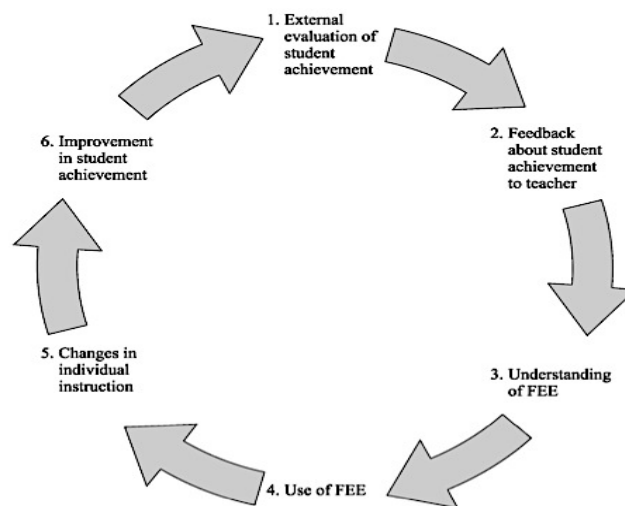
Figure 4. FEE feedback loop. Hellrung, K. & Hartig, J. (2013). Understanding and using feedback: A review of empirical studies concerning feedback from external evaluations to teachers. *Educational Research Review*, *9*, 174-190.

Effective feedback conditions. Effective supervision and management indicates that the "key responsibility for managers is to help employees improve their job performance on an ongoing basis" (Aguinis, Gottfredson, & Joo, 2011, p. 105). This process, when conducted inside the educational setting, must provide a culture that is receptive to educator change. In one study conducted by DeNisi and Kluger (2000) it was found that in order for the use of feedback to effectively facilitate the inquiry cycle that focuses on the specific skills in need of improvement, the culture of the work environment must be conducive to individual and collaborative problem-solving and investigation of instructional practices. To help facilitate this transformation of culture in schools, Ash and D'Auria (2013) provide school and district leaders with an innovative framework for transforming or changing schools into organizations that prioritize learning for students as well as adults. They cite four drivers of change: (a) culture of collaboration and trust; (b) multiple levels of leadership; (c) personalization; and, (d) capacity building and effective professional development.

For example, the researchers found that supervisor coaching with collaborative goal-setting positively impacted the delivery of feedback to employees, thus increasing its effectiveness to activate improvement changes in performance. This particular study helped supervisors to understand that the delivery of feedback does not always result in its intention to improve individual performance and notes that for feedback to be effective, it must be presented in a manner that encourages teachers to take instructional risks (DeNisi & Kluger, 2000).

For teachers to accept performance feedback that is meant to activate reflection and learning that leads to continued individual teacher growth, the individual delivering the feedback must model and demonstrate sincerity that the intent of the feedback is to create a learning opportunity for both the administrator and teacher within the context of the school (Wiggins,

2012). Kouzes and Posner (2002), experts on leading change in organizations, call for school leaders to create a "system of trustworthiness" (p. 10) so that leaders are able to move much faster in implementing change processes. Relationship-building skills for school administrators are critical to fostering improved teacher quality that results in greater student achievement (DuFour & Marzano, 2011; Schmoker, 2006).

Kegan and Leahy (2001), developmental psychologists in adult learning, discovered some barriers that interfered with the delivery of quality feedback. They found that when supervisors delivered constructive criticism or feedback on employee performance, it was assumed that the individual delivering the feedback had some type of "super vision" that held a higher value (p. 128). This belief created an imbalance of knowledge between collaborators and inhibited conversations to improve employee performance. As a result, feedback delivery sessions became supervisor-focused leading to the belief: "I'm right and you're wrong - end of discussion" (p. 129). School and district leaders must practice transparency in thought and action to develop the relational trust necessary for effective team learning (Covey & Merrill, 2006; Hargreaves & Fullan, 2012; Peterson & Behfar, 2003; Wiggins, 2012).

Further, Keegan and Leahy (2001) claim that school leaders must be able to engage their staff in "two-way" conversations around instructional performance where the teacher and the administrator are both active learners (p. 143). This embedded, collaborative professional development will assist in avoiding any misunderstandings and assumptions about the purpose and intent of the feedback delivery processes conducted in schools. Thus, school leaders must use constructive feedback language that values a person's individual contribution and expertise in resolving instructional problems. A collaborative goal-setting process reinforces administrator investment in staff development while establishing partnership for creating necessary action

steps toward improved teaching and learning inside the school. Administrators who foster and support collaborative work and honest and open conversations will help to ensure educator acceptance of feedback that interrogates beliefs and facilitates the change processes needed for ongoing growth of teachers (Keegan & Lahey, 2001).

Teacher performance feedback, collaborative problem solving, and goal setting for changes in instruction are similar to what Guskey (2002) terms as the teacher professional development and change process (p. 383) shown below:

Figure 5. Model of Teacher Change
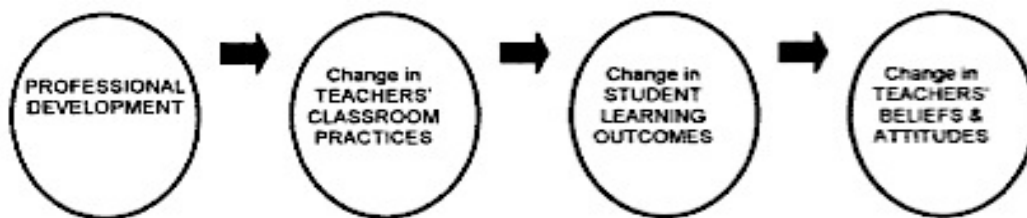
Figure 5. Guskey Teacher Professional Development and Change Model. Guskey, T.R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, *8*(3/4), 381-391.

Guskey's (2002) work suggests that if educator changes are to sustain and endure, the individuals involved must receive regular feedback about the impact of their efforts. This finding parallels the views of behaviorists that claim when successful actions are reinforced, they are likely to be repeated while those that are unsuccessful tend to be diminished (p. 387).

One way to sustain positive educator instructional inquiry and change is through the use of protocols for collaborative discussions around data, student work or curriculum alignment (Little, 2006). Collaborative discussions that are focused on teaching and student learning in schools are dependent on the data provided to teachers as a result of frequent and effective delivery of feedback from multiple sources.

Research has repeatedly emphasized the importance of principals as educational leaders who establish trusting teacher/supervisor learning partnerships to ensure the delivery and acceptance of ongoing, clear, quality feedback. Effective delivery of information to improve teaching and learning serves as an embedded teacher professional development tool to assist in facilitating the positive educator change that leads to individual and collective professional growth (DuFour & Marzano, 2011; Hattie & Timperley, 2007; Danielson & McGreal, 2000). "The process of transforming schools into learning organizations will come to its end when intellectual processes and feedback mechanisms at learning organizations become built into employee's attitudes, norms of conduct and value system" (Radivojevic, 2010, p. 93*).* By delivering frequent, goal-oriented, user-friendly multiple forms of educator feedback, schools can embed an evidence-based, data-driven strategy for whole school learning and improvement.

If American schools are to create a positive, collaborative culture that fosters whole school learning, administrators must prioritize and consistently demonstrate the importance of building and maintaining a common, mutual trust among all staff. It is only through this continuous, collaborative investigation of teaching and learning resulting from the delivery of effective feedback processes that America's educational system will improve the nation's economic power and guarantee that all students will possess the competencies needed to enter the 21st century workforce (Hargreaves & Fullan, 2012; Sahlberg, 2011; Kirsch, Braun, Yamamoto, & Sum, 2007; Rothstein 2012; Rothstein, 2010; Sherman, Honegger, & McGivern, 2003). Bambrick-Santoyo (2012) notes that, "the real turnaround challenge will not be teacher resistance, but your own (leadership). Lock in your schedule for observation and feedback meetings, and you will make the turnaround a success" (p. 102).

Supporting the Growth of New Teachers

Characteristics of strong induction programs build upon a teacher's pre-service development with a plan comprised of mentoring and collaboration. New teachers often face much adversity in their first classroom, not only from students, but also from fellow faculty members, parents, and the culture of the school. As Stanulis, Little, & Wibbens (2012) suggest:

Teaching is complex work and the complexity is exacerbated when novices are prepared with different frameworks and emphases within teacher preparation programs. [Thus,] a question is raised: With what practices are we aligning induction in order to continue helping novices to learn, regardless of their preparation pathway? (p. 40)

The benefit of strong induction programs "can be realized even after one year when mentoring is well specified and targeted on a high-leverage practice" (p. 40).

Induction programs support teacher development. Moir (2009) believes that the foundation for a new teacher's interaction with students, established course expectations, and "whether kids will be bored or inspired" is built within the first two years in the role (p. 30). School district policy and administrators "can influence both a new teacher's development and her socialization and enculturation" by establishing a "high quality, comprehensive induction program" (p. 31). Other research points to the major components used in induction programs: "Mentorship programs, collaboration and planning time with other teachers, seminars for new teachers, and regular communication with administrators or department chairs were the major components used to integrate teachers into a new school" (Smith & Ingersoll, 2004, p. 706). Hayes (2006) maintains that a well-designed mentoring program consists of placing expectations on the mentor teachers that "move beyond the support of the novice teacher to the establishment of individual professional goals" (p. 216). Hence, to assist in the transition to developing and

improving new teacher effectiveness, perhaps one of the single best paths to success for new teachers is an effective induction and mentoring program.

Wood and Stanulis (2009) maintain that a formative approach fosters reflective discussions about classroom practices between new teachers and their mentors. Accordingly, the mentor and protégé relationship hinges on a relationship built through trust. Common elements of the mentor programs reviewed by Wood and Stanulis include: "Evidence of novice teacher's strengths and weaknesses, collected through mentor observations, team teaching, and novice teacher's analyses of students in collaboration with their mentors" (p. 139). As a result, Wood and Stanulis define exemplary mentoring as that which educates as part of quality induction programs; such programs focus on developing subject specific knowledge and pedagogy, "designing lesson plans, discussing observations, analyzing student work, and reflecting on the novice teacher's growth as a teacher" (Odell & Huling, 2000, as stated by Wood & Stanulis).

Effective teacher mentor programs serve as key models for developing and retaining novice new teachers and teachers entering into a new school. Administrators are charged with supporting and retaining new teachers, so strong induction programs focused on mentoring, professional development, and improved practice are a concern for all school leaders. Teacher induction and mentoring programs can impact multiple aspects of education, school administration, and student achievement. New teacher support programs assist novice teachers by building on the knowledge and skills gained in pre-service teacher preparation programs to further educate them on competencies in effective teachers. To understand new teacher induction programs, one must understand new teacher mentoring. Ingersoll and Strong (2011) state in reference to mentoring and induction that "the two terms are often used interchangeably" (p. 203). According to Ingersoll and Strong, "Mentoring is the personal guidance provided, usually

by seasoned veterans, to beginning teachers in schools" (p. 203). In recent decades, teacher-mentoring programs have become a dominant form of teacher induction (Britton, Paine, Raizen, & Pimm, 2003; Fideler & Haselkorn, 1999; Hobson, Ashby, Malderez, & Tomlinson, 2009; Strong, 2009, as cited by Ingersoll & Strong, 2011). St. George and Robinson (2011) define "*mentor* as an experienced teacher who assists, coaches, consults with, collaborates with, and guides new teachers to support their transition from novices to successful educators committed to the profession" (p. 25). The primary goal of new teacher support programs is to improve student learning, support strong teaching, and encourage continuing growth and development.

Therefore, defining teaching and learning is an important starting point for knowing the intended outcome of a quality, mentoring program. Old definitions of teaching maintain that it is the transmission of knowledge from the instructor to the student. Consequently, "Learning is receiving well-defined knowledge through memorization and correct behaviors through practice and then reproducing them in certain contexts (Skinner, 1968, as cited by Wang & Odell, 2002, p. 484). Furthermore, "Teaching is supposed to transmit external knowledge to students through demonstration, reinforcement, and controlled or sequenced practice" (Rosenshine, 1985, as cited by Wang & Odell, p. 484). Wang and Odell provide a deeper understanding of how to define and conceptualize good teaching and learning for students through a review of past and current literature. Cohen, McLaughlin, & Talbert (1993) argue that curricula should "stress importance of students' deeper understanding of concepts and the relationships of concepts within and across various subjects, as opposed to memorization of isolated facts, concepts, and theories" (as cited by Wang & Odell, p. 484). Resnick (1987) believes that curriculum frameworks should "encourage teachers to challenge students' misconceptions and to connect students' learning meaningfully with their personal experiences and real-life contexts" (as cited Wang & Odell, p.

484). Bruner (1960) maintains that national curriculums "stress that teaching needs to place students' active discovery of important ideas at the center" (as cited by Wang & Odell, p. 484). Leinhardt (1992) states that students should be encouraged "to share and examine what they find through discourse" (as cited by Wang & Odell, p. 484). In addition, Kennedy (1991) contends that all teachers should "strive to teach all students and promote excellence for all students whatever their gender, race, and social, cultural, and economic backgrounds" (as cited by Wang & Odell, p. 484). The teacher as the center of the classroom instead of students serves as an antiquated view of classroom teaching, and new teacher supports can focus on student-centered activities, which build on the new teacher's pre-service preparation.

Mentoring as part of the induction program or new teacher support program can involve a variety of activities between a mentor teacher and new teacher. Stanulis and Floden (2009) define "intensive mentoring" as an activity that involves close work between the mentor and teacher, "where mentors observed, co-planned, analyzed student work and collected and analyzed teaching data together with a beginning teacher" (p. 120). Results of their study confirm that an intensive mentoring plan focusing on balanced instruction improved the practice of new teachers as measured using the study's particular observation tool, "aligned with specific goals of the program" (Stanulis & Floden, 2009, p. 120). Without sustained one-on-one activity between the teacher and mentor, one might question the effectiveness of an induction program. In their district-wide study of beginning teachers in the Chicago Public Schools, Kapadia, Coca, and Easton (2007) state that their data confirm that first year teachers who receive high levels of mentoring and support are likely to report a good teaching experience and their chances of remaining in the same school increases. Kapadia et al. (2007) also report that, "Many individual, classroom, and school factors, most particularly the number of students with behavioral

problems, are strongly associated with novices' plans to continue teaching" (p. 2). They further

argue that a variety of factors play a key role in the success and positive experience of novice

teachers. A welcoming faculty assisting new teachers as well as strong school administrators

contributes significantly to a good teaching experience. Quality and helpfulness of various

induction activities, including mentoring, serve as high indicators of the novice teacher's positive

first years. To support their claims, Kapadia et al. (2007) also contend that, "new elementary

teachers receiving strong levels of support are *twice* as likely to report a good experience than

peers receiving low levels" and the chances of staying in the same school after their first year

remain strong as well (p. 2). However, the induction program alone is not enough to influence

teacher's intentions to continue in the profession as other school factors and classroom demands

play a large role. In a large, urban school district such as Chicago, a robust and supportive

induction program improves the reported experience of teachers new to the profession.

Supporting the experience of teachers new to the profession is a significant concern for

many school districts that not only want to improve teaching and learning, but also increase

retention. With the challenges facing new teachers, researchers argue that teaching has a

relatively high turnover compared to other occupations and professions such as lawyers,

engineers, architects, professors, pharmacists and nurses (Ingersoll, 2001; Ingersoll & Perda,

2011; Ingersoll & Strong, 2011). Ingersoll and Strong (2011) report that as a result of the

relatively high turnover in the teaching profession, schools are regularly plagued by a shortage of

teachers. However, many believe that this occurrence results from a lack of teachers entering the

profession. Ingersoll and Strong (2011) contend that "the much heralded mathematics and

science shortage [and] the minority teacher shortage" is not true (p. 202). Rather, the data that

point to teacher shortages and staffing problems are attributed, by a significant extent, to a

"'revolving door'—where large numbers of teachers depart teaching long before retirement" (Ingersoll, 2011, p. 202; Ingersoll & May, 2011; Ingersoll & Perda, 2010). Concerns about the problems faced by teachers in their first few years and the high attrition rate of new teachers led to the creation of induction programs with a heavy mentoring component (Lai, 2010; Serpell & Bozeman 1999; Wojnowski, Bellamy, & Cooke, 2003). Boruch, Merlino, and Porter (2012) refer to the high attrition rate of teachers, especially in urban school districts, as "churn." "Churn is a remarkable instability among school personnel that makes it nearly impossible to build a professional community or develop long-term relationships with students" (Boruch et al., 2012, p. 20). High quality mentoring programs serve as one way to reduce churn as these programs encourage and support teachers to remain in their schools and positions. As Boruch et al. argue, "in a hurricane of churn, you can't build the culture of trust and safety that kids need to learn" (p. 21). Nurturing programs as a component of a collaborative culture of continuous improvement requires the support of school level leaders as well as district level administrators.

Role of Educational Leadership in Continuous Teacher Improvement

The effect of leadership on teacher quality and student learning is significantly underestimated (Leithwood et al., 2004). In a landmark study into the ways in which leadership influences student learning, Leithwood and colleagues found that the "total (direct and indirect) effects of leadership on student learning account for about a quarter of total school effects" (p. 5). This presents a challenge for school districts, as "principals, superintendents, and teachers are all being admonished to be instructional leaders without much clarity about what that means" (p. 6). The principal has been cited as the foremost instrumental factor in developing the capacity of staff to effectively engage in their work as a community of professional learners (Cranston, 2009; Hipp & Huffman, 2000; Hord, 1997; Huffman, 2001; Lambert, 1998; Louis et al., 2010;

Reeves, 2006; Spillane, Halverson, & Diamond, 2001). Principal leadership has a positive, while indirect, relationship with student achievement (Hallinger & Heck, 1998; Marzano et al., 2005). The principal affects teachers, who in turn directly influence student achievement. DuFour and Marzano (2011) offer a visual representation of this relationship, indicating that the principal's influence on student learning passes through teachers.

Figure 6. Relationship Between Principal Behavior and Student Achievement

Student Achievement

Teacher Actions in the Classroom

Principal Actions

Figure 6: Relationship between principal behavior and student achievement (DuFour & Marzano, 2011, p. 49).
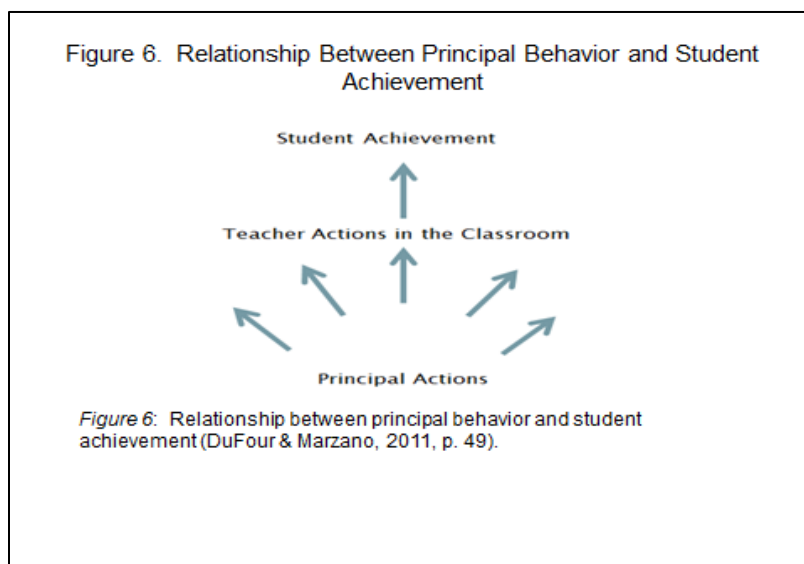
Blasé and Blasé (2000) "found that in effective principal – teacher interactions about instruction, processes such as inquiry, reflection, exploration, and experimentation result; teachers build repertoires of flexible alternatives rather than collecting rigid teaching procedures and methods" (p. 132). Hargreaves and Fink (2003) also articulate the relationship of principal behavior to student achievement when they maintain that all "leaders of learning put learning at the center of everything they do. They put student learning first, and everyone else's learning is directed toward supporting student learning" (p. 3).

In assessing the effect of superintendents on student achievement, Marzano & Waters (2009) highlight the significant role that district leadership plays in this work, as superintendents are able to provide the conditions necessary for principals to be most effective in facilitating

continuous teacher improvement. Fullan (2001) asserts, "The role of leadership is to 'cause'
greater capacity in the organization in order to get better results (learning)" (p. 65). Richard
Elmore (2000) agrees, stating that:

> …the job of administrative leaders is primarily about enhancing the skills and knowledge
> of people in the organization, creating a common culture of expectations around the use
> of those skills and knowledge, holding the various pieces of the organization together in
> productive relationships with each other, and holding individuals accountable for their
> contributions to the collective result. (p. 15)

The role of instructional leadership is not limited to school or district administrators,
however (Leithwood et al., 2004). Leithwood et al. assert that in order to create an environment
of student and organizational success, effective instructional leadership should be distributed
among all staff in school districts, providing opportunities for the continuous skill development
of superintendents, principals, and teachers (Leithwood et al., 2004). In an analysis of over 20
leadership and management studies, Peter Gronn (2002) concluded that effective school
leadership can be found in the practices and interactions of "many leaders" to complete the
diversified tasks of the principal (p. 430). As an alternative to the more traditional focus on the
deeds of individual leaders, Gronn proposes that a distribution of leadership will more effectively
accommodate new patterns of interdependent practice (p. 424). While supporting Leithwood et
al's (2004) claims that effective organizations are developed and maintained by the measurement
of "how well these leaders interact with the larger social and organizational context in which
they find themselves" (p. 23), Gronn's work also aligns with Burch and Spillane's (2005)
concept of distributed leadership, which echoes this democratic, distributed notion of leadership.
Spillane states, "Leadership practice takes form in the interactions between leaders and

followers, rather than as a function of one or more leaders' actions" (p. 147). Like Gronn, Spillane sees leadership as evident in the interaction of many leaders, so that ''leaders' practice is stretched over the social and situational contexts of the school…not simply [as] a function of what a school principal, or indeed any other individual leader, knows and does (Spillane, Halverson, & Diamond, 2001, p. 6, original emphasis).

Role of Teacher Evaluation in Teacher Growth

In June 2011, the Massachusetts Board of Education (BoE) passed new regulations on the evaluation of educators in the Commonwealth. The Massachusetts Department of Elementary and Secondary Education (MA DESE) and BoE have identified reflective practice as a requirement for effective teaching and leadership in the schools across the Commonwealth. Under the professional culture standard for administrators, an indicator for "continuous learning" will evaluate the administrator on how they "develop and nurture a culture in which all staff members are reflective about their practice and use student data, current research and best practices and theory to continuously adapt instruction and achieve improved results" (Mass Department of Ed., 2011).

Additionally, school leaders will also be evaluated on how they model these behaviors in their own practice (Mass Department of Ed., 2011). As districts across the Commonwealth are in the early stages of interpreting and implementing these regulations, what this looks like in practice is still largely unknown. Research supports the use of tools such as self-assessment, journaling, and videotaping as a means of formative assessment leading to personal and professional goal setting (Barnett & O'Mahony, 2006; Beerens, 2000; Bolton, 2010; Bourner, 2003; DuFour & Marzano, 2011; Larrivee, 2008; Reagan, Case, & Brubacher, 2000).

It is important for school administrators to consider how they interpret and implement the regulations as Elmore (2004) cautions "most workplace learning mirrors the norms of the organization" (p. 92). The potential and the pitfalls encompassed in the new regulations are clearly articulated with Day's (1999) assessment. He states it is necessary for policymakers to acknowledge the importance of reflection that includes more than personal experience, and policymakers must see to providing "appropriate support to enable this to occur" (p. 228). He sees this support as a "key factor in raising teacher morale for so long battered by reforms which seek to simplify the nature of their work by judging it through narrowly conceived measures of student achievement" (p. 228).

The new Massachusetts Model Evaluation System requires educators to set professional and student achievement goals and to collect evidence that shows how the educator has progressed towards these goals. Successful implementation of the new evaluation system will be more likely to occur in districts that provide both teachers and administrators the levels of training and support and time essential to build a culture that is prepared to embrace this tool as a vehicle of professional growth.

As discussed, Wenger's (2011) theory of communities of practice is the conceptual framework for this study, and functions as the lens in which to analyze the various foci of the study. Wenger's communities of practice leads into the research of Judith Warren Little's levels of collaboration, and specifically, joint work, favored by Cordova's superintendent. The four main parts of our study each contribute to the gap in the literature regarding teacher's perspectives on professional growth and support. While the research is unclear on a succinct definition for teacher quality, the importance of ongoing teacher improvement is clear. Teaching is a dynamic profession, and teacher growth and development leads to improved practice and

better student learning outcomes. As Marzano (2003) points out, the single biggest factor to improving education is improving the effectiveness of teachers. Consequently, professional development support is a key practice focused on teacher growth, and research points to the importance of administrators, and specifically principals, in facilitating growth opportunities for teachers.

The four areas of research focus -- reflection, new teacher support, feedback and building leadership capacity --collectively contribute to the gap in the literature around educator's views regarding the impact of structure and supports to promote ongoing professional growth for teachers. Reflection addresses the importance of examining one's practice in order to analyze ways to improve and solve problems of practice. To support new teachers, the research outlines the importance of a formal induction program and one-on-one mentoring. The investigation into the use of educator feedback provides an analysis of how the district uses multiple forms of feedback content to support individual and collaborative teacher growth. District leadership plays a key role in providing the leadership capacity necessary for building leaders to cultivate schools that function as strong and effective communities of practice. In tying these different perspectives back to the gap in the literature, the importance of highlighting educator voice is key to understanding the structures and supports available to teachers in a school district.

Blasé and Blasé (2000) studied teachers' perspectives on how principals promote teaching and learning, and they claim that few studies have directly examined teachers' perspectives on the principles of everyday instructional leadership characteristics and the impact of those characteristics on teachers. Blasé and Blasé further argue that the relationship among instructional leadership, teaching, and even student achievement has not been adequately studied. They cite that more research is needed "into the effects of leader behavior on teacher behavior,

the relationship of instructional leadership to teaching, instructional leaders' characteristics, and conditions necessary for effective instructional leadership" (p. 131). As a result of this gap in the literature, we conducted a case study to examine the impact of leadership on the growth and development of teachers.

CHAPTER 3

METHODOLOGY[3]

The goal of this study was to investigate teachers' and leaders' perceptions of how one Massachusetts school district supports teacher growth and improvement. In an age of high teacher accountability and a strong focus on student achievement, school districts must be able to ensure that all students have access to quality teaching from instructors who are committed to their own professional growth and development. However, districts, and more specifically, leadership at both the school and district levels, must be able to provide the structures and conditions necessary to foster ongoing teacher improvement. Therefore, the research team has identified the following overarching question as the focus of this qualitative case study investigation of a suburban Massachusetts district: How are teachers' professional growth supported by their school and district? The sub-questions serve to look deeper into what promotes or hinders teachers' continuous growth:

1. What district and school-based supports do teachers and leaders perceive enable teachers to improve teaching practice and professional growth?

2. What leadership behaviors and structures at the school and district levels do teachers and leaders perceive as most beneficial to improvement in teacher practice and professional development?

Individual Research Questions:

- In what ways do the structures and resources provided by district leaders support school-based collaborative teacher growth?

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[3] This chapter was jointly written by the authors listed and reflects the team approach of this project: Telena S. Imel, Philip McManus II, Maryanne Ryan-Palmer and Christine M. Panarese

- What actions do school leaders take to engage teachers in a reflective process?

- How is feedback used to support individual and collective educator development?

- What supports new teacher growth?

Case Study Design

The research group reviewed several types of data collection methods before selecting a qualitative study approach to answer their research questions. Qualitative research allows for the researchers to build upon their initial knowledge about this phenomenon using a "systematic process" of investigation (Merriam, p. 4, 2009). Merriam (2009) describes qualitative research as a process in which the research seeks to understand "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (p. 5). This case study seeks to describe and understand the processes, protocols, and practices that facilitate the ongoing growth and development of teachers in one school district. Yin (2003) describes the case study as an "empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). Merriam (2009) uses a more standard definition to convey understanding of a qualitative research case study by stating that a "case study is an in-depth description and analysis of a bounded system." This case study was bounded by a focus on one Massachusetts school district.

Sample Selection and Description of Site

Given that time and site access are critical to the success of this case study, purposive sampling was used in our research. Purposeful selection allows the researcher to choose research sites for a particular purpose (Leedy & Ormond, 2005). To initiate the purposive sampling process in this study, the research team solicited three nominations each from five Massachusetts

educational experts who are familiar with district reputations regarding teacher instructional growth. These experts included three former superintendents, one Massachusetts Department of Elementary and Secondary Education official, and the president of a state-wide administrators' professional association.

As part of the pre-selection process, the team narrowed the pool of districts in Massachusetts by applying a sorting filter that would meet the criteria of a district that was K-12; had a student population of more than 1,000 but less than 8,000 students; and was categorized by the Department of Elementary and Secondary Education (DESE) as a level 1, 2, or 3 school. These criteria eliminated all turnaround schools, as their unique challenges prohibit their being a subject of this study. The research team asked nominators to recommend districts they perceived to have a commitment to continual teacher growth. Furthermore, we asked our experts to limit their district referrals to those located in the eastern part of the state, preferably in the metro Boston area.

In consultation with our dissertation committee, the research team reviewed the recommended sites. The types of districts suggested included middle class to upper middle class, suburban to urban cities, and towns with a reputation for supporting teacher growth. We used our superintendent mentor to reach out to the superintendents of these nominated districts to ascertain interest in our study. Based on the information gleaned through this process, the research team selected a district that met the criteria we have named Cordova (pseudonym). Once preliminary interest was established, the research team met with the superintendent to share our proposed study and to secure agreement to conduct research within the district.

Participants

The superintendent identified three principals, including the high school principal, the middle school principal, and an elementary principal he deemed to be supportive of the growth and development of their teachers (See Table 2). When determining our sample group, the researchers asked the superintendent to identify 26 potential participants who have demonstrated an openness to growth in their professional practice, including seven teachers from each level (elementary, middle and high) who display the range of characteristics outlined in the participant selection protocol (i.e. gender, new teacher, mentor, and position (See Table 1).

From this sampling, the research team selected participants to fulfill the stated criteria. We acknowledge the limitations of asking district leadership and principals for recommendations. These limitations and biases may include administrators choosing candidates with qualities similar to themselves, or educators who are viewed as supportive of administrators' efforts, or educators who exemplified high quality instruction. The resulting participant group represented a cross section of the district's professional staff that allowed for generalizations in analysis.

Table 1
Participant chart by level and role

	Central Office	High School	Middle School	Elementary
Administrator	Superintendent A. Superintendent	Principal	Principal A. Principal	Principal
Teacher		ELA Special Ed. *	Art Science Special Ed.* ELA	Music Kindergarten Special Ed.

* This teacher is shared between two levels.

Data Sources

This qualitative study employed multiple, in-depth data collection processes, including field notes, interviews of professional staff members, collection of district and site-based artifacts, and multiple research team member observations to establish the themes that assisted in creating detailed, descriptive outcome reports (Creswell, 2012).

The particular theoretical framework that a researcher selects will "generate the problem of the study, specific research questions, data collection and analysis techniques, and how you will interpret your findings" (Merriam, 2009). A conceptual framework using Wenger's (1998) communities of practice has been applied to shape this study's analysis. Our intention was to collect data for this qualitative study through the months of August 2013 through February 2014. This limited time frame allowed the research team to conduct individual and group interviews, observe schools, and collect artifacts for analysis. The actual dates and times for the interviews, observations and data review were scheduled for the convenience of the participating school district. Researchers utilized detailed data collection procedures (See Appendices B, C, and D for examples of the teacher interview protocol, administrator interview protocol, and observation protocol). The research team determined the extent of the need for targeted observations based on the initial data collection analysis. Minimally, each researcher conducted one targeted observation specific to the research topic.

To investigate and collect data to answer these research questions, the research team conducted (a) semi-structured interviews; (b) artifact/archival reviews; and (c) researcher observations of those events that provided additional information about district efforts to improve teacher quality such as professional development workshops, staff and team meetings, administrative meetings, and mentoring activities (Creswell, 2012).

Interviews. Interviews in qualitative studies are conducted either individually or in focus groups and usually consist of open-ended questions. Qualitative interviews are designed to collect personalized data on an individual's beliefs or experiences that cannot be obtained using other methods of data collection such as field observations. It is for this reason that the research group chose to gather the data for this inquiry using open-ended questions and probes to interview this study's participants (See interview protocols in Appendices B & C). Participant responses to the interview questions were recorded through the use of technology and later transcribed for analysis (Creswell, 2012). Interviews and recordings were transcribed using the same fee-based transcription service to preserve accuracy in transcription.

The research team field-tested interview questions and follow-up probes on three neutral participants prior to use in the research site to validate their effectiveness. As Merriam (2009) notes, "A pilot study is more than trying out your data collection methods" (p. 270). The purpose of the pilot study is to field test the interview questions, assist in the identification of some preliminary codes, as well as to alert the research team to any potential problems with the interview questions in advance of the actual scheduled site visits and interviews. The pilot study participants were selected from non-participating school districts similar in nature to our research site. Face-to-face interviews "yield the highest response rates" and thus have been chosen for use in this qualitative study (Leedy & Ormond, 2005, p. 185). A full disclosure statement for research participants about the study was given to all participants prior to the interview (see Appendix A).

The research team conducted 14 individual, face-to-face, semi-structured interviews with interviewees using open-ended questions and predetermined probes to elicit in-depth responses. Participants included the superintendent, the assistant superintendent, three principals (one from

each level), an assistant principal, and eight teachers from all levels (See Table 1). The

interviews focused on eliciting responses from individuals to uncover the district's attitudes,

beliefs, practices, and perceptions concerning continuous teacher improvement. The interview

protocol followed standard research guidelines that allowed participants to skip questions or end

the interview at any time. Interviews were approximately 45-60 minutes in length for each

participant. All interviews were recorded by the research team and were transcribed verbatim and

coded for further data analysis. Transcripts were then sent to interview participants as a form of

"participant verification" to ensure the accuracy of participant responses (Harper & Cole, 2012).

The research team used "check-coding" by breaking into pairs and dividing the transcripts

between the two teams allowing for discussion which resulted in consensus on data interpretation

(Miles & Huberman, 1994, p. 64).

Observations. The purpose of the observations was to collect data about practices in the

district that might relate to teacher growth and development. During the leadership retreat and

new teacher induction, as participant observers, the researchers were placed within the

participant groups to closely observe and engage in the meetings. School site observations

focused on the interactions and types of communication that support teacher development at the

school and district level. The research team used the annual district professional development

calendar to preselect specific meetings or events to observe. Some examples of these types of

meetings included leadership team meetings, induction program meetings, and data team

meetings.

To conduct participant observations researchers must manage competing tasks to

"write/listen/think/observe all at once" (Palmer, 2001, p. 310). Borrowing from the ethnography

side of qualitative research, the research team used a structured approach through observations to

manage the collection of data in a focused, systemic manner. Spradley and Baker (1980) provide researchers with a suggestion that allows for a focused collection of key data: space or the physical environment observed; actors (meaning who is running the meeting, who is talking, who is listening and what are they saying); activity or focus of the meeting; what objects are present; what actions people are taking; sequence of events; what people are trying to accomplish; and feelings expressed. All observations were recorded using technology and written field notes, which described interactions and the physical environment.

Artifacts/Document Review. The research team used purposeful sampling for the review of school and district documents. As Creswell (2012) notes, "Documents represent a good source for text data for a qualitative study" (p. 223). For this study, the researchers reviewed artifacts to help inform and validate interview data and to identify structures and supports that encourage teacher growth. Researchers examined the following documents from the school years 2002 to present:

- District and building benchmark data meeting schedules, agendas and reports for determining frequency, quality, and types of performance feedback

- Teacher and administrator evaluation tool(s)

- District improvement plan and school improvement plans for alignment of goals

- School committee and leadership meeting agendas and notes to determine superintendent's priorities

- Meeting protocols and norms

- Daily schedule and annual professional development calendar

- MA DESE reports (i.e. district review, district audit, and mid-cycle quality review)

Data Analysis

      The study aimed to identify teacher and administrator perceptions about how one district supports the growth and development of teachers within their system. Several stages of data analysis were used in this study. The initial analysis began early in the study with the full reading and verbatim transcription of each interview and observation field notes as they were completed. Upon completion of all interviews and observations, a preliminary exploratory analysis of transcripts, field notes, and artifacts was used to provide a general sense of the data, facilitate the structure of organization, and to help decide whether more data were necessary or needed (Creswell, 2012, p. 243). The next step in our data analysis was use of predetermined codes to elicit the themes or categories in the data. These initial codes provided a starting point for the management of the data. Additional codes surfaced "during the interaction with data and in conversations with" the research team (Hatt, 2012, p. 10). This secondary coding process was conducted using the predetermined codes that helped to identify and describe the themes that emerged from the data, as well as to highlight and categorize similar attitudes, beliefs, and perceptions among all study participants. This analysis also provided researchers the opportunity to identify contrary evidence or evidence that did not support or confirm the research team's established themes (Miles & Huberman, 1994).

      Use of technology, including the online software program Dedoose, assisted in the coding, storage, organization, management, and analysis during the coding and examination stage of the study. Interview transcripts, observation field notes, and artifacts were coded using a team-coding manual to assist in the storing, organizing, and management of the data collected from this study. This allowed for expeditious processing when researchers identified common descriptions and themes across the data set (Creswell, 2012).

Authenticity and Trustworthiness of the Data

Creswell (2012) states that, "good qualitative reports need to be realistic and persuasive to convince the reader that the study is an accurate and credible account" (p. 18). A structured observation strategy allows researchers to use a common form of data gathering such as recording of observations and researcher notes. Although observations are meant to collect data using an unstructured approach, as novice researchers, this strategy reminds each observer to record some predetermined focus areas as well as to maintain the individual researcher's flexibility in the recording of what is seen and heard (Leedy & Ormond, 2005). Using this strategy, researchers recorded a chronology of events, a detailed portrait of each individual or individuals, a picture or map of the setting, or verbatim quotes of the individuals (Creswell, 2012, p. 277). Maxwell (1992) describes this process as "descriptive validity" which serves to increase the validity of this study by avoiding the omission of data (p. 287). According to Miles and Huberman (1994):

> In qualitative research, issues of instrument validity and reliability ride largely on the skills of the researcher. Essentially a person – more or less fallibly is observing, interviewing, and recording, while modifying the observation, interviewing and recording devices from one field trip to the next. Thus you need to ask about yourself and your colleagues, how valid and reliable is the person likely to be as an information-gathering instrument? (p. 38)

The research team used a pilot study, teacher interview protocols, administrator interview protocols, and group consensus on the prescriptive delivery of the interview questions, to provide validity and reliability assurances. Further, this systematic, structured investigation used triangulation to validate the interpretation of the data that was collected. In this case study,

triangulation consisted of multiple researchers who triangulated multiple data sources. Triangulation of theorists and triangulation of school level data is the process that assures research credibility by soliciting multiple viewpoints of various researchers and accessing a variety of sources of information, confirmation, individuals and processes of data collection (Creswell, 2008). Ongoing scrutiny of the work of the research team was essential to the validity of the research being conducted. Miles and Huberman (1994) suggest that in order to confirm a finding, members of this research team should employ the method of triangulation to identify consistencies or contradictions. Triangulation allowed the researchers to see or hear multiple accounts of the same themes from a variety of sources and consult with each member of the research team for confirmation. Triangulation can increase strength and validity of data collection methods (Creswell & Miller, 2000).

Secondly, member checks were conducted to ensure the credibility of this case study. Hatt, Lincoln, and Guba (1985) consider member checking the single most important provision that can be made to bolster a study's credibility. Creswell (2008) would suggest that members of this research team take their own accounts, description and themes and compare the findings with each participant to increase the validity of data collection and analysis. Checks relating to the accuracy of the data took place "on the spot," in the course, and at the end of the data collection dialogues. Informants were also asked to read any transcripts of dialogues in which they have participated and confirm their accuracy. Here the emphasis was on whether the informants considered that their words matched what they actually intended, since, if a tape recorder had been used, the articulations themselves should at least have been accurately captured.

Another element of member checking should involve verification of the investigator's

emerging theories and inferences as these were formed during the dialogues (Merriam, 2009, p. 217). "This is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do in the prospective they have on what is going on as well as being an important way of identifying your own biases and misunderstandings of what you have observed" (Maxwell, 2005, p. 111).

Finally, the researchers implemented Audit Trails, which documented the process of collecting the data, similar to Yin's (2009) "chain of evidence" (p. 3). These processes provided evidence of the sequence of procedures and events used to gather the evidence. A journal was used to record reflections, assumptions, and reactions to the phenomenon that was being studied (Guba, 1981). The investigation of "rival explanations" assisted in assuring that the data and its analysis were accurate (Yin, 2009, p. 3).

Individual Biases

Each researcher acknowledged any relations with district members of the sample group. Possible individual biases were identified and disclosed to members of the research team. We also created processes designed to limit the impact of individual biases on the study. These included having another team member review the verbatim transcriptions and co-code sections of the data, audit trail entries, and member checks with participants.

Timeline

The following timeline guided the research tasks of this proposal:

Start Date	End Date	Research Task
March 2013	April 2013	Solicited multiple nominations from experienced educational experts that have knowledge about districts that have the reputation of fostering growth and development of teachers
July 2013	July 2013	Defended proposal
July 2013	August 2013	Contacted the selected district and made initial introductions and presentation of proposed study
August 2013	August 2013	Completed pilot study in the research group's individual districts
August 2013	October 2013	Initiated the scheduling of perspective district leaders; conducted interviews with available district personnel, collected data and artifacts, observed specific district activities
September 2013	October 2013	Continued with district visits to conduct interviews with district and school personnel, continued to collect artifacts and strategic observations
October 2013	January 2014	Began data analysis process and identification of themes, document inferences and findings
November 2013	February 2014	Continued with data analysis and identification of themes, documented inferences and findings, began to write up findings

District Historical Background and Setting

The Cordova School District was specifically chosen for this study because of its reputation as a district that promotes ongoing teacher growth. The school district, located in the northern part of Massachusetts, is best characterized as a suburban community. Cordova, a middle-class, residential community, continues to use the town meeting form of government consisting of a five-member board of selectmen and town manager.

District policies and fiscal procurement are delegated to the collaborative work of the five-member school committee who are elected by the town voters. The school board and the superintendent are responsible for the development and adherence of policy and the fiscal

management of Cordova Schools. There are five elementary schools, one middle school and one high school that serve students in kindergarten through grade 12. There are approximately 5,000 students enrolled in the Cordova schools during the 2013-2014 school year, and the total per-pupil expenditures for the 2012 school year were $11,603.00, approximately $2,000 less than the state cost per student. It should be noted that while Cordova 's school enrollment trends for the past several years have remained relatively stable, the average cost per student for this period of time has shown a consistent upward trend as noted in Figure 7 (DESE, 2013). The district has minimal diversity among its students as approximately 81% of the students are categorized as white. The next largest demographic subgroup of students is identified as Asian (7% of the student population), followed by Hispanic students who make up 6.8% of the total population.

Figure 7. FY2008-FY2012 Cordova School District Per Student Spending
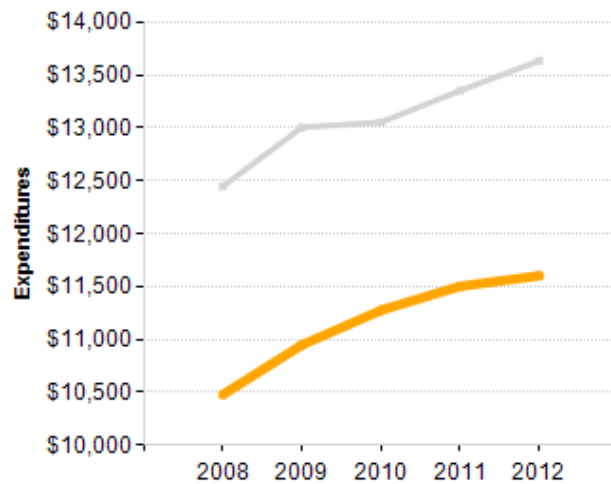
Figure 7: NA Five-year trend of per student spending (MADESE, 2013).

The district has an overall a poverty rate of approximately 30% with two of the five elementary schools enrolling the largest number of high need students. Although the district remains well below the State average for special education with only 14% of their students

requiring specialized services, there has been an increasing trend in the identification of students assigned to this category over the past five years. The student-to-teacher ratio for the school year 2012 was 15.1:1, which is a little higher than the state average.

Transitions in leadership & governance. In 2010, the Massachusetts Department of Elementary and Secondary Education (DESE) assigned Cordova Public School District a level three designation in response to the low achievement of Tyler Elementary School. The school had not met its improvement targets, and the district was continuing to struggle to close the achievement gap between the special education subgroup and the aggregate.

The findings outlined in this audit report explain why, in the letter from the Director of the New England Association of Schools and Colleges (NEASC), the Cordova School District was issued a one-year extension to complete the mandatory NEASC site visit to secure its high school accreditation. The letter states that the high school would be "unable to undertake the self-study" based on the "conditions" of the District. (NEASC, 2006). These events, along with almost a $3,000,000 budget shortfall and reductions in force (RIF) precipitated the resignation of the superintendent prior to the end of the 2006 school year. The district experienced instability for a period of time after this incident and would have four more central office leader transitions before finally appointing the current superintendent who has been in office since 2012. The district has made a great deal of progress over the course of the past few years since the budget shortfall and has been more financially stable.

In the past ten years residents of Cordova have voted to allocate funds to renovate, expand, or build several new schools, including the construction of two new elementary schools, a complete renovation of the intermediate school, and the completion of the new high school and athletic stadium.

In 2012 the transition for the current superintendent was eased as he had previously served as the assistant superintendent for the district. Other stabilizing factors include the promotion of an elementary school principal to the position of assistant superintendent. The current superintendent and assistant superintendent maintain positive relationships with the faculty and have a good reputation in the district. In fact, in all but a single case at the elementary school level, each of the school leaders in the district, including the middle school and high school principals, have served in their roles for five years or more. Teacher transition in Cordova is minimal and the only major incidence of staff turnover in the past five years was found in 2006 (for the 2007 school year) as a result of a budget shortfall and RIF processes.

By the start of the 2012 school year the newly appointed superintendent conducted a series of entry interviews with stakeholders in the community and the schools. Their responses centered around three areas: (1) setting high, aspirational goals for both staff and students; (2) expanding communication; and (3) targeting resources for student achievement and student success (DESE, 2014).

From the onset of his appointment as superintendent, Dr. Murphy focused on establishing a culture of continual improvement of practice toward student learning. Based on the work of Judith Warren Little (1990), Superintendent Murphy propagated a common understanding throughout the district regarding the use of protocols to review student work with the goal of improving instructional practices. Consequently, he has worked to provide the structures to enable collaboration while maintaining the expectation that teachers must collaborate and principals must ensure that collaboration takes place. The results section will delve into the superintendent's vision for collaborative structures and protocols and discuss the district's culture of psychological safety.

CHAPTER 4

RESULTS[4]

This study examined how one Massachusetts district, Cordova, promoted professional growth of all educators. It is hoped that the outcomes of this study offer school leaders insight into ways in which they can foster ongoing professional learning of educators both individually and collectively within their schools. Teachers' and leaders' perceptions and the examination of current district structures and professional growth initiatives revealed leadership practices and supports that appeared to facilitate both the individual and the collective capacity of educators. The results section shares the findings from data analysis to answer the central research question: How are teachers' professional growth supported by their school and district? The sub-questions serve to organize the findings into two sections and allow a closer examination of what teachers and leaders perceived to promote or hinder teachers' continuous growth.

Wenger (1998b) asserts that collaborative communities of practice form naturally in organizations due to similar interests. This study assumed that the district selected for our case study had numerous and varied communities of practice (Wenger, 1998b). The research team found communities of practices that were as varied as each individual in the district. There were many structured communities of practice created at each level of the district, specifically grade level, departmental, district, and building-based leadership teams. While many communities of practice existed, the level of functioning and collaboration between each varied. Additional unstructured "communities of practice" based on alliances and interests (e.g. teachers with the

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[4] This chapter was jointly written by the authors listed and reflects the team approach of this project: Telena S. Imel, Philip McManus II, Maryanne Ryan-Palmer and Christine M. Panarese

same lunch period, teachers newer to the building, or those who have had similar students and have created a support system) were also found to exist in the Cordova School District.

Sub-question 1: What district and school-based supports do teachers and leaders perceive to enable teachers to improve teaching practice and professional growth?

       A district vision that is articulated through clear expectations and modeling.

       Professional growth in Cordova is supported by a centrally developed vision for the district, clearly articulated in a one-page, strategic plan that establishes the direction for all district work. The strategic plan, developed by the leadership team (district and building-level leaders), sets forth a theory of action that is clear and concise:

> If we establish a standards-based curriculum and assessment system with collaboration
> focused on improving instructional practices that engage students to critically think,
> collaborate, communicate, and demonstrate creativity, then we will continually improve
> student learning.

In a one-page format, the strategic plan also sets forth a clear expectation of professional practice for district educators:

> Teachers will address the needs of all learners through the regular use of data, gathered
> by frequent formative assessments and the consistent use of structures to examine their
> practice through the lens of student work, to inform and adapt instruction.

This strategic plan provides a consistent message for district administrators and teachers alike regarding the power of collaborative examination of practice through the lens of student work. The superintendent expressed it this way:

> … that's the structure I asked for. School improvement goals ultimately have to be about
> how will this improve student achievement. In our strategic planning we talk about the

instructional core, student, teacher. It's a triangle. Student, teacher and content make up this instructional core. If what you're doing doesn't relate to that instructional core in my estimation don't put it in the school improvement plan.

The district leadership team outlined the strategic plan and process for implementation on opening day as the Cordova staff began their two-day retreat in preparation for the new school year. In the words of the superintendent:

… teachers will adjust to the needs of all learners through the regular use of data gathered from the frequent formative assessments and the consistent use of structures to examine their practice through the lens of student work to inform and adapt instruction. Again it's very much directly related to supervision and evaluation. But the initiatives that we're trying to focus on…establishing a system of common assessments… implementing and analyzing different models of collaborative time… it's always improving.

The superintendent's vision involves improved practice that leads to student learning. He explains:

I think the vision is ultimately to improve student learning. What do you do to improve student learning? …It goes back to the four questions. What is it we want kids to be able to do? How will we know? What is it we want them to be able to do? How will we know? It's not about what the kids have to do differently. What do we have to do differently?

Through the use of norms and protocols, district leaders consistently communicated and modeled vision and expectation to facilitate joint work. This was evidenced by the observations of leadership team meetings and the collection of district artifacts. Assistant Superintendent

Sullivan also articulated the use of modeling as a means of establishing the need for collaborative structures in schools and classrooms across the district:

> We're [referring to the leadership team] always talking about we want teachers, data teams, to look at student work and teachers to get together to collaborate and share best practices and come out of the caves of isolation. In order to do that it's critical that [the leadership team] model that behavior, and we're kind of the exemplar for that behavior, and I think that's something we've really worked on in the last two years…Rather than telling the teachers: this is what you're going to do…We can't pay lip service to it, we truly have to live that.

> As modeling clarifies expectations, the vision is shared across the district, heightening the capacity of all educators to collaborate in meaningful ways that impact professional practice toward student achievement. One building-level leader reinforced how using common assessments to drive instructional practices is increasing and becoming embedded in the culture of the school:

> But now, I think it's part of our culture… and people are seeing the value … what it means is that it shouldn't matter which teacher you have, everyone should be getting the same curriculum… [teachers] see value in collaborating and working together, and developing assessments.

In an observation of the middle school PLC meeting, this work was visible "on the ground." Teachers in this content area grade level team used a protocol to guide their examination of student work, and made significant changes to their instructional planning as a direct result of their joint work. Led by a trained teacher-facilitator, teachers in this meeting were able to look collaboratively at samples of student work on a teacher-created common assessment, and

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examine the teaching practices that led to the varied student responses on an assignment that was given at the end of a commonly developed unit in seventh grade ELA. The sharing of practices among team members resulted in deepened and expanded instructional approaches to the use of a simple graphic organizer. As evidenced in the following quote, the use of a Venn diagram to promote the identification of text-based evidence was common among each team, but the collaborative and reflective dialogue among team members about scaffolding student learning enabled their collective understanding to become greater than the sum of individual members' contributions:

T1: We did a Venn diagram on the board as a class.

T3: I gave them the Venn diagram…but it started out more independent – what do you recall? And they each did it independently… and then we went over it as a group…and put it up on the board.

T2: We started that way too, and then we took that diagram, and we said ok, find it in the text. Find your textual evidence for this…Let's write it. What page? Take notes.

T1: Oh, we didn't even do that. We didn't go to that level with it, as a class. I like that. I really like that.

In our interviews across all levels throughout the district, a clear and focused articulation of three questions drove the work that Cordova educators participate in collaboratively. "…what do we want kids to know and be able to do....how do we articulate that? How do you we know they're learning?" With a focus on these questions, Cordova Public Schools connects the vision of continual improvement of practice to a relentless focus on learning for all Cordova students.

District supports for a culture of psychological safety. "Classroom observations can be a powerful tool" for improving classroom instruction and advancing the professional growth of all educators (MET, 2013, p. 16). Several district and school leaders articulated a belief that creating a learning environment that is psychologically safe contributes to teacher development. One central office administrator articulated his positive intent with the educator evaluation tool when he stated: Supervision and evaluation isn't a tool of getting rid of teachers, it's about improving instruction. . . and develop a nice relationship, we're all in this together.

One principal explained how she attempts to foster a culture of safety so teachers in her school would not be afraid of taking instructional risks:

> I might not know this or I'm going to make a mistake here and it's okay and for teachers to know that too. Teachers can be very hard on themselves. We're trying this new writing program . . . So you know if you have to go slower, you have to figure it out, you have to modify it. It's all O.K. At least we're doing something, you know, so that's a kind of cultural.

One veteran middle school teacher shared how teacher walkthroughs contribute to this culture:

> . . . Again, . . .it's become a culture. It's normal. It's not that once or twice a year where somebody comes in and they tell you and… you're ready with your lesson and tell the kids this is a walkthrough. It's what's happening at that moment and it's [feedback] so useful.

Thus, there appears to be a concern for the psychological safety for adult learning, as well as student learning. We found a common perception that everything teachers and administrators in Cordova do is guided by "just what is best for kids." This shared belief helps to buffer any negative impact, which might result from staff expressing differences of opinion. Multiple

respondents articulated their responsibility to model and adopt a value-based district mission. For instance, RAISE is a program in the district that promotes character building and civic responsibility among students across the district. A middle school teacher leader articulated the district values she thought promoted psychological safety for teachers and students:

> We do have the whole… the RAISE piece that is for the children. So that, it stands for Respect, gosh, I can't think of the A, Inclusion, Service, and Empathy. And those are values that I think we as a staff try to uphold and also pass on to our students.

At the elementary level, an administrator supported that same belief about psychological safety:

> . . . in Tyler, we've incorporated those into a school constitution that all of our students have signed. So, that's kind of… the values of it, the vision going forward, I think we are always striving to get these kids the best education that we can give them… it's part of the culture of the school.

Evidence suggested that district administrators worked to minimize the negative impact of the new mandated Massachusetts' Teacher Evaluation Tool. As noted by a central office administrator, ". . . we're really ahead of this. We developed a new tool a couple years ago . . . It just needed minor tweaking [tool]." These district actions helped to preserve and foster a culture of psychological safety for educators. The care evidenced in rolling out the evaluation tool was most evident during the observation of the summer leadership retreat in August of 2013. During that retreat, administrators spoke of the collaborative work with the union on the design and implementation of the district evaluation tool (See Appendix F).

There was also evidence that some administrators modeled collaborative learning in the implementation of this new educator evaluation system:

We also did a ton of work with the supervision and evaluation committee, which consists

of teachers from every level, the union president and principals from every level around

using the tool and what the philosophy [intent] is. We spent hours and hours and hours

going every page of that tool.

Summarizing the superintendent's views, which were corroborated by other respondents,

Cordova appears to have escaped some of the negative pushback and teacher overload that some

districts in the Commonwealth experienced when Massachusetts mandated the Common Core

standards and new Educator Evaluation. They accomplished this by purposefully scaffolding the

implementation to show the interconnectedness and provide focused strategic action steps.

These district actions may have contributed to a school and district culture of safety and

relationship-building that is important for the development of collaborative instructional

investigations into teaching and learning. These actions also helped structure the use of this

evaluation protocol (See Appendix G) to support educator professional growth.

District supports that provide opportunities for educator leadership. The philosophy and

intent behind the work of professional learning communities is to transform the culture of the

district by shifting educator mindset from one of instructional isolation to one of collaborative

inquiry that fosters academic dialogue and instructional risk-taking, leading to broad-based

instructional leadership. The role of instructional leadership is not limited to include school or

district administrators (Leithwood et al., 2004). At some sites, researchers found evidence of

effective distribution of instructional leadership in Cordova, which resulted in the creation of an

environment of student and organizational success. Such practices included individual and

collective efforts to complete tasks involved in the monitoring and improvement of teaching and

learning.

Evidence was found that Cordova administrators viewed educator learning and application through the concept of "educator as researcher." Staff who attended external, high quality, evidenced-based professional development sessions were encouraged to return to the district to provide professional development workshops on what they had learned and to share their experience. A lead teacher shared his experience:

> So we went to this special education summit in the middle of October and it was like knowledge is empowering and so it was a bunch of attorneys. There were like five presenters and they pretty much ran us through many facets of what our job entails and it wasn't just ETLs, it was SPED directors, assistant directors, principals but those legal things that we face. And so I felt very empowered and I feel… the meeting went well.

A teacher respondent echoed another opportunity to engage in external professional development in this statement:

> . . . we started a new writing program. I was fortunate enough this summer to go to the Home Grown Institute through Teacher's College Reading and Writing Project with a bunch of my colleagues from here, and start the whole Lucy Calkins Writer's Workshop in my classroom.

The teacher provided information that professional development in Cordova is an ongoing cycle of inquiry that is expected to be shared beyond the district as well:

> The writing course, which is also, not only did we do it this summer, but it's continuing with the PLC throughout the school year, which has been great. We're actually working with teachers in Bluestone, so we meet every other month either in Bluestone or Cordova. We just met last week. It was great to sit down with other kindergarten teachers and say 'oh, I did this and it really worked' or 'how are you setting up in the classroom, because

I'm doing this and it's just not working,' just to sit down and bounce ideas off of each

other, share what we've been doing, that kind of thing.

By creating and maintaining a culture of teacher and administrator empowerment, positive

relations and psychological safety, Cordova nurtures the continued growth of all District

educators. By granting the request for teachers to go observe and discuss other districts' writing

practices, the District has committed resources and time to support this educator's instructional

inquiry and risk-taking.

> ***District support of ensuring approachability of administrators.*** The Cordova School
> District has made progress in establishing the conditions necessary for teacher engagement in
> collaborative conversations around student work and curriculum inquiry and instructional risk-
> taking. Administrators and teachers offered testaments to the District's cultural evolution:

> For instance, I do believe some of the best movement in practice has occurred over the
>
> years at the middle school. But we began training facilitators in protocols six years ago at
>
> the middle school and they really bought into it, more so than anybody else. The high
>
> school in the past two years has. But, again, you see you're working.....counter to culture
>
> and we all know high school cultures are tough to move. They have been relentless over
>
> the past year and a half in the use of protocols to have those discussions. You will see
>
> over time the belief is changing.

One teacher supported this statement.

> So, as a kindergarten team, at the end of last year, we sat down with the reading teacher
>
> and with Noreen and, you know, they kind of said to us, 'this is what's working; this is
>
> what's not; this is what your literacy block is going to look like next year.' .....I said, I've
>
> been doing this work board. I feel like it's chaotic; the kids aren't getting anything out of

it anymore....I was looking at the Daily 5.' 'Oh, they do the Daily Five in Beantown.…

maybe I can talk to the teachers there and arrange a visit.' So, we went….

A psychologically safe environment assists in motivating educators to initiate and direct their

own professional learning (Knowles, 1980). Also, this culture of safety provides individuals the

opportunity to learn from their errors without any worry of reprisal or loss of self-esteem. The

data indicate that Cordova supports innovative instructional practices and encourages their staff

to take instructional risks. School leaders, who model openness and understanding, send the

message that sometimes we fail but we are able to learn from our mistakes through the reflection

processes that lead to improved instructional action plans. A teacher shared this reflective

process and demonstrated how it led to a change in her instruction:

I think one of the times is when you plan something out, and it goes nothing like you

anticipated, and you really have to take a step back and say 'Wow! That really didn't

work!' One of the things that I did this year in going along kind of that whole responsive

classroom thing: those first six weeks of school, I stepped even further back than I ever

had in practicing routines with my students. And I have to say: it really has made a huge

difference, I think, in the behavior and in the functionality of my classroom.

Another teacher underscored the supportive relationship with her principal:

Again … this is her second year here as principal, and I think she has been, for me

personally, very supportive both informally and formally. You know… her door is

always open, if you need to just check in real quick. I think she's also a very good

communicator, which is very important in a leader. You know, if there's a problem, she'll

let us know what's going on, or, you know, help, if it's something (in the) classroom,

she's very quick to help resolve it. So, I couldn't be happier with her leadership that she's shown.

Support of teachers by principals allows them to feel validated in their work.

Teachers are not the only educators to experience freedom to direct their individual learning and professional development. One building level administrator validated the actions of a district level leader modeling of collegial, collaborative discussion and healthy approachability by encouraging others to investigate their instructional ideas to direct their professional growth. By prioritizing time to listen and discuss an administrator's innovative idea, this district-level leader modeled collegial respect for educator expertise by the prioritization and allocation of his time and attention. Such demonstrated leadership actions nurture educator growth and foster respectful learning partnerships by first establishing the conditions of respect for expertise, trust, and autonomy. By enabling teachers and school-based administrators to use their expertise to create their own professional development opportunities, district leaders provide a venue in which they are able to grow future teacher leaders where they can share this learned instructional and content area expertise with others. The following excerpt reveals how Cordova provides these teacher-leader learning opportunities:

> I feel like if I talk to Murphy or Sullivan about something that I'm interested in ... (for instance) no one else was talking about the reading and writing project, and they supported me going in. We went over for verification and got sort of my first taste of that. They supported the institute. They've supported the PLC with Bluestone. They've supported me going to the leadership. So definitely, if I bring something forward, I think they've come through, and Murphy was really pleased when he saw the kids reading and the stamina and looking at that whole Daily 5 piece. So I definitely feel like if I have

some ideas and, you know, can talk about why I want that to happen, they definitely have

been very supportive.

Nearly all educators interviewed provided data to support that a collaborative, collective, and

commonly shared vision was a district expectation. These district supports are characteristic of

what Little (2006) describes as an established professional learning community.

These research findings support the belief that the district values and respects the

expertise and professionalism of their faculty. It was also found that the central office leaders

possess the same belief and confidence in their site-based administrators to be experts and

credible instructional leaders. This was evident when one district level leader was willing to

listen and collaborate with a building-level leader around a curriculum issue. A site-based

administrator confronted the content inadequacies of a newly purchased reading program with a

District leader:

When I came here as a SPED person, they had just adopted the Reading Street program.

I have a special education background, so I have a fair understanding of reading and

reading development, in terms of programs, not so much. My gut feeling, when I saw

that, was I had concerns about how and what they were reading. There were also benefits

to the program I felt. There were good things I saw. So we, over the course of time I've

been here, we're working, and Murphy has approved this, that Reading Street is more of a

resource than a program. Because when it first came, the people were trained and they

had to use it by the book. I also have started doing a lot of work with writing.

This passage demonstrates that leadership permitted teachers to modify a scripted curriculum,

thus valuing their expertise and knowledge about their students' learning needs. This principal

shared the ways in which empowerment filtered down to improved instructional practices within the school.

> We've formed a PLC with Bluestone. We shared the training with the Bluestone teachers. We had our first meeting two weeks ago. We have another meeting coming up in November, so there's some really exciting work coming out of that. . . . I attended the training myself with the teachers, because how can I support them if I don't know what the expectations are.

This type of administrative action builds teacher efficacy and supports curriculum decision-making as teachers collaboratively accommodate the needs of students in their implementation of the newly adopted reading program. This type of embedded group learning facilitates the building of what Hargreaves and Fullan (2012) call "professional capital," which is a more advanced form of a professional learning community in which teachers "challenge each other as well as challenge their leaders as part and parcel of the give and take of continuous learning (p. 132). It is clear from strategic actions described in staff interviews that district leaders fully embraced the responsibility and commitment to create conditions that support collaborative inquiry about curriculum. These supportive behaviors enable district leaders to advance to the next level of collaboration on Little's continuum of collaborative practices.

Administrators interviewed shared a collective belief that meeting time for teacher collaboration should be preserved and that "staff meetings" should be eliminated or kept to a minimum. Most school-based leaders provided evidence of a general agreement and shared philosophy to protect the use of after school time for meaningful collaborative purposes:

My experience with teachers has been if you provide them with quality professional

development and you work on those types of things, they feel more empowered, and I

think that's critical.

District support for relationship-building. Relationship-building appeared to be

prioritized at all levels within the Cordova School District. One new secondary school educator

shared the support he receives from his principal:

It's a very… safe feeling that we get from people above us. It's very nurturing. It seems

like I've never gotten the vibe that, I don't really know how to say this stuff. I personally

haven't been encouraged to go out and start this stuff yet, but they know where I'm at in

school and my own education.

Another novice teacher explained how the school leader facilitated her professional development

by taking on the unofficial role of mentor. By investing time and interest to observe her

instruction and engage in open, nonthreatening, academic discussion, the teacher developed a

positive perception of the leader. The teacher recognized the time and effort expended by this

building level leader, and valued the benefit she received as a result, and noted that "she will

come into our classrooms. She gives great feedback, is always willing to help out with things, so

I think, you know, that's kind of another example of a mentoring program." This type of caring

behavior creates positive interactions among staff and works to establish trusting relationships

that welcome disagreement within a context of respect and professionalism. A building

administrator explained that on one hand she knows she must create a healthy school culture; and

on the other, she must have collective and individual accountability for student and teacher

growth. This creates a tension she faces in balancing the delivery of positive and negative

feedback. Feeling empathy towards her staff and preserving the trust she established, one

administrator noted how "difficult it can be to give very explicit, very clear feedback" and how she did not want anyone to feel like they were "doing a bad job, or not trying hard enough, or any of those things." She elaborated on how, although she continues to work on providing feedback, "One of the things I think I have in my favor is I think the teachers here trust me, so you can't do that if you don't have that trust there."

One district-level leader provided insight into the internal and external forces that facilitate the development of positive relationships as part of the District culture.

. . . So community- wide I think we've done more with less, but it's also a place where people have created a culture and a community that they care for each other. They care about our students. They're passionate about many things in this community. Parents are supportive, and I would say that teachers really go the extra mile to help folks out when they need it.

By fostering a culture grounded in positive relationships and collegial support, principals and district administrators appear to have built an atmosphere of collegiality and collaboration. In order to do so, building level leaders have taken the lead in developing a supportive atmosphere for their teachers, and teachers in turn work with each other collaboratively.

Sub-question 2: What leadership behaviors and structures at the school and district levels do teachers and leaders perceive as most beneficial to improvement in teacher practice and professional development?

Since collaboration is a major focus and vision for the district, the superintendent holds each member of his leadership team accountable for ensuring that structured and unstructured collaborative practices take place around improving teaching and learning. The superintendent believes that principals are responsible for facilitating, encouraging, and supervising

collaborative behaviors, including grade level meetings, departmental meetings, or other group meetings to review student work or examine data.

Collaboration as the focus for improved instruction. The superintendent in Cordova has adopted Judith Warren Little's work as the main focus and vision for his work in the district with teachers. Collaboration is a standard, an expectation and, in his words, a "non-negotiable." New teachers, from day one of orientation, are told of Little's research and given the expectation that teachers in the district are expected to collaborate with each other with the goal of improving instruction. In turn, district leadership not only facilitates collaboration among building leaders and provide the structures and opportunities for it, but also expects principals to lead and facilitate collaboration in their own schools. The superintendent believes in the importance of collaboration with the purposeful creation of and support for regular, meaningful, collaborative meetings with job-embedded professional development. One new teacher notes:

> … the professional development that's built in is huge if you're a new teacher because you're going to learn so much from the onset about what you're doing in your classroom and what it looks like in other classrooms.

A high school teacher describes the structures in place for collaborative meeting time:

> ...last year the collaborative time was in the morning... It's done informally, but it's definitely happening… if you come to my office any morning it's like Grand Central Station… Then after school people might have questions or come in. A lot of people stay here late... We also have interdisciplinary classes... Those teachers are always collaborating as well because they're team teaching.

While each school in the district differed in terms of the structures present, frequency and effectiveness of collaborative time, teacher participants identified the principal's use of faculty

meetings as a time to think about their practice and learn how to utilize other collaborative times more effectively. All participating teachers and administrators unanimously identified collaboration as critical to improved practice and their development as reflective practitioners.

All participants, from teachers to the superintendent, expressed strong positive feelings about the importance of collaboration in improving teacher practice. The superintendent shared his view on the importance of collaboration for ongoing teacher growth and improved student achievement:

> I spent a number of years talking about levels of collaborative practice with the rubric that was developed with Judith Warren Little's work. Only joint work, which is really the work of what PLCs really are. When you get to that level… we're highly collaborative. So putting those elements together is absolutely critical for the leadership team, critical for teachers, and most importantly all teachers need to know that we're all involved in the same type of work. Some levels (and) some schools may be at a higher level right now than others, but were all moving in the same direction.

For district leaders collaboration is not a choice but rather a requirement. Leaders could determine the timeframe, but not whether or not collaboration will occur. The superintendent was not shy when he shared that "this is not the place for you if you will not collaborate." Building leaders also emphasized the focus on collaboration. One principal stated,

> I look at [collaboration] as it's the foundation. And, the more they [teachers] do it the better they get at it. And my job is to make sure they do it and continue to explore student work. And the more they become comfortable, and the more they work it through, the more apt they will be to improve their practice.

This principal perceives her job as facilitating the practice of collaboration and ensuring that it occurs. Results do not offer data to support that the leadership team collaborates without the facilitation of the superintendent. Furthermore, this principal supervises collaboration among teachers and helps when necessary, although there is no evidence to support that she is in a position to act as a peer collaborator. A building assistant principal shared ways that teachers can practice collaboration as well:

> [Collaboration] is a tremendous piece of their professional development, and again I keep going back to these planning periods. Teachers have a subject plan. They have the team plan. If they are on a team that has a co-taught special education teacher on it they have a plan to meet with them and it's all about collaborating. So they have collaboration to talk about students who are progressing. They have collaborations to talk about their core content with their colleagues. There is opportunity for collaboration every day.

The assistant principal discusses how collaboration is critical piece of professional development for teachers, and the school has built structures into the school day to allow for collaboration.

Teachers highlighted the specific impact they perceived that collaborative discussions with other teachers had on their practice. A novice teacher shared that her professional learning comes from "just sitting in and talking with them about what they've done and what not… That's where the bulk of everything is coming from just learning firsthand what they've done… what works, what doesn't, what can I do…Collaborative practice was viewed as contributing to his development as a novice teacher and improving his instruction. Another novice teacher discussed the importance of collaboration in her instruction:

> This is the school I've done the most collaboration with… the autistic behavior program… the outside extracurricular stuff like... geography, the musical, everybody in

the faculty is so good about helping each other out. I kind of wish that the other teachers had moments where they could come and sit in my class for a little bit and see what the difference is, but that's a hard thing to do with their own classes too.

As evidenced by this novice teacher's response, collaboration is a culture encouraged within the building. This response honestly discusses that persevering through these tensions is ultimately valuable for teachers. Another veteran teacher stated her view succinctly, "I just think collaboration is one of the key elements of professional learning." The face-to-face meetings and sharing effective practices is important. As this teacher noted, it does not just happen, one has to persevere for collaboration to occur meaningfully.

    School-based collaboration. School-based collaboration, including grade level or department and faculty meetings and early release days for professional development, provided opportunities for teachers to work with each other. Teachers and administrators from elementary through high school believed in the importance of collaboration; yet, how time was scheduled for collaboration and the topics that teachers addressed during collaborative time varied by level. Topics commonly addressed across levels included reviewing student work and curriculum planning, including standards-based unit development, common assessments, and adjusting to the common core standards.

    School-based structures for collaboration included grade-level team meeting time during the regular schedule in the middle school; teachers are provided with 45 minutes per week to meet as a department. In the high school, department meetings are held regularly. The elementary level provides a once per month meeting time of 30 minutes for teachers to meet, facilitated by the principal. The district scheduled three professional development days before the school year began and scheduled one early release day per month.

The superintendent acknowledged that principals need to play an active role in promoting a supporting collaboration, but it will not just happen. Principals also require guidance and support to be able to lead effective collaboration in their building. Therefore, the superintendent discussed the importance of modeling the use of protocols to facilitate collaboration with his leadership team. This type of leadership behavior allowed principals a place to learn how to foster a collaborative atmosphere while demonstrating the superintendent's role as an instructional leader.

In their interviews principals discussed how they fostered collaboration through team meetings. For instance, the middle school principal shared how she both measured and supported her teams' engagement in meaningful collaborative work:

When I look at the social and emotional growth of the teachers, when I look at them in collaboration, I looked at some groups just sailing and other groups really struggling. The ones who struggle I go to all of the meetings. The ones who sail I stop in and they ignore me. It's great and it's the best compliment I get when I walk in and they don't even bat an eyelash, they just keep going and that's one of the growth indicators for me.

Recognizing that some teams struggled with collaboration while others worked easily, the principal realized that struggling teams just needed more support and guidance while others did not. The middle school was widely regarded by district leadership as having the most advanced levels of collaboration when considering the frequency and meaningful use of collaborative time. Participants from the middle school and central office regularly referred to the varied forms of collaborative time scheduled at the middle school. One teacher shared, "They developed a schedule like three or four years ago where they rotated it through. They did a really good job. So you get a team and a department every week and that's on top of either afterschool meetings

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or professional development half days." An administrator shared, "We have shifted from the traditional team plans as a priority to the [departmental] plans, so every week every subject area meets and it's scheduled and they have 'do notes' and they have to share." A middle school teacher new to the district referenced the value of the weekly team and departmental meetings noting, "It's definitely improved [my practice] definitely, definitely, definitely. If I had been taken out of those meetings I wouldn't be as good a teacher as I am now…. It's really been crucial." This teacher provides a strong view of the importance of the team meetings and how they improved her practice. As demonstrated by the middle school teacher's quote, the meetings were perceived as a structure to help teachers grow professionally. The value of these collaborative meetings is clear among all teachers and administrators with varied levels of experience.

At the core of collaboration is the need to improve instruction and student learning, and the principal highlights this goal. In addition to trained facilitators, the middle school administration makes attending collaborative meetings a priority. Teachers also highlighted the attendance of administrators during their collaborative meetings. The principal noted:

> We have structured ourselves, the three of us, where we attend them, as many as we can. I discovered last year accidentally, that even though I didn't do anything, my presence made the teachers feel like this was important. The same thing with my assistant principals… And so by us coming or going to those meetings, it right away brought it from, 'oh my God, do we have to do this' to 'this is important.' And this was huge. This was really big.

The principal fostered a collaborative atmosphere that focused on the value and significance of the work. Her presence served as reason enough for teachers to take the work seriously. While

not all schools worked at the same collaborative level, the superintendent maintained collaboration as a district goal.

The superintendent, leaders, and teachers established a collaborative mindset through work, protocols, and structures, thus creating common assessments, reviewing data, and building professional development with students at the center of their ongoing, collaborative practice. The superintendent further explained that his experience has taught him that engaging in true collaborative work, such as looking at student work, creates trust faster than anything else. He notes this below:

> It was interesting when I was first coaching critical friend groups we were doing a lot of falling into your arms, all this type of trust activities. The first time, after couple of months, we used the protocol to examine student work. One of the teachers, who is the most reluctant to do anything, said 'that experience built more trust in 45 minutes than we have done in the past three months.'

Building trust takes time and practice, but the superintendent perceives that the quickest process for building that trust and creating a safe environment was by utilizing protocols to examine practice though the lens of student work.

Teachers engaged in collaboration with colleagues across schools:

We usually meet with our (subject area colleagues) on PD days… and I find that really helpful.....What are the high school teachers seeing that we need to work on at the middle school and what are the middle school teachers seeing from the elementary kids coming up… I'm seeing that the kids really don't understand this and don't understand that. That's really helpful within the district stuff.

By providing structures for articulation across the district, district leadership fostered a collaborative atmosphere between all levels of teachers. Without these formal structures it is highly unlikely that teachers would have been able to meet and collaborate regularly. A secondary teacher explained the meeting structures in place at his school:

> Monday is team time and then Tuesday through Friday is the department. They rotate departments through Tuesday through Friday. Whoever has a department meeting doesn't have lunch duty. So they have their lunch and they get a prep and they alternate that out. Yes, they developed a schedule like three or four years ago where they rotated it through. They did a really good job. So you get a team and a department every week and that's on top of either after school meetings or professional development half days.

These structures established valuable and productive time for all teachers, but one teacher described a limitation to his collaborative time. He felt that more time to meet with teachers in other grades or vertical collaboration would be beneficial.

> They want us to collaborate. I wish, we have to fight to collaborate vertically, top to bottom. That's a battle to get [grades] five with six and get eight with nine. That's really hard. I wish that was done more and there's a new thing this year, a new initiative to link eight to nine.

> A secondary teacher also discussed his department's interaction with the principal during department meetings, and how she checked in to monitor the team's progress and refocus them:

> [she] will come to a lot of meetings, a lot of department meetings and she'll ask opinions but there's usually something coming from above so she's kind of saying, okay, but this is where we're going and this is what we need to do… She does take our feedback… But

sooner or later the teachers can, there has to be decisions from above and I think that's

okay. But they seem pretty open with us.

The district's initiatives concerning common units of study and assessments are set as a top

down structure for building leaders to facilitate and monitor the work completed at the teacher

level. Principals nurture the development of team effectiveness by differentiating their support

and involvement, thus giving more direction to teams who are still internalizing the use of norms

and protocols (See Appendix H) while leaving more skillful teams to work independently. A

secondary principal discussed teams that work independently:

......some groups just sail and other groups really struggle. The ones who struggle, I go to

all of the meetings. The ones who sail, I stop in and they ignore me....it's the best

compliment I get when I walk in and they don't even bat an eyelash, they just keep going.

Another secondary teacher explained collaboration in her school, focusing on informing practice

through student work and sharing good practice and supports that promote student learning.

…we are a thoughtful faculty who looks at student work to inform our practice. That we

collaborate so that we share good practice with each other... I think that kind of like

positive collaboration brings about a great deal. We have collaboration probably once a

week about an hour at a time… we look at student work that way and we also look at

assessments that way.

The assistant superintendent modeled this continuum of inquiry into student work by

sharing the MCAS student achievement data with the high school leadership team. A department

head brought the data back to her team for collaborative problem solving and action steps, which

would adjust the curriculum to address student needs:

Two weeks ago I looked at the MCAS data with the leadership team. Then based on those scores and what I saw, I ran off the long comp from kids… and we as a department looked at that. So like what do we need to do to challenge these kids more so that they do better on the Long Composition.

This experience of using data to inform instruction exhibits a high degree of collaboration with colleagues with the ultimate goal of improving student outcomes. Structures across schools aided in this collaboration.

We have early release days, so the kids get out on Wednesdays, I would say twice a month at 1:00. We have from 1:15 to 2:15 to collaborate as a department. On the half days that are usually through the district, district-wide half days, most of that is collaboration.

Two hours a month is specifically devoted to collaborative time with department colleagues on early release day in addition to weekly meeting times.

As part of the district's vision, collaboration permeates the culture and fabric of the faculty and administration in Cordova. Teachers live out the vision through collaboration in their professional lives. Furthermore, the district provides the structures and conditions conducive to collaboration among teachers and between administrators and teachers.

Prioritizing time and resources for collaboration and professional growth. The Cordova School District has faced fiscal challenges for the last several years which have resulted in reductions in staff, increased class sizes across all levels, and restructuring of programs in order to maintain services. The district's constrained budget has resulted in difficult choices. The district has a number of part-time professional staff including part-time specialists at the elementary level and a kindergarten coordinator that works one day a week. One teacher shared

that in recent years the number of special education team chairs have been cut and this has impacted her caseload from fifty students to one hundred thirty students. The one elementary school that participated in this case study has lost five of the six teachers and tutors who provided reading support and both the math teacher and tutor positions have been eliminated in the last five years.

All participants acknowledged that school and district leaders made collaboration and professional growth a priority. Participants identified time for collaborative meetings and the development of skilled facilitators at each level to structure these meetings as priorities within the district. The training of teachers as facilitators at the elementary level has not taken place. As a result, elementary principals are facilitating grade level meetings or the meetings are informally structured without the benefits of shared norms and routines. The superintendent identified increasing the number of skilled facilitators to lead grade level collaboration and curriculum development especially at the elementary level as a priority area. In spite of this recognized area of need, there was strong understanding and appreciation of the administration's continued efforts to expand and enhance the quality of collaborative, job-embedded, professional learning. Yet many participants identified limitations in district funding as a barrier to collaboration and improved practice.

Allocating an increased number of early release days for professional collaboration was one of the ways the district enhanced a structure to prioritize time for professional growth. One principal shared:

> We actually didn't have half days every month when I started here seven years ago. I think we only had three. So over the years they've made it a priority and they've gotten the community to recognize that although they don't like it, that teachers need time to

work together on either the curriculum or improving their practice and you can't expect

that to happen during the school day…So I think the district has done a good job putting

that message out there, if this is really what we value then we have to give people time to

do it.

The superintendent explained how prioritizing time through early release days resulted in a

broader understanding and acceptance of the need for faculty to work together. "The school

committee … used to complain about early release days. Parents used to complain about it. We

have added more. The committee is not complaining because we have them sold on the idea this

is what you need to do to improve professional practice."

The middle and high school have created structures in their schedules with additional

early release time that allows teachers to engage regularly in facilitated collaborative meetings.

During the school day, as a benefit of a middle school structure, middle school teachers meet

together weekly, not only as a grade level team but also by content area. The high school held

weekly departmental meetings during the 2013-3014 school year, but due to teachers' concerns

about meeting times, teachers and administrators negotiated a mutually agreeable compromise,

which allowed for regular and meaningful opportunities for departmental collaboration. As a

result, the high school has two early release days per month which allows teachers to meet by

department two hours a month. Both teachers and administrators identified this compromise as

testament to the shared belief that collaboration is valued and important to continued teacher and

district growth. One high school teacher explained:

We started… last year with collaborative meetings twice a week. It was difficult because

it almost got in the way of (our work with students) …There was a concern about that

and they did get together with the union and talked about what can we do, how can we do

this better. So … they came to an agreement and every two weeks we get out at 1:00 at the high school and meet in professional development with the professional learning communities and continue the work in an hour and fifteen minutes. So rather than having two 25 minute times during the week, which was very hard with teachers because it brought them right up to the time their class started … So now we're at the every two weeks 1:00 dismissal.

Conversely, administrators and teachers highlighted that the elementary schools have the least time in their daily schedule for collaborative meetings and rely heavily on eight early release and four full professional development days each year to do collaborative work. The superintendent reported that each elementary school had varied ways of assuring collaborative time for grade levels to meet. The elementary school participating in the study assigns specialists to rotate through classrooms during morning meeting in order to provide grade level teachers thirty minutes to meet with grade level teachers. Elementary school participants referred to common planning time with the principal, which occurs once every three weeks, as the most structured and consistent collaboration within their school. In addition, teachers on the same grade level have one preparation in common which they may choose to utilize for collaboration, but it is not required. The superintendent explained in his interview that he believes there is a need for more collaborative time at the elementary level and shared one specific solution to provide an additional preparation time for grade-level collaboration. By hiring librarians at the elementary level he would create an additional 45 minutes per week for elementary teachers to collaborate. Yet, he shared that the challenge is a financial one and unlikely to materialize, as it would require an additional $120,000 in the budget.

The actions taken by principals to prioritize time and resources for professional growth and collaboration were perceived as critical, especially during tight budget seasons. The middle school principal shared how she prioritized collaborative time through difficult budget years:

I made a significant shift [to the master schedule] quite a few years ago …because I valued [collaboration] … I preserved collaboration time … even through the bad budget years, I would not touch it… in the past couple of years the schedule has been pretty much the same.

While participants identified different areas for improvement based on their position, they recognized that professionals with a learning mindset would always identify areas where more time and resources were warranted. One participant characterized it the best.

I would say that the negative piece of it is that teachers just don't, even though they have planning periods and they have team planning, there is just not enough time in the day, for all the initiatives that are in place for them to feel like, while we're moving forward with something, there's just always something else. You never feel like your work is done. It's part of the nature of the beast.

Administrators also prioritized time by creating narrowly focused professional learning activities or school initiatives. The majority of participants referred to the use of faculty meetings as time utilized for collaborative learning to meet district goals and initiatives. Additionally, the middle and high school principals both meet weekly with their department heads and academic coordinators to discuss the current initiatives and provision for upcoming collaborative meetings.

Participants also provided examples of administrators valuing teachers' time and energy. One middle school teacher shared his appreciation of the principal's leadership during the previous year's failed attempt to adopt and implement a standards-based report card.

Most of us said we are going to buy in. It was a lot of work and then once we got

kickback it stopped. It's a shame …and I've got to admit (the principal) recognized that

we were exhausted. So she backed off. I think she did a great job. It was one of her better

moments as principal.

One principal shared a misstep in rolling out the process for standards-based unit development

and common assessments and the ways in which that incident reinforced her obligation to

provide the resources and support to enable teachers to meet the professional expectations of the

district.

We looked stupid at a few points to the staff, like, yes, we wanted you to do this and now

we're going to tell you, no, we're not going to do that anymore. And so we've tried to be

very conscientious about not putting anything out to them until we vetted it all the way

through. We all understood it and knew we could explain it to them, because otherwise

it's not a pretty picture.

The principal's perception alludes to a level of confusion in the rollout of a district initiative.

Data collected did not detail the central office role or the role of teacher leaders in the planning

and implementation of these district initiatives. It may be worthwhile to examine how

professional development planning occurs between district and building leaders. Participants

from the secondary level highlighted how department heads (at the high school) and academic

coordinators (at the middle school) have been beneficial to the advancement of collaboration and

job-embedded professional learning. Because the elementary schools do not have grade level

leaders or identified facilitators, they have struggled to create sustainable structures that might

support collaboration and professional growth. The superintendent acknowledged the need "to

create a more equitable distribution of curriculum support" and shared his struggle with

maintaining the department head structure, which he viewed as "only contribut(ing) to the high school" and not "the system" overall. While the data does reveal a gap in curricular support at the elementary level, the teacher and leader perceptions at the high school showed a connection between the facilitative, instructional leadership role of the high school department heads and the effectiveness of collaborative meeting times.

   Use of protocols and facilitation to increase effectiveness of collaboration. Professional development in Cordova cannot be separated from collaboration or expectations for teachers and administrators alike as a district strategy to improve teaching and learning. The superintendent characterized professional learning opportunities within the district as part of "a disciplined, facilitated conversation." Cordova administrators have focused professional development resources and energy on developing facilitators and training staff in the use of protocols to increase the effectiveness of collaboration and professional growth. One teacher shared the process her department regularly utilizes using protocols to keep the conversation focused on instruction to improve student learning: "As a department, we look at common assessments (at the) grade level, and then after we've done that we look at common assessments within the department as well. Like what have we learned." She further explains how protocols have allowed her department to regularly examine student work:

   For the last maybe six years we've looked at student work as a department … to make
   sure that we're all on the same page… We're in the process now where each one is
   bringing a problem with a student to the table and we discuss that as a whole group.
   We've done strategy shuffle with them like, "what do you do when you have an issue?"
   We write it on a piece of paper and everybody adds a bit of advice.

The superintendent explained how protocol use came to be widespread in the district:

....the DI course was designed around....using protocols for … looking at student work, but it's really looking at the teaching practice through the lens of student work… the second year around they created a critical friends group....(and) protocols for text-based discussions … it comes down to a disciplined facilitated conversation.

The superintendent viewed protocols and facilitation as inseparable from and essential to the depth of learning and change that can occur within a team as well as the overall organization.

We have to be seen as leading the charge through a systematic structure. That's why protocols are critical because it's about a disciplined conversation; that will get us from "What does the data say?" to "Where do we see kids need to improve?" to "What are we going to do differently?" We can't stop at the data.

A middle school teacher shared that the agendas and protocols have created a focus for the collaboration time in his department. He also shared a challenge he faces in sticking with the protocol he is charged with facilitating; "The principal … will often set the agenda and we know what we need to do. Some departments are better than others at holding that and sticking to protocol. That's one of my weaknesses…" He further explained that he is a team member and wants his voice to be heard equally with his peers; therefore he is flexible with the protocol.

While the majority of participants referred to protocols in their interviews, there was little discussion of the frequency of protocol use or how protocols were used within collaborative meetings. Teacher participants from the middle school and high school referred to protocol use more than elementary participants. One high school teacher shared an example of how a protocol which was used following training helped her share new knowledge with her department members.

I came back and I just did … a museum walk… I learned about bringing content literacy into the classroom based on the common core, and so the teachers walked through that… I have a list of things they want to know more about that we haven't been able to address yet.

In addition to consistently scheduling collaborative time, the middle school, which trained facilitators and embraced the use of protocols six years ago, has continued to refine the use of protocols to make school-based collaboration effective. This use of protocols has brought them to the level of "joint work" (Little, 1990) on a more frequent basis than the other schools in the district. The middle school has academic coordinators, which are stipend positions "to help move forward with curriculum planning and instructional practice." The coordinators meet weekly with school administration "to discuss steps we're taking in each department and school-wide to move forward." The superintendent confirmed what the middle school teachers and administrators highlighted: "I do believe some of the best movement in practice has occurred over the years in the middle school. But we began training facilitators in the protocol 6 years ago at the middle school and they really bought into it, more so than anybody else." A middle school principal shared her stance on utilizing collaborative meeting time.

I try to structure my teacher meetings all through the lens of student work, student improvement and improving practice. Rarely do I stand up in front of my staff and have a faculty meeting, rarely. It's always connected to student learning. Everything else is done through a different vehicle of communication. I try to show them that if we're going to have a face time meeting it better be about student learning. It's about that kind of stuff. I try to, not always, it doesn't always work, but that's what I try to do.

Data collected at the one elementary school in the study revealed that collaboration is not attaining the level of "joint work," which is the superintendent's aspiration for professional collaboration. This is due in part to the schedule and in part to the lack of identified and trained facilitators. The elementary teachers interviewed shared that either the principal facilitated collaborative meetings or meetings took place without administrative participation. For the elementary teachers to meet the expectations of "joint work," more trained facilitators are needed. The superintendent acknowledged this need and explained that we're trying...to be able to have a stronger core of facilitators.....we want to train the facilitators to be able to use these tools well, but also understand the model that we are promoting in Cordova."

To facilitate teacher meetings among departments and grade levels, a secondary teacher explained how her group used protocols to review student work:

> We have these neat protocols that we were introduced to last year. Again, some people didn't love them but they give a real kind of organized approach to what you're doing. Instead of just throwing a piece of work out and going okay, there's a process. The one that we use for student work is everybody, whoever is responsible for bringing the work or the assessment that day, will bring a piece and pass it out to everybody. Everybody takes five minutes … to read it. Then we go through the group and everybody expresses warm feedback, something positive, and then cool feedback and then take away a reflective question on it.

Although the development of a psychologically safe environment to foster and support collaboration through relationship building and joint work served as the major group finding, individual studies drilled down more deeply into the data to examine specific functions, structures, or supports for professional growth in the district. Individual sections delve into the

relationships, structures, and modeling that supports new teachers; the type of reflective

questions and processes employed by district leaders with teachers; the leadership vision and use

of PLCs to build the culture of collaboration; and the feedback processes employed to encourage

teacher growth. The following sections of the study discuss these individual analyses as a subset

of findings using the same data set.

CHAPTER 5

DEVELOPING LEADERSHIP CAPACITY[5]

Introduction

District leadership has been found to have a measurable effect on student achievement by creating conditions within which teachers and administrators frame their daily work with children (Fullan & Stiegelbauer, 1991; Fullan, 2006; Lambert, 1998; Marzano & Waters, 2009; Schlechty, 2002; Thessin & Starr, 2011). Superintendents are in a position to contribute positively to student achievement, by fostering relationships across the district that diverge from the traditional organizational structure, to a model of collaboration and shared leadership - a culture of inquiry and continuous improvement. These are qualities found in a community of professional learning (DuFour, 1998; DuFour & Marzano, 2011; Easton, 2011; Harris, 2010; Hord & Tobia, 2011). The development of such a learning community requires re-culturing (Huffman & Hipp, 2003) the district through shared values and norms, an emphasis on student learning, reflective dialogue, de-privatization of practice, and collaboration (Huffman & Hipp, 2003; Kruse, Louis, & Bryk, 1994). The superintendent is uniquely poised to build the needed infrastructure of support and assure its alignment with the philosophy and mission of the district and, in turn, with the work of the school, involving the hiring process; allocation of resources; professional development; work structures; policies; and available outside networks (Lambert, 1998). By attending to the habits and conditions that allow a staff to work as a unit, superintendents are able to contribute to the development of a community of professional learners within and among district schools. This individual investigation, a sub-set of the larger study, analyzes the impact that district-level administrators' practices and skills have on school-

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based improvement efforts in one Massachusetts district. This study aims to answer the following research question: *In what ways are the structures and resources provided by district leaders perceived to support school-based collaborative teacher growth and development?* It examines the practices and statements of the superintendent and their perceived impact on the ongoing development of a community of professional learners within and among the district's schools.

Importance of the Study

Professional learning communities have the potential to provide substantial benefits as a school improvement approach (Fullan, 2001; Hord, 1997; Senge et al., 2000). In order to empower school leaders to develop communities of professional learners in their schools, they must work in partnership with district level leaders. The superintendent is in a valuable position to promote policies and teaching practices for improving student learning (Elmore & Burney, 1999; Hightower, Knapp, Marsh, & McLaughlin, 2002; Marzano & Waters, 2009; Massell, 2000). By communicating a clear vision to stakeholders (Harris & Lambert, 2003; Hord, 1997; Lambert, 2003; Marzano & Waters, 2009; Senge et al., 2000), allocating the resources necessary for school leaders and teachers to fully engage in the reform effort (Marzano & Waters, 2009; Wahlstrom et al., 2010), and monitoring the ongoing progress of the initiative being implemented (Hightower et al., 2002), the superintendent can make a positive impact on generating widespread engagement in a reform effort, thus reculturing the district. When all members of the learning community work collectively toward a common vision, sharing collaborative professional growth experiences toward nonnegotiable goals, the vision is reinforced and sustained (Marzano & Waters, 2009; Elmore & Burney, 1999; Fullan, Bertani, & Quinn, 2004; Massell, 2000).

In her 2003 book, *Leadership Capacity for Lasting School Improvement*, Linda Lambert (2003) contends:

> Learning and leading are deeply intertwined....Reciprocity helps us build relationships of mutual regard, thereby enabling us to become colearners. And as colearners we are also coteachers, engaging each other through our teaching and learning approaches. Adults as well as children learn through the processes of inquiry, participation, meaning and knowledge construction, and reflection. (p. 2)

This study offers valuable insight for district and school leaders, highlighting their potential to impact student learning by attending to the important role they play in re-culturing the district into a learning organization that promotes "reciprocal, purposeful learning in community….[where] organizational reciprocity –as opposed to a 'loose' (decentralized) or 'tight' (centralized) system…[fosters] a dynamic of mutual responsibility characterized by shared vision, leadership, learning, expectations, and resources" (Lambert, 2003, p. 84).

Review of the Literature

Since the inception of the No Child Left Behind Act of 2001 (NCLB), there has been increasing pressure for school leaders to address issues of student achievement through school accountability and education reform, assuring high quality teachers for every classroom in the country. Teacher quality is a complex concept (Dufour & Marzano, 2011), drawing on a unique blend of background qualities (training, degrees/certifications, experience) and skills/practices (pedagogy, classroom management) (Lewis et al., 1999; Stronge, 2007), which are interactive and context-driven (Rice, 2003, Kennedy, 2010). Teachers need to continually develop their craft through ongoing development of both their background qualities, and the quality of their skills and practices throughout their careers. Fostering this development requires consistent

opportunities to engage in activities that promote professional learning. Therefore, attending to the professional development needs of teachers is an important responsibility of school leaders.

Research on effective teaching over the past two decades indicates that effective practice is linked to inquiry, reflection, and continuous professional growth (Killeavy & Moloney, 2010). The development of site-based professional learning communities (PLCs) offers an infrastructure in which to create the supportive cultures and conditions necessary for achieving significant gains in teaching and learning, and by providing opportunities for professional staff to deeply examine their teaching and learning process with an eye toward continually increasing their effectiveness with students (Morrissey, 2000). "An effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning" (Bolam et al., 2005). While the structure, purpose, and function of high performing PLCs have been well documented in the research, some PLCs have a stronger impact on school improvement than others (DuFour, 1998; Giles & Hargreaves, 2006; Hargreaves & Fink, 2006; Hord, 1997). School leaders must understand the important role they play in establishing a professional community of educators as learners who continually work together toward targeted student-growth. Much has been written about the importance of the principal in facilitating the development of school based PLCs (Cranston, 2009; Hipp & Huffman, 2000; Hord, 1997; Hord & Sommers, 2008; Lambert 1998; McLaughlin & Talbert, 2006). However, without the appropriate support from district level administrators, building leaders run into barriers in efforts to foster a community of professional learners (DuFour & Marzano, 2011; Fullan & Stiegelbauer, 1991; Lambert, 1998; Marzano & Waters, 2009; Schlechty, 2002). Thus, it is imperative that building principals have the support of district level leaders in fostering a culture of continuous improvement.

Schlechty (2009) believes: "The superintendent is necessarily the key leader with regard to inspiring the internal changes that will be required to transform the schools in the district, as well as the operation of the superintendent's office and central office apparatus on which the superintendent depends" (p. 268). Fullan and Stiegelbauer (1991) maintain: "The district administrator is the single most important individual for setting the expectation and tone of the pattern of change within a local district" (p. 191). Additionally, Hord & Tobia (2011) observe that while the principal's actions are uniquely important, "there is an additional factor that inputs the development possibilities of the PLC's attributes and consequently, the members' learning and growth to become professionally oriented. This factor is the system, its organizational policies and/or culture, and particularly decision-making practices" (p. 111).

This raises the question of what impact an aligned effort between principal and superintendent has on creating school cultures of continuous improvement in teacher practice. Schlechty (2002) highlights the relationship between the principal and the superintendent as one that has a significant impact on sustaining change initiatives. He affirms that this relationship, more than any other, "explains the ability of school districts to ensure that change efforts are sustained beyond the tenure of the initiating principal and that whatever positive effects there are become distributed throughout the system" (p. 67). He asserts that, "good things" come from strong and mutually supportive relations, while "fragile or antagonistic" relationships yield only temporary or isolated improvement.

Marzano and Waters (2009) sought to uncover the "true underlying relationship between district leadership and student achievement" (p. 3) in their meta-analysis of 35 years of research, spanning 2,714 districts, 4,500 ratings of superintendent leadership, and 3.4 million student achievement scores, to answer: "What is the strength of relationship between district-level

administrative actions and average student achievement?" (p. 4). This analysis identified the

correlation between district-level leadership and student achievement that was statistically

significant. They identified five district-level leadership responsibilities that had a statistically

significant impact on student achievement. Figure 7 illustrates the five responsibilities, offering a

conceptual illustration of the relationship of collaborative goal setting, board alignment, and

allocation of resources as the foundation on which nonnegotiable goals for achievement and

instruction can be reached.

Figure 7. Collaborative Goal Setting

Figure 7. *Collaborative goal setting* is the vehicle used to establish nonnegotiable goals for achievement and instruction: *board alignment* is necessary to sustain long-term attention to these goals; and *resources* must be allocated to fund activities such as professional development, schedule changes, and the like (Marzano & Waters, 2009, p. 72).

The authors observe that collaborative goal-setting is the starting place for establishing

nonnegotiable goals for instruction and achievement; and that these goals must be supported by

board alignment and adequate allocation of resources in order for the goals to be reached. The

importance of nonnegotiable goals is echoed by DuFour and Fullan (2013), who assert that the

superintendent must clarify the specific practices and conditions they expect to see in every school:

> PLCs are certainly attentive to making the case for focused learning, building shared knowledge regarding what it entails, and soliciting questions and concerns. At some point, however, they move beyond helping others in the organization learn about these processes to insisting that they engage in them. When they do, they articulate the exact conditions they expect to see in their schools. (p. 40)

DuFour and Marzano (2011) agree that the superintendent acts through the principals to affect change in schools and contend that in order develop a community of professional learners throughout the district, superintendents must establish a framework for building the individual and collective capacity of principals to lead the process successfully. "This strategy…seeks to create the structures and cultures by which current educators continuously improve both their individual and their collective professional practice." Such improvement strategies affirm "educators as the solution rather than the cause of, the complex problems confronting public education" (p. 19). They conclude that central office leadership is critical to embedding the "PLC process in schools throughout the district" (p. 45)

In 2010, the Wallace Foundation funded a comprehensive, multi-year study which examined the relationship between school administrator behaviors and actions and student academic achievement (Wahlstrom et al., 2010) At the district level, the study noted that district leaders "should consider school leaders' collective sense of efficacy for school improvement to be among the most important resources available to them for increasing student achievement" (p.140). District leadership, school leadership, teacher actions, and student achievement

represent a complex system of interacting influences. When all elements within this system operate in concert the effectiveness of K–12 schooling is maximized.

Lambert (2003) explored the superintendent's important role in educational change. In order to develop a culture of professional learning that is self-sustaining, she posits the need for superintendents to build *leadership capacity,* defined as "broad-based, skillful participation in the *work of* leadership" (p. 12) across the district, focusing on two important aspects of participation – breadth (inclusive of many) and skillfulness (level of competence). She asserts that the core of leadership must be to "construct meaning and knowledge collectively and collaboratively" in order to mediate surfaced "perceptions, values, beliefs, information, and assumptions through continuing conversations; to inquire about and generate ideas together; to seek to reflect upon and make sense of the work in the light of shared beliefs and new information; and to create actions that grow out of these new understandings" (pp. 6-7).

Lambert developed the *District Leadership Capacity Matrix* to describe the conditions of leadership capacity from the district level. The Matrix proposes six leadership capacity features that are prerequisites to the development of leadership capacity:

1. District administrators and board members model, develop, and support broad-based, skillful participation in the work of leadership.

2. Shared vision results in district-wide program coherence.

3. An inquiry-based accountability system informs decisionmaking and practice at classroom, school and district levels.

4. Organizational relationships involve high district engagement and low bureaucratization.

5. Professional selection and development recruits and educates learners and leaders.

6. Student achievement and development is either high or steadily improving among all schools, with equitable outcomes for all students.

These features provide a framework for examining the structures and resources that district leaders provide to support school-based collaborative teacher growth.

This review of the literature underscores the important role that district leaders play in building capacity in school-based leaders and teachers as they develop strong and sustaining PLCs. As part of the larger case study, this individual study sheds an important light on perceptions of the structures and resources that the district leadership team in this Massachusetts district, led by the superintendent, provide to empower school leaders and teachers and to develop the collective capacity to carry out this important work.

Methodology

As a sub-set of the broader qualitative case study, this individual study aimed to answer the question: "*In what ways are the structures and resources provided by district leaders perceived to support school-based collaborative teacher growth and development?*" The use of qualitative case study was an appropriate choice for this study, as it utilized "… a source of well-grounded, rich descriptions and explanations of processes in identifiable local context[s] (Miles & Huberman, 1994). As Merriam (2009) explained, having an "interest in knowing more about one's practice, and indeed in improving one's practice, leads to asking researchable questions, some of which are best approached through the qualitative research design" (p. 1). As such, this researcher utilized the data gathered through the qualitative case study methods described previously in the methods section of the wider study, applying specific coding and analysis to identify structures and supports provided by the superintendent that are aimed to build capacity in school leaders and teachers through a collaborative cycle of inquiry.

Using Linda Lambert's (2003) *District Leadership Capacity Matrix* as a theoretical framework, the researcher inductively analyzed the behaviors and views of district leaders with regards to capacity-building for teacher growth and development.

This study utilized data collected through interviews with a variety of district level and school administrators, including the superintendent, assistant superintendent and several building-level principals (one elementary; two middle and one high school), as well as teachers from the elementary, middle and high school level. It included a review of district and school documents, such as the district's strategic plan, meeting agendas and notes from team meetings among both teacher teams and leadership teams, and meeting protocols and notes from debriefing sessions. Use of questions on both the Teacher's Protocol (see Appendix B) and the Administrator's Protocol (see Appendix C) helped to identify leadership attributes that the researcher sought to understand.

While there is a body of literature that speaks to the role of leadership in school improvement, there is a gap in the research regarding the ways in which district-level leaders support teacher growth and development as part of their daily practice. The results of this individual study have contributed to the research team's understanding of the impact that district-level leadership has on district and school-based structures and supports in Cordova's schools and classrooms.

Results

Lambert's (2003) Leadership Capacity Matrix provided a framework to examine the work of Superintendent Murphy's work in the Cordova school district and answer the research question: *In what ways are district leaders perceived to support school-based collaborative teacher growth?* Organized by Lambert's six leadership capacity features, these results discuss

the ways in which the superintendent uses a PLC process to model and provide support to school-level leaders and teachers.

Leadership Capacity Feature #1– *District administrators and board members model, develop, and support broad-based, skillful participation in the work of leadership.*

Districts that are strong in Leadership Capacity Feature #1 are involved in decision making, which involves "interconnected school, cross-school, and district leadership team[s]" (Lambert, 2003, p. 84-85). Evidence suggests this leadership capacity features in the work of Superintendent Murphy *with* and *through* his Leadership Team, which included central office administrators and district principals of all levels. Data gathered demonstrated the collective professional growth of the leadership team through the development of a shared purpose which is "stretched" throughout the Cordova School District. This was particularly evident during our observation of the leadership retreat, when the superintendent facilitated how the implementation of the MA Educator Evaluation system might work in concert with the Cordova Strategic District Improvement Plan (SDIP) (see Appendix M).

When a consultant from MA Department of Elementary and Secondary Education (DESE) launched its teacher evaluation system in 2013, Superintendent Murphy modeled constructivist learning that is mutual and interactive (Lambert, 2003) by leading the district's principals and district leaders through a process of "digging into" the performance standards and rubrics of the new evaluation system. During the meeting he facilitated a collaborative process through which district leaders identified common focus elements of the educator evaluation rubric to be used to allow for targeted district-wide focus. He explained,

And again I'm going to ask us if we can try to narrow down our focus to four elements…

And elements that you think will really make a difference in our collective practice. And

I do mean collective, because we'll be doing activities around it together.

By leading the learning with his leadership team, the superintendent provided an opportunity for district administrators to gain a deeper understanding of the rubrics of the new evaluation system, and develop capacity to effectively use these rubrics. In doing so, these focus elements provided for inter-school, cross-school and cross-district connections around the implementation of this new evaluation system, nurturing broad-based leadership. He clarified this process by articulating the activity's purpose:

…[I]t's all about creating the focus that's doable…that's why in our district our strategic plan… we embedded these elements into it because we want to show the teachers how everything connects and [it's not] overwhelming.

As he modeled the interactive activity, Superintendent Murphy explained the ways in which building leaders could do the same in the schools to facilitate collaborative goal setting aligned with the SDIP, the building's School Improvement Plan, and teacher Professional Practice Goals. He explained that all contribute to a cohesive targeted focus, which is centered on student learning and that "guiding people through the rubric is done prior to our setting professional goals" with hope that focus areas in the rubric are worth focusing on in professional practice goals. Ultimately, "when we look at our student achievement goals, it's always all about where kids are and where we want students to be…as the more teachers can focus on these things the more they're going to be able to provide evidence for their own professional practice goals.

Later, during the two-day teacher orientation retreat in September, each building leader and department head replicated the process with his/her respective building staff, helping

distribute a common understanding of the new rubrics that would serve to drive their professional growth across the district. One of the building principals noted the impact this activity had on her work as a building leader:

> … it seems like what [Superintendent Murphy]'s approach is right now, to try to get us closer on how we're interpreting rubrics...So [this] has just helped me immensely…when I talk to my staff …here's the standards, here's your goals, and it's like it's a little package. And if you're talking about anything else, you need to question yourself as to why you're talking about it because this is all we're doing…. So they've come a long way with that.

Just as leadership capacity is developed between the district and building leaders, leadership capacity is extended to teachers and staff through the development of the facilitator training process. The development of skilled team facilitators has been underway in the district for a number of years. As cohorts of teachers participated in the program alongside administrators, and returned to schools as trained facilitators, ready to contribute to the collaborative work of building level teams, the culture of collaboration across the district began to emerge, "altering long-held assumptions, beliefs, expectations, and habits that represent the norm for people in the organization" (DuFour & Fullan, 2013, p. 2). One building principal described the process in its infancy six years ago: "It was interesting to see when we trained the first cohort. Teachers were going back [to their buildings] saying this is what we need to do. This is how we need to run faculty meetings." A district administrator described the facilitator training program, as one in which volunteer teachers first learned about facilitation, and facilitated "more and more throughout the year. Then they came together for a few days, during the summer to …[mobilize the group]." Facilitators then identified others, constantly bringing in

more people" and building capacity. This training, which leads to taking on the role of building-level team facilitation, offers school level leaders the opportunity to participate in the work of leadership in ways that have a positive impact on professional learning. The Superintendent has included the further development of this process in the Strategic District Improvement Plan (SDIP) (see Appendix M), as an initiative aligned with the objective of professional practice:

> [W]e're trying to get to [a place where we're] able to have a stronger core of facilitators. What we have in our district improvement plan now, our strategic plan, is to …build even further cohorts of facilitators. We want to train the facilitators to be able to use these tools well, but also [to] understand the model that we are promoting in Cordova… Therefore, those are the people that will help facilitate.

The district leadership team promotes inclusive development of educators as leaders at all levels. As a district administrator articulated, "My experience with teachers has been if you provide them with quality professional development and you work on those types of things, they feel more empowered and I think that's critical." A teacher who works in multiple schools across the district shared the following when talking about professional growth opportunities:

> There's no red tape when it comes to wanting to go get some professional development here, which I think that's a refreshing thing too. If you have an idea and you bring it to someone's attention they kind of like help you make it happen….So I think professional growth is held really to a high regard here.

Evidence of broad-based leadership is also seen in examples of cross-district collaboration. An elementary teacher shared her experience participating in collaborative learning experiences with educators from a neighboring district. An elementary principal shared another cross-district collaborative experience when she talked about bringing teachers from her

building to a neighboring district to observe an instructional strategy that she believed would support their work in literacy:

> So, for example, last year I brought the kindergarten teachers up to [a neighboring district] because one of my colleagues there had started the Daily 5 as a management tool. We went up in the spring and they got to observe the classes, and it was phenomenal. [T]hen I got them each the book, kind of a self-study over the summer.

Leadership in Cordova is also stretched across the district by the collaborative focus on examining student work. The SDIP provides a centrally developed vision for the district, clearly articulated in a one-page, strategic plan that establishes the direction for all district work. During his interview, Superintendent Murphy displayed a copy of the SDIP (see Appendix M), which provides a clear statement of strategic objectives for the district in three areas:

- Engaging and Motivating Students

- Professional Practice

- Curriculum and Resources

These objectives feed directly into strategic initiatives, with action steps toward each of the three strategic objectives, which provide a cohesive district-wide direction that fosters broad-based implementation. For example, the strategic objective for Professional Practice states:

> Teachers will address the needs of all learners through the regular use of data gathered by frequent assessments and consistent use of structures to examine their practice through the lens of student work to inform and adapt instruction.

The corresponding strategic initiatives direct educators to:

1. Establish system of common assessments and analysis of associated student achievement data;

2. Implement and analyze use of models of collaboration time, structures and facilitation;

3. Define and implement RTI … for each level; and

4. Establish a system for designating yearly plans for PD for teachers, paraprofessionals, and administrators.

Further, the SDIP aligns to supervision and evaluation, based on the four common focus elements of the MA Educator Evaluation system selected last spring by consensus among the learning community: II-B-3 (Student Motivation), aligning to the strategic objective of engaging and motivating students; I-B-2 (Adjustments to Practice) and IV-C-1 (Professional Collaboration), aligning to the strategic objective of professional practice; and III-B-2 (Curriculum Support), aligning to the strategic objective of curriculum resources.

The superintendent introduced this clear theory of action to all Cordova educators at the Welcome Back meeting that opened the 2013-2014 school year. He quoted the theory of action directly:

> If we establish a standards-based curriculum and assessment system with collaboration focused on improving instructional practices that engage students to critically think, collaborate, communicate and demonstrate creativity then we will continually improve student learning.

He then clarified this quote in terms of daily teacher practice elaborating that teachers will modify practice to serve all learners based on regularly gathering and examining data from ongoing formative assessments. He models this practice on a regular basis with district leaders, by facilitating their use of protocols to examine school-level work; this leads to collaborative modifications to leadership practice targeted at the needs of educators as learners in a collaborative cycle of inquiry.

Leadership Capacity Feature # 2 – *Shared vision results in district-wide program coherence.*

As Lambert (2003) notes, "A *shared* vision based upon the core values of participants and their hopes for the school ensures commitment to its realization. Realizing a shared purpose or vision is an energizing experience for participants, and a shared vision is the unifying force for participants working collaboratively. A shared vision provides a touchstone from which all other district actions flow" (p. 6). The theory of action that drives the SDIP in Cordova flows directly from the vision of the Superintendent. He describes his vision as one that "is relentless [in] focus[ing] on improving our practice. End of discussion! That's it!" For him the bottom line addresses four questions shared on a PowerPoint slide at the Welcome Back meeting:

1. What do we want our students to know?

2. How will we know when they are learning?

3. How will we respond when individual students do not learn?

4. How will we enrich and extend the learning for students who are proficient?

He followed with a second slide that simply read:

- Relentless focus on what matters: Teaching and Learning

Sharing his recent experience in Washington, D.C. on the anniversary of the historic march on Washington and the memorable Dr. MLK Jr. speech, Superintendent Murphy organized his welcome back message around the theme of "hope" and "urgency":

"What we can only hope for is impacting our students each and every day. I know that's your intent. I know that over the next couple of days, in the work that we'll be doing…that's why we do what we do…. To make an impact every day. …. From

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our work together, we're taking away that sense of purpose, that relentless sense of

purpose and focus…. But to have the dream also means to have a purpose to that

dream…. We have a very focused strategic plan that helps us create that sense of purpose

and maintain that sense of purpose….But in a nutshell that's what we're trying to do. That

is our relentless focus for this year."

Our interviews and observations indicate that the way this vision is shared district-wide is

through a process of collaborative professional learning that includes examination of student

work, the use of common assessments and collaborative decision-making to determine

proficiency among students, and the adjustment of practice to meet specific student needs. An

assistant principal articulated the district vision in this way:

So everybody is currently working on making sure that they use pre-assessment and post-

assessment to have data where they can determine…student growth. Then in the middle

of that, formative assessment is where they can actually adjust instruction based on

student needs. Everybody is working on that, so every week …teacher meetings …

discuss what is working and what is not, what somebody may be doing and having

success with that another teacher didn't think about, individual students who may be

struggling, so they work together... and that's constant.

A district level department echoed this collaborative focus on "student work like

writing.…getting a rubric so that everybody was using the same yardstick, and looking at student

writing in the same way….and then [they adjust]…instruction so that those weak areas are sort

of shot up."

Data collected from interviews with teachers expressed the ways in which they

understand and share the vision. At the high school level, a teacher summarized:

I know the vision of the high school…is the professional learning community. [It] is huge and to really, really look closely at student work and to assure that all students have the opportunity to find success and be successful …We're really looking at student work in order to affect practices.

A middle school teacher said: "[W]e've had this focus on professional learning communities and looking at student work and really getting familiar with standards based learning…" And an elementary teacher talked of the changes made to the planning of reading intervention, based on examination of formative assessment data, "For example, last year, when we did our midyear DIBELS testing, we found that we had a lot of kids who were scoring low… So, we met as a team …with [the principal], and [with] the reading teachers…we set up a new way that we [provided] reading support."

Clarity about the district vision, values, and goals can drive the daily work of individual schools. By providing a cohesive focus across the district, the Superintendent in Cordova develops a common understanding and shared beliefs among all educators, broadening opportunities for participation in the transformation of district schools and enabling district educators to collectively contribute to the development of a district-wide community of professional practice.

The district vision is also evident in the district-wide program coherence and commitment to align curriculum resources with the district's strategic plan:

Curriculum and Resources: As a district we will communicate a clearly articulated curriculum to all stakeholders for each level, grade and/or course, and align system resources to support programmatic decision-making. Implement budget process for programmatically aligning and allocating resources across all levels.

Program coherence is also evidenced in the district-wide RAISE program, which highlights civic and character education across all levels, PreK-12. RAISE is the acronym that outlines the district's social-emotional learning expectations:

"Civic and character education is vitally important to the development of well-rounded students. Our Building Respectful Community (BRC) initiative highlights the values associated with RAISE through which Cordova students will demonstrate **respect**, by thinking about others before speaking or taking any action, appreciating the contributions of others, while showing respect for themselves, other people, personal and/or community property and the environment. Cordova students will demonstrate **achievement,** by exercising their best effort and judgment in all activities in which they participate and will set goals that promote positive academic, social, and personal development. Cordova students will demonstrate **inclusion**, by breaking down barriers by inviting new people into teams, circles of friends, and experiences as they work to be a unified, collaborative community. Cordova students will demonstrate **service** by their willingness to contribute support to the greater good." Cordova students will demonstrate **empathy**, by their awareness of and consideration of another person's situation, feelings or motives before speaking or taking action.

This program provides a common expectation of civic responsibility and respect for students, allowing all constituents to develop a collective sense of belonging and trust. This connection is also evident in the welcome back meeting for Cordova educators. After the high school chorus opened the meeting by performing the National Anthem, educators were greeted back to school with a performance by *The Raise-ins,* a fourth and fifth grade rock n' roll band that came to life through an elementary after school program. Superintendent Murphy deferred to

an elementary school leader, Principal Harry McCarthy, a jovial and gregarious speaker, to introduce his students, who were to appear in a video clip that followed. Harry joked about the name of the band, assuring that all educators in the audience made the connection that the band's name was inspired by the RAISE program. After a couple of laughs, Cordova educators were invited to sing along with the Raise-ins' version of the Tom Petty song, *I Won't Back Down,* with adjusted Raise-in lyrics, which he introduced: "You can stand me up at the gates of teasin,' but I won't back down." He invited them to sing along with the chorus, which had been changed to, "Hey, RAISE is the easy way out." At that, the auditorium lights then dimmed, and the movie screen lit up with the Raise-ins, and their adorable rock n' roll RAISE tribute. It was a special way to open the year, and one that every educator in the auditorium could connect to, because of this district-wide program coherence. Throughout the opening meeting, Superintendent Murphy communicated the message of his district vision in a variety of ways that offered inspiration leading to common beliefs among district educators as they began the new school year.

Leadership Capacity Feature #3 – *An inquiry-based accountability system informs decision making and practice at classroom, school and district levels.*

Lambert (2003) calls for "inquiry based accountability," whereby educators pose questions, examine evidence of student learning, and engage in reflective dialogue and action with their colleagues (Bolam et al., 2005; DuFour, 1998; DuFour & Marzano, 2011; Easton, 2011; Harris, 2010; Huffman & Hipp, 2003; Lambert, 2002a). This process has been a focal point in Cordova. Prior to the appointment of Superintendent Murphy in 2012, the Cordova Public Schools had been developing a culture of continuous improvement among teachers under the facilitation of former *Assistant* Superintendent Murphy, whose use of protocols enhanced group process and collaboration. "I think [Superintendent Murphy], as our assistant

superintendent, really kind of reframed things for me and for us as a district about PLCs and also just being a collaborative district and working together to improve teacher practice by looking at student work and using data." A district-level administrator reinforced this perception, noting, "beginning about six years ago, we began to do more training on collaborative facilitation, using protocols, and warm and cool feedback." He observed that using protocols allowed probing and that the level and depth of probing depended on facilitation, which required work, but has generally been "carried on tremendously at the middle school level."

A principal articulated the impact that the superintendent has had on professional growth across the district, commenting that "Dr. Murphy heightened my awareness of professional development, and he really prioritized our own professional development as leaders because he showed us" by involving leaders in workshop presentations and funding memberships in organizations, and modeling the importance of assuming a instructional leadership role. It is clear that Superintendent Murphy had been teaching Cordova educators - at both the leadership level and the teacher level - about the significance of collaboration (Little, 1990) at all levels for several years. This work became a driving force behind efforts to build capacity for meaningful collaboration in Cordova. Superintendent Murphy talked directly about this capacity-building process in his interview:

> I spent a number of years talking about levels of collaborative practice with a rubric that was developed with Judith Warren Little's work. It's like storytelling. Does it impact student achievement? Aid and assistance does not count. Sharing, sorry, does not impact student achievement. Only joint work [counts], which is really the work of what PLCs really are.

Much of this work was implemented through use of protocols. A building principal shared that "we use a lot of protocols that are facilitated, and we set norms, and we have norm-checkers, which has really helped…and over time we've gotten better at [eliminating] parking lotting, so people walk away with some sense of closure and direction. We [still] have a long ways to go." District wide, use of protocols such as the Tuning Protocol (http://www.nsrfharmony.org/protocol/doc/tuning.pdf), which involves the respectful give-and-take of warm and cool feedback among team members in educator groups, helped educators work collaboratively in grade-level teams. A district level director talked about the ways in which protocols were introduced across the district: "We were introduced to them last year [during] professional learning communities in the morning." He identified the expectation that consistent use would result in comfort and potential use even with "kids. So it's having this kind of toolbox of being able to reflect and look at work. So it's all connecting."

Participants interviewed cited the emergence of a culture of collaboration that is driven by the examination of student work to drive instructional practice. Through implementation of protocol-use, and attention to the levels of collaboration (Little, 1990), some teams of teachers began to engage in joint work (Little, 1990), defined as "encounters among teachers that rest on shared responsibility for the work of teaching (interdependence), collective conceptions of autonomy, support for teachers' initiative and leadership with regard to professional practice, and group affiliations grounded in professional work (Little, 1990, p. 519). One teacher described it this way:

> …[W]e have tuning protocols around work…So you take a piece of work and everybody
> has a sample of it. They look at it and you do warm feedback, cool feedback and then

ways to improve. It's done in such a way that you really come away with some useful ways to make changes, not just a conversation. So I think that helps in that group…

In some schools, the use of warm and cool feedback has become an accepted contributor to educator growth. The superintendent observed that middle school teachers were asking for cool feedback. "I was like, whoa! That's pretty cool!" One building leader described that the work of collaboration and reflection in his building was driven by data such as test scores, student work, and other assessments. Such inquiry led to next steps for improving teacher practice. This was evident in our observation of a PLC meeting at the middle school level. This content area team (ELA) connected three Grade 7 teams across the school. The meeting used a familiar protocol, which was followed as if a natural part of the routine. The team examined student work samples from a completed, common ELA unit centering on *A Christmas Carol,* to guide their instructional practices and curriculum planning. In an essay, students compared and contrasted the differences and similarities between the written literature and the play, using a team-developed rubric. When the principal, who was an observer rather than a participant in the meeting, complimented the team on their rubric, she was jokingly labeled a "protocol breaker" for adding dialogue outside the protocol. After light laughter, the teacher explained that this rubric was developed based on the work of Larry Ainsworth (Ainsworth & Viegut, 2006), referring to a workshop one of the teachers had attended, from which she had shared the information with her colleagues. This showed further evidence of the teacher-directedness that brought the work of this team to broad-based participation in the work of leadership (Leadership Capacity Feature #1).

Throughout this collaborative scoring process, teachers remained grounded in the rubric to guide analysis of student work. As they collaboratively graded each student work sample, teachers refined their grading policies, as evidenced in this excerpt:

The textual evidence, I put yes. I was happy with that, and the person went on to clarify [the] reason they had chosen it, sort of defending their reason. However, originally, I had given this an A-. I would totally back off from that now, because the evidence wasn't as important, and I was one of those sticklers for, you can give a quote, but you also have to give the page number…to make it more official.

They also adjusted their instructional strategies:

T1: We did a Venn diagram on the board as a class.
T3: I gave them the Venn diagram…but it was more independent – what do you recall? And they did do it independently… and then we went over it as a group.
T2: We started that way too, and then we took that diagram, and we said ok, find it in the text. Find your textual evidence for this…Let's write it. What page? Take notes.
T1: Oh, we didn't even do that. We didn't go to that level with it, as a class. I like that.

They also examined the clarity of their expectations for the students in this collaborative exchange:

I think this leads to the question that I had about requirements. Like you just said, talking about the plot differences that you focused on in class, and I think that I remember you talking about focusing in on page numbers, or copying from the book was not a big focus for you. But in my class it was. So I think we may have come at this from different angles.

As a result the team explored ways to assure that they had a cohesive understanding of the assignment, outlining future expectations, the nature and amount of explanation provided prior to the assignment, and the quality of similarities and differences that was acceptable. As this team

of Grade 7 ELA teachers brainstormed a complete revision of the assignment for next year, they consulted MA ELA Curriculum Frameworks (http://www.doe.mass.edu/frameworks/) for clarity. This discussion led to an analysis of the development of particular language arts skills that pervaded the standards from Grade 1 to Grade 7. Furthermore, the team explored ways in which the skill is developed in standards of reading, writing and discourse, weighed the level of engagement among students (a strategic objective of the SDIP), reconsidered a change they had made in the order of the unit, and noted an increased level of student engagement with unit as a result of their viewing the play before reading the text.

This collaborative meeting among content area teachers is a clear example of the power of collaborative inquiry: "a focus on learning, capacity building, wise and thorough use of data, and identifying and spreading good practice are all integrated in this interchange" (DuFour & Fullan, 2013, p. 7). But nowhere is there better evidence of an inquiry-based accountability system informing decision-making and practice at classroom, school and district levels than in the development of the Cordova Administrative Walkthrough.

The Cordova Administrative Walkthrough process bears a resemblance to Instructional Rounds (City, Elmore, Fiarman, & Teitel, 2009), which are designed to shift the professional learning community focus to administrators, pushing district leaders to network with colleagues to improve practice and rethink the instructional evaluation process. During Administrative Walkthroughs, district and building leaders visit classrooms in teams, using a custom-designed walkthrough protocol that is being developed iteratively by the leadership team (see Appendix H- K). This protocol is described as a work-in-progress, and its ongoing development is a focal point of the leadership team's PLC work. It is particular to Standard II, Indicator B (http://www.doe.mass.edu/edeval/model/), one of the four common focus elements that were

selected last spring by consensus among the learning community, including representation from

all constituents: School Committee, Teacher's Union, Administrators, and Parents. The

Superintendent described that the purpose of the walkthrough experience, is "to improve the way

we [administrators] give feedback on the observation. What is it we really see? There are tons of

distracters when you go into a classroom. How do I give better feedback?"

The first iteration of the protocol (see Appendix H) was designed to define the focus of

inquiry by listing the language used to describe a rating of proficiency on Professional Standard

II-B: "Learning Environment: Creates and maintains a safe and collaborative learning

environment that motivates students to take academic risks, challenge themselves, and claim

ownership of their learning" (http://www.doe.mass.edu/edeval/model/PartIII_AppxC.pdf). The

protocol clarified expectations by outlining collaboratively developed group norms around the

process of visiting classrooms, gathering evidence and debriefing the classroom visits. This is

similar to Curtis & City (2009), who maintain that, "The key to developing norms is describing

the preferred behavior in simple terms that help people know what it looks like" (p. 5).

Superintendent Murphy describes his belief in the power of simplicity in clarifying expectations,

noting that "improving teachers' practice I think it's a function of us being honest with them,

keeping it as simple as possible, so focusing...I think the more I've learned and grown in wisdom

it's simply a matter of narrowing the focus."

The Cordova Leadership Team agreed to the following norms, which clearly describe

their collective commitments (DuFour & Marzano, 2011) to and with all those involved in

Cordova Learning Walks: a) collective learning and no evaluation of one another, teachers, or

students; b) upheld norms of confidentiality for students and teachers: c) explicitness of evidence

that supports feedback; d) clearly identified behavioral expectations of observers during

classroom visits; and e) minimal impact on the functioning of the classroom. Other requirements include refraining from conversations and avoiding distractions, reviewing student work in folders, portfolios or displays, assuring consistent durations of visits, and posing questions.

This level of clarity avoids the need to rectify missteps and promotes cohesive teamwork. The protocol further clarified the steps for gathering evidence during the Walkthrough, which includes recording factual data, using quotes, tallies or descriptions; stating factual evidence ("I heard…I saw…"); refraining from subjective statements ("I liked…"); articulating what is actually said or done, as a video camera might record; scripting the lesson as objectively as possible; and labeling scripts with numbers that do not identify teacher names/classroom numbers.

Using collaboratively-developed behavioral descriptions and exemplars, the protocol set the stage for meaningful data analysis in the debriefing session, which was clearly defined in a specific outline of the process - from analysis of evidence, to generation of next steps, and finally reflection. In this process, administrators share highlights of the observation (big ideas, trends, areas of strong practice, areas of need) and identify patterns and trends and generate next steps. They brainstorm possible *quick wins* that will address the key themes that emerge, and collaborate on the content and wording of summary observations to be shared with the faculty. Finally, this process facilitates formal reflection around changes to practice based on key themes that emerged, as well as on the process, results, and relationships developed during the day, noting areas to keep or improve for future *Learning Walkthroughs.*

The level of clarity standardized the walkthrough practice, offering consistency that facilitated learning. Superintendent Murphy was intentional about keeping the focus targeted on the specific standards being observed. He shared the seriousness with which protocols directed

the focus of the observation in Cordova: "I'm pretty relentless when I run a protocol. It's like no we can't talk about that. And move on." Observers also used a Walkthrough Scripting Sheet Template, which provided a common recording sheet, designed to include a space for formal information at the top, organize effective record keeping and analysis and record "What I see" and "What I hear." This information guided discussion during debriefing sessions. With a shared purpose and a clear process in place, district administrators began to collaboratively develop the skills required to allow Learning Walkthroughs to expand their potential in Cordova. The superintendent described the results of the first debriefing:

> So we've already made some adjustments for next time because what we're trying to do
> is improve our work … For instance we did brainstorming...This is Harry's
> summary…*quick wins to practice* we call it, the feedback we want to give to teachers, the
> warm feedback….

In debriefing the first protocol, the leadership team brainstormed reflective questions (see Appendix L) that would be appropriate to offer to teachers in response to observations and walkthroughs. This triggered a shared attention to the development of reflective dialogue among educators and administrators across the district, supporting teacher reflection and fostering continual growth.

During the debriefing discussion as part of the first round of walkthroughs, the leadership group began to form the next iteration of the protocol (see Appendix I), which came to include a table (See Table 3) that deconstructed the standard into four phrases from the language of the proficiency rating, each represented in a column (i. e. A, B, C, & D). The table also revised "What I see" and "What I hear" to "I would expect to see…" and "I would expect to hear…" to particular attributes of the proficiency rating.

Table 3

learning experiences that guide students to *identify their strengths, interests and needs* "A"	learning experiences that guide students to *ask for support when appropriate* "B"	learning experiences that guide students to *challenge themselves* "C"	learning experiences that guide students to *claim ownership of their learning* "D"
I would expect to see…	I would expect to see…	I would expect to see…	I would expect to see…
I would expect to hear…	I would expect to hear…	I would expect to hear…	I would expect to hear…

The debriefing notes (see Appendix J) showed the use of these questions to guide the conversation, leading to the development of the third iteration of the protocol (see Appendix K), which offered examples of evidence seen in Cordova classrooms that would meet the proficiency standard. The debriefing sheet also included a new heading in the section, Generate Next Steps entitled, "*Quick Wins of Practice,*" referred to earlier. This new section prompted observers to articulate a summary of the instructional practices associated with the cited evidence, encouraging all administrators to look at the evidence collection process through the lens of instructional practice.

The latest iteration of the protocol (see Appendix K) includes yet another section called "Missed Opportunities." The superintendent explained how this section emerged during a

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discussion of feedback. "When teachers are asking for the cool feedback - that's how we're organizing cool feedback: missed opportunities." Missed opportunities provided a space for principals to follow up at a later time as observers would often see "great examples where [teachers] nail it in the classroom." Missed opportunities also helped observers narrow the focus to the specific visit and observation. Norms embedded in this protocol are listed below. Each walk through group shares a "missed opportunity" observed based on their window of viewing, identifying what is considered to be an area that may be in need for the principal to follow up on through further observations. The expectation is that the principal will provide the leadership group with any follow up learning at a leadership meeting prior to the next leadership walk through. This additional item on the debriefing section of the protocol facilitates shared learning among administrators, further enhancing their collective capacity to promote teacher growth through examination of educator practice in a way that parallels the teachers' examination of student work.

The value of the Cordova Walkthrough Process is multi-faceted: working collaboratively on developing this district tool, administrators generate their collective capacity for using feedback to guide ongoing teacher improvement. Additionally, their presence in classrooms further nurtures a culture of learning that is accepting and expectant of shared practice, breaking down barriers of isolation that keep educators from developing cultures of democratic inquiry and practice (Friedman, et al., 2009). Finally, the collaborative development of the administrative walk-through protocol builds common understanding among district leaders as well as teachers regarding the practical application of the MA Educator Standards in daily classroom practice. As they participate in this collaborative cycle of inquiry, they strengthen the ability of all educators in the learning community to do the same.

"A district needs to develop not only its own leadership capacity, but that of its schools as well. This dual responsibility requires district administrators to model certain leadership behaviors; abide by certain structures, processes and policies; and to focus (and focus others) on student learning" (Lambert, 2003, p. 80).

Leadership Capacity Feature # 4 – *Organizational relationships involve high district engagement and low bureaucratization.*

Lambert (2003) posits that policies and procedures should support engagement rather than bureaucratization. She describes the connection between the district and school processes as reciprocal in nature, whereas the district is accountable to schools for services and resources, for instance, and schools are accountable to the district and community for student learning. Cordova Public Schools demonstrate evidence of this concept in the connections between the professional learning patterns that align throughout the district, from central office, to schoolhouse, to classroom. The data consistently articulate that collaborative inquiry among educators in all areas of the learning community is "nonnegotiable." This has been highlighted in the wider study in multiple ways, pointing to a "top-down" approach to leadership. While the superintendent is clear that collaborative work in Cordova is nonnegotiable and directed from the top, it is embedded in the SDIP, which was developed collaboratively by the leadership team, as referred to by the superintendent:

> So I think it's all about creating the focus that's doable. That's why in our district our
> strategic plan we embedded these elements, because we want the teachers to see how
> everything connects…

In developing the strategic plan the Superintendent and the leadership team made "lists of initiatives, and it was odd that they considered every initiative equal to the other. Let's look at

what's essential, what's important… We're only going to list what's essential… It all has to connect to the instructional core." Together, the leadership team developed the strategic plan, involving the input of building principals and district coordinators who each represented the ideals and beliefs of their respective schools and department staff. The result of this collaborative effort became a theory of action that would drive goal setting across the district, aligning curriculum standards and educator evaluation within a cohesive focus on student learning driven by collaborative inquiry based on the examination of student work to inform instructional practice. As the superintendent engaged the leadership team and district leaders in this collaborative goal setting, he garnered a collective commitment to the vision in the strategic plan. The superintendent talked about the ways in which their collective commitment to the nonnegotiable vision became an important energy source that allowed the strategic objectives and initiatives to come to life throughout the schools:

> It comes from establishing behaviors. [I]f you ask teachers what they value in school it's a reflection of what the principal says is nonnegotiable in this school and what's the expectation. So the principal has to play a role in that. Again, it's working with the principals to do that. What I try to do is model the use of protocols when we have different elements in the leadership team. They have to understand.

The superintendent, then, works through the principals to establish the behaviors that will lead to widespread culture. He elaborated on this thought, by theorizing the ways to bring about cultural change, which he referred to as *behavior begets belief*:

> Behavior will beget the belief. If we think we … can't do anything until everybody agrees that, yes, we believe we'll be here forever because … history shows that it takes forever to change culture. Get people to behave in a certain way and we'll change the

belief much quicker. You could say the cart and the horse… [I]f you're waiting for

people to say we all believe before you do something you'll never do anything. So get

them to behave in a certain way, which means you have to have a sense of direction for

them. You have to have a certain level of trust but, again, trust comes through an

experience.

Although a shared sense of commitment keeps school leaders across the Cordova district

focused on the same vision, each school utilized a different approach to implementation. The

high school negotiated a change in the school day to assure that both time on learning and

professional work time shared priority within the school day. This change required board

alignment and acceptance of the wider community of the importance of scheduling the school

day in a way that assures professional staff have the opportunity for collaborative work on a

regular basis. The superintendent talked about the widespread agreement among constituents

regarding this change noting that in the past the school committee and parents complained about

early release days, but now they do not complain "because we have them sold on the idea this is

what you need to do to improve professional practice."

The middle school schedule has been a priority, even during difficult budget seasons, and

the work has evolved to include both grade level and subsidiary (content area) teams.

My master schedule is [critical]. I made a significant shift … because I valued it through

my middle school experience, I preserved collaboration time … even through the bad

budget year, I would not touch it … and so the past couple of years the schedule has been

pretty much the same... [W]e decided to shift from the traditional team plans as a priority

to subsidiary plans, so every week, every subject area meets…it's scheduled, and they

have to do notes, and they have to share.

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The elementary staff interviewed talked about the use of specialists during morning meeting time to give teachers a common period free, and rotating the use of that time between principal-led PLC time, and teacher-driven common planning time. The elementary level staff also talked about participating in collaborative study groups around shared reading as a means to developing common understanding about culture and curriculum:

> …staff meetings last year were very collaborative in terms of we're all doing the book study, we're all discussing things, we had questions that we looked at, we shared work during those meetings, we're going to continue with that around responsive classroom and the rest of the Pathways book on writing.

These differences at the three levels across the district demonstrate that within the boundaries of the nonnegotiable goals, school leaders have autonomy and personal discretion in creating the conditions within which those nonnegotiable goals will be met.

Leadership Capacity Feature # 5 – *Professional selection and development recruits and educates learners and leaders.*

This feature includes both recruitment of new personnel and professional development of veterans. Lambert (1998) promotes the superintendent's use of specific strategies to recruit and retain high quality teachers and leaders within schools. As noted previously, Superintendent Murphy consistently connects the work of Cordova educators to the district vision. One principal, who had left the district due to budget cuts, and was recruited back, talked about her motivation to return: "Part of what drew me back here is that I believe in his philosophies. I believe in his thinking." The superintendent articulated the ways in which he sees building leadership as impacting the distribution of the district vision, and what he will consequently look for in replacing a retiring school principal:

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I see principals leading the charge around using data more effectively to talk about instruction. The nice thing is it's been built more into the culture… We're changing the leadership at [the Elementary School] this year. (The principal) is retiring. That's what I'm looking for in a new leader - the ability to do that. So that's going to be critical.

The ongoing individualization of educators' needs offers opportunities for leaders as well as teachers at all places along the career continuum t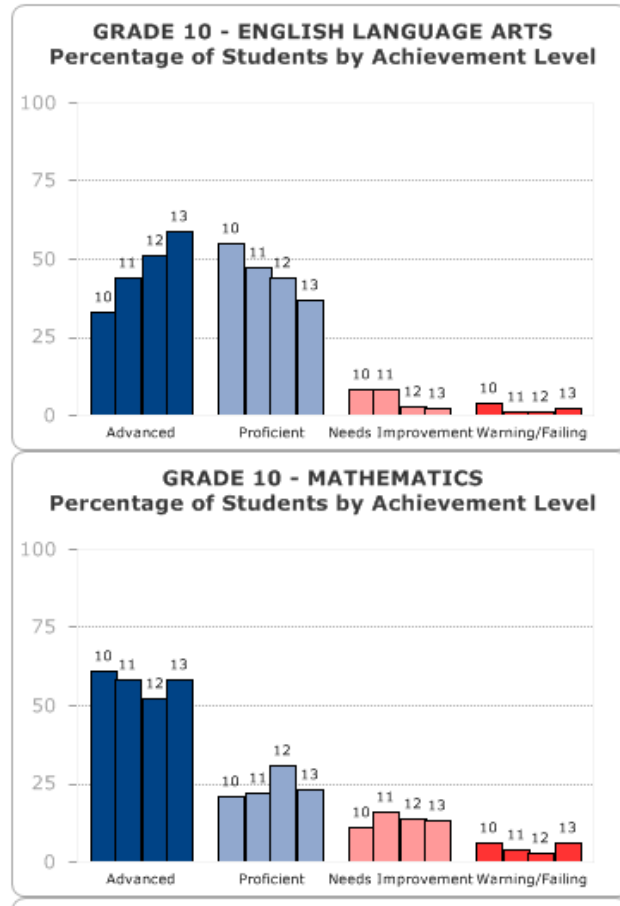o continue to grow and improve. Collaborative inquiry fosters individualized professional growth as educators share their practices, examine student work together, focus instructional strategies on student needs, and use data to make decisions about their teaching. In this way, professional development becomes an "ongoing activity that is embedded in the various educational processes of operating schools – curriculum development, student assessment, and the development and evaluation of instructional strategies" (Huffman & Hipp, 2003).

Leadership Capacity Feature # 6 - *Student achievement and development is either high or steadily improving among all schools, with equitable outcomes for all students.*

Lambert (2003) articulates the importance of professional development to student learning, because it "shapes teacher beliefs, assumptions, and practice" (p. 90). It is the district level that enacts policies that sustain equitable access of opportunities and outcomes for students (e.g. tracking; narrow curriculum). In today's diverse classrooms, all students are expected to achieve the same outcomes. Working as a community of professional learners, teachers discuss student learning outcomes during continuing professional dialogue, which leads them to reflect about practice as a result, leading to improved practices, and higher student achievement. A steady increase in student achievement scores is seen in Figure 8, showing a historical analysis of MCAS scores from 2010 to 2013:

Figure 8 MCAS Historical Analysis

GRADE 10 - ENGLISH LANGUAGE ARTS
Percentage of Students by Achievement Level

GRADE 10 - MATHEMATICS
Percentage of Students by Achievement Level

Figure 8 shows the historical trends in MCAS achievement
from 2010-2013 for Grade 10 ELA and Math.

"Students will develop and learn in environments where adults do the same" (Lambert, 2003, p.
54). By reflecting collaboratively on their own individual and collective practice, teachers
continually increase their skills toward increased student achievement. Lambert proposes
parallels between teaching "habits of mind" and leading. According to Lambert, "As principals
and teachers, we must attend not only to our students' learning but also to our own and to that of
the adults around us. When we do this, we are on the road to achieving collective responsibility
for the school and becoming a community of learners.

Discussion

Although based on a small representative sampling of Cordova schools (one elementary; one middle school; one high school) these findings highlight the ways in which the Cordova Superintendent encourages broad-based participation in the skillful work of leadership, shared vision resulting in program coherence, established a system of inquiry-based accountability that informs decision making and practice, and developed organizational relationships that involve high district engagement and low bureaucratization to support school-based collaborative teacher growth. This section connects the findings back to the literature and conceptual framework of the study, and identifies the ways in which these findings developed.

Broad-Based Skillful Participation in the Work of Leadership

Linda Lambert (1998) defines leadership as "the reciprocal learning processes that enable participants to construct and negotiate meanings leading to a shared purpose (p. 7). Lambert stresses the importance of distributing leadership widely among teachers, students, parents and the wider community members, as "each of these leadership roles permeates district culture and provides for broad-based participation" (Lambert, 2003, p. 86). Broad-based participation in the work of leadership in Cordova is seen in interconnected school, cross-school, and district leadership teams that support the professional growth of all educators through coordinated implementation of new initiatives, such as the MA Educator Evaluation System and the Common Core State Standards (CCSS). Similar to Spillane et al.'s (2001) notion about leadership which is distributed among both positional and informal leaders (p. 24), the superintendent stretched leadership practices across the situational context within the district (p. 23), using district and State initiatives to pursue a "task-centered approach, grounded in the functions of leadership within the school as a means of accessing the distribution of leadership practice" (p. 24). Spillane (2005) maintains that leadership practice results from interactions between leaders and

followers which is critical in the process. Lambert (2003) agrees, stating "It is what people learn and do together, rather than what any particular leader does alone, that creates the fabric of the school" (p. 20). Because the focus on collaboration among educators in Cordova provides consistent opportunities for collaborative interaction among teachers and administrators, which is situated within the context of initiative implementation (CCSS; MA Educator Evaluation system), leadership practice is driven not by the actions of individuals, but by the interactions among them.

In line with the work of Schlechty (2009), Superintendent Murphy emphasized a common set of beliefs that was echoed time and again in interviews with participants. These beliefs are stated clearly in the theory of action that establishes the purpose of the SDIP. Shared goal-setting (Marzano & Waters, 2009) is evidenced in the strategic objectives which guide district work, as they were developed collaboratively among the district administrators during leadership team meetings in the spring of 2013. The design of SDIP provides a one-page tool that illuminates the alignment of the Common Core State Standards (CCSS) and the teacher evaluation rubrics, within three strategic objectives: engagement and motivation of students; professional practice; and curriculum resources. This alignment is organized to drive the work of collaborative inquiry, based on examination of student work, in order to impact the instructional planning of teacher teams and ultimately to improve student achievement.

Leadership was further stretched across the district in Cordova through the training of facilitators, who would take on leadership roles within team meetings, providing a collaborative structure that encourages teachers to take ownership of their work. The training of skilled facilitators allows leadership to be shared across levels – from district, to schoolhouse, to classroom, aligning with the work of Fullan and Hargreaves (1996), who highlight the

importance of shared leadership and supportive organizational structures in successful

achievement of school improvement goals. Shared instructional leadership involves the active

collaboration of administrators and teachers in Cordova on curriculum, instruction, and

assessment. As Lambert's description of broad-based leadership characterizes, leadership in

Cordova speaks to a group broader than the individual leaders. This connotes leadership that is

"broader than the total sum of its 'leaders,' for it also involves an energy flow or synergy

generated by those who choose to lead" (Lambert, 2003, p.3).

Shared Vision Resulting in District-Wide Program Coherence

"Vision presents a realistic, credible, attractive future for the organization – a future that

is better and more desirable in significant ways than existing conditions. It offers a target that

beckons" (DuFour & Eaker, 1998, p. 62). Therefore, it is important that the superintendent

develop a shared vision of excellence about teaching, learning, and leading with all constituents

in the learning organization– students, adults and the wider community – and that s/he model the

importance of making collaborative decisions that are consistent with that vision (Carter, Glass,

& Hord, 1993; DuFour & Marzano, 2011; Huffman & Hipp, 2003; Marzano & Waters, 2009;

Ovando & Owen, 2000; Schlechty, 2009).

As highlighted in the larger study, the superintendent shares the vision for the district

through the SDIP, contextualized through the use of the four critical questions that DuFour and

colleagues (DuFour, 1998; DuFour & Marzano, 2011; DuFour & Fullan, 2013) observe help

educators focus relentlessly on learning for all students. The strategic objectives of the SDIP

establish professional practice goals and expectations that call for teachers to engage in ongoing

cycles of collaborative inquiry based on examination of student work in order to adjust

instructional practices toward increased student learning. It is notable that participants we

interviewed were able to articulate this shared purpose, referring to the use of protocols to guide the work of collaborative teams in using common assessments to examine student work, and to adjust the instructional practices of teachers to meet the needs of individual students. In addition to interview data, shared understanding was evidenced in observations of team meetings, as well as artifacts collected in the form of protocols that guide the focus of collaborative work.

Lambert also notes that a result of shared vision is program coherence. This is evident in Cordova through district-wide participation in RAISE, a program that consistently builds character and develops civic responsibility throughout the school career of district students. The district-wide nature of this program allows for school-wide, interschool, and cross-district connections that build a sense of community and belonging among constituents, providing interdependence among their relationships.

An Inquiry-Based Accountability System Informs Decision Making and Practice

A number of researchers have found that collaboration is a key ingredient of organizational change and improvement (Blasé & Blasé, 2000; Chi Keung; 2009; Frederiksen & White; 1997; Gallimore, Ermeling, Saunders, & Goldenberg, 2009; Jacobson & Bezzina; 2008; Saunders et al., 2009; York-Barr et al., 2007). Lambert (2003) calls for "inquiry based accountability," whereby educators pose questions, examine evidence of student learning, and engage in reflective dialogue and action with their colleagues (Bolam et al., 2005; DuFour, 1998; DuFour & Marzano, 2011; Easton, 2011; Harris, 2010; Huffman & Hipp, 2003; Lambert, 2002). The development of this process has been a focal point in Cordova for some time now. Interview data confirmed that the district had been moving toward this culture of collaboration since Dr. Murphy began in the district six years ago. Multiple educators at all levels across the

district referred to the use of protocols as a meaningful and helpful tool to guide the work of teacher teams as they engage in the process of collaborative inquiry.

Evidence of the inquiry-based accountability system was seen in the observation of the content area PLC. As articulated by Fullan and DuFour (2013), "In addressing these [four] questions [that guide the work of PLCs], educators go beyond pooling opinions, sharing personal anecdotes, or citing precedents. They engage in exactly what the PLC process calls for: *learning together*" (DuFour & Fullan, 2013). This work was evidenced in Cordova, in interviews, artifacts that show protocols that are used throughout the district, and *on the ground* in meetings of PLCs at both the leadership and teacher level.

While "[c]ollaboration includes continuing interactions about effective teaching methods, plus observation of one another's classrooms" (Stigler & Hiebert, 1999, p. 124), these activities are not exclusive to teachers in Cordova. District leaders, as well, participate in continuous cycles of collaborative inquiry through their learning walks and leadership meetings, paralleling the work of teacher teams by examining *teacher work* to help direct their *leadership practices* toward the achievement of district goals. Although much of the discussion about critical reflection on practice in education has focused on the participation of teachers and practitioners in reflective practice (Brookfield, 1995; Harford & MacRuairc, 2008; Zeichner & Liston, 1987), the Cordova Administrative Walkthrough process bears a resemblance to Instructional Rounds (City et al., 2009), which are designed to shift the professional learning community focus to administrators, thus pushing district leaders to network with colleagues to improve practice and rethink the instructional evaluation process. Cordova educators were prepared for this next step toward utilizing the PLC process to drive the entire system (DuFour & Fullan, 2013), because the groundwork had been laid and cultural change had begun. "Unlike structural change, that can

be mandated, cultural change requires altering long-held assumptions, beliefs, expectations, and habits that represent the norm for people in the organization" (DuFour & Fullan, 2013, p. 2).

The use of an inquiry-based accountability system informs decision making and practice at all levels across the district, and helps all educators in Cordova to reflect on their own practice and identify things that can be improved. "The process itself cultivates and deepens the sense of common purpose, mutual accountability, and collective efficacy of the group…" (DuFour & Fullan, 2013, p. 16).

Organizational Relationships Involve High District Engagement and Low Bureaucratization

Organizational relationships in Cordova reflect *defined autonomy* (Marzano & Waters 2009), within an atmosphere of *reciprocal accountability* (Elmore, 2004; DuFour & Fullan, 2013). As highlighted above, the development of shared knowledge regarding the relevance and process of collaborative inquiry is evident in Cordova. DuFour & Marzano (2009) assert that, while building such shared knowledge about the purpose and relevance of district vision is very important, at some point district leaders need to be direct and explicit about not only the goals to be achieved, but also about the critical conditions they expect to see in every school, because "…a culture of *defined* autonomy ultimately calls upon leaders to *define* what is to be tight throughout the district" (p. 33). Such defined autonomy calls for the superintendent to set nonnegotiable goals for the district, and then to support individual principals in achieving those goals. This quality is evident in the relationships of Superintendent Murphy and his building principals and district leaders. Clarity around nonnegotiable goals and expectations is provided in the SDIP, keeping the learning needs of students central to all instructional decisions. The superintendent consistently provides opportunities for capacity building among his leadership

team, developing stakeholders who are empowered to meet the nonnegotiable goals in schools. In doing so, he provides leaders at the school level with clear guidelines, support, and the freedom to achieve the nonnegotiable goals, while sending a clear message to principals and teachers that curriculum and teaching is important to the district office.

Throughout the data, it is clear that the vision of the district, calling for continual improvement of practice aimed at increasing student learning, is driven by very specific nonnegotiable practices that are required throughout the system. These practices include working in collaborative teams rather than in isolation, and developing and monitoring student learning within a common curriculum that is delivered in ways that are differentiated to meet the individual needs of all learners. Student work is used as evidence of student learning, keeping the needs of the student central to all curriculum planning. The nonnegotiables in Cordova create a structure for professional learning that "builds leadership practices through the interactions of leaders and followers" (Spillane, 2005), fostering the development of leadership capacity across the district. This interaction is characterized by reciprocal accountability (Elmore, 2004), calling upon leaders to help build the capacity of the members of the group to accomplish what they have been asked to accomplish.

In order to build a relationship of reciprocal accountability, nonnegotiable expectations, such as those seen in Cordova, need to be balanced by a commitment on the part of the leadership team, led by the superintendent, to provide the time and resources to support success:

"A fundamental task of leadership at all levels in systemic reform is to create the conditions that allow people to be successful at what they are being asked to do" (DuFour & Fullan, 2013, p. 51).

Conditions ripe for professional growth were not seen consistently across Cordova. Multiple educators, including the Superintendent, referenced a disparity in the amount of time provided for teachers at the elementary level and their colleagues in middle and high school levels. While the study included limited data from the elementary level, the interviews indicated that the participating elementary school appeared to be at the *implementing* stage (DuFour et al., 2008) on the PLC continuum in the area of building a collaborative culture through high performing teams:

> "Teachers have been assigned to collaborative teams and have been provided time for collaboration during the regular contractual day. Teams may be unclear about how to use the collaborative times" (p. 147).

In its second year with the current principal, this elementary school has begun to develop a culture of collaboration through faculty book studies and grade level meetings that use student data to drive RtI planning. Although it is limited, common time is scheduled weekly for planning across grade levels. However, a reliance on principal facilitation appears to dictate the frequency of PLC work done during this common time, limiting the team's ability to continually develop its capacity to collaborate at meaningful levels (Little, 1990). On the other hand, both teachers and administrators referenced a group of educators from the target elementary school who collaborate beyond the district, through participation in a community of learners in partnership with a neighboring district which is focused on curriculum and pedagogical practice.

Although not consistently inherent in all participating schools, reciprocal accountability within a structure of defined autonomy was especially clear in the middle school, where the necessary conditions were provided (time, facilitators, protocols, open communication), and

teachers were able to move their collaboration to the level of joint work (Little, l990). The principal of this school reported:

> "My underlying belief is that my job is to make sure that my teachers are the best that they can be, because they are the direct link to children, not me. And so I try to prioritize giving the teachers everything they need to do that."

Defined autonomy was evident, in that while the non-negotiable practice of collaborative professional learning was a central focus in this school, the nuts-and bolts of the work (i.e. the pacing of the lessons; the planning of curriculum; development of the common assessments to drive inquiry process) were left to the professional educators who make up the individual teams. "Together, teachers study curriculum frameworks and translate them into the specific knowledge and skills students must acquire from each unit of instruction…they make decisions regarding recommended pacing for those units, and about the instructional strategies they feel will be most effective in their classrooms." (DuFour & Fullan, 2013, p. 15.)

In a similar way, building administrators share a relationship of defined autonomy with the superintendent. While principals are expected to ensure that district nonnegotiable practices are present in their schools, they have latitude in terms of how they create the conditions to do so. One school built shared understanding of collaborative inquiry through the use of book study; another used technology to communicate between and among teachers and administrators regarding the work of each team; and a third navigated the political waters to make changes to the schedule that would allow more productive professional learning opportunities for teachers.

The balance of loose and tight leadership has been carefully established over several years in Cordova, through building shared knowledge about what the nonnegotiable collaborative practices entail and by creating supports for broad-based leadership to provide the

capacity for this work to move forward. DuFour and Fullan (2013) concur that "successful districts…are characterized by *interdependence* – the right amount of autonomy and collaboration that results in focus, learning together, and strong internal commitment to group accountability that serves them well in the face of external public accountability" (p. 39). As the leadership team in Cordova continues to participate in joint work demonstrated in their collaborative development of the administrative walk though process, they continue to develop a sense of interdependence by actualizing a cycle of inquiry that builds their individual and collective capacity to provide school-level leadership that supports ongoing teacher growth.

Superintendent Murphy articulates a belief in the power of building leaders to establish behavioral expectations that will foster the development of a collaborative culture. His theory of *behavior begets belief* is supported by DuFour and Fullan (2013)*,* who echo a similar notion, "[District leaders] must not wait for universal buy-in before moving forward, because there will never be complete support for substantive change…. Good change processes generate more and more ownership as they proceed….Purposeful interaction generates a shared mindset" (p. 27). Doug Reeves also supports this notion, asserting that leaders must recognize the fact that the cycle of organizational improvement is not "vision, buy-in, and action, but vision, action, buy-in, and more action" (Reeves, 2006, p. 96). By investing in the development of capacity by the leadership team, Superintendent Murphy generates a power-source for building level action that drives instructional improvement, and ultimately increased student learning. Within the boundaries of the district-level common goals and expectations, building leaders are able to provide opportunities for purposeful action among teachers and meaningful collaboration through cycles of inquiry that connect teaching practices to learning outcomes.

Conclusion

The major findings from this study suggest that district leadership places in the fourth quadrant of Lambert's Leadership Capacity Matrix. As such, Cordova attends authentically to the responsibilities set forth by Linda Lambert (2003):

> A district needs to develop not only its own leadership capacity, but that of its schools as well. This dual responsibility requires district administrators to model certain leadership behaviors; to abide by certain structures, processes, and policies; and to focus (and focus others) on student learning. (p. 80).

In Cordova, principals share leadership skillfully with teachers. Teachers and leaders alike continually develop their skill using action research, asking hard questions, and providing feedback within collaborative norms that have become established procedure. Questions and concerns are subjected to thoughtful dialogue and are thoroughly investigated, as the role of educators takes on important meaning through collective responsibility that extends to the school and the district.

The major challenge in Cordova is sustainability, which is addressed in the recommendations of the larger study. As found in the Wallace study (2010), district leadership, school leadership, teacher actions, and student achievement represent a complex system of interacting influences that impact teacher growth. The Wallace study asserts that when all elements within this system are operating in concert, the effectiveness of the district is maximized. The findings of this qualitative case study suggest that Cordova's superintendent is the conductor of this concert and, as such, orchestrates the complex interacting influences, attempting to build collective coherence and a shared mindset across the district.

CHAPTER 6

DISCUSSION[6]

The research team's findings highlight the Cordova School District's system-wide vision, culture of psychological safety, focus on collaboration, prioritization of time and resources, and emphasis on protocols. In this section, the team connects the findings back to the literature and conceptual framework for the study, and identifies how these findings developed while also discussing how they differed across the participant schools. In identifying limitations, we lay out the limited scope of the study and why certain decisions were made regarding the size and choices made in the study. Finally, we present a set of recommendations to the district based on our findings.

A District Vision That is Articulated Through Clear Expectations and Modeling

Research is clear that it is important for district leaders to develop a vision of excellence about teaching, learning, and leading that is shared with all constituents in the learning organization, and that they model the importance of making collaborative decisions that are consistent with that vision (Carter, Glass, & Hord, 1993; Dufour & Marzano, 2011; Huffman & Hipp, 2003; Marzano & Waters, 2009; Ovando & Owen, 2000; Schlechty, 2009). Such a shared vision provides a touchstone from which all other district actions flow (Lambert, 2003). The research team found that the Superintendent of the Cordova Public Schools effectively communicates a clear vision for the district in his strategic plan. This plan calls for educators to work collaboratively to utilize data gathered from frequent formative assessments in order to examine their instructional practices through the lens of student work, and to adjust their

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[6] This chapter was jointly written by the authors listed and reflects the team approach of this project: Telena S. Imel, Philip McManus II, Maryanne Ryan-Palmer and Christine M. Panarese

teaching accordingly to meet the needs of all learners. This work is guided by four critical

questions (DuFour & Fullan, 2013):

- · What is it we want our students to know?

- · How will we know when they are learning?

- · How will we respond when individual students do not learn?

- · How will we enrich and extend the learning for students who are proficient?

The use of these consistent questions to guide continuous cycles of inquiry allows a

common voice to be heard in conversations of educators at all levels, including examination of

student work, use of common assessments, collaborative decision-making to determine

proficiency among students, and adjustment to practice targeted at specific student needs.

Wenger (2011) defines this iterative process of learning, as the "interplay of learning and

experience," exemplified in the shared repertoire of resources, routines, and practices that

enhance individual and organizational practice. Although evidenced in varying degrees at the

elementary, middle and high school levels, the relationship between students' needs and

instructional practice is the consistent focus of collaborative professional inquiry in Cordova.

This leads to adjustments in practice and pedagogy that allow teachers to more effectively meet

the needs of the students they serve, in direct alignment with the vision of the Superintendent.

The vision of Cordova is clearly articulated in a one-page, strategic plan, setting forth a

theory of action that is shared with all members of the learning community. The superintendent

consistently communicates and models this vision in his work with the leadership team,

increasing their collective capacity to extend the work in schools and classrooms across the

district. Through his consistent use of norms and protocols in leadership team meetings, the

superintendent models the strategies that live the mission in the district schools. By leading the

iterative development of learning walks with his leadership team, the superintendent and his leadership team examines teacher practice in a collaborative cycle of inquiry, affording a deeper and more personal understanding of expectations for teachers in studying student work and revising practice. As a result, district administrators are better able to make meaningful connections between teacher practice and student learning, as they model the collaborative cycle of inquiry they are fostering among district teachers.

Culture of Psychological Safety

The research team found that Cordova School District leaders recognize the critical importance of their role in fostering and establishing a culture of safety throughout the entire district. Administrators from each of Cordova's school levels conveyed their responsibility to facilitate educator inquires into teaching and learning that lead to teachers' professional growth and greater student achievement through a facilitative process that fosters relational trust among all stakeholders. The evidence that supports the finding of a positive school and district culture and climate appears to be fostered by the establishment of a safe working environment for educators to learn and grow. This culture of safety has helped to foster the development of trusting, collaborative relationships among a significant number of school leaders and teachers. This culture of safety has preserved the preplanning work the district had engaged in around educator evaluation and is a key factor in the district's successful implementation of the new educator evaluation tool. McLaughlin and Talbert (2006) remind school and district leaders of the importance of their role in creating trustful cultures and observe that the principal is "in a key strategic position to promote or inhibit the development of a teacher learning community in their school...school administrators set the stage and conditions for starting and sustaining the community development process" (p. 56).

Triangulated data from multiple sources, such as interviews, artifact analysis, field notes, and site observations, validates the widespread success of the Cordova Schools in creating and maintaining a culture of safety. It is important to note, however, that the research sample was small and might have been comprised of a high concentration of collaborative individuals whose personalities seek to please others. Data collected from three different schools, however, challenges this alternative speculation. Additionally, there was significant evidence that supported the administrators' consistent actions to monitor school or district culture for elements of safety and trust to ensure that the collaborative practices that foster educator growth and improved student achievement are not interrupted.

These important findings assist in accelerating change processes associated with the transformation of schools and districts and validates the existence of a critical element necessary for the establishment of a community of practice (Covey, 2006). Wenger (1998b) states, "as a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of enterprises, communities hold the key to real transformation - the kind that has real effects on people's lives" (p. 85). Evans, Thorton & Usinger (2012) recognize the opportunity school leaders have to create a culture of ongoing examination of teaching and learning that facilitates the necessary changes in instruction and assert, "effective job-embedded professional development can increase the capacity of individual teachers, which in turn, enable teachers to more effectively meet the needs of students" (p. 157).

Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner (2012) remind school leaders to develop the structures that support the opportunity for frequent, positive collaborative practices among educators and note it is the first of the "five principles of a learning organization" (p. 70). These five domains of a learning organization first focus on creating the

context for effective, safe organizational learning. In this way, leaders can be assured of the development of a solid foundation to support the second principle of a learning organization, "personal mastery," which assists in refueling an individual's motivation and desire to advance their own and others' learning (p. 76).

Research indicates that the district had implemented several initiatives to facilitate and promote honest and open dialogue among faculty and administrators, thus building a level of relational trust among employees. This finding infers that district leadership understands the research cited by Handford & Leithwood (2012) that asserts that trust among administrators, colleagues and other educational stakeholders is significantly related to student achievement (Bryk & Schneider, 2003). Bryk and Schneider (2003) support this notion of open and honest dialogue to build trust and foster effective collaborative practices by asserting,

> Relational trust is grounded in the social respect that comes from the kinds of social discourse that take place across the school community. Respectful exchanges are marked by genuinely listening to what each person has to say and by taking these views into account in subsequent actions. Even when people disagree, individuals can still feel valued if others respect their opinions.

To support this idea, there is also a large body of research that asserts the need for school and district administrators to create and maintain a culture of safety and collegial openness to help to assure educator engagement in collaborative, school-based professional development (Darling-Hammond et al., 2009; Elmore 2004; Hargreaves & Fink, 2003).

Research conducted by Bryk and Schneider (2003) also highlighted the importance of removing the barriers that lead to organizational and relational distrust, finding that "without interpersonal respect, social exchanges may cease" (p. 40). Thus leaders must be aware of the

risk of educator avoidance in engaging in any collaborative learning that is perceived as unrewarding or degrading to their professionalism (p. 40) that can result from a culture of low organizational or relational trust.

The benefit of trust is best explained by Covey (2006) who notes, "trust is a function of both character (which includes integrity) and competence" (p. 25). Clearly, a majority of the interview participants perceived the Cordova leaders and their colleagues as trustful and competent. For organizations engaged in implementing a change process, it would beneficial to the reform effort to first establish or rebuild trust. By establishing relational trust and organizational safety prior to embarking on any change initiative, school leaders allow for the wide dispersing of any concerns or risks associated with the change initiative. Therefore, school environments with high levels of trust have a distinct advantage in the instructional change processes that lead to greater student achievement because they possess what is known as a "core resource for school reform" or trust that allows for a quicker pace through the school change or transformative process (Byrk & Schneider, 2003, p. 43).

Since collaboration is a main focus in Cordova, the district leaders' vision and focus on district improvement to establish and maintain healthy collaborative practices hinged on the establishment of a culture of safety. While there was evidence to support that there were high levels of relational trust among some educators, this was not a generalized finding. However, it can be assumed that this existence of relational trust, while concentrated throughout the district, was preceded by the establishment of a culture of psychological safety that fostered the open, honest discussion and inquiry into teaching and learning. Specifically, the way in which the district implemented and used the new teacher evaluation tool is to be commended.

Collaboration as the Focus for Improved Instruction

The research team anticipated that collaboration would be evident in the district. However, collaboration quickly emerged as a key focus and initiative in the district during observations of our first meeting. The superintendent discussed the importance of collaboration at the new teacher orientation and specifically focused on the four levels of collaboration (Little, 1990). As the focus for the school district and vision of the superintendent, collaboration is regarded as a "non-negotiable." The focus on collaboration is the means for improving educator practice and ultimately student achievement. Consequently, collaboration in the district exists at all levels and is something that district and building leadership works to promote and facilitate.

Illustrative of Wenger's (2011) theoretical framework, the district fosters a culture that values relationship development within the organization. Some of the qualities of Wenger's communities of practice evident in Cordova include: problem solving, requests for information, seeking experience, coordination and synergy, and discussing developments (Wenger, 2011). As such, Little (1990) maintains that at its highest level, collaboration focuses on joint work to determine a basic set of priorities that can guide teaching. Connecting back to Wenger (2011), collaboration includes the qualities found in communities of practice, as mentioned earlier.

A number of researchers have found that collaboration is essential to organizational change and improvement (Blasé & Blasé, 2000; Chi Keung; 2009; Frederiksen & White; 1997; Gallimore, Ermeling, Saunders, & Goldenberg, 2009; Jacobson & Bezzina; 2008; Saunders et al., 2009; York-Barr et al., 2007). In Cordova, organizational change is fast moving under the new superintendent, and as a result, collaboration is critical. Working in isolation has been a constant practice within American teaching culture; thus the shift to a more collaborative professional culture has been difficult for organizations to embrace, but not Cordova. While

change begins with individuals, these individuals are more likely to change in meaningful and lasting ways when they work and learn collaboratively in communities of practice (Blasé & Blasé, 2000; Chi Keung; 2009; Darling- Hammond, 2010; Wenger, 1998a). The researchers found that communities of practice exist at every level and support collaboration. Structures that allow for collaboration and reflective conversations are seen as "viable way(s) to develop teachers because they are school-based and arise from teachers' daily concerns in the classroom and school" (Ashraf & Rarieya, 2008, p. 278). In Cordova, the structures include time for grade level and departmental meetings, professional development opportunities, and scheduled time to review data or look at student work. "Collaboration includes continuing interactions about effective teaching methods, plus observation of one another's classrooms. These activities help teachers reflect on their own practice and in identifying things that can be improved" (Stigler & Hiebert, 1999, p. 124).

As collaborative communities of practice form naturally, the researchers assumed that the district selected for our case study would have numerous and varied communities of practice. We found communities of practice that were as varied as each individual in the district. There were many formal communities of practice created at each level of the district, specifically grade level and departmental teams, district, and building-based leadership teams. While communities of practice existed, the level of functioning and collaboration within each varied. Additional informal communities of practice based on alliances and interests (e.g. teachers with the same lunch period, teachers newer to the building, or those who have had similar students and have created a support system) were also found to exist in the Cordova School District.

The importance of collaboration in Cordova is a top-down vision and initiative, but one that is shared at all levels. Teachers and administrators discussed the importance of collaborative

work in their daily practice, and identified the structures in place to allow them to collaborate. New teachers affirmed working in grade level teams to discuss student work and common assessments. Other teachers examined student achievement data to identify areas of growth to thus inform curriculum and instruction. Consequently, while teachers are expected to collaborate, so much so that new teacher support is regarded as a type of collaborative support and mentoring, principals are the ones responsible to ensure that collaboration is taking place at a level that improves instruction and student learning.

Among the three participant schools, the researchers found that collaboration is occurring most frequently and at its highest level in the middle school. Over the past six years, the middle school principal has maintained a focus on collaboration, and has provided teachers the structures needed to facilitate collaboration. Not far behind, the high school instituted structures to enable collaboration. Department meetings focus on joint work, which can involve reviewing student data, developing common assessments, or reviewing student work. The principal fosters a collaborative atmosphere, but also trusts department heads and teachers to carry out the work. Given its size, building capacity and buy-in have taken time in the high school. At more of a developmental level, the target elementary school is working towards more frequent and high-level collaboration. While the principal is committed to it, she is only in her second year, and the structures at the elementary level are not as conducive to collaboration. However, they are working to find time to collaborate, and district leadership is open to modifying the schedule to allow for more collaborative time at the elementary level.

Collaboration is a major focus for the district, and one that the research team spent considerable time investigating and discussing. With Judith Warren Little's research grounding

his vision for the district, the superintendent has established a collaborative atmosphere at all levels and works consistently to support and enhance it.

Prioritizing Time and Resources for Collaboration and Professional Growth

Data consistently reflected that district and school leaders made a concerted effort to prioritize time and resources to enhance the district's collaborative structures in order to drive individual and institutional growth. The district prioritized time and resources in three specific ways. First, they maximized use of existing structures; a specific example was how the middle school scheduled weekly collaboration for teachers. This time shifted from working in cross subject teams to a more strategic use of the time collaborating in content area teams in response to a district expectation that time be utilized to modify instructional practice in order to improve student outcomes. Second, they enhanced structures within the district by increasing the number of district-wide early release days. Time was focused on developing and refining standards-based units and common assessments. Finally, they created new structures within the system, as teachers, building principals, and the superintendent compromised to create a new structure for regular collaboration in departments at the high school. While this new structure provided less time for collaboration than the previous structure, participants felt that the compromise created time that could be more meaningfully used to collaborate and examine their practice.

In the context of Wenger's framework, findings suggest that Cordova prioritized time and resources to enhance the social learning of individuals in the organization, a key element for improved organizational functioning. School districts are complex organizations that rely heavily on relationships to improve practice and effectively meet the social and academic needs of students. Through this type of prioritization, Cordova supported educator growth.

Research acknowledges that for schools to better serve their students, established structures and allocated times are essential for individual and collaborative reflection to occur (Dana & Yendol-Hoppey, 2008; Danielson, 2009; Drago-Severson, 2004; DuFour & Marzano, 2011; DuFour et al., 2010; Frederiksen & White, 1997; Glazer, Abbott, & Harris, 2004, Larrivee, 2008b). Stigler and Hiebert (1999) also recommend that teacher improvement efforts in the United States must focus on job-embedded, collaborative work where teams look closely at lessons and student work to enhance educator practice. They view professional development to be a critical component of the vocation and recommend for time to be scheduled into the teacher workday. Cordova's prioritization of time and resources to enhance collaboration shows the district has embraced this belief. Furthermore, Cordova prioritized and restructured the schedule to provide collaborative time, with targeted professional development, which aligns with the work of Elmore (2004) and Proefriedt & Raywid (1994). Additionally, this move exemplifies that "the Star teachers of the 21st century will be teachers who work every day to improve teaching – not only their own, but that of the whole profession" (Stigler & Hiebert, 1999, p. 179). These enhancements reflect district and school leaders' commitment to provide professional development opportunities, which foster a supportive environment and provide time for individuals and groups to engage in the examination of instructional practices and school problems (Osterman & Kottkamp, 2004).

Cordova has made teacher growth the core of district and school improvement efforts (Stigler & Hiebert, 1999). This is evident in efforts, which prioritized and guarded time and resources of the district and the time, energy, and effort of educators. Participants viewed these decisions as advancing the district expectation that all educators engage in continuous learning in order to provide students increased opportunities for growth and achievement.

Use of Protocols and Facilitation to Increase Effectiveness of Collaboration

Participants viewed protocols as useful tools for facilitating collaborative conversations and consensus building during meeting times. The most prevalent protocol focused on a structure of inquiry designed to examine student work. This finding is representative of the consistent progress the district has made towards one of the superintendent's reform initiatives. Wenger (1998a) found that effective communities of practice are recognized by a shared repertoire of resources, routines, and practices. Cordova's use of protocols allowed participants to engage in more effective collaboration. Therefore, specific grade levels and departments, which functioned as communities of practice, engaged in cycles of inquiry due to protocols and facilitation. These two components worked together to focus conversations, allow all voices to be heard, and develop institutional knowledge and skills through the examination of student work. The uses of these tools are examples of what Wenger (2011) refers to as the iterative process of learning or the "interplay of learning and experience."

The importance of the use of protocols in the Cordova Public School District is best explained as the mechanism of choice for providing embedded supports for staff to inquire into teaching and learning, facilitate collaborative group work around topics, ensure effective, reflective discussion among educators, create avenues for the internal/external communication of teacher and administrator voice, and ensure efficient use of educators' time. "Through systematic reflection on and analysis of practice, teachers take charge of their own professional development, and they have the potential to substantially contribute to institutional problems and issues" (Cole & Knowles, 2000, p. 2). Within this collaborative culture, school leaders are able to build and strengthen the capacity of teachers – both individually and collectively (Schmoker, 2006). Spillane (2005) states, "Leadership practice takes form in the interactions between leaders

and followers, rather than as a function of one or more leaders' actions" (p. 147). Spillane sees leadership as evident in the interaction of many leaders, so that "'leaders' practice is stretched over the social and situational contexts of the school…not simply [as] a function of what a school principal, or indeed any other individual leader, knows and does" (Spillane, Halverson, & Diamond, 2000b, p. 6, original emphasis).

Little (2006) advocates for the use of protocols for collaborative discussions around data, student work, or curriculum alignment. Spillane (2005) explains that utilizing the leadership practices (not necessarily utilized by administrators) of "structures, routines and tools" (p. 147) within the context of a specific situation allows people to take action in improving individual and collective growth. DuFour & Eaker (2010) make the case that using protocols helps collaborative teams become more efficient and more effective in analyzing assessment results (p. 185–190). In order for educators working in schools to better serve their students, established structures, such as protocols and allocated times, are needed for individual and collaborative reflection to occur (Dana & Yendol-Hoppey, 2008; Danielson, 2009; Drago-Severson, 2004; DuFour & Marzano, 2011; DuFour et al., 2010; Frederiksen & White, 1997; Glazer, Abbott, & Harris, 2004, Larrivee, 2008b).

While use of protocols and facilitation was valued across all levels, the effectiveness of use varied by level, with the elementary school being the least evolved of the three schools. Data found the middle school to be the most evolved in their use of protocols and the high school to be making steady progress. For the elementary to make similar gains, the district needs to provide opportunities for teacher leaders to become skilled facilitators allowing administrators to stretch the leadership throughout the teams. Since collaboration is a main focus in Cordova, the use of protocols to facilitate discussion and aid in the decision-making process is to be

commended, because they provide essential structures for grade level teams, departments, and groups to work together effectively.

Limitations

The purpose and design of this study was crafted to respond to the research question about "How One Massachusetts School District Facilitates and Sustains Teacher Growth." At the study's inception and throughout the first months, it was originally thought that the structure of this investigation would allow for a clear delineation of the researchers' secondary focus areas. However, after the initial review of data from observations, interviews, and district artifacts, researchers discovered that many of the study's major findings overlapped not only with each other, but also with the study's secondary topic areas. While not a significant limitation of this study, data analyses yielded a more limited, but albeit meaningful, set of findings, especially for the secondary focus areas. It is important, however, to identify other more impactful limitations of this study:

- Our sample group did not include representation from every elementary school in the district, only one out of the five schools participated in the TQ study.

- The majority of the sample group of teachers that participated in our study represented secondary level schools (middle and high school).

- The district leadership team participants that were interviewed represented a sample of convenience.

- There was limited transcript verification from the study's participants; less than half of the participants replied to our request for verification of accuracy.

- It is acknowledged that although the researchers employed the use of audit trails, code checking, and participant validation, qualitative research by nature occurs in a natural setting where changing day-to-day happenings make the study difficult to replicate.

- Because the district lacks a formalized mentoring program, the data collected on this topic represent a newly developed and uniquely innovative approach to supporting new teachers that are hired into the district.

Recommendations for Cordova

The Cordova School District has many conditions and structures in place which foster teacher growth, but there is always room for improvement. This research offers the following recommendations that address Leadership Capacity, Reflection, Feedback, and New Teacher Support.

Leadership capacity. While the researchers found that the Cordova district prioritizes time and resources for collaboration and professional growth, educators in Cordova consistently identified a lack of time and resources at the elementary level as an obstacle to instantiating a community of professional learners in an equitable way across the district. DuFour and Marzano (2013) remind us that in order for the PLC process to impact education beyond individual schools, the process must be implemented across the entire system. As a system-level PLC, the Cordova District should explore opportunities to increase frequency, facilitation, and structure of collaborative time at the elementary level so that it aligns with opportunities available to middle and high school teachers. This can be accomplished by establishing an inclusive think tank that represents all constituencies in the learning community, with the goal of collaboratively investigating opportunities to develop structural strategies that address the limited amount of

collaborative opportunity afforded elementary school teams (DuFour & Eaker, 1998; DuFour et al., 2010).

- Look at the elementary level as a whole, allowing separate elementary schools to work together to develop more effective scheduling of specialists and sharing of scheduling strategies.

- Consider the mutual efforts of all staff members - classroom teachers, specialists, interventionists, and support staff - in creating a schedule that supports a structure of collaborative inquiry.

- Consider creating the schedule from a template organized in small increments (5 minute increments as opposed to 30 minute increments) to allow for flexible blocks of time.

- Prioritize the inclusion of an intervention block for all grade levels, allowing a schedule that provides support staff within the intervention block that allows students who need more support to gain proficiency to get that support without missing important classroom content.

  - Determine the additional staff needed to implement such a schedule.

  - Calculate the cost of this staffing.

  - Look across the district for existing resources that can potentially contribute to the effort.

- Participants across the district identified the effectiveness of trained facilitators at each level as significant to developing professional learning communities. At the elementary level however, training of teachers as facilitators has not occurred, resulting in the need for principals to act as facilitators in this process. DuFour and Marzano (2011) assert that without effective leadership at the team level, the collaborative process is likely to stray

away from the issues that are most critical to student learning. Therefore, the researchers recommend that Cordova trains facilitators at the elementary level who can skillfully guide teacher teams to develop collective capacity to use protocols to examine student work toward targeted planning of instructional practices that increase student learning. This team level leadership further allows the PLC process to create opportunities for shared leadership across the district, enabling people throughout the organization to take the lead in identifying and solving problems.

Reflective process. Many participants identified a desire to increase the number of peer observations, making it a regular part of the reflective process within the district. One building level administrator explained that peer observation is a "growth area" for the district and stated, "It's (peer observation) not an embedded norm in our school." Research identifies peer observation as an approach, which positively impacts teachers' abilities to reflect on instructional practice (Ashraf & Rarieya, 2008; Collet, 2012).

- Because participants expressed differing thoughts on whether peer observation was a tool to which they had access, it is recommended that district leaders review with school leaders how to utilize substitute teachers or other staff to enhance use of peer observations. Several teacher participants expressed a concern about limited opportunities to collaborate vertically with subject area teachers; this was especially true for teachers from small departments. It is recommended that the district review the opportunities and structures that allow "non-core" subject area teachers to collaborate with their peers and develop structures that increase opportunities for vertical collaboration and curriculum alignment. This type of structure would empower teachers to work together in professional communities of inquiry and

practice and increase opportunities to develop reflective judgment to monitor and assess current practices and foster collaborative decision-making, resulting in enhanced future practices (Barnett & O'Mahoney, 2005; Darling-Hammond & McLaughlin, 1995; Killeavy & Moloney, 2010; Friedman & Schoen, 2009; Stigler & Hiebert, 1999).

Educator feedback. Many of the district's teacher and administrator participants provided researchers with detailed descriptions of the delivery and use of effective feedback in the form of instructional observations, student achievement data, surveys, or student feedback. By using feedback as a catalyst for igniting individual and collaborative educator reflection that will lead to change in practices and beliefs, the district has created a culture of ongoing learning in some schools (Mory, 1992; Hattie & Timperley, 2007; Mayfield & Mayfield, 2012). This type of school climate of collective educator learning around the use of feedback supports the concepts outlined in Wenger's concept of Communities of Practice (1998). However, for the District to fully benefit from the effective use of feedback as a means for district-wide educator growth, it is critical that every school leader allocate the necessary time to not only become the instructional leader in their organization, but also model the behavior of continuous learner as well.

- It is recommended that the superintendent place a mandatory, minimum allocated time of two hours each for district administrators to observe instruction and provide feedback to teachers. In this way, the school district can continue to develop their positive use of the feedback processes and expand upon the collaborative examination of instructional practices and the development of the collective instructional improvement goals that will lead to greater student achievement across the district.

Data collected at some sites indicated supervisory use of coaching after the delivery of feedback to assist in educator understanding of the information and corrective actions that would ensure teacher and student growth. Coaching can "refine and boost" individual performance (Lemov, Woolway & Yezzi, 2012, p. 16). Because the District appears to have established the right conditions for this practice in some of the schools, it is probable that the district-wide adoption of instructional supervisor coaching with the delivery of educator feedback will help to facilitate the continual examination and improvement in teaching and learning (Killion, Harrison, Bryan, & Clifton, 2012).

- To circumvent potential barriers to the effective use of feedback at the Cordova School District, the superintendent should consider developing a method that would ensure the consistent use of supervisory coaching along with the delivery of formal and informal educator feedback. The art of teaching is becoming more and more complex. Sellars (2012) reminds educators that as continuous learners, " . . . teachers must now be prepared to engage with the entirety of the holy trinity for teachers: know your content and how to teach it, know your students and how they learn and know yourself, your values and your capacity for reflection and ethical decision making" (p. 462). To ensure that teachers are receptive to the feedback and have the available supports needed to improve their instructional practices, all supervisors of instruction should be trained in effective coaching methods and the positive use of collaborative dialogue prior to the pairing this support with the delivery of educator feedback.

- Data collection and analysis did not indicate that the District was using a valuable feedback source provided by the Massachusetts Department of Education, EDWIN Analytics, either at the teacher or school leader level (MADESE, 2013). This restrictive use of focused data allows for the delivery of feedback in the form of state assessment data and subsequent use of this information for developing common benchmarks, making corrections, analyzing student progress, and monitoring and examining instruction therefore remains in the control of central office administrators. In order for teachers to use feedback to be proactive in seeking feedback and becoming self sufficient in acquiring and using student data effectively, they must have access to the data source (Feeney, 2007). Therefore, it is suggested that the District consider widening the access and use of EDWIN Analytics by taking advantage of the State training opportunities and first train all building leaders in this use of this system. The District should also develop an individual professional development plan that would allow for each administrator to become the EDWIN System "go to" person for their building as well as the embedded staff trainer for this feedback data resource.

New teacher support. The Cordova School District provides important supports for new teachers including informal and formal feedback, grade level or department meetings, and discussions between new teachers and more veteran teachers. They also have district-level mentor coordinators who hold bi-weekly meetings for new teachers and act as mentors for all new teachers. This research found areas for improvement and makes several recommendations to improve new teacher support.

- Given research that supports one-on-one mentor programs, Cordova should establish a formal, mentoring program. Assigning a mentor teacher to a new teacher provides an immediate "go to" person for questions, feedback, and support. This can be accomplished in the context of the collaborative atmosphere and joint work already in place because mentors and protégés will still participate in all regular meetings such as department and grade level teams. Retaining district-based mentor coordinators not only to mentor new teachers, but also to plan a district-wide induction program is somewhat effective, but assigning a one-on-one mentor to each new teacher would ensure that teachers have a formally recognized mentor in place.

- Formalized meeting times should be built into the schedule to provide more structure to allow for exchanges between new teachers and a mentor. As new teachers are not currently assigned to mentor teachers, mentor coordinators serve as mentors for multiple new teachers and other teachers take on the role organically and informally as relationships develop at the beginning of the school year through collaboration and discussion. Since only the high school and one elementary school have mentor coordinators in-house, the principal is responsible for assigning a mentor teacher to new hires. Assigning only one mentor coordinator to the elementary schools places additional pressure on coordinators and may result in less than effective mentoring.

- In retaining the mentor coordinator model, coordinators should have a lighter teaching load so they can travel between schools to check in with one-on-one mentors and new teachers. Otherwise, the district should assign a mentor coordinator to each school where new teachers work. This assignment should remain fluid, as not every school will have a new teacher each year.

The district's new teacher support protocol does not formally involve principals, and currently principals can decide when and how much to be involved in supporting new teachers. While the collaborative vision and norm for the district assumes that principals provide support to new teachers, evidence demonstrates variation among principals.

- Although concerns are brought to the mentor/coordinator who then responds to the new teacher, a formal expectation should require principals to work with new teachers and function as instructional leaders. This could involve instructional modeling, check-in meetings or informal observations. This will help the principal better support new teachers and ensure their growth as practitioners.

Moving forward in Cordova. One area that the data collection did not illuminate is how the district monitors and evaluates implementation of established expectations at the building level. The researchers question if the district has in place a mechanism, which allows for continuous cycles of review and evaluation for each initiative. This review process would provide for the immediate needs of those implementing the initiative based on feedback and validate the progress and effectiveness of district initiatives.

- If there are no such mechanisms currently in place it is recommended that structures be established to review district initiatives and the review process should include stakeholders from all levels of the district.

Fullan (2001) and others have identified leadership succession as a critical factor in initiative sustainability (Hargreaves & Fink, 2003; Jacobson & Bezzina, 2008). A comprehensive succession plan would include training and mentoring for individuals who would have the social and leadership capacity to carry on the vision and mission of the district as well as build and maintain the healthy culture that has already been established.

Finally, it is recommended that district leaders attend to issues of succession planning as participants perceived that schools in the district with stable school leadership provided greater opportunities for teachers to engage in the reflective process.

Summary

Our findings highlight the importance of a district vision that provides the support and structures for collaboration, which in turn leads to educator growth. Although creating a psychologically safe environment to foster and support collaboration through relationship building and joint work served as the major group finding, individual studies drilled down more deeply into the data to examine specific functions, structures, and supports for professional growth in the district. Individual sections examined the relationships, structures, and modeling that supports new teachers; the type of reflective questions and processes employed by district leaders with teachers; the structures and supports provided by district leaders that support school-based collaborative teacher growth; and the feedback processes employed to encourage educator growth. As our findings highlight, the Cordova school district has created a safe collaborative environment with strong leadership and a reflective stance that uses various forms of feedback to support teachers, including those new to the procession. The goal of this study was to inform practice with knowledge and insight with the hope that school districts and leaders can make improvements to foster teacher professional growth through the implementation of a cohesive vision, structures, and leadership behaviors.

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References[7]

Aguinis, H., Gottfredson, R.K., & Joo, H. (2012). Delivering effective performance feedback: The strengths-based approach. *Business Horizons 55*, 105-111. doi:10.1016/j.bushor.2011.10.004.

Ainsworth, L. & Viegut, D. J. (2006). *Common formative assessments: How to connect standards-based instruction and assessment.* Thousand Oaks, CA: Corwin Press.

Akbari, R. (2007). Reflections on reflection: A critical appraisal of reflective practices in L2 teacher education. *System, 35*(2), 192-207. doi:10.1016/j.system.2006.12.008.

Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). *High-quality professional development for all teachers: Effectively allocating resources*. Washington, D.C.: National Comprehensive Center for Teacher Quality.

Argyris, C. (1982). *Reasoning, learning, and action: Individual and organizational*. San Francisco, CA: Jossey-Bass.

Ash, P. B., & D'Auria, J. D. (2013). *School systems that learn: Improving professional practice, overcoming limitations, and diffusing innovation.* Thousand Oaks, CA: Corwin Press.

Ashraf, H., & Rarieya, J. F. A. (2008). Teacher development through reflective conversations - possibilities and tensions: A Pakistan case. *Reflective Practice, 9*(3), 269-279. doi:10.1080/14623940802207055.

Ayas, K., & Zeniuk, N. (2001). Project-based learning: Building communities of reflective practitioners. *Management Learning, 32*(1), 61-76.

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[7] Authors: Telena Imel, Philip McManus II, Maryanne Ryan-Palmer, Christine M. Panarese

Bambrick-Santoyo, P. (2012). *Leverage leadership: A practical guide to building exceptional schools*. San Francisco, CA: Jossey-Bass.

Barnett, B. G., & O'Mahony, G. R. (2006). Developing a culture of reflection: Implications for school improvement. *Reflective Practice, 7*(4), 499-523. doi: 10.1080/14623940600987130

Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principals can make the difference*. San Francisco, CA: Jossey-Bass.

Beerens, D. R. (2000). *Evaluating teachers for professional growth: Creating a culture of motivation and learning.* Thousand Oaks, CA: Corwin Press, Inc.

Blankstein, A. M. (2011). *The answer is in the room: How effective schools scale up student success*. Thousand Oaks, Calif.: Corwin Press.

Blase, J., & Blase, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration, 38*(2), 130-141. doi: 10.1108/09578230010320082

Bloom, G. (2007). Classroom visitations done well. *Leadership, 36*(4), 40-44.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and sustaining effective professional learning communities*. London: Institute of Education, University of London.

Bolton, G. (2010). *Reflective practice: Writing and professional development* (3rd ed.). London: Sage Publications.

Boruch, R., Merlino, J., & Porter, A. (2012). Where teachers are replaceable widgets, education suffers. *Education Week, 31*(27), 20-21.

Bourner, T. (2003). Assessing reflective learning. *Education Training, 45*(5), 267-272.

    doi:10.1108/00400910310484321

Brandt, C., Mathers, C., Oliva, M., Brown-Sims, M., & Hess, J. (2007). *Examining district*

    guidance to schools on teacher evaluation policies in the Midwest region. Washington,

    DC: U.S. Department of Education, Institute of Education Sciences, National Center for

    Education Evaluation and Regional Assistance, REL Midwest. Retrieved from

    http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2007030.pdf.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind,*

    experience, and school (Expanded ed.). Washington, DC: National Academies Press.

Britton, E., Paine, L., Pimm, D., & Raizen, S. (2003). *Comprehensive teacher induction: Systems*

    for early career learning. Norwell, MA: Kluwer.

Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.

Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform.

    Educational Leadership, *60*(6), 40-45.

Burch, P., & Spillane, J. P. (2005). How subjects matter in district office practice: Instructionally

    relevant policy in urban school district redesign. *Journal of Educational Change, 6*(1),

    51-76.

Carter, D. S. G., Glass, T. E., & Hord, S. M. (1993). *Selecting, preparing, and developing the*

    school district superintendent. Washington, D.C.: Falmer Press.

Chi Keung, C. (2009). Cultivating communities of practice via Learning Study for enhancing

    teacher learning. *KEDI Journal of Educational Policy, 6*(1), 81-104.

Cinnamond, J. H., & Zimpher, N. L. (1990). Reflectivity as a function of community. In R. T.

    Clift, W. R. Houston, & M. C. Pugach (Eds.), *Encouraging reflective practice in*

education: An analysis of issues and programs (pp. 59-72). New York: Teachers College Press.

City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning* Harvard Education Press Cambridge, MA.

Cochran-Smith, M., Barnatt, J., Friedman, A., & Pine, G. (2009). Inquiry on inquiry: Practitioner research and student learning. *Action in Teacher Education, 31*(2), 17-32.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education, 24*, 249-305.

Cole, A. L., & Knowles, J. G. (2000). *Researching teaching: Exploring teacher development through reflexive inquiry*. Boston: Allyn and Bacon.

Collet, V. S. (2012). The gradual increase of responsibility model: Coaching for teacher change. *Literacy Research & Instruction, 51*(1), 27-47. doi: 10.1080/19388071.2010.549548

Covey, S. M., & Merrill, R. R. (2006). *The speed of trust.* New York, NY: Free Press.

Cranston, J. (2009). Holding the reins of the professional learning community: Eight themes from research on principals' perceptions of professional learning communities. *Canadian Journal of Educational Administration and Policy, 90*, 1-22.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Addison Wesley.

Creswell, J. W. (2008). *Research design* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), 124-130.

Curtis, R. E., & City, E. A. (2009). *Strategy in action: How school systems can support powerful learning and teaching.* ERIC.

Dana, N. F., & Yendol-Hoppey, D. (2008). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry.* Thousand Oaks, CA: Corwin Press.

Danielson, C. (2009). *Talk about teaching!: Leading professional conversations.* Thousand Oaks, CA: Corwin Press.

Danielson, C., & McGreal, T. L. (2000). *Teacher evaluation to enhance professional practice.* Alexandria, VA: ASCD.

Darling-Hammond, L. (2011). Effective teaching as a civil right: How building instructional capacity can help close the achievement gap. *Voices in Urban Education, 31,* 44-52. Retrieved from http://vue.annenberginstitute.org/sites/default/files/issuePDF/VUE31.pdf

Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future.* New York, NY: Teachers College Press.

Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching.* Kutztown, PA: National Commission on Teaching & America's Future.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan, 76*(8), 597-604.

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad.* Washington, DC: National Staff Development Council.

Day, C. (2000). Effective leadership and reflective practice. *Reflective Practice, 1*(1), 113-127.

Day, C. (1999). Researching teaching through reflective practice. In J. Loughran (Ed.),

　　Researching teaching: Methodologies and practices for understanding pedagogy (pp.

　　215-232). London: Falmer Press.

DeNisi, A.S., and Kluger, A.N., (2000). Feedback effectiveness: Can 360-degree appraisals be

　　improved? *Academy of Management Executive, 14*(1), 129-139.

DeMulder, E. K., & Rigsby, L. C. (2003). Teachers' voices on reflective practice. *Reflective*

　　Practice, 4(3), 267 - 290. doi:10.1080/1462394032000112192

Dewey, J. (1938). *Logic, the theory of inquiry*. New York: H. Holt and company.

Dewey, J. (1933). *How we think*. Boston: D.C. Heath & Co.

Drago-Severson, E. (2007). Helping teachers learn: Principals as professional development

　　leaders. *Teachers College Record, 109*(1), 70 - 125.

Drago-Severson, E. (2004). *Helping teachers learn: Principal leadership for adult growth and*

　　development. Thousand Oaks, CA: Corwin Press.

DuFour, R. (2010). *Learning by doing: A handbook for professional learning communities at*

　　work. Bloomington, IN: Solution Tree Press.

DuFour, R. (2002). The learning-centered principal. *Educational Leadership, 59*(8), 12-15.

DuFour, R. (1998). *Professional learning communities at work: Best practices for enhancing*

　　student achievement. Bloomington, IN: National Educational Service.

DuFour, R., DuFour, R. B., & Eaker, R. E. (2008). *Revisiting professional learning communities*

　　at work: New insights for improving schools. Bloomington: Solution Tree.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for*

　　enhancing student achievement. Alexandria, VA: Association for Supervision and

　　Curriculum Development.

DuFour, R., & Fullan, M. (2013). *Cultures built to last: Systemic PLCs at work* Solution Tree Press.

Dufour, R., & Marzano, R. J. (2011). *Leaders of learning: How district, school, and classroom leaders improve student achievement*. Bloomington, IN: Solution Tree Press.

Eaker, R., DuFour, R., & Burnette, R. (2002). *Getting started: Reculturing schools to become professional learning communities*. Bloomington, IN: Educational Services.

Easton, L. (2011). *Professional learning communities by design: Putting the learning back into PLCs*. Thousand Oaks, CA: Corwin Press.

Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance*. Cambridge, MA: Harvard Education Press.

Elmore, R. F. (2000). *Building a new structure for school leadership.* Washington, DC: The Albert Shanker Institute. Retrieved from www.shankerinstitute.org/Downloads/building.pdf.

Elmore, R. F., & Burney, D. (1999). Investing in teacher learning:Staff development and instructional improvement. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 263-291). San Francisco: Jossey-Bass.

Evans, L. Thornton, B., & Usinger, J. (2012). Theoretical frameworks to guide school improvement. *NASSP Bulletin*, *96*(2), 154-171.

Farrell, T. S. C. (2004). *Reflective practice in action: 80 reflection breaks for busy teachers*. Thousand Oaks, Calif.: Corwin Press.

Feeney, E. J. (2007). Quality feedback: The essential ingredient for teacher success. *Clearing House, 80*(4), 191-198.

Fendler, L. (2003). Teacher reflection in a hall of mirrors: Historical influences and political

    reverberations. *Educational Researcher, 32*(3), 16 - 25.

    doi:10.3102/0013189X032003016

Fideler, E., & Haskelhorn, D. (1999). *Learning the ropes: Urban teacher induction programs*

    and practices in the United States. Belmont, MA: Recruiting New Teachers.

Frederiksen, J. R., & White, B. Y. (1997). Cognitive facilitation: A method for promoting

    reflective collaboration. In R. Hall, N. Miyake, & N. Enyedy (Eds.), *Proceedings of the*

    2nd international conference on computer support for collaborative learning (pp. 53-62).

    Toronto: University of Toronto.

Friedman, A., Galligan, H., Albano, C., & O'Connor, K. (2009). Teacher subcultures of

    democratic practice amidst the oppression of educational reform. *Journal of Educational*

    Change, 10(4), 249-276. doi:10.1007/s10833-008-9090-x

Friedman, A., & Schoen, L. (2009). Reflective practice interventions: Raising levels of reflective

    judgment. *Action in Teacher Education, 31*(2), 61-73.

Fullan, M. (2011). *Change leader: Learning to do what matters most.* San Francisco, CA:

    Jossey-Bass.

Fullan, M. (2006). *Turnaround leadership*. San Francisco, CA: Jossey-Bass.

Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.

Fullan, M., Bertani, A., & Quinn, J. (2004). New lessons for districtwide reform. *Educational*

    Leadership, 61(7), 42.

Fullan, M. & Hargreaves, A. (1996). *What's worth fighting for in your school?*. New York:

    Teachers College Press.

Fullan, M., & Stiegelbauer, S. (1991). *The new meaning of educational change* (2nd ed.). New York: Teachers College Press.

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

Ganley, D. D., Quintanar, A. P., & Loop, L. S. (2007). Raising the bar of teacher quality: Accountability, collaboration, and social justice. *College Quarterly, 10*(3), 1-11.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915-945.

Ghaye, T. (2011). *Teaching and learning through reflective practice: A practical guide for positive action.* New York, NY: Routledge.

Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly, 42*(1), 124-156. doi:10.1177/0013161X05278189

Glazer, C., Abbott, L., & Harris, J. (2004). A teacher-developed process for collaborative professional reflection. *Reflective Practice, 5*(1), 33-46.

Goe, L. (2007). *The link between teacher quality and student outcomes: A research synthesis.* Washington, DC: National Comprehensive Center for Teacher Quality.

Goe, L., Biggers, K., & Croft, A. (2012). *Linking teacher evaluation to professional development: Focusing on improving teaching and learning.* Washington, DC: National Comprehensive Center for Teacher Quality.

Goe, L., & Stickler, L. M. (2008). *Teacher quality and student achievement: Making the most of recent research*. Washington, DC: National Comprehensive Center for Teacher Quality.

Goldhaber, D. (2002). The mystery of good teaching. *Education Next*, *2*(1), 50-55.

Gronn, P. (2002). Distributed leadership as a unit of analysis. *The Leadership Quarterly*, *13*, 423-451.

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, *29*, 75–91.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice, 8*(3/4), 381-391.

Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9*(2), 157 - 191. doi:10.1080/0924345980090203.

Handford, V., & Leithwood, K. (2013). Why teachers trust school leaders. *Journal of Educational Administration*, *51*(2), 194 – 212.

Harford, J., & MacRuairc, G. (2008). Engaging student teachers in meaningful reflective practice. *Teaching and Teacher Education, 24*(7), 1884-1892.

Hargreaves, A., & Fink, D. (2003). Sustaining leadership. *Phi Delta Kappan, 84*(9), 693-700.

Hargreaves, A., & Fullan, M. (2012*). Professional capital: Transforming teaching in every school.* New York, NY: Teachers College Press.

Harris, A. T. (2010). *Using professional learning communities to build teacher leadership capacity: Creating sustainable change in education*. Retrieved from Education Resources Information Center. http://eric.ed.gov/?id=ED513642

Hatt, B. (2012). Smartness as a cultural practice in schools. *American Educational Research Journal*, *49*(3), 438-460.

Hattie, J., & Timperly, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81-112.

Hayes, J. L. (2006, May 5-7). *An inquiry into best practices for preparing and retaining alternative certification candidates in the sciences.* Paper presented at the Science, Technology, Engineering and Math - Alternative Certification for Teachers Conference, Arlington, VA. Retrieved from http://www.stemtec.org/act/

Hellrung, K., & Hartig, J. (2013). Understanding and using feedback – A review of empirical studies concerning feedback from external evaluations to teachers. *Educational Research Review*, *9*, 174-190. Retrieved from http://www.sciencedirect.com/science/article/pii/S1747938X12000474.

Helterbran, V. R. (2008). Professionalism: Teachers taking the reins. *Clearing House, 81*(3), 123-127.

Hightower, A. M., Knapp, M. S., Marsh, J. A., & McLaughlin, M. W. (2002). The district role in instructional renewal: Making sense and taking action. In A. M. Hightower, M. S. Knapp, J. A. Marsh, & M. W. McLaughlin (Eds.), *School districts and instructional renewal* (pp.193-201). New York, NY: Teachers College Press.

Hipp, K. A., & Huffman, J. B. (2000). How leadership is shared and visions emerge in the creation of learning communities. In P. Jenlink & T. Kowalski (Eds.), *Marching into a new millennium: Challenges to educational leadership. The Eighth Yearbook of the National Council of Professors of Educational Administration.* Lanham, MD: The Scarecrow Press.

Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education, 25*(1), 207–216.

Hodgman, M. R. (2012). Boundaries and applications: The teacher quality debate in America. *Journal of College Teaching & Learning, 9*(3), 223-228.

Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement.* Austin, TX: Southwest Educational Development Laboratory.

Hord, S. M., & Sommers, W. A. (2008). *Leading professional learning communities: Voices from research and practice*. Thousand Oaks, Calif.: Corwin Press.

Hord, S. M., & Tobia, E. F. (2011). *Reclaiming our teaching profession: The power of educators learning in community*. New York: Teachers College Press.

Horsch, E., Kleinsasser, A. M., & Traver, E. (1996). *Collaboration for a change: Teacher-directed inquiry about performance assessments: Reports of five teacher-directed inquiry projects.* Aurora, CO: Mid-continent Regional Educational Laboratory. Retrieved from Educational Resources Information Center. (ED423246)

Houston, W. R., & Clift, R. T. (1990). The potential for research contributions to reflective practice. In R. T. Clift, W. R. Houston, & M. C. Pugach (Eds.), *Encouraging reflective practice in education: An analysis of issues and programs* (pp. 208 - 222). New York: Teachers College Press.

Huffman, J. B., & Hipp, K. K. (2003). *Reculturing schools as professional learning communities*. Lanham, Md.: ScarecrowEducation.

Huffman, J. B., Hipp, K. A., Moller, G., & Pankake, A. M. (2001). Professional learning communities: Leadership, purposeful decision making, and job-embedded staff development. *Journal of School Leadership, 11*(5), 448-463.

Imel, T. S. (2014). *Engaging teachers in the reflective process: How one Massachusetts school district facilitates and sustains teacher growth* (Unpublished doctoral dissertation). Boston College, Boston, MA.

Ingersoll, R. M. (2011). Do we produce enough mathematics and science teachers? *Phi Delta Kappan, 92*(6), 37-41.

Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal, 38*(3), 499-534.

Ingersoll, R. M., & May, H. (2011). *Recruitment, retention and the minority teacher shortage.* CPRE research report # RR-69. Philadelphia: Consortium for Policy Research in Education.

Ingersoll, R. M., & Perda, D. (2011). Is the supply of mathematics and science teachers sufficient? *American Educational Research Journal, 47*(3), 563-594.

Ingersoll, R. M., & Smith, T. M. (2004). Do teacher induction and mentoring matter? *NASSP Bulletin, 88*(638), 28-40.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81*(2), 201-233. doi:10.3102/0034654311403323.

Jacobson, S., & Bezzina, C. (2008). The effects of leadership on student academic/affective achievement. In G. Crow, J. Lumby, & P. Pashiardis (Eds.), *The international handbook on the preparation and development of school leaders* (pp. 80-102). Thousand Oaks: Sage.

Kapadia, K., Coca, V., & Easton, J. Q. (2007). *Keeping new teachers: A first look at the influences of induction in the Chicago public schools.* Chicago: Consortium on Chicago School Research.

Keegan, R., & Lahey, L. L. (2001). *How the way we talk can change the way we work.* San Francisco, CA: Jossey-Bass.

Kennedy, M. (2010). Attribution error and the quest for teacher quality. *Educational Researcher, 39*(8), 591-598. doi:10.3102/0013189X10390804.

Killeavy, M., & Moloney, A. (2010). Reflection in a social space: Can blogging support reflective practice for beginning teachers? *Teaching and Teacher Education, 26*(4), 1070-1076.

Killion, J., Harrison, C., Bryan, C., & Clifton, H. (2012). *Coaching matters*. Oxford, OH: Learning Forward.

Killion, J. P., & Todnem, G. R. (1991). A process for personal theory building. *Educational Leadership, 48*(6), 14-16.

King, P. M., & Kitchener, K. S. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults.* San Francisco, CA: Jossey-Bass.

Kirsch, I., Braun, H., Yamamoto, K. & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future*. Princeton, NJ: Educational Testing Service.

Knight, J. (2004). Instructional coaches make progress through partnership. *Journal of Staff Development, 25*(2), 32-37.

Knowles, M. (1980). *The modem practice of adult education: From pedagogy to andragogy.* San

Francisco, CA: Jossey-Bass.

Kouzes, J. M., & Posner, B. Z. (2003). *The leadership challenge* (Rev. ed.). San Francisco: Jossey-Bass.

Kruse, S., Louis, K. S., & Bryk, A. S. (1994). *Building professional community in schools.* Madison, WI: Center on Organization and Restructuring of Schools.

Lai, E. (2010). Getting in step to improve the quality of in-service teacher learning through mentoring. *Professional Development in Education, 36*(3), 443-469. doi:10.1080/19415250903115962.

Lambert, L. (2003). *Leadership capacity for lasting school improvement.* Alexandria, Va.: Association for Supervision and Curriculum Development.

Lambert, L. (2002a). A framework for shared leadership. *Educational Leadership, 59*(8), 37-40.

Lambert, L. (2002b). *The constructivist leader* (2nd ed.). New York: Teachers College Press.

Lambert, L. (1998). *Building leadership capacity in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.

Larrivee, B. (2008a). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice, 9*(3), 341-360. doi:10.1080/14623940802207451.

Larrivee, B. (2008b). Meeting the challenge of preparing reflective practitioners. *New Educator, 4*(2), 87-106. doi:10.1080/15476880802014132.

Larrivee, B. (2000). Transforming teaching practice: Becoming the critically reflective teacher. *Reflective Practice, 1*(3), 293-307. doi:10.1080/14623940020025561.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.

Lavié, J. M. (2006). Academic discourses on school-based teacher collaboration: Revisiting the

    arguments. *Educational Administration Quarterly, 42*(5), 773-805.

    doi:10.1177/0013161X06290647.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design*. Upper Saddle

    River, NJ: Prentice Hall.

Leitch, R., & Day, C. (2000). Action research and reflective practice: Towards a holistic view.

    Educational Action Research, 8(1), 179-193.

Leithwood, K., Louis, K. S, Anderson, S., & Wahlstrom, K. (2004). *How leadership influences*

    student learning: A review of research for the Learning from Leadership project. New

    York: The Wallace Foundation.

Lemov, D., Woolway, E., & Yezzi, K. (2012*). Practice perfect: 42 rules for getting better at*

    getting better. San Francisco: Jossey-Bass.

Lewis, L., Parsad, B., Carey, N., Bartfai, N., Farris, E., & Smerdon, B. (1999). *Teacher quality:*

    A report on the preparation and qualifications of public school teachers (NCES 1999-

    080). Washington, DC: National Center for Education Statistics. Retrieved from

    http://nces.ed.gov/pubs99/1999080.pdf

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Little, J. W. (2006). Professional community and professional development in the learning-

    centered school. Washington, DC: National Education Association.

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers'

    professional relations. *Teachers College Record, 91*(4)*,* 509-536.

Loughran, J. J. (2002). Effective reflective practice. *Journal of Teacher Education, 53*(1), 33-43.

Louis, K., Dretzke, B., & Wahlstrom, K. (2010). How does leadership affect student

achievement? Results from a national US survey. *School Effectiveness & School Improvement, 21*(3), 315-336. doi:10.1080/09243453.2010.486586.

Louis, K., Leithwood, K., Wahlstrom, K. L., & Anderson, S.E. (2010). *Investigating the links to improved student learning: Final report of research findings*. St. Paul, MN: University of Minnesota. Retrieved from http://www.cehd.umn.edu/carei/Leadership/Learning-from-Leadership_Final- Research-Report_July-2010.pdf.

Louis, K. S., & Marks, H. M. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American Journal of Education, 106*, 532 - 575.

Marzano, R. J. (2003). *What works in schools: Translating research into action.* Alexandria, VA: Association for Supervision & Curriculum Development.

Marzano, R. J., Pickering, D., & Pollock, J. E. (2005). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Upper Saddle River, N. J.: Pearson/Merrill Prentice Hall.

Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance.* Bloomington, IN: Solution Tree Press.

Massachusetts Department of Education. (2012). *Massachusetts Model System for Educator Evaluation*. Retrieved from http://www.doe.mass.edu/edeval/model/PartI.pdf.

Massachusetts Department of Education. (2011). *603 CMR 35.00: Evaluation of teachers and administrators - Massachusetts education laws and regulations*. Retrieved from http://www.doe.mass.edu/lawsregs/603cmr35.html?section=04.

Massell, D. (2000). *The district role in building capacity: Four strategies.* Washington, DC: Center for Policy Research in Education.

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand

     Oaks, CA: Sage Publications.

Maxwell, J. A. (1992) Understanding and validity in qualitative research. *Harvard Educational*

     Review, 62(3), 279-300.

Mayfield, M., & Mayfield, J. (2012). Effective performance feedback for learning in

     organizations and organizational learning. *Development and Learning Organizations,*

     26(1), 15-18.

McCarthy, A., & Garavan, T. N. (2008). Team learning and metacognition: A neglected area of

     HRD research and practice. *Advances in Developing Human Resources, 10*(4), 509-524.

McCullagh, J. F. (2012). How can video supported reflection enhance teachers' professional

     development? *Cultural Studies of Science Education, 7(1)*, 137-152.

McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning*

     communities: Professional strategies to improve student achievement. New York:

     Teachers College Press.

McManus, P.B. (2014). *New teacher support: How one Massachusetts school district facilitates*

     and sustains teacher growth (Unpublished doctoral dissertation). Boston College, Boston,

     MA.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San

     Francisco, CA: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.*

     Thousand Oaks, CA: Sage Publications.

Moir, E. (2009). *New teacher mentoring: Hopes and promise for improving teacher*

     effectiveness. Cambridge: Harvard Education Press.

Morrissey, M. S. (2000). *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory.

Nagle, J. F. (2008). Becoming a reflective practitioner in the age of accountability. *The Educational Forum, 73*(1), 76-86.

Nehring, J., Laboy, W. T., & Catarius, L. (2010). Connecting reflective practice, dialogic protocols, and professional learning. *Professional Development in Education, 36*(3), 399-420.

Nelson, T. H. (2008). A culture of collaborative inquiry: Learning to develop and support professional learning communities. *Teachers College Record, 110*(6), 1269-1303.

New England Association of Schools and Colleges (NEASC). October 13, 2006 letter to the North Andover School District. Retrieved from: http://www.paddyduncan.com/NAPS/index.php#nahs

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

Ng, P. T., & Tan, C. (2009). Community of practice for teachers: Sensemaking or critical reflective learning? *Reflective Practice, 10*(1), 37-44.

No Child Left Behind Act (2001). 20 U.S.C. 6301 et seq.

Noordhoff, K., & Kleinfeld, J. (1990). Shaping the rhetoric of reflection for multicultural settings. In R. T. Clift, W. R. Houston, & M. C. Pugach (Eds.), *Encouraging reflective practice in education: An analysis of issues and programs* (pp. 59-72). New York: Teachers College Press.

Oliva, M., Matters, C. & Laine, S. (2009). *Improving staff evaluation systems*. Washington, DC:

National Comprehensive Center for Teacher Quality.

Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators: Professional development to improve student learning*. Thousand Oaks, CA: Corwin Press.

Ovando, M. N., & Owen, J. C. (2000). *Superintendent's guide to creating community*. Lanham, MD: Scarecrow Press.

Palmer, C. (2001). Ethnography: A research method in practice. *International Journal of Tourism Researc*h, *3, 301-312*.

Panarese, C. M. (2014). *Feedback: How one Massachusetts school district facilitates and sustains teacher growth.* (Unpublished doctoral dissertation). Boston College, Boston, MA.

Peterson, R. S., & Behfar, K. J. (2003). The dynamic relationship between performance feedback, trust, and conflict in groups: A longitudinal study. *Organizational Behavior and Human Decision Processes*, *92*(1/2), 102-112. doi: 10.1016/S0749-5978(03)00090-6.

Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment and Evaluation in Higher Education*, *35*(3), 277-289.

Proefriedt, W. A., & Raywid, M. A. (1994). *How teachers learn: Toward a more liberal teacher education*. New York: Teachers College Press.

Pugach, M. C., & Johnson, L. J. (1990). Developing reflective practice through structured dialogue. In R. T. Clift, W. R. Houston, & M. C. Pugach (Eds.)*, Encouraging reflective practice in education: An analysis of issues and programs* (pp. 59-72). New York: Teachers College Press.

Radivojevic, N. (2010). *The principal's role in the Finnish schools*. Metodički obzori, *9*(5), 91 -

96.

Ramani, S., & Krackov, S. (2012). Twelve tips for giving feedback effectively in the clinical environment. *Medical Teacher*, *34*, 787-791. Retrieved from http://sse.umontreal.ca/apprentissage/documentation/Ramani_KracKov_2012_Tips_Feed back.pdf. DOI: 10.3109/0142159X.2012.684916.

Reagan, T. G., Case, C. W., & Brubacher, J. W. (2000). *Becoming a reflective educator: How to build a culture of inquiry in the schools*. Thousand Oaks, CA: Corwin Press.

Reeves, D. B. (2006). *The learning leader: How to focus school improvement for better results*. Alexandria, VA: Association for Supervision and Curriculum Development.

Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.

Robertson, J. (2006). "If you know our names it helps!" Students' perspectives about "good" teaching. *Qualitative Inquiry, 12*(4), 756-768.

Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635-674. doi:10.1177/0013161X08321509.

Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. *Elementary School Journal, 89*(4), 421-439.

Ross, D. D. (1990). Programmatic structures for the preparation of reflective teachers. In R. T. Clift, W. R. Houston, & M. C. Pugach (Eds.), *Encouraging reflective practice in education: An analysis of issues and programs* (pp. 97 - 118). New York: Teachers College Press.

Rothstein, J. (2012). Teacher quality policy when supply matters. *National Bureau of Economic*

Research, Working Paper No. 18419. Retrieved from

http://gsppi.berkeley.edu/faculty/jrothstein/rothstein_performancecontracts_nov2013.pdf

Rothstein, J. (2010). Teacher quality in educational production: Tracking, decay, and student

achievement. *The Quarterly Journal of Economics*, *25*(1), 175-214.

Sahlberg, P. (2011). The professional educator: Lessons from Finland. *American Educator,*

Summer, 34 - 38. Retrieved from http://pasisahlberg.com/wp-

content/uploads/2013/01/Lessons-from-Finland-AE-2011.pdf

Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future*

student academic achievement. Knoxville: University of Tennessee Value-Added

Research and Assessment Center.

Sanders, W. L, Wright, S. P., & Horn, S. P. (1997). Teacher and classroom context effects on

student achievement: Implications for teacher evaluation. *Journal of Personnel*

Evaluation in Education, 11(1), 57-67.

Saunders, W. M., Goldenberg, C. N., & Gallimore, R. (2009). Increasing achievement by

focusing grade-level teams on improving classroom learning: A prospective, quasi-

experimental study of Title I schools. *American Educational Research Journal, 46*(4),

1006-1033.

Schlechty, P. C. (2009). *Leading for learning: How to transform schools into learning*

organizations. San Francisco, CA: Jossey-Bass.

Schlechty, P. C. (2002). *Working on the work: An action plan for teachers, principals, and*

superintendents. San Francisco, CA: Jossey-Bass.

Schmoker, M. J. (2006). *Results now: How we can achieve unprecedented improvements in teaching and learning*. Alexandria, Va.: Association for Supervision and Curriculum Development.

Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2012). *A fifth discipline resource: Schools that learn*. New York, NY: Crown Publishing Group.

Senge, P. M., Cambron-McCabe, N. H., Lucas, T., Kleiner, A., Dutton, J., & Smith, B. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. New York: Doubleday.

Serpell, Z., & Bozeman, L. A. (1999). *Beginning teacher induction: A report on beginning teacher effectiveness and retention.* Washington, DC: National Partnership for Excellence and Accountability in Teaching.

Sherman, J. D., Honegger, S. D., & McGivern, J. L. (2003). *Comparative indicators of education in the United States and other G8 countries: 2002 (NCES 2003-026).* Washington, DC: National Center for Education Statistics, U.S. Department of Education.

Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal, 41*(3), 681-714.

Song, K. H., & Catapano, S. (2008). Reflective professional development for urban teachers through videotaping and guided assessment. *Journal of In-Service Education, 34*(1), 75-95. doi:10.1080/13674580701828229.

Spillane, J. P. (2005). Distributed leadership. *The Educational Forum*, *69*(2), 143-150.

Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher, 30*, 23-28.

Spillane, R., & Regnier, P. (1998). *The superintendent of the future: Strategy and action for achieving academic excellence*. Gaithersburg, MD: Aspen Publishers.

Spradley, J.P. (1980). *Participant observation*. New York: Holt, Rinehart and Winston.

St. George, C. A., & Robinson, S. B. (2011). Making mentoring matter: Perspectives from veteran mentor teachers. *Delta Kappa Gamma Bulletin, 78*(1), 24-28.

Stanulis, R. N., & Floden, R. E. (2009). Intensive mentoring as a way to help beginning teachers develop balanced instruction. *Journal of Teacher Education, 60*(2), 112-122.

Stanulis, R. N., Little, S., & Wibbens, E. (2012). Intensive mentoring that contributes to change in beginning elementary teachers' learning to lead classroom discussions. *Teaching & Teacher Education, 28*(1), 32-43. doi:10.1016/j.tate.2011.08.007.

Stigler, J., & Hiebert, J. (1999). *The teaching gap*. New York: The Free Press.

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. doi:10.1007/s10833-006-0001-8.

Stoll, L., & Louis, K. S. (2007). *Professional learning communities: Divergence, depth and dilemmas*. Maidenhead: McGraw-Hill/Open University Press.

Stronge, J. H. (2010). *Effective teachers -- student achievement: What the research says*. Larchmont, NY: Eye on Education.

Stronge, J. H. (2007). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

Stronge, J. H. (2002). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

The MET Project. (2013). *Ensuring fair and reliable measures of effective teaching: Culminating findings from the MET project's three year study*. Seattle: Bill & Melinda Gates Foundation. Retrieved from: http://metproject.org/downloads/MET_Ensuring_Fair_and_Reliable_Measures_Practition er_Brief.pdf.

The Wallace Foundation. (2012). *The   school principal a teaching and learning.* New York: Author. Retrieved from www.wallacefoundation.org/knowledge-center/school-leadership/ effective-principal-leadership/Pages/The-School-Principal-as- Leader-Guiding Schools-to-Better-Teaching-and-Learning. aspx

Thessin, R. A., & Starr, J. P. (2011). Supporting the GROWTH of effective professional learning communities districtwide. *Phi Delta Kappan, 92*(6), 48-54.

Tsui, A. B. M. (2009). Distinctive qualities of expert teachers. *Teachers & Teaching, 15*(4), 421-439. doi:10.1080/13540600903057179.

Tucker, P. D., & Stronge, J. H. (2005). *Linking teacher evaluation and student learning.* Alexandria, VA: Association for Supervision and Curriculum Development.

Valli, L. (1997). Listening to other voices: A description of teacher reflection in the United States. *Peabody Journal of Education, 72*(1), 67-88.

Valli, L. (1992). Afterword. In L. Valli (Ed.), *Reflective teacher education: Cases and critiques*. Albany, N.Y.: State University of New York Press.

Vescio, V. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education, 24*(1), 80-91.

Vidmar, D. (2005). Reflective peer coaching: Crafting collaborative self-assessment in teaching. *Research Strategies, 20*(3), 135-148. doi:10.1016/j.resstr.2006.06.002.

Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational Administration Quarterly, 44*(4), 458-495.

Wahlstrom, K. L., Louis, K. S., Leithwood, K., & Anderson, S. E. (2010). *Learning from leadership: Investigating the links to improved student learning.* New York: Wallace Foundation. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf

Wang, J., & Odell, S. (2002). Mentored learning to teach according to standards-based reform: A critical review. *Review of Educational Research, 72*(3), 481-546. doi:10.3102/00346543072003481.

Wenger, E. (2011). *Communities of practice: A brief introduction.* Retrieved from http://www.ewenger.com/pub/index.htm.

Wenger, E. (2000). Communities of practice and social learning systems. *Organisation Articles, 7*(2), 225–246.

Wenger, E. (1998a). Communities of practice: Learning as a social system. *Systems Thinker, 9*(5), 2-3.

Wenger, E. (1998b). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.

Wiggins, G., (2012). Seven keys to effective feedback. *Educational Leadership, 70*(1), 10-16.

Williams, R., Brien, K., Sprague, C., & Sullivan, G. (2008). Professional learning communities: Developing a school-level readiness instrument. *Canadian Journal of Educational Administration and Policy*, *74*(6), 1-17.

Wojnowski, B. S., Bellamy, M. L., & Cooke, S. (2003). A review of literature on the mentoring and induction of beginning teachers with an emphasis on the retention and renewal of science teachers. In J. Rhoton & P. Shane (Eds.), *Science teacher retention: Mentoring and renewal*. Arlington, Va.: NSTA Press.

Wood, A. L., & Stanulis, R. N. (2009). Quality teacher induction: "Fourth-Wave" (1997-2006) induction programs. *New Educator, 5*(1), 1-23.

Wright, S. P., Horn, S. P., & Sanders, W. L. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, *1*(1), 57-67.

Yin, R. K. (2009). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.

Yin, R. K. (2003). *Applications of case study research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

York-Barr, J., Ghere, G., & Sommerness, J. (2007). Collaborative teaching to increase ELL student learning: A three-year urban elementary case study. *Journal of Education for Students Placed at Risk, 12*(3), 301-335. doi:10.1080/10824660701601290.

York-Barr, J., Sommers, W. A., Ghere, G. S., & Montie, J. (2006). *Reflective practice to improve schools: An action guide for educators* (2nd ed.) Thousand Oaks, CA: Corwin Press.

Zeichner, K. M., & Liston, D. (1987). Teaching student teachers to reflect. *Harvard Educational Review, 57*(1), 23-48.

Consent to Participate in Interview
Boston College Lynch School of Education
Informed Consent for Participation as a Subject in the Research Study

How One Massachusetts School District
Facilitates and Sustains Teacher Growth
Researchers: Telena Imel, Philip McManus, Maryanne Palmer, and Christine Panarese, PSAP
Ed.D. Candidates, Class of 2014

Adult Participation in an Individual Interview:

Purpose of this research study
The purpose of this study is to examine how one district supports and facilitates teacher growth and the role of leadership in the process. This study will examine the perceptions of teachers and leaders as to which conditions and structures within a district or school are perceived by teachers to support their professional growth.

Why have I been selected to participate?
You have been selected as a possible participant in this study because you work in the [Cordova] School District and are either a teacher or administrator. The total number of participants in the study is expected to be 15-20. We ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Description of the Study Procedures
If you agree to be in this study, we would ask you to participate in a 1-hour in-person interview. This will involve answering questions about your background, how you go about improving your practice and the roles that school and district leaders support teacher growth within your school and district. All questions you answer are voluntary. You may elect not to answer any question. In addition, you will be given the opportunity, if you choose to do so, to review the interview transcript for accuracy; it is estimated that this will take approximately ½ hour.

Voluntary Participation/Compensation
Your participation in this study is completely voluntary. There is no penalty for not participating. There is no compensation to participate in the study. Members of the research team do not have any financial interest in the study.

Risks and Benefits of Being in the Study
There are no reasonable foreseeable risks to participation. This study may include risks that are unknown at this time.

The information yielded from this study may provide beneficial information on what practices within schools and districts are seen by teachers and leaders as helping teachers grow their practice. This study highlights the importance of teacher voice in research and practice and may be useful to professional associations of school leaders, school districts and schools of education as they prepare and/or recruit administrators for school district leadership positions, and

preparation programs. The findings will also benefit school districts on how they might take steps to further support teacher professional development.

I understand the possible risks and benefits of being in this study.
I know that being in this study is voluntary and I can stop at any time.
I choose to be in this study.

Confidentiality
The records of this study will be kept confidential; however, we acknowledge the limitation of our ability to protect the confidentiality of your participation in this study. In any report we may publish, we will make every effort not to include any information that will make it possible to identify a participant. Your name and the name of the district will not be published.

Access to the records will be limited to the researchers; however, please note that the Institutional Review Board and internal Boston College auditors may review the research records to make sure the researchers have followed regulatory requirements.

Audio Permission
I have been told that the interview will be digitally recorded. I have been told that I can state that I do not want the interview tape- recorded and it will not be.   I can turn the tape off at any time.

I agree to be audio taped.   Yes_____   No_____

Contacts and questions
The researchers conducting this study are current doctoral students in the PSAP program at Boston College: Telena Imel, Philip McManus, Maryanne Palmer, and Christine Panarese. For questions or more information concerning this research you may contact Telena Imel.

If you have any questions about your rights as a research subject, you may contact: Director, Boston College Office for Research Protections at (617) 552-4778, or irb@bc.edu

Copy of Consent Form
You will be given a copy of this form to keep for your records and future reference.

Statement of Consent
I have read the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions. I give my consent to participate in this study. I have received (or will receive) a copy of this form.

Signatures/Dates
Study Participant (Print Name)_____
Participant Signature_____Date_____

Appendix B
Teacher Interview Questions

Introduction

- Greet the teacher and thank him or her for allowing the interview.
- Inform him or her about confidentiality. They are not required to participate in the interview. They may choose not to answer a certain question or all questions. They may stop the interview at any time.
- Explain that the purpose of the interview is to discuss how the school uses data to inform instructional practice.
- Let's begin by discussing your background.

Background

1. Why did you become a teacher?
   Probe: What grade do you teach, and how long have you been teaching it? (If the teacher teaches a specific subject, ask them to state their subject.)
2. How would you describe your approach to improving your practice?
   Probe: Give an example of a time when you saw the impact from this development on student outcomes?

Reflective Practice

3. Reflective Practice encompasses the examination of the academic, social and ethical consequences of actions or possible action on professional practice or student learning.

   Considering this definition of reflective practice, please discuss what situations or conditions are most conducive to your engagement in reflective practice?
   Probe: Are there school or district experiences that have helped you become a more reflective practitioner?
   Probe: How have your principal or other district leaders supported your development as a reflective practitioner?

4. What kinds of questions do you ask yourself about your own teaching?
   Probe for academic/instructional, social and ethical

Leadership and Professional Learning

5. What is the vision of this school district? How do people come to share this vision?
   Probe: How does that translate into goals?
6. How does school leadership support teachers as they try to improve their teaching?
   Probe: Do you feel their efforts are aligned with the needs of staff?
   Probe: How successful do you think the administration has been at establishing a culture of valuing teacher growth and instructional improvement? Can you explain your assessment?
7. How would you characterize the quality of professional learning experiences your school provides? Why?
   Probe: What are some examples of professional development offerings your school provides?

8. How are faculty and staff involved in the decision making process within the school/district?

Probe: What role do faculty and staff members play in this process?

New Teacher Support

9. What are the supports the district has in place for new teachers?
    Probe: Is it district led or building led?

    Probe: Discuss what effect, if any, that the new teacher supports have had on your teaching or that of a new teacher you know.

    Probe: What role does the principal play in supporting new teachers?

10. In what ways does the mentor/protégé relationship impact new teacher development?
    Probe: Give examples of ways that a mentor helps his/her protégé.
    Probe: Do you feel that this has an impact on new teacher retention?
    Probe: Do you see similar relationships elsewhere in the district?

Feedback

11. What are the structures, protocols and processes your district employs to deliver feedback to the educators?
    Probe: Which types of feedback do you find most useful to guide your professional growth as an educator? Please explain your choice (s) to me.
    Probe: Who are the people who provide you with the feedback that focuses on improving student achievement? Tell me about what this information looks like and how you use and/or share this information.

12. Tell me about a time when you implemented an instructional change as a result of receiving feedback.
    Probe: Who helps you work through this feedback process? How did you feel about this?
    Probe: Have you ever provided feedback to a colleague? Tell me more about this.

13. Has your district provided professional development to help you understand and use feedback? Tell me more about this (who, where, how long)?
    Probe: Are there teams or committees that provide feedback that helps you grow?
    Probe: Does data play a role in any of the feedback processes you participate in?

Collaboration

14. What role does collaboration play in teachers' professional learning?
    Probe: school support?
    Probe: district support?
    Probe: Who are the groups you meet with regularly? If so, why?
    Probe: Discuss what effect, if any, that collaboration has had on your teaching.
    Probe: Are there specific structures in place that have allowed you to use scheduled collaborative time effectively? Can you give an example?
    Probe: Who decides the agenda topic for collaborative meeting time?

Closing

15. Is there anything else that you think I should know that is important to understanding how your school supports and facilitates teacher growth?

                          Thank you for your time.

Appendix C

Administrator Interview Questions

Introduction
- Greet and introduce yourself and your role and explain to the school/district administrator the purpose of the study - to gather data on *how teachers perceive professional growth and development to be supported by their school and district* and thank for participating in this study.
- Go over the disclosure statement and highlight the Informed consent and confidentiality. Remind the individual that they are not required to participate in the interview. They may choose not to answer a certain question or all questions. They may stop the interview at any time.
- State that the interview will begin with an inquiry to their background.

Background
1. Why did you become an administrator?
2. How would you describe your approach to improving your practice? Improving your teachers' practice?
3. Describe your school system and staff.
    Probe: What are its strengths and weaknesses?
    Probe: What are the most pressing student learning needs, and how do you address them?

Reflective Practice

4. Reflective Practice encompasses the examination of the academic, social and ethical consequences of actions or possible action on professional practice or student learning.

    Considering this definition of reflective practice, please discuss what situations or conditions are most conducive to your engagement in reflective practice?

        Probe: Are there school or district experiences that have helped you become a more reflective practitioner?
        Probe: Are there ways in which district and school leaders purposefully support the development of reflective practice across the district?

5. What kinds of questions do you ask yourself about your own practice?
        Probe for academic, social & ethical

Leadership and Professional Learning
6. What is the vision of this school district? How do people come to share this vision?
        Probe: How does that translate into goals?
7. How does school leadership support teachers' continual improvement of practice?
8. Probe: Do you feel that district-wide efforts are aligned with the needs of staff?
        Probe: Are there building-based supports that foster teacher improvement?
        Probe: Are these unique to one/your school?
        Probe: Does the culture of the system value teacher growth and instructional improvement? Can you explain your assessment?
9. What are some examples of professional development offerings your district provides?

Probe: Are there professional development opportunities for administrators in the district?

Probe: Do you feel the professional development that administrators participate in throughout the school/district enhance their leadership skills? Can you provide some examples?

New Teacher Support

10. What are the supports the district has in place for new teachers?
    Probe: Is it district led or building led?
    Probe: Discuss what effect, if any, the new teacher supports have had on your teachers.
    Probe: What is the district's expectation for principals in supporting new teachers?
11. In what ways does the mentor/protégé relationship impact new teacher development?
    Probe: How?
    Probe: Do you feel that this has an impact on new teacher retention?
    Probe: Do you see similar relationships elsewhere in the district?

Feedback

12. What are the structures, protocols, and processes your district employs to deliver feedback to educators?
    Probe: Which types of feedback do you find most useful to guide your professional growth as an educator? Please explain your choice (s) to me.
    Probe: Who are the people who provide you with the feedback that focuses on improving student achievement? Tell me about what this information looks like and how you use and/or share this information.

13. Tell me about a time when you implemented an instructional change as a result of receiving feedback. This action voluntary?
    Probe: Who helped you work through this feedback process? How did you feel about this?
    Probe: Have you ever provided feedback to a colleague? Tell me more about this.

14. Has your district provided professional development to help you understand and use feedback? Tell me more about this (who, where, how long)?
    Probe: Are there teams or committees that provide feedback that helps you grow?
    Probe: Does data play a role in any of the feedback processes you participate in?

Collaboration

15. What role does collaboration play in teachers' professional learning?
    Probe: How do the schools in the district schedule for teacher collaboration?
    Probe: Are teachers prepared to use collaborative meeting time productively?
    Probe: Who decides the agenda topic for collaborative meeting time?
    Probe: Is information from this meeting shared?

Probe: How has the district supported the use of meeting time to enhance the school and teacher effectiveness?

       Supports?

       Structures?

Probe: Discuss what effect, if any, that collaboration has had on your teachers' work?

Closing

16. Is there anything thing else that that you think I should know in order to fully understand how your school/district supports and facilitates teacher growth?

Appendix D
Observation Protocol

1. What space is being utilized for this meeting?

2. Who are the participants? Facilitator? Protocols?

3. Who does the talking? Any timekeeper? Who listens?

4. What are some of the conversations you hear? Themes?

5. What is the focus of the meeting? Is it sustained? Any decisions made?   If so, what method is used to make the decision (s)?

6. What actions or statements are observed? What is the sequence of the actions or statements?

7. How are people working together? Individualistic?

8. What structures & routines do we see

9. Are there norms

10. Is there feedback given

11. Is it top down or collaborative?

12. Any feelings expressed by the meeting participants?

13. Do people sway on their choices or influence others? If so, how does this happen?

14. How does the meeting end? Any Take-Aways?

15. Are there conversations after the close of the meeting? Sidebar and/or parking lot conversations?

E-mail Recruitment Text

Dear Staff Member,

We are seeking out participants in your district for our research study. The study is designed to examine how one district is supporting teacher growth throughout their career. Our research team seeks to hear from both teachers and administrators about the conditions and structures that have or have not been established within the school and district that teachers perceive to be meaningful to their continued growth throughout their career.

We hope that you might consider participating in our study. This would involve an individual interview lasting no longer than one hour. Dr. [Murphy] has agreed to this study and is willing to provide you release time if you are willing to be interviewed by a member of the research team we are also happy to interview you at another time that is convenient to you. You will be asked a series of questions related to your experiences and perceptions of how the district supports you (or others) through collaboration, reflection, feedback and new teacher supports and leadership. It is important to note that and you may opt out of answering any of questions. Your participation is voluntary and your privacy will be protected. Your name will not be used in any report that is published and the discussion will be kept strictly confidential. If you'd like more information about the study, you may contact: Telena Imel, Philip McManus, Maryanne Palmer, and Christine Panarese.

We hope that you will consider participating in our study!

Sincerely,

Telena Imel, Philip McManus, Maryanne Palmer and Christine Panarese

Boston College IRS

Approved

July 2013

Appendix F
Cordova Leadership Retreat Agenda

<table>
<tr><td colspan="2" style="background-color:#b5c78a">**Agenda**
Monday, August 19, 2013

DISTRICT ADMINISTRATIVE RETREAT

AUGUST 19, 20 and 21, 2013
THEME: SENSE OF URGENCY   Essential Questions:

How do we measure success?
How do we motivate and energize people to improve?</td></tr>
<tr><td>8:30 a.m. to 8:45 a.m.</td><td>Connections and introduction (Sullivan)

• Use revised carousal format
• Introduction and overview
• Reflections (from July 2)
• Including "Parking Lot"</td></tr>
<tr><td>8:45 a.m. to 9:15 a.m.</td><td>Norms review (Jim)</td></tr>
<tr><td>9:15 a.m. to 9:45 a.m.</td><td>Our agenda with context of "Fears and Hopes" (Sullivan)</td></tr>
<tr><td>9:45 a.m. to 11:15 a.m.</td><td>SDIP Completion (Murphy)

• Overview of current overview draft
• Review of PP2 model template (Sullivan)
• Group work on template completion (Team)
   o Breakdown into 2-3 groups
   o Templates</td></tr>
<tr><td>11:15 a.m. – 12:00 p.m.</td><td>Lunch</td></tr>
<tr><td>12:00 p.m. to 2:45 p.m.</td><td>**SDIP Work Continued**
• **Please read Chapter 5 "Developing A Guaranteed and Viable Curriculum" (previously provided hard copy in July retreat binder) If we complete templates, we will use this chapter for a text-based discussion connected to the SDIP**</td></tr>
<tr><td>2:45 p.m. to 3:00 p.m.</td><td>Wrap-up and reflections (Sullivan)

• Reflection sheets</td></tr>
</table>

	Agenda **Tuesday, August 20, 2013** DISTRICT ADMINISTRATIVE RETREAT AUGUST 19, 20 and 21, 2013 THEME: SENSE OF URGENCY Essential Questions: How do we measure success? How do we motivate and energize people to improve?	
8:30 a.m. to 8:45 a.m.	Connections with Reflections Reflections from August 19	
8:45 a.m. to 9:45 a.m.	Safety Protocols (Chief G, Lieutenant G, HS Principal)	
9:45 a.m. to 10:45 a.m.	S & E Updates (Murphy with S & E Committee)	
10:45 a.m. to 11:15 a.m.	Opening Days Agendas (Sullivan)	
11:15 a.m. to 12:00 p.m.	Lunch	
12:00 p.m. to 1:00 p.m.	S & E for Administrators Rubric for Administrators (handout) Leadership Meeting Calendar (in July binder)	
1:00 p.m. to 2:30 p.m.	Program-based Budgeting (Jim)	
2:30 p.m. to 3:00 p.m.	Other needs, wrap-up, reflections Reflection sheets	

	Agenda
	Wednesday, August 21, 2013
	DISTRICT ADMINISTRATIVE RETREAT
	AUGUST 19, 20 and 21, 2013
	THEME: SENSE OF URGENCY Essential Questions:
	      How do we measure success?
	       How do we motivate and energize people to improve?

8:30 a.m. to 8:45 a.m.	Connections with Reflections Reflections from August 20
8:45 a.m. to 9:15 a.m.	PARCC and MCAS Updates (Sullivan) PARCC handouts Level One information and data
9:15 a.m. to 11:00 a.m.	Technology (Corey) Website ITAC Automated calling system OASYS revisions (Mike)
11:00 a.m. to 11:45 a.m.	Communication Merrimack Fellowship (Jim) Identified other needs
11:45 a.m. to 12:00 p.m.	Closing and reflections (Murphy) Reflection sheets
12:00 p.m. to 1:00 p.m.	Lunch (catered)

Appendix G
Tuning Protocol

well (New York: Teachers College Press, 1999)

National
School
Reform
Faculty

Harmony
Education
Center   www.nsrfharmony.org

avid Allen

- Warm feedback may include comments about how the work presented seems to meet the desired goals; cool feedback may include possible "disconnects," gaps, or problems. Often participants offer ideas or suggestions for strengthening the work presented.
- The facilitator may need to remind participants of the presenter's focusing question, which should be posted for all to see.
- Presenter is silent and takes notes.

7. Reflection (5 minutes)
- Presenter speaks to those comments/questions he or she chooses while participants are silent.
- This is not a time to defend oneself, but is instead a time for the presenter to reflect aloud on those ideas or questions that seemed particularly interesting.
- Facilitator may intervene to focus, clarify, etc.

8. Debrief (5 minutes)
- Facilitator-led discussion of this tuning experience.

NORTH ANDOVER PUBLIC SCHOOLS ADMINISTRATIVE WALKTHROUGH PROTOCOL

Focus of Inquiry

Indicator II-B   Learning Environment: Creates and maintains a safe and collaborative learning environment that motivates students to take academic risks, challenge themselves, and claim ownership of their learning.

Proficient: Consistently creates learning experiences that guide students to identify their strengths, interest, and needs; ask for support when appropriate; take academic risks; and challenge themselves to learn.

Group Norms

- We are here for our collective learning, not to evaluate one another, the teachers, or the students.
- We will uphold norms of confidentiality in relation to the visits we make to students and teachers.
- We will encourage one another to be as explicit as possible about the evidence behind our statements.

Classroom Visits

- Our goal is to have as minimal an impact as possible on the functioning of the classroom.
  - Refrain from conversation with other team members; avoid distractions to the class.
  - Review student work samples in folders, portfolios, or displays.
  - Ask students (if appropriate): *What are you learning? Why are you learning it? How do you know if your work is good? What do you do if you need help?*
  - Ensure that each class visit is for a consistent duration.

Gathering Evidence

- Record factual data on scripting sheets using quotes, tallies, or descriptions.
- Focus on stating factual evidence *("I heard… I saw…")* and refrain from subjective statements *("I liked...")*.
- Focus on what is actually said or done, as a video camera might record.

- Be as fine-grained and objective as possible, for example:
  Teacher asked: "How would you demonstrate that these fractions are equivalent…?"

  Students worked in teams of four following the scientific process to…

- Label scripting sheets with visit numbers, not identifiers such as teacher names/classroom numbers.

Debriefing the Classroom Visits

- Analyze Evidence.
  - Share highlights (big ideas, trends, areas of strong practice, areas of need) from the aggregated evidence.
  - Identify patterns, trends, and big ideas, noting areas of strength and areas in need of support.
- Generate Next Steps.
  - Brainstorm possible Quick Wins that will address key themes that emerged.
  - Collaborate on the content and wording of summary observations and feedback to be shared with faculty.
  - Reflect on how they might change their own practice based on key themes that emerged.
- Reflect on the process, results, and relationships developed during the day, noting areas to keep or improve for future *Learning Walkthroughs*.

WALKTHROUGH SCRIPTING SHEET TEMPLATE

School		Date	
Participants		Time	
Grade/Subject		Observation #	
Number of Students	Type of Class: ☐ SpEd ☐ Inclusion ☐ Regular Ed		
Number of Teacher(s)			
Standard(s)	II - Teaching All Students		
Indicator(s)	II-B Learning Environment		

Evidence Notes

What do I see?

What do I hear?

CORDOVA PUBLIC SCHOOLS ADMINISTRATIVE WALKTHROUGH PROTOCOL

Focus of Inquiry

Indicator II-B   Learning Environment: Creates and maintains a safe and collaborative learning environment that motivates students to take academic risks, challenge themselves, and claim ownership of their learning.

Proficient: Consistently creates learning experiences that guide students to identify their strengths, interest, and needs; ask for support when appropriate; take academic risks; and challenge themselves to learn.

learning experiences that guide students to *identify their strengths, interest, and needs* "A"	learning experiences that guide students to *ask for support when appropriate* "B"	learning experiences that guide students to *challenge themselves* "C"	learning experiences that guide students to *claim ownership of their learning* "D"
I would expect to see…	**I would expect to see…**	**I would expect to see…**	**I would expect to see…**
I would expect to hear…	**I would expect to hear…**	**I would expect to hear…**	**I would expect to hear…**

Group Norms

- **Our purpose is to improve our ability to focus on description of observational elements and not to be distracted by personal interests or other matters in the classroom**
- We are here for our collective learning, not to evaluate one another, the teachers, or the students.
- We will uphold norms of confidentiality in relation to the visits we make to students and teachers.
- We will encourage one another to be as explicit as possible about the evidence behind our statements.

Classroom Visits

- Our goal is to have as minimal an impact as possible on the functioning of the classroom.
  - Refrain from conversation with other team members; avoid distractions to the class.
  - Review student work samples in folders, portfolios, or displays.
  - Ask students (if appropriate): *What are you learning? Why are you learning it? How do you know if your work is good? What do you do if you need help?*
  - Ensure that each class visit is for a consistent duration.

Gathering Evidence

- Record factual data on scripting sheets using quotes, tallies, or descriptions **<u>SPECIFIC TO THE RUBRIC FOCUS</u>**
- Focus on stating factual evidence *("I heard… I saw…")* and refrain from subjective statements *("I liked...")*.
- Focus on what is actually said or done, as a video camera might record.
- Be as fine-grained and objective as possible, for example:
  Teacher asked: "How would you demonstrate that these fractions are equivalent…?"

  Students worked in teams of four following the scientific process to…

- Label scripting sheets with visit numbers, not identifiers such as teacher names/classroom numbers.

1. Analyze Evidence **<u>SPECIFIC TO THE RUBRIC FOCUS</u>**
   o Share highlights (big ideas, trends, areas of strong practice) from the aggregated evidence.
   o Identify patterns, trends, and big ideas, noting areas of strength.

2. Generate Next Steps.
   o Brainstorm possible "Quick Wins of Practice" that will address key themes that emerged.
   o Collaborate on the content and wording of summary observations and feedback to be shared with faculty.
   o Reflect on how they might support practice based on key themes that emerged.

3. Reflect on the process, results, and relationships developed during the day, noting areas to keep or improve for future *Learning Walkthroughs*.

WALKTHROUGH SCRIPTING SHEET TEMPLATE

School		Date	
Participants		Time	
Grade/Subject		Observation #	
Number of Students	Type of Class: ☐ SpEd ☐ Inclusion ☐ Regular Ed		
Number of Teacher(s)			
Standard(s)	II - Teaching All Students		
Indicator(s)	II-B Learning Environment		

Evidence Notes
What do I see?
What do I hear?

Appendix J

DEBRIEFING OF Walk throughs 1-15-14

HS Principal debrief:

- Would be good to get teachers involved in walk throughs
  - Work with NATA to organize and format

Discussing evidence:

A

- Choices provided: tasked with making up a division problem with a remainder
- Varied types of worksheets for students
- Teacher worked off of what she heard from students to ask more critical thinking questions
- Very good circulation of teachers
- "who has" activity had all students engaged
- small group work with teacher conferencing with individuals had all engaged
- template used to guide students

B

- in K students were turning to each other both asking and offering
- within groups with teacher/para students were asking questions continuously
- para selectively intervened without supporting too much

C:

- reading groups were varied with appropriate levels of questions
- sharing writing with both warm and cool feedback, and teacher posed an additional challenge
  - students were eager to continue with feedback
- "What do you notice, what do you think" questions
- use of thumbs up, horizontal, down for understanding for feedback
- teacher reinforcing "you are never done….you can always add"
- "How could you…" follow up questions clearly focused on genre of writing
- centers use and follow up with each group

D:

- conferencing around writing pieces and not just giving answers
- use of centers with understanding of purpose of each
- use of structures (e.g. centers) was well understood by students

- used hand signals to check for understanding
- teacher stuck with student who was struggling
- use of charts for students to check their learning

Elem. Principal's summary:

- students engaged
- teachers being organized and directive
- creation of choice
- use of reading and writing interactive and varied activities
- affirming school focus on math

"Missed opportunities": MAKE SURE WE ARE CLEAR ON PURPOSE OF THIS

need for follow up to see if there are patterns of behavior

- occasional student "left out"
- is reading a book when you're done, really productive and engaging?
- Some simple recall going on
- Clarify role of adults in classroom
- Centers: learning gaps? Students not being as productive as they can
- Making sure all students are engaged

Reflective questions:

- How can you engage yourself with the students when you go in a classroom?
- How do you transition specialists into the classroom when they come in?
- How do we consult with each other?
- How do you understand your role when you are in someone else's "turf"?
- What ways to you use "X" during lessons?
- When do you choose to correct a student in their writing?
- I'm curious to know when you choose what miscues you choose to correct or not?

Debrief:

- Process is helping me go into classrooms with different eyes
- Irwin: our group is very sophisticated in this work
- We have grown as a team in this work
- We are definitely more focused
-

NORTH ANDOVER PUBLIC SCHOOLS ADMINISTRATIVE WALKTHROUGH PROTOCOL

Focus of Inquiry

Indicator II-B   Learning Environment: Creates and maintains a safe and collaborative learning environment that motivates students to take academic risks, challenge themselves, and claim ownership of their learning.

Proficient: Consistently creates learning experiences that guide students to identify their strengths, interest, and needs; ask for support when appropriate; take academic risks; and challenge themselves to learn.

learning experiences that guide students to *identify their strengths, interest, and needs* "A"	learning experiences that guide students to *ask for support when appropriate* "B"	learning experiences that guide students to *challenge themselves* "C"	learning experiences that guide students to *claim ownership of their learning* "D"
I would expect to see… • Choices provided to students • Skill based groupings • Structured around interest centers	**I would expect to see…** • Students raising hands to ask questions • Teacher positively supporting and modeling real life examples	**I would expect to see…** • Differentiated assignments and extensions	**I would expect to see…** • Conferencing: student summarizing and explaining • Center time having child explore without too much dependence • Quiet time and wait time for students to process

I would expect to hear…	I would expect to hear…	I would expect to hear…	I would expect to hear…
• Teacher facilitating process of questioning and relating to student interests, etc. • Modeling thinking of when something is difficult	• Teacher individualizing answers • Kids feeling comfortable asking peers for support	• Teacher following up guiding questions that push higher order thinking • Teacher would be asking students to explain their thinking	• student not saying "How does this effect my grade?" • Teachers using questions to re-direct students to learning objective

Group Norms

- **Our purpose is to improve our ability to focus on description of observational elements and not to be distracted by personal interests or other matters in the classroom**
- We are here for our collective learning, not to evaluate one another, the teachers, or the students.
- We will uphold norms of confidentiality in relation to the visits we make to students and teachers.
- We will encourage one another to be as explicit as possible about the evidence behind our statements.

Classroom Visits

- Our goal is to have as minimal an impact as possible on the functioning of the classroom.
  - o Refrain from conversation with other team members; avoid distractions to the class.
  - o Review student work samples in folders, portfolios, or displays.
  - o Ask students (if appropriate): *What are you learning? Why are you learning it? How do you know if your work is good? What do you do if you need help?*
  - o Ensure that each class visit is for a consistent duration.

Gathering Evidence

- Record factual data on scripting sheets using quotes, tallies, or descriptions **<u>SPECIFIC TO THE RUBRIC FOCUS</u>**
- Focus on stating factual evidence *("I heard… I saw…")* and refrain from subjective statements *("I liked...").*
- Focus on what is actually said or done, as a video camera might record.
- Be as fine-grained and objective as possible, for example:
  Teacher asked: "How would you demonstrate that these fractions are equivalent…?"

  Students worked in teams of four following the scientific process to…

- Label scripting sheets with visit numbers, not identifiers such as teacher names/classroom numbers.

Debriefing the Classroom Visits

4. Analyze Evidence **<u>SPECIFIC TO THE RUBRIC FOCUS</u>**
   - Share highlights (big ideas, trends, areas of strong practice) from the aggregated evidence.
   - Identify patterns, trends, and big ideas, noting areas of strength.

5. Generate Next Steps.
   - Brainstorm possible "Quick Wins of Practice" that will address key themes that emerged.
   - Collaborate on the content and wording of summary observations and feedback to be shared with faculty.
   - Reflect on how they might support practice based on key themes that emerged.

6. "Missed Opportunities"
   - Each walk through group shares a "missed opportunity" observed based on their window of viewing, identifying what is considered to be an area that may be in need for the principal to follow up on through further observations.
     - ***New for 1-15-14:*** When sharing the "missed opportunity," each group shares a reflective question they developed to address their concern
   - The expectation is that the principal will provide the leadership group with any follow up learning at a leadership meeting prior to the next leadership walk through.

7. Reflect on the process, results, and relationships developed during the day, noting areas to keep or improve for future *Learning Walkthroughs*.

Walk Through Scripting Worksheet

Evidence Notes
What do I see? *"A"*   *"B"*   *"C"*   *"D"*
What do I hear? *"A"*   *"B"*   *"C"*   *"D"*

Appendix L
Walk-Through Reflective Question Samples

Red highlighted text indicates suggestions or comments from the group. Asterisk indicates questions identified by group for discussion

- This was very quick snapshot of the reading block. It seems that the students have comfortably settled into a routine around practice. What is your perspective on the importance of classroom routines in the learning process?
- *During this brief observation, there was evidence that routines were well established in the classroom during snack time. How routine is it for you to incorporate a variety of higher-order questions with your groups and what advice would you give to a new teacher about questioning techniques for any lesson? (assumes there was higher-order questions being discussed during snack; focusing on higher-order questioning is a key to learning)
- When doing a whole-group review of any in-class or homework task, how do you monitor if each child is on track with his or her understanding?
- *This was a very brief observation that spotlighted the high expectations you have for your students and the strong and supportive relationships that you've developed with the kids in your fifth grade class. Humor can be an important tool to building rapport with a group. How do you view the relationship between humor and student engagement? (Acknowledges 2 key factors and question seeks to cause deeper reflection on connections)
- *This was a very quick snapshot of the ELA block. It seems that after only a handful of weeks, the students have comfortably settled into a routine around classwork practice and expectations for behavior. What advice would you give a new teacher about the importance of a teacher's tone in establishing classroom routines? (acknowledges positive with advice question that supports teacher thinking of modeling)
- Realizing that I only saw a small portion of the lesson, the students seemed to be engaged and active with the task of re-reading the story and responding to comprehension questions within groups. For this and other cooperative group work, how do you go about making "teams" and are there roles assigned for members of these learning groups?
- The topic of friendship is obviously very connected to our work on RAISE values. Before I arrived, the students had worked with classmates to discuss brainstorm an initial list of rules and individuals came out with a great set of ideas. What did you do or what do you do generally to help students be as effective and productive as they can be in cooperative learning groups?
- *This was a very quick snapshot of lesson in mathematics. Based on the behavior of the students, they were engaged in the activities and were eager to show what they've learned so far. What advice would you give a new teacher about a teacher's tone of voice and

attitude in motivating students to put in their very best effort? (good blend of positive with question that makes teacher think as leader)

- How does reading a book aloud to this 2nd grade audience demonstrate what you want them to know and be able to do?

- This was a very brief observation of a morning meeting and mini-lesson in writing. The students were very comfortable together with you sharing their ideas and stories. What advice would you give to Abby K or any other new teacher about the part relationship-building plays in student engagement and learning?

- What kinds of things to you take into consideration while planning for any kind of group work in class?

- This was a quick snapshot of an ELA lesson in K. It is the second year that you've prepared stone soup alongside the other teachers on the grade level. Were there any changes made to how you all planned the classroom activities or family celebration or are there ideas you've had this time through that you would suggest changing for next year?

- *What have you found to be two effective and meaningful ways to review student work in class? How do you know? (this question could use some contextual framing with what was seen in the classroom)

- *Is there another way to help manage the noise of the children? (see comments below and above)

- *You seemed to work well with your Paraprofessional, is there any special planning that goes into making that work? (identify what specifically seemed to work well)

- At this point in their high school careers how much directing and teaching do they need around website research? You gave a great explanation on the project directions. Do they need follow up during the project?

- How does the binder check impact the student's grade?

- Are the students that Mrs. Mc works with groups in a certain area or are they random? What's the rationale for either?

- How much smaller would you like the class to accomplish what you want to the way you want to do it?

- Does it help you get more out of at risk students (D) if you let them listen to music at certain times?

- Does having the students go to the board to complete the problems help keep them engaged?

- *What activity or activities could be planned to keep the students engaged while you did check-ins? (How do we acknowledge good teaching but nudge people forward? see below)

- Do you ever go more in-depth on your agenda or do you just list the subject the students will cover for the day?

Suggested intros or other frames to use:

- Previously I noticed (something positive)…
- Prior to check-in (something positive)…
- I noticed these two engaged…
- It was orderly and quiet…
- What are 2 effective strategies you've used to keep all students engaged?
- TO PUSH A P/A teacher: This was an awesome lesson…what would you want to grow in?

VISION

North Andover Public Schools, with the support from our community, will provide a learning environment that cultivates a respectful community of engaged learners, insightful thinkers, and effective communicators who will demonstrate progress toward career and college readiness.

THEORY OF ACTION

IF we establish a standards-based curriculum and assessment system with collaboration focused on improving instructional practices that engage students to critically think, collaborate, communicate, and demonstrate creativity, THEN we will continually improve student learning.

STRATEGIC OBJECTIVES

Engaging and Motivating Students: Teachers will engage all students to critically think, collaborate, communicate and demonstrate creativity within a safe and nurturing school environment.	Professional Practice: Teachers will address the needs of all learners through the regular use of data gathered by frequent formative assessments and the consistent use of structures to examine their practice through the lens of student work to inform and adapt instruction.	Curriculum and Resources: As a district we will communicate a clearly articulated curriculum to all stakeholders for each level, grade and/or course, and align system resources to support programmatic decision-making.

STRATEGIC INITIATIVES -- Phase 1

1) Establish systems to showcase student work in which students demonstrate critical thinking, collaboration, communication, and creativity skills	1) Establish system of common assessments and analysis of associated student achievement data	1) Implement budget process for programmatically aligning and allocating resources across all levels
2) Review and refine process and procedures for safe and supportive school environments	2) Implement and analyze use of models of collaboration	2) Develop system wide model of communicating curriculum to parents
	3) Define and implement RTI and SAT system for each level	3) Develop technology plan to support curriculum, assessment and instruction
	4) Establish a system for designating yearly plans for PD for teachers, paraprofessionals, and administrators	

RELATED FOCUS AREAS FOR SUPERVISION AND EVALUATION -- Phase 1

II-B-3 (Student Motivation)	I-B-2 (Adjustments to Practice)	III-B-2 (Curriculum Support)
Consistently creates learning experiences that guide students to identify their strengths, interests, and needs; ask for support when appropriate; take academic risks; and challenge themselves to learn.	Organizes and analyzes results from a variety of assessments to determine progress toward intended outcomes and uses these findings to adjust practice and identify and/or implement appropriate differentiated interventions and enhancements for students.	Regularly updates parents on curriculum throughout the year and suggests strategies for supporting learning at school and home, including appropriate adaptation for students with disabilities or limited English proficiency.
	IV-C-1 (Professional Collaboration)	
	Consistently and effectively collaborates with colleagues in such work as developing standards-based units, examining student work, analyzing student performance, and planning appropriate intervention.	

STRATEGIC INITIATIVES: Phases 2 and 3

Reevaluate comprehensive social-emotional learning program, including effectiveness of bullying program	Create "Impact on Learning" data system	Develop a system of curriculum review and unit-based curriculum models
Document combined school safety and supportive school environment process and procedures	Implement cohort of Curriculum and Professional Development facilitators	Evaluate the defined measurements of PBB and refine the process
Establish a system of transitional exhibitions of student learning	Define a system of best practices relating to RTI	Implement stages of the district technology plan and establish yearly benchmark and evaluation method

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