THE URBAN DISTRICT LEADER AND SYSTEMIC IMPLEMENTATION OF
COLLABORATIVE LEARNING COMMUNITIES: A MIXED-METHOD STUDY

A Doctoral Research Project
Presented to
Associate Professor Robert Bradley
Doctoral Committee Chair
School of Education
The Sage Colleges

In Partial Fulfillment of the
Requirements for the
Degree of Doctor of Education
In Educational Leadership

Barbara Malkas
September 29, 2011

Abstract

The purpose of this mixed method research is to determine if urban superintendent leadership actions and perceptions of depth of implementation impacts the depth of knowledge of professional learning communities for district educational staff. This research uses data obtained from two sources. The district staff completed the Professional Learning Communities Assessment (PLCA) (Olivier, Hipp, and Huffman, 2003). The district leaders were interviewed and evaluated the depth of implementation using the Initiative Implementation-Professional Learning Communities Audit Rubric (Reeves, 2010). A matrix was used to develop a side-by-side comparison of the data. Based on the data analysis, high frequency indicators of professional learning communities were identified for each dimension. Superintendents' perceptions of the level of implementation according to the Initiative Implementation Audit-PLC rubric for each criterion of professional learning communities as well as an overall perception of the depth of implementation were identified. Specific actions associated with district leadership and implementation of professional learning communities were identified and summarized through a categorical coding of the interviews of superintendents. Urban district leadership actions influence staff depth of knowledge, and therefore, the level of implementation of professional learning communities. For this study, staff knowledge of the attributes of professional learning communities was high where superintendent actions were purposeful in supporting professional learning community implementation. The superintendent influences the building leaderships' understanding of shared leadership by modeling shared leadership practices for decision-making, use of meeting time, and through the provision and transparency of information. This study suggests that

the superintendent's ability to facilitate conversation and dialogue into problem solving and action determines the effectiveness of these interactions with principals and central office staff. This study also suggests that superintendent influence of professional learning communities implementation is focused on coherence and alignment of school goal attainment with district non-negotiable goals. The results of this study suggest that districts implementing professional learning communities as a systemic reform initiative target coherence and alignment with district mission, vision, values, and goals. When staff experience professional learning at the deepest levels, then instructional improvement through collaboration leads to professional contribution to the learning culture of the school. This study showed that when professional learning communities achieve this depth of implementation, then peer observation and the use of critical feedback for improvement becomes the norm.

Acknowledgements

Leonardo da Vinci is quoted as having said, "It had long since come to my attention that people of accomplishment rarely sat back and let things happen to them. They went out and happened to things." The achievement of this doctoral dissertation has been accomplished through the enduring support and mentorship of many people who have encouraged me to be true to my nature and make things happen.

I want to thank Dr. Ann Meyers for her innovative thinking and being a role model for women in leadership. In addition, I would like to thank Drs. Raymond O'Connell and Katheryn Gerbino for their knowledge and inspiration in the development of the purpose, research questions, and methodology. I especially need to thank Dr. Robert Bradley, who as chair of my committee has provided numerous insights through his many readings of each of the chapters of this dissertation. His wisdom, professionalism, and support have allowed the completion of the dissertation to be a learning opportunity and not just an example of task completion. I also need to acknowledge the work of the other committee members, Drs. Daniel Alemu and Lee Wilson, whose expertise and knowledge have also challenged me to write with clarity and begin to see myself as "the expert." I especially wish to thank my executive coach, Sr. Jane Herb, for the numerous cups of tea, phone conversations, and unconditional compassion that have helped me to believe in my own capacity to persist. My cohort colleagues have taught me so much over the last two years. Thank you for being models of leadership and courage that I am proud to be associated with.

I want to acknowledge my colleagues in the Pittsfield Public Schools, especially

the members of the school committee, administrative cabinet, curriculum department, and the principals. It is our collective work on behalf of children that remains my constant inspiration. I want to thank Dr. Howard J. Eberwein, the superintendent, for being a district leader of great knowledge, work ethic, and compassion whose faith in the improvement of education for all students continues to motivate and encourage me.

I want to acknowledge the generosity of the five participating district leaders and their staff. Their willingness to participate in this research study and provide me with time, district resources, and knowledge of district leadership was the best personal professional development I have ever had the opportunity to participate in. My understanding of instructional leadership for urban districts has been influenced by their experiences that they so willingly shared with me.

I have many friends and family members to thank for their support. Rita, thank you for your wisdom and encouragement. Keith, thank you for your laughter and optimism. Jill, I want to thank you for the numerous walks, phone conversations, and reminders to live in the moment. The Chesbro family, I want to thank you for being neighbors and friends who celebrate all the special moments of life with me. Pat, who has known me for thirty-five years and still calls me friend, thank you for encouraging me to have balance and reminding me to breathe. Sister Linda, the first Dr. Malkas, thank you for convincing me that it was all right to be the smartest girl in the class back in elementary school. Dr. Robert Hickey, my wonderful brother in-law, I want to thank you for being a part of my family.

My two greatest achievements are my children, Eric and Kristin. Each of you has been my inspiration throughout this process. Eric, thank you for reminding me that life is

art and that having and using my voice is a creative expression. Your combination of wit and wisdom has kept me humble. Kristin, thank you for being a model of determination and focus. You are the strongest woman I know.

My greatest supporter has been my husband, John Euchler. After twenty-five years of marriage your continued trust, faith, and encouragement continues to humble and surprise me. You have made many cups of tea and had to listen to each new idea, reading, and reflection. This accomplishment is as much yours as it is mine because it surely would not have happened without you. As we move forward beyond this achievement I know that it will be together.

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Chapter One

Introduction

This chapter describes the purpose of the study, an overview of the study, and the need for research to understand district leader actions that support deep implementation of professional learning communities as a systemic reform initiative. This is followed by a description of instruments and data collection that were used in response to the research questions. The definition of terms and limitations of the study are also discussed as well as the study parameters that mitigate these limitations. The significance of this research to the education profession is also discussed.

Purpose

The purpose of this mixed method research study is to determine if urban superintendent leadership actions and perceptions of depth of implementation within the district impacts the depth of knowledge of professional learning communities for district educational staff. Urban district leaders are expected to provide instructional leadership and are held accountable for student performance with continuously increasing improvement targets, despite the fact there are several degrees of separation between the superintendent and the classroom. There are specific district leadership actions that have been associated with instructional leadership (Marzano and Waters, 2009).

District leadership activities tend to be focused on resource allocation and the political dynamics of the local community as well as the interactions with the governing school board (Knapp, Copeland, and Talbot, 2003). The role of the superintendent, as an instructional leader in the capacity of goal setting and resource allocation, is critical in developing the conditions to improve student achievement, but do not directly impact

improvement in instruction and subsequent student outcomes. Those staff with the greatest influence over student achievement has the most direct contact with the classroom, namely teachers. Leithwood, Louis, Anderson, and Wahlstrom (2004) suggest that "Leadership is second only to teaching among school influences on student success, and its impact is greatest in schools with the greatest needs" (p. 3). Principals can hold teachers accountable for implementation of district initiatives, but compliance does not necessarily mean that teachers are engaged in the systemic reform of the educational process in the school or district. Changing beliefs about student learning and teacher instructional practices does not occur merely because the district strategic plan identifies an instructional improvement goal and resources are allocated for professional development with the time to meet collaboratively is scheduled. People do not necessarily do what is expected of them simply because they are told to do so by an administrator.

Studies on the implementation of professional learning communities and school-based administration identify specific leadership support and actions that lead to deep implementation and increased student achievement, such as scheduling for time to meet and implementation of systems of shared leadership at the building level (Hord and Sommers, 2008; Reeves, 2010). There are a limited number of studies on the role of the superintendent as an instructional leader and even less regarding the implementation of collaborative learning communities district wide (Dufour and Marzano, 2011; Marzano and Waters, 2009). Research indicates that rural district leadership can impact implementation of professional learning communities, where the superintendent has more direct contact with teaching staff, but research on urban districts focuses on principal

leadership as having the main role in implementation of collaborative professional development models (Hill, 2009; Nelson, et al., 2010a; Hord, 2008; Hord, 2009; Schmoker, 2006). In large urban districts, where multiple layers of staff and bureaucracy exist between the superintendent and the work of the classroom teacher, identifying the key actions and activities that impact implementation of systemic reform initiatives, which shift the system toward achievement targets, informs professional practice and the development programs for future leaders (Childress, Elmore, Grossman, and Johnson, 2007).

A mixed methods approach was selected for this study because neither qualitative nor quantitative data collection and analysis alone would be sufficient in determining the extent of the actions by the district leader to facilitate implementation of professional learning communities in the urban district context. The mixed methods strategy allowed for quantitative survey data collection from staff in five urban districts in a northeast state of the United States using the Professional Learning Communities Assessment (PLCA) (Olivier, 2003) (See Appendix A). Simultaneously, reflections of the superintendent for each of these districts using the Initiative Implementation-Professional Learning Communities Audit Rubric (Reeves, 2010) (See Appendix B) were obtained. A semi-structured interview on district leader actions associated with creating conditions of improvement of student achievement was also conducted as part of this study. This research process allowed for the comparison between the data collected on the extent of professional learning community implementation from staff and the superintendent perceptions of implementation. The interviews afforded the researcher the opportunity to obtain specific information on the use of the professional learning community model as a

lever of systemic educational change as well as superintendent self-reported actions supporting implementation.

Research questions

The research questions are:

1) What is the level of knowledge of collaborative learning communities by staff in implementing districts?

2) What district leadership activities does the urban superintendent identify as supportive of implementation of collaborative learning communities?

3) In what ways do the urban superintendent's leadership activities relate to his/her perceptions of implementation of collaborative learning communities?

4) How do the urban superintendent's leadership activities contribute to the depth of knowledge of professional learning communities by district staff?

District staff were asked to complete the Professional Learning Communities Assessment (PLCA) survey (Olivier, 2003), which consists of forty-five items on six dimensions of professional learning communities: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions-relationships, supportive conditions- structures (Hord, 1997). The analysis of the survey data for this study used the frequency of response as a descriptive statistic by section identifying areas of knowledge regarding professional learning communities. Open-ended structured interview questions (See Appendix C) were used to determine specific leadership practices associated with the role of the superintendent as instructional leader, which include: collaborative goal setting, school committee alignment and support, allocation of resources, the use of defined autonomy, and

modeling of shared leadership practices (Marzano and Waters, 2009), which responds to research question number 2. For research question 3, the Initiative Implementation-Professional Learning Communities Audit Rubric (Reeves, 2010) was used to determine the perceived depth of implementation of collaborative learning communities as reported by the superintendent. The Initiative Implementation-Professional Learning Communities Audit Rubric uses the definitions and characteristics of professional learning communities as defined by Dufour, Dufour, and Eaker (2008). The PLCA survey data reveals areas of knowledge of professional learning communities, which can be compared to the self-report perceptions of the superintendent using the Initiative Implementation-Professional Learning Communities Audit Rubric and the coded interview responses using a mixed-method matrix for analysis of the data to respond to question four.

Definitions of Terms

Urban Districts: school districts identified as meeting the criteria for invitation to participate in a statewide network of district leaders. The representative districts in this network have a minimum of 40% low-income students with at least 4500 students enrolled. These districts also must receive federal funds through Title I.

Superintendent or District Leader: refers to the person in the role of superintendent and/or chief executive officer (CEO) of the district. The person in this role is hired and evaluated by the school board or committee to oversee the district regardless of the title used.

District staff: refers to all district personnel other than the district leader, including assistant superintendents, directors, coordinators, principals, and teachers.

Professional or Collaborative Learning Community: for the purposes of this study is

defined as the collective input and communication among staff using student achievement data that results in actions that improve instructional practice in an ongoing cycle of continuous improvement (Southwest Education Development Laboratory, 2005).

Professional Development: "a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (Learning Forward, 2011, p. 12).

Systemic reform:

The change that occurs in all aspects and levels of the educational process and that affects all of the people included in this process - students, teachers, parents, administrators, and community members. It is a dynamic process that requires constant communication and evaluation and has implications for curriculum, instruction, assessment, and professional development (Regional Laboratory for Educational Improvement of the Northeast Islands, 1995).

Limitations and Delimitations

The limitations of this study include the limited number of districts represented, the disproportionate survey participation by district staff, and the self-report nature of the interviews and identification of perceptions of implementation using the audit rubric.

The participating districts are representative of the urban context and demographic making the results more broad in range despite the limited number. While six districts of the 24 network districts self-selected to participate in the study and internal review policy and procedure approval was obtained for each, one district was unwilling

to release the survey in a timely manner and was excluded from the study. The sample size of five districts limits the interpretation of the results to correlations, relationships, and comparisons between survey items and superintendent responses not causation and conclusions. However, the district size and urban demographic does mitigate the relevance of the findings for consideration for further research and potential identification of productive practices and actions of superintendents as instructional leaders. All five participating districts happen to have district leaders who are white males and do not represent a diverse sample of district leadership.

Three of the five districts released the survey to all district staff, while one district released the survey to one school, and another released the survey only to the district leadership team. The survey data was analyzed holistically as representative of district staff knowledge of professional learning communities representing a 34.3% response rate (n = 436) for all possible survey completers (1271). All of the participating districts were implementing professional learning communities as an accountability action recommended by the state department of education as a systemic reform initiative. The three districts that released the survey to all district staff represent 91.5% of the completed surveys. The number of surveys completed by the other two districts was sufficiently small so as to have limited impact to the overall analysis of the survey data.

Self-report of district leader actions and perceptions of the depth of implementation can be affected by bias. Using the collective data provided by the audit rubric and the identification of common themes from the interviews limits the impact of any individual bias. The researcher limited personal bias by recording and transcribing the interviews in their entirety and provided these transcriptions to the participating

district leaders for review and clarification. The transcriptions were coded based on the recommended actions of district leadership in the role of instructional leader as identified by Marzano and Waters (2009). These coded quotations from the interviews were reviewed for objective actions so that subjective opinions of the interviewees were not included in the analysis. The objective actions leading to implementation of professional learning communities were corroborated with either a follow-up question, review of the district improvement or strategic plans, or other document review provided by the district leader. The participating district leaders self-selected to participate in this research study and each district used professional learning communities as a systemic reform initiative. This would also limit the generalizability of the results to districts without any experience with professional learning community implementation as a systemic reform initiative.

Significance of the Study

Marzano and Waters (2009) conducted a meta-analysis of quantitative studies in order to establish if a correlation exists between district level administration actions and student achievement. Their work identified the specific actions associated with increases in student achievement. Five specific district leadership actions associated with increased student achievement and one additional finding not specifically intended as part of the initial study were identified. The report of these district leader actions and subsequent professional development, training, and preparation of district leadership has been altered and improved to include the development of the instructional leadership skills associated with these actions. The number of studies that met the criteria for inclusion in the meta-analysis study was limited to 14 studies. This is indicative of the limited number of

studies containing information about the relationship between district leadership in improving student achievement and influencing teaching and learning.

Defining the actions of the district leader as an instructional leader are usually referenced in "sloganistic terms" (Leithwood, et al., 2004, p. 5) that is largely undefined by a set of specific actions and practices. Models of practice that incorporate high leverage skills that guide systemic reform of school districts in general, and particularly urban districts where volume and demographics can inhibit change, are limited in number and specificity (Leithwood, et al., 2004).

The improvement of instruction and learning as evidenced by student achievement is dependent on the effective distribution of leadership and supportive organization structures that provide a culture of learning. Practices associated with a learning culture "include strengthening district and school cultures, modifying organization structures and building collaborative processes" (Leithwood, et. al., 2004, p. 7). These collaborative processes include professional learning communities that rely on leadership support for full implementation. This research study attempts to add to the collective understanding of specific district leadership practices that are replicable, which can be associated with successful implementation of professional learning communities.

Summary

This chapter described the purpose of the study and an overview of support for the study in understanding district leader actions that support deep implementation of professional learning communities as a systemic reform initiative. The purpose of this mixed method research study is to determine if urban superintendent leadership actions

and perceptions of depth of implementation impacts the depth of knowledge of professional learning communities for district educational staff.

This research study uses data obtained from two sources. The district staff completed the Professional Learning Communities Assessment (PLCA) (Olivier, 2003). The district leaders were interviewed and evaluated the depth of implementation using the Initiative Implementation-Professional Learning Communities Audit Rubric (Reeves, 2010). A matrix was used to develop a side-by-side comparison of the data.

There are a limited number of studies on the role of the superintendent as an instructional leader and even less regarding the implementation of collaborative learning communities district wide (Marzano and Waters, 2009). This research study attempts to add to the collective understanding of specific district leadership practices that are replicable, which can be associated with successful implementation of professional learning communities. The next chapter is a review of the literature regarding professional learning communities and leadership for implementation.

Chapter 2

Literature Review

Introduction

This review of the literature presents current research and views on the use of collaborative learning communities as an effective method for providing job-embedded professional development, identifying the essential elements in order to operationally define effective professional learning communities, and review the current research on leadership activities that support student learning improvement and systemic implementation of collaborative learning communities. Improvement in student achievement occurs in the "crucible" of learning: that is the classroom under the leadership and authority of the teacher (Knapp, Copeland, Honig, Plecki, and Portin, 2010). However, urban districts leaders are expected to provide instructional leadership and are held accountable for student performance with continuously increasing improvement targets, despite the fact there are several degrees of separation between the superintendent and the classroom (Dufour and Marzano, 2011).

Collaborative professional development is effective as a means of improving instructional practice by "closing the knowing-doing gap" (Learning Forward, 2011, p. 26) that leads to improved student achievement. Due to the broad use of the term *professional learning communities* as a way of identifying any collaborative effort among teachers, effective learning communities that impact student achievement are not prevalent in practice (Dufour, Dufour, and Eaker, 2008; Dufour and Marzano, 2011). Effective collaborative professional development within learning communities includes a common mission, vision, and belief regarding student learning expectations, use of data-

based decision-making, shared leadership, and action orientation or use of evidence as part of a continuous cycle of improvement (Dufour, et al., 2008; Dufour and Marzano, 2011; Reeves, 2010). Leadership practices that support implementation of professional learning communities focus primarily on the role of the school leader and the implementation of shared leadership practices (Hord and Sommers, 2008). There is research on the superintendents' role as an instructional leader and innovator, and within the band of research studies on district leadership as an instructional leader, there is a limited number of research studies addressing the role of the urban district leader in the implementation of professional learning communities (Dufour and Marzano, 2011).

In the following sections, the literature for the use of professional learning communities as a systemic reform initiative, the issues of implementation and defining professional learning communities, and the role of the district leader in implementation and support for professional learning communities are discussed.

Defining Learning Communities

This section presents the definitions of collaborative learning communities found in the literature, the problem with the overuse of the term to describe a variety of collegial team structures in schools, and the attributes of effective learning communities.

Hord (1997) defined professional learning communities as having supportive and shared leadership practices, collective creativity, shared values and vision, supportive conditions (including physical conditions and people capacities), and shared personal practice. In effect, the expectation that decision-making with staff input and autonomy with a common vision for collective student learning and expectation for collective

teacher learning, coupled with the structures to support collaboration, leads to professional learning communities that impact the quality of instruction (Hord, 2008).

Dufour, Dufour, Eaker, and Karhanek (2004) defined professional learning communities through the development of a conceptual model which includes the following attributes: shared mission, vision, values, and goals; collaborative teams; collective inquiry; action orientation and experimentation; and results orientation. While striving to achieve the purpose of the organization, professional learning communities accomplish interim goals with a focus on learning, a commitment to assisting all students to learn at high levels, and the implementation of collaborative teams linked through common goals engaged in collective inquiry and a commitment to continuous improvement, (Dufour, et al., 2006; Dufour, et al., 2008; Dufour and Marzano, 2011).

City, Elmore, Fiarman, and Teitel (2009) refer to the use of "networks" for collaborations of teachers working on school systemic improvement initiatives. "It seems you cannot turn around in a school or district with an improvement agenda without bumping into some kind of network - a professional learning community" (p. 5). In the networks that these authors are describing, educational colleagues either by role or in mixed roles work together regularly in formalized structures and participate in classroom observation practices that leads to "a community of practice that supports their improvement work" (p.5).

Waters and Cameron (2007) have proposed the concept of purposeful communities that go beyond collaboration with a shared mission and vision. The purposeful community is characterized by high levels of collective efficacy, strategic use of available resources, the use of outcomes that are meaningful to all stakeholders, and

agreed upon processes for accountability, transparency, and communication (Cameron, McIver, and Goddard, 2008). High levels of collective efficacy are developed by staff when there are opportunities to implement research based strategies with fidelity and evaluate the results; peer observation of other teachers being successful with similar students and circumstances; and opportunities for teachers with high expectations to influence other staff through mentorship and action planning (Cameron, et al., 2008).

Hirsch (2009) outlined the definition of professional development that has been developed by Learning Forward, formerly known as the National Staff Development Council (NSDC), to be included in the reauthorization of *No Child Left Behind* (2001) as an amendment. This definition includes the capacity of collaborative learning communities as professional development to improve teacher quality. According to this definition professional development is "a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (p. 12). Hirsch (2009) says, "The new definition calls for every educator to engage in professional learning at the school as part of the workday" (p. 10). In a recent publication by Learning Forward (2011), the professional development standard for learning communities provides the definition of "professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment" (p.24).

Systemic Educational Reform and Collaborative Learning Communities

Accountability and standards-based educational reform have been the force of school improvement of the last two decades (Elmore, 2002). The authorization of *No*

Child Left Behind (2001), focused school districts on the goals of improving public education and closing the achievement gaps between historically underperforming subgroups of the population and improving overall academic expectations for all students (U.S. Commission on Civil Rights, 2004). State and local development of curriculum aligned to accountability standards has led many schools to conclude that changes in curriculum and instruction are needed to meet the learning needs of students with a specific paradigm shift focused on coverage of curriculum to the learning of content (Learning Forward, 2011). As Elmore (2002) states, "The accountability movement expresses society's expectation that schools will face and solve the persistent problems of teaching and learning that lead to academic failure of large numbers of students and the mediocre performance of many more" (p. 3).

Goodwin (2010) identifies a framework of the elements that are essential to systemic school reform by reviewing the research of high performing schools with traditionally at-risk students. The successful systemic reform of these schools, which has lead to improved student achievement, includes creative high performance school cultures and data-driven high reliability systems. High performing "beat-the-odds" schools have common values and shared mission and goals, with an academic press for achievement through high expectations, and a strong support for teacher leadership.

Hoy, Tarter, and Woolfolk Hoy (2006) identified high performing schools as having *academic optimism* characterized by a press for academic achievement, collective efficacy, and faculty trust in families and students. "Self-efficacy, a critical component of the theory, is an individual's belief about her or his capacity to organize and execute the actions required to produce a given level of attainment (Bandura, 1997). Efficacy beliefs

are central mechanisms in human agency, the intentional pursuit of a course of action. Individuals and groups are unlikely to initiate action without a positive sense of efficacy. "The strength of efficacy beliefs affects the choices individuals and schools make about future plans and actions" (Hoy, Tartar, and Woolfolk Hoy, 2006, p. 426-427). Collective efficacy in the delivery of high quality instruction occurs as a result of collaborative professional development, which supports the development of individual educator knowledge and skills as well as organizational capacity to respond when students do not achieve (Elmore, 2002).

Lai, McNaughton, Timperly, and Hsiao (2009) identified school-based practices associated with sustainable systemic reform including organizational learning through problem solving and the development of professional learning communities. Thompson, Gregg, and Niska (2004) identified professional learning communities as a promising strategy for dissolving teacher isolation and autonomy and creating school cultures focused on improving student achievement through collaboration. School leadership and teachers in this study identified the following areas associated with professional learning communities: systems thinking, personal mastery, mental models, shared vision, team learning, data informed decision-making, relationships, and risk-taking behavior (Thompson, et al., 2004). The first five areas align to the systemic reform model proposed by Senge (1990), the other three areas were identified by the researchers as additional elements that school leadership and staff consider components of a learning organization and the capacity of that organization to respond to organizational change (Thompson, et al., 2004).

The professional development opportunities provided for staff need to provide more than the acquisition of knowledge and skills to the supported implementation of new knowledge and skills with embedded opportunities for reflection as part of a cycle of continuous improvement (Vescio, Ross, and Adams, 2008). Phillips (2003) identifies this vision of professional development as a new paradigm where teachers are simultaneously responsible for teaching and their own professional learning as part of the everyday school operation, which is coupled with the expectation of the staff to work as teams who share responsibility for high levels of learning for each student. "One model that has evolved as a way of supporting this paradigm change is that of professional learning communities" (Phillips, 2003, p. 80).

Gregson and Sturko (2007) found that the use of collaborative learning communities for professional development supported innovation in instruction when coupled with teacher workshops. In the findings of their study, it was determined that teacher study groups provided a professional development experience that was "well-suited for providing the ongoing support and collaboration that is needed for teachers who have been introduced to a reform innovation and must make complex changes in their practice over the long-term" (Gregson and Sturko, 2007, p. 55). Engstrom and Danielson (2006) concluded from their study that teachers' assimilation of an educational innovation into classroom practice is based on the level of successful professional development and ongoing support as they transition from learner to implementation.

The Center for Performance Assessment conducted a large research study of schools identified as having 90% of the students eligible for free and reduced lunch; 90% of the students representing ethnic minorities; and 90% of the students meeting or

exceeding academic proficiency on standards assessed by independently conducted tests. One of the characteristics identified in the study was the use of collaborative learning communities that focused on analysis of student work and increasing student performance expectations (Reeves, 2000). Another study by Reeves (2006) demonstrated that district claims of initiatives, including professional learning communities, had a wide range of implementation at the classroom level. Research also indicates that focused job-embedded professional development improves student achievement (Reeves, 2010). In research reported by Reeves (2010), the relationship between the use of professional learning communities as a systemic reform initiative and student achievement is dependent upon the depth of implementation.

Professional learning communities provide teachers the professional development opportunity to develop collegiality through regular conversations about student learning with the focus on improving student achievement. The goal of professional development is to improve the individual teacher's capacity to improve in practice (Doolittle, Sudeck, and Rattigan, 2006; Dufour and Marzano, 2011). The collective goal of the school improvement process is to improve student achievement through the use of effective instructional strategies (Nathan, 2008). Evans, Baugh, and Schaffer (2005) concluded that effective sustainable implementation of a reform model required the use of ongoing collaboration with a clear and specific focus on improved student achievement in order to bridge the need for individual teacher professional growth and the capacity of the school to respond to student learning challenges. Woods and Weasmer (2004) indicated that collegiality was a strong contributor to teacher feelings of job satisfaction, which can

translate into positive attitudes about the educational process that are conveyed to students.

Jacobson (2010) contends that professional learning communities function through two distinct schools of thought on the development, function, and implementation of professional learning communities: bottom-up and top-down. One approach is teacher-led and more organic based on the reflected needs and wants of teachers collaboratively identifying strategies to implement. The other is more structured and administrator led approach where teachers rely on data analysis to create the sense of urgency that results in identified strategies that support the reform efforts resulting in improved student outcomes. While the advantage of the first approach is the enthusiasm and support of teachers, it requires high levels of coherence and collective efficacy with collaboration. The second approach requires focused, centralized, as well as distributed leadership and a facility with data analysis that leads to targeted intervention strategies while not becoming too narrowly defined.

Elbousty and Bratt (2010) indicated that professional learning community implementation can at first be a welcome professional development and collaborative school reform effort, but many teachers can become resistant to the perceived threat to classroom autonomy. In cultures characterized by teacher isolation, the skills for collaboration may be lacking. High functioning professional learning communities require certain specific elements such as the development and use of common assessments, the sharing of instructional practices, the reflection on and discussion of teaching (Nathan, 2008). Creating a culture of openness as opposed to isolation requires school and district leaders to implement strategies that support professional risk-taking

and simultaneously improve the technical skills of staff (Nathan, 2008). School and district leaders must balance top-down and bottom-up approaches to achieving instructional improvement objectives by developing effective teacher teams and coherent school wide systems to improve teaching and learning. This can be accomplished by managing the implementation of professional learning communities as both "bottom-up and top-down teacher teaming, between open-ended and structured processes, between instruction-driven and assessment-driven improvements, and between discipline and creativity" (Jacobson, 2010, p. 44).

The MetLife Survey of the American Teacher: Collaborating for Student Success (2010), a national survey of 1003 teachers and 500 principals, determined that "collaboration is valued in public schools as a concept, but is practiced in varying degrees" (p. 18). This survey by Metlife (2010) reported that public school teachers and principals "share a belief in the relationship between student success and collaborative school environments" (p. 3). Sixty-seven percent of the teachers and 78% of the principals agreed that increased collaboration among teachers and principals would have a positive impact on student achievement. The teachers reported an average of 2.7 hours per week spent in structured collaboration with the most frequent types of collaborative activities including teacher teams that focus on improving student learning outcomes, school leaders sharing responsibility with teachers for decision making, and beginning teachers working with experienced teachers in mentor relationships. However, the least frequent type of collaborative activity is teachers observing each other and providing feedback to improve instructional strategy with only 22% of the teachers responding in agreement with this activity.

The study (MetLife, 2010) determined that teachers and principals reporting the highest levels of school wide collaboration have strong beliefs about shared responsibility for student learning, collaboration with peers as a determiner of successful personal teaching practice, and trust among teaching staff with the building leader. In particular, 71% of the principals strongly agree that all staff within the school community "trusts each other" (p. 11).

High impact strategies determined to have "greater feasibility of implementation" (p. 11) include:

1. Creating a safe environment for risk taking;
2. Having a clear strategy and vision of the goals for collaboration;
3. Providing a strong orientation for new teachers about the expectations for collaboration;
4. Selecting strong teacher leaders to facilitate groups;
5. Providing specific training on how to achieve collaboration (MetLife, 2010).

The Problem with *Professional Learning Communities*

Two studies indicate an increased use of and adherence to the professional development standards through the use of learning communities, but issues associated with defining and implementing learning communities as a professional development model persist (Wei, et al., 2009; Wei, et al., 2010). The first study, published by the NSDC, based on the analysis of survey data and interpretation of research, defined professional development that achieves the sustained improvements in teacher instructional performance and student academic achievement as: intensive, ongoing, and connected to practice; focused on student learning and addressing the teaching of specific curriculum content; aligned with school improvement priorities and goals; and able to build strong working relationships among teachers (Wei, et al., 2009). This study also

indicated that almost forty percent of the teachers in the United States reported participating in individual or collaborative action research on a topic of professional interest and seventy percent of the teachers have regularly scheduled meetings with other teachers to collaborate on issues of instruction.

A follow-up study by Wei, et al. (2010) a year later, indicates that teachers in the United States report increased opportunities for collaborative professional development. However, there is still insufficient time provided to job embedded professional learning communities, and a very small percentage of respondents (16%) indicated collaborative participation among staff in professional learning communities.

Dufour, Dufour, Eaker, and Many (2006) indicated that there is the "growing popularity of the term professional learning community" (p. 2). The frequency of the use of the terms to describe any group of educators with an interest in an educational topic leads to ineffective implementation and fails to achieve the resulting increases in student achievement indicated by research.

The four reasons that professional learning communities in name only are doomed to failure include: complacency with existing structures, cultures of schools with resistance to change, lack of clarity of expectations for school reform initiatives, and the use of capacity building to delay action oriented implementation (Dufour, et al., 2006).

"Improving instructional practice requires a change in beliefs, norms, and values about what is possible to achieve as well as in the actual practices that are designed to bring achievement" (Elmore, 2000, p. 18). However, one cannot directly control the beliefs of others, but one can influence beliefs through evidence-based professional conversations and the use of action research to explore practices and strategies (Elmore,

2000). Educational accountability for improvement through expectations for performance evaluation can influence compliance to the implementation of identified and targeted research-based practices, but student performance provides an intrinsic internal incentive that will inherently influence beliefs (Elmore, 2000).

There are various reasons why schools remain virtually unchanged even though tremendous efforts and resources have been undertaken to frame changes in how education is conducted. Stigler and Hiebert (1997) proposed that teaching practice is a cultural artifact of the American educational experience. Teachers are products of the very educational systems in need of changing and the gaps in learning get perpetuated from generation to generation in order to meet the expectations of educators, and more importantly of parents and community members (Stigler and Hiebert, 1997). Bennis (2009) refers to the "traps" of being part of the culture and knowing how to operate within the culture, and then trying to successfully change the culture from within.

Dufour, et al., (2008) have identified the lack of clarity of intended results as a reason that past reform initiatives have failed to achieve positive outcomes for student learning. "While there has been general agreement that schools should improve, consensus on the criteria that should be used to assess that improvement remains elusive" (p. 65). The urgency for immediate improvement in student achievement, and the tendency for what appears as random implementation of reform strategies, can lead an unwilling staff to conclude that this professional learning community initiative, like many others, will eventually lose momentum. Reeves (2010) refers to the *Law of Initiative Fatigue,* which is defined as "when the number of initiatives increases, while time, resources, and emotional energy are constant, then each new initiative- no matter how

well conceived or well intentioned - will receive fewer minutes, dollars, and ounces of emotional energy than its predecessors" (p. 27).

Failure by educational leadership to attend to the change process itself can also contribute to the ineffective implementation of professional learning communities (Dufour, et. al., 2008; Dufour and Marzano, 2011). Gaining consensus with those intended to implement the desired change needs to be attended to, but waiting for unanimous approval and attempting to avoid conflict with change resistors will cause the reform initiative such as implementation of professional learning communities to lose momentum and stall. Eventually, professional learning communities become part of the staff lexicon as something that used to be done at the school (Dufour, et. al., 2008).

Elements of Effective *Professional Learning Communities*

The standards-based educational reform movement and subsequent accountability movement coupled with changes in management theory have led to the idea that teachers working in collaboration could address the challenges of closing the achievement gap, which led to a proliferation of collegial learning groups of teachers (Sherman, 2009). However, a limited number of schools were able to use teacher collaboration to improve student achievement outcomes (Dufour, et al. 2008). Inevitably, schools that successfully used teacher collaboration to improve student achievement became models of implementation. These schools were examined as individual exemplars and isolated case studies regarding the attributes of effective professional learning communities (Dufour, et al. 2008; Dufour, et al., 2006; Hord, 1997).

Hord (2009) uses the attributes of professional learning communities to define the terms of effective implementation practices. The professionals "are responsible and

accountable for delivering an effective instructional program to students so that they each learn well" (p. 41). According to Hord (2009), there is an expectation that educators share commitment and purpose in improving their own learning and the learning of their students. Learning refers to the demonstrated need and desire for lifelong learning as adaptive educational systems are developed for the changing dynamics of the classroom. Community refers to the act of coming together "in order to interact in meaningful activities to learn deeply with colleagues about an identified topic, to develop shared meaning, and identify shared purposes related to the topic" (p. 41).

Based on a review of the literature, studies indicated that effective learning communities had an emphasis on collaboration, focus on student learning, teacher authority in decision-making, and a commitment to continuous teacher learning (Vescio, et al., 2006). Ultimately, effective learning communities create the changes in organizational structures, roles, and processes by impacting large issues central to the organizational achievement of the mission (Smith and MacGregor, 2009).

Fogarty and Pete (2009) have identified protocols based on characteristics found frequently in the literature where experiences with implementation of professional learning communities have led to experiences of lasting impact in teacher quality and student performance. These protocols describe sustained, job-embedded, collegial professional development characterized by interactive and integrative professional learning grounded in results-oriented practical application to practice.

Professional learning communities that are effective, productive and professionally stimulating use a collaborative inquiry cycle, have deep conversations about instructional practice, and look at student work through the lens of continuous

improvement (Nelson, LeBard, and Waters, 2010b). The inquiry cycle is a means of investigating a problem of practice in need of improvement as identified through a critical analysis of data (Nelson, et al., 2010b). The inquiry cycle begins by identifying a single area of focus identified through data analysis (Nelson, et al., 2010b). The implementation of common actions in response to the identified area of need and collection of student data to monitor the effectiveness of the strategies employed (Nelson, et al., 2010b). Through the analysis of the student data, the approach to the problem of practice is improved as a continuous improvement cycle (Nelson, et al., 2010b).

Reeves (2010) indicated, "Collaboration, it turns out, is not a gift from the gods but a skill that requires effort and practice" (p. 50). Professional development, that has high yield improvement in student achievement, must be data-driven, systemic, and sustained with a clear focus. While school systems have sufficient data for analysis, the use of this data to identify a high leverage focus can be challenging. Instead, Reeves (2010) supports the "systematic observation of the impact of specific teaching practices on student achievement and the continuous sharing of those observations with colleagues" (p. 73). In this way the focus of the collaborative effort is instructional practice and student achievement data becomes the means of measuring the effectiveness of the practice in improving student learning.

The action research model that includes collaborative learning communities to guide the work of teams includes: defining the research question, identifying the student population for the action research project, using student achievement data to monitor effectiveness of the strategies or interventions, and observation of professional practice (Reeves, 2010). It is this last step that includes the opportunity to operationalize in

descriptive terms the expectations for implementation and performance. For this type of collaborative work to be systemically effective a culture of trust and teacher leadership needs to be developed, modeled, and supported by school and district administration (Reeves, 2010).

Leadership and Professional Learning Communities

This section will review the literature on the roles of the district leader as an instructional leader, within the urban context, and with implementation of professional learning communities as a systemic change initiative.

Superintendent as Instructional Leader

Marzano and Waters (2009) conducted a meta-analysis of quantitative studies in order to establish if a correlation exists between district level administration actions and student achievement. Their work also identified the specific actions associated with increases in student achievement. Studies included in the meta-analysis had to meet two criteria: the study had to demonstrate a correlation between district leadership, and variables of district leadership, and student achievement measured using a standardized measure. Most of the studies used for analysis involved the survey of perceptions of superintendents correlated to student achievement data. The results of the meta-analysis revealed five specific district leadership actions associated with increased student achievement and one additional finding not specifically intended as part of the initial study.

The meta-analysis study found a relationship between district leadership behavior and student achievement when superintendents ensured collaborative goal setting occurred in their districts (Marzano and Waters, 2009). This meant that the various

stakeholders in the district, especially principals, had been given the opportunity to identify, develop, and provide feedback on goals. The content of the goals set for the district focused on nonnegotiable goals for student achievement and instruction. These goals created a focus on measurable outcomes for students and implementation of proven high quality instructional practices. There was support and alignment for the district improvement goals with the school board as a result of the superintendent's actions in working with the board with limited diversions to "pet projects" or reactivity to isolated local concerns not associated with student learning in schools (Marzano and Waters, 2009). There was a system for monitoring progress and attainment of goals. Discrepancies between measures of goals and progress monitoring were viewed as opportunities for change or increased effort. This included observed teaching practices in comparison to instructional expectations or models. Allocation of resources supported goal attainment by focusing expenditures on teaching personnel and instructional materials. This included increasing funds to support professional development in content and pedagogy (Marzano and Waters, 2009).

The non-negotiable goals, focusing on high quality instruction and expectations for student achievement, target the instructional core including curriculum, instruction, and assessment (Marzano and Waters, 2009). These goals are universal and systemic with evidence of dissemination from the district level to the individual school improvement planning (Marzano and Waters, 2009). The superintendent must provide explicit support for these goals through actions that lead to the development of goals and a framework for classroom instructional expectations, and through implicit support demonstrated by protecting the instructional core from diversions or communicating messages in

opposition or conflict with the expressed goals (Marzano and Waters, 2009). There must be consistency of message and actions regarding the main educational mission of the district.

The meta-analysis study also revealed an apparent conflict between school autonomy and site-based management (Marzano and Waters, 2009). While school based autonomy was found to have a positive impact on student achievement, site-based management was found to have a slight negative correlation with student achievement. The difference between autonomy and site-based management was the articulation of non-negotiable goals. Schools had the authority for implementation of district goals, but were also held accountable for student achievement success. The superintendent had expectations of other district level and building based administrators that leadership was defined by the boundaries of the goals (Marzano and Waters, 2009). In large districts, with higher numbers of office staff and building level administrators, it was suggested that systemic alignment through defined autonomy of non-negotiable goals resulted in increased student achievement (Marzano and Waters, 2009). The superintendent sets expectations for effective district and school level leadership to change what is occurring in the classrooms, which has a direct impact on the instruction occurring in the classroom.

The one finding that was not initially a focus of the meta-analysis study was the impact of tenure of the superintendent on student achievement (Marzano and Waters, 2009). While only two studies demonstrated a positive correlation between the length of time the superintendent held the position and student achievement increases, the

implications of this finding may be important to understanding the success and failure of systemic reform initiatives.

A report, from a major research project by the Wallace Foundation on educational leadership impact to student learning, reviewed the empirical research and literature (Leithwood, Louis, Anderson, and Wahlstrom, 2004). Based on the analysis of the evidence, the report identified two claims with regard to one research question, "What effects does successful leadership have on student learning?" (Leithwood, et al., 2004, p. 2). First, effective leadership is an important contributing factor to student learning, which is "second only to classroom instruction" (p. 3). Second, the impact of successful leadership practice is "considerably greater in schools that are in more difficult circumstances" (p.3).

The report identifies three key leadership practices that are foundational to the leader's role in the improvement process: setting the direction or goal setting, developing people or attending to the direct and indirect relationships in the organization and the communication of expectations and provision of support, and redesigning the organization for effectiveness. The researchers also found that effective leaders were adaptive to organizational context, the educational needs of diverse student populations, and the context of policy and governance in addition to these "basics" of leadership (Leithwood, et al., 2004).

The report from this major research project on educational leadership identified "at least 12 common focuses of district-level strategic action identified in the literature on district efforts to improve student learning" (Leithwood, et al., 2004, p. 41). These twelve strategic actions of the district level administrator include:

1. 1.District-wide sense of efficacy.
2. District-wide focuses on student achievement and the quality of instruction.
3. Adoption and commitment to district-wide performance standards.
4. Development/adoption of district-wide curricula and approaches to instruction.
5. Alignment of curriculum, teaching and learning materials and assessment with relevant standards.
6. Multi-measure accountability systems and system-wide use of data to inform practice, to hold school and the district leaders accountable for results and to monitor progress.
7. Targeted and phased focuses of improvement.
8. Investment in instructional leadership development at the school and district levels.
9. District-wide job-embedded professional development focuses and supports for teachers.
10. District-wide and school-level emphasis on teamwork and professional community.
11. New approaches to board-district and in district-school relations.
12. Strategic engagement with state reform policies and resources (Leithwood, et al., 2004).

These 12 strategic actions are consistent with other research and literature on district level leadership and instructional impact. The system wide prevalence of high expectations, the development of explicit goals that are focused on student learning, the attention to an aligned and coherent standards-based instructional system with measures of learning, the use of data to inform decision-making, and strategic focus and investment of resources are representative of strategic district leader actions (Childress, Elmore, Grossman, and Johnson, 2007; Leithwood, et al., 2004; Marzano and Waters, 2009). The one district level leadership action of specific interest for this research study is the use of "teamwork and professional community" (Leithwood, et al., 2004, p. 46).

> Collegial work groups (e.g., grade level teams, school improvement teams), sharing of expertise, networking of teachers and principals across schools, cross-role leadership and school improvement teams at school and district levels – all these and many other configurations of professional educators collaborating with one another on student achievement-focused district reform initiatives are indicative of a common emphasis on

teamwork and professional community as one of the keys to continuous improvement (Leithwood, et al., 2004, p. 46).

District Leadership in the Urban Context

In large urban districts, the superintendent's challenge is to provide instructional leadership where there are layers of district office staff, building level leadership for schools, and a multitude of classrooms (Childress, et al., 2007; Knapp, Copland, Honig, Plecki, and Portin, 2010). The political, financial, and community interests are more complex in these districts (Childress, et al., 2007).

In order to provide a structure to understanding and creating organizational coherence, the Public Education Leadership Program (PELP) at Harvard University, which is a collaborative including Harvard Graduate School faculty, business leaders, and a network of urban superintendents, developed the PELP Coherence Framework (Childress, et al., p. 3). Organizational coherence is achieved when the various parts of the district work together to achieve district goals. Through "hundreds of interactions with urban district leaders" (p. 43), it was determined that many superintendents see the various activities of urban district leadership as separate problems rather than as related parts. The PELP Coherence Framework was designed to demonstrate the interconnectedness of these challenges and as a means of demonstrating the support needed for strategy implementation. "The PELP Coherence Framework is designed to focus the attention of public school district leaders on the central problem of increasing the achievement levels of all students by making all the parts of the large district work in context with its strategy" (Childress, et al., 2007, p. 54).

The identified challenges of the urban district that provide the need for the organizational Coherence Framework include: 1) the systemic implementation of strategy across schools with different characteristics, 2) effectively re-designing the large organization to support the strategy or initiative, 3) developing and managing human resources to carry out the strategy or initiative, 4) allocating resources in alignment to the initiative and goals, and 5) using performance data for decision-making, organizational learning, and accountability (Childress, et al., 2007).

The instructional core is at the center of the PELP Coherence Framework and it is defined by the interactions of students, teachers, and content. Instructional practices are the means by which their interaction occurs. The systemic reform strategy or initiative, which has been identified as the means of improving the instructional core and student learning, surrounds the instructional core. The environmental factors that support the strategy implementation so that there is an impact on the instructional core are: 1) a culture of collaboration, high expectations, and accountability; 2) a defined formal structure and informal structures that empower staff to act in support of the district goals and implementation of the strategy; 3) district systems for work completion that are efficient and effective; 4) consistency in the allocation of resources that supports the implementation of reform strategies, as well as operations; and 5) the managing of various stakeholder relationships. It is through the oversight within these five environmental domains that the urban superintendent impacts the instructional core and the implementation of systemic reform strategies or initiatives. Building a culture of collaboration is foundational to the ability of district leaders to initiate, implement, and sustain systemic improvement (Childress, et al., 2007).

When district leaders take specific actions, such as redefining roles or relationships, altering performance expectations, or using job assignments in creative ways, they send signals about which behaviors they value and desire throughout the organization. Over time they can upend an entrenched counterproductive culture and see it replaced by a productive one (Childress, et al., 2007, p. 3).

A report from the Wallace Foundation, *Learning-Focused Leadership and Leadership Support: Meaning and Practice in Urban Systems* (Knapp, et al., 2010), used a multi-strand investigation involving qualitative and mixed-method research techniques to investigate leadership in urban schools and districts implementing systemic reform to improve learning and leadership capacity. The study focused on the urban context because demonstrating success in high poverty schools associated with urban demographics and challenges is complicated by multiple variables. Staff complacence with the overwhelming odds against increasing student achievement can permeate the culture of urban schools.

The study found that schools within the districts, characterized by a belief in the capacity of the school to collectively and individually be able to impact student learning, had certain sustaining and supporting attributes. These attributes included: 1) consistent messaging by the school leadership team, 2) a school wide improvement "agenda" or strategic plan, 3) a system for tracking the progress of students and the ability to make adjustments in the learning experience, 4) and school staff sharing responsibility for student progress (Knapp, et al., 2010). These schools are supported by district central office staff that provide support to principals as instructional leaders, that have developed a district reform plan that provides principals with significant discretion and some additional resources, and that have clear system wide expectations for the district. "While

many things are involved, at the root of them is the exercise of leadership-by many people at different levels of the system - that brings focus, resources, and effort to the task of learning improvement" (p. 3).

The study (Knapp, et al., 2010) identified two specific conclusions regarding urban district leadership. First, leadership needs to be student-learning improvement focused and that leadership needs to include "both those in administrative positions (principals, assistant principals) and others exercising teacher leadership" (p. 6). Second, supporting activities are provided that "not only guide and assist the practice of learning-focused leadership, they also embody it" (p. 26). District leaders are acting as learning-focused leaders through provision of support for building level leadership. "Leadership support is itself leadership" (p. 26).

> Network arrangements in several districts, for example, simultaneously offered school principals and other school staff colleagues intellectual, emotional, operational, and strategic support. Within the schools, principals guided and supported teacher leaders' learning and practice by offering material and financial resources, providing ideas (or access to idea sources), and legitimizing the work of teacher leaders in the eyes of staff members who were not always initially receptive (p. 26).

The study found that in the districts demonstrating improvement in student learning and closing achievement gaps, the district leadership demonstrates a strong conviction that learning improvement can be scaled up through a focus on learning through the work of building level leaders. These district leaders model lifelong learning by adopting "a learning stance" (p. 33).

> Improving teaching and leadership practice means new learning for teachers, administrators, and other staff, all of whom have much to understand and new skills to acquire to do their work effectively. But, more to the point, a central part of the work is to adopt a learning stance,

one that assumes that one never knows it all, nor has a sufficient understanding of newly arising problems of practice (p. 33).

The district leaders of the districts in the study actively recruited talented new leaders and provide professional development for existing leaders because the building level administrator implements the improvement plan at the school level. These district leaders had a systems perspective and recognize the "interconnected whole of a functioning educational system" (p. 34), despite the experience of dysfunctional systems requiring reorganization. When the possibility of a functional and interconnected educational system is understood, coherence can be achieved (Knapp, et al., 2005). "Ultimately, we need educational systems in which the whole and the parts work together to the greater benefit of urban school children" (p. 34).

Leadership and Implementation of PLCs

There are limited research studies regarding leadership actions and attributes associated with implementation of professional learning communities for educational leadership roles in general. Most of them focus on the role of principal leadership (Dufour and Marzano, 2011; Hord and Sommers, 2008). The principal has the proximal and supervisory capacity to influence professional development and instructional practices (Hill, 2010; Nelson, et al., 2010; Hord, 2008; Hord, 2009; Schmoker, 2006). Much of what is written about the superintendent's role in implementing professional learning communities in the literature is qualitative case study or based on the experiences of the author (Dufour, 2003; Dufour, 2007; Dufour and Marzano, 2011). Among the studies of professional learning community implementation and leadership certain actions and attributes can be identified in comparison to the instructional

leadership actions identified by Marzano and Waters (2009) and the PELP Coherence Framework (Childress, et al., 2007).

Communication of district vision and goals with a focus on student learning is a primary supportive action for district superintendents using professional learning communities as a systemic reform initiative to improve student achievement (Dufour and Marzano, 2011; Hord and Sommers, 2008; Hord, 2009; Johnson and Uline, 2005; Killion and Roy, 2010; Nelson, et al., 2010b; Schmoker, 2006; Tyson, 2006; Wagner, 2010). The consistency of message through measurable district goals based on measures of student learning, supportive actions, and in building capacity with bargaining units, school board membership, and local political representatives provides direction and educates the school community on the expectations and decision-making process (Dufour, 2003; Dufour, 2007; Dufour and Marzano, 2011; Killion and Roy, 2010; Wagner, 2010). There is a certain level of relational support that uses influence as opposed to directive management for the development and attainment of the district goals as a component of professional learning community implementation (Dufour, 2003; Dufour, 2007; Dufour and Marzano, 2011; Hord and Sommers, 2008; Hord, 2009; Wagner, 2010).

The instructional core of the district educational program is defined by the curriculum, the instructional strategies, and the assessment of student learning answering the questions: What content is taught? How is the content taught so that students can learn it? How will we (educators) know if the students have learned it? (Dufour, et al., 2010; Dufour and Marzano, 2011; Schmoker, 2006). The superintendent supervises the central office staff to identify and provide a "guaranteed and viable curriculum" (Dufour and Marzano, 2011; Schmoker, 2006). The curriculum is based on high expectations for

all students and requires content specific, as well as pedagogical professional development that addresses the need to improve the instructional practice of teachers (Killion and Roy, 2010; Schmoker, 2006).

Assessment data is used in two ways with the implementation of a systemic reform initiative, such as professional learning communities. First, student achievement data is used to identify and establish professional learning community goals and action plans (Dufour, et. al., 2004; Dufour, et al., 2006; Dufour, et al., 2008; Dufour, et al., 2010; Dufour and Marzano, 2011; Hord and Sommers, 2008; Hord, 2009; Schmoker, 2006). The second use of data is to monitor the implementation of the professional learning community action plan and progress toward goal attainment (Dufour, et. al., 2004; Dufour, et al., 2006; Dufour, et al., 2008; Dufour, et al., 2010; Dufour and Marzano, 2011; Hord and Sommers, 2008; Hord, 2009; Reeves, 2010; Schmoker, 2006). This leads to the use of objective measures of performance informing supervision practices and accountability for all school community members for student achievement (Johnson and Uline, 2005; Killion and Roy, 2010; Schmoker, 2006; Wagner, 2010).

A third question to the use of data for instructional decision-making can be added: How do we (educators) respond when students have not learned what has been taught? (Dufour, et al., 2004; Dufour, et al., 2010; Dufour and Marzano, 2011). The building level structural supports for a comprehensive response to intervention require targeted and creative solutions in order to provide all students access to the curriculum (Dufour, et al., 2004; Dufour, et al., 2010; Dufour and Marzano, 2011; Hord and Sommers, 2008; Wagner, 2010).

Implementation of professional learning communities requires a collective understanding that all students can learn at high levels with the appropriate instructional practices and supports, and that individuals have a personal responsibility for achieving the district goals (Cameron, et al., 2008). For this to occur, all staff must assume the role of instructional leadership and all administrators must understand and implement shared leadership practices ((Dufour, et. al., 2004; Dufour, et al., 2006; Dufour, et al., 2008; Dufour, et al., 2010; Dufour and Marzano, 2011; Nelson, et al., 2010; Hord and Sommers, 2008; Hord, 2009; Leonard and Leonard, 2005; Reeves, 2010; Schmoker, 2006; Wagner, 2010; Wells and Keane, 2008). As Marzano and Waters (2009) indicated through *defined autonomy,* the superintendent has a role in the development of professional learning communities by employing "loose-tight" strategies (Dufour, 2003; Dufour, 2007; Dufour and Marzano, 2011; Eck and Goodwin, 2008; Westover, 2008; Weick, 1976). These strategies include district leadership clarity of mission, goals, and performance expectations with the freedom at the school level to attain the goals within the parameters set by the district. Clear priorities with defined expectations and parameters are presented, but then schools and school leadership teams have the autonomy to implement the necessary steps to achieve the school goals aligned to the district priorities (Marzano and Waters, 2009).

Shared leadership is an example of distributed leadership when the shared practices exemplify the leadership practice rather than leaders or their roles, functions, routines, and structures (Spillane, 2005). Spillane (2005) describes distributed leadership "as the interactions between people and their situation" (p.144). The leader's actions in these interactions construct distributed leadership practices, which need to be modeled

through effective teamwork at the central office and in interactions with building level administration (Dufour and Marzano, 2011; Hord and Sommers, 2008; Killion and Roy, 2010; Schmoker, 2006; Westover, 2008). Superintendents use administrative meetings to "invite and actively promote high-density involvement not only in administrative or school wide decisions, but also in professional interaction" (Leonard and Leonard, 2005, p. 24). The superintendent's role is to define purpose to these meetings and facilitate collaborative dialogue (Hord, 2009). This is modeled through asking and responding to probing questions, using cognitive conflict as a means of developing deep understanding, being intentional about the content of the dialogue, and accessing and using protocols and questions to shift from "congenial to collegial conversations" (Nelson, et al., 2010).

Implementation of a systemic reform initiative, such as professional learning communities, requires resources. Management and allocation of resources for a systemic reform initiative implementation needs an assessment of current practices, identifying areas that will be supportive factors, and eliminating use of resources in areas that are not aligned to the district goals (Fullan, 2005; Hord and Sommers, 2008; Killion and Roy, 2010; Reeves, 2010). Whether it is the increase in financial resources or the intended and targeted use of resources, financial resource allocation is related to student achievement (Marzano and Waters, 2009). Discrepancies in resource allocation to schools within large districts, particularly impacting schools with high levels of poverty, is caused by district budgeting practices that sometimes use different funding categories (Marzano and Waters, 2009).

"The central office must become the catalyst for the structural and cultural changes required to implement and sustain thriving PLC at the site level" (Westover,

2008, p. 235-236). While supported by systems thinking change theorists and advocates, this can be the most controversial task in the implementation of systemic reform through professional learning communities. Fullan (2005) indicates, "it would be a fundamental misunderstanding of systems theory to assume that the system should change first" (p. 221). The superintendent influences the change implementation through the development of a budget in collaboration with and by obtaining approval from the school board that allocates resources aligned to district student achievement goals and closing achievement gaps. This is accomplished through operational budget presentations that inform school board membership and the community at-large about mission, issues that need to be addressed, and targets for innovation (Houston and Eadie, 2002).

The Pitfalls to Systemic PLC Implementation

The research indicates that there are two major obstacles to successful implementation of professional learning communities that lead to improved student achievement. First, many educators and other stakeholders believe school improvement is the result of adoption of a program (Dufour, et al., 2008). Second, the systemic reform initiative is implemented through the filter of the existing *mental models* (Senge, 1990) of what educational systems and school cultures should look like (Dufour, et al., 2008). Systemic reforms and the implementation of professional learning communities require a broader contextual definition that encompasses cycles of continuous improvement and a willingness to envision creative solutions built on a foundation of risk and trust.

> Superintendents can help educators see how systems that continually protect themselves from honest information, do not ultimately serve students or the faculty. Superintendents are the keepers of the vision that is grounded in honesty and transformation, and they model that behavior as they seek out and accept, and in turn provide feedback, not criticism (Wells and Keane, 2008, p. 29).

The superintendent must use effective communication to develop and model the expectation for professional collaborative dialogue that is relational, calm, positive, mutually beneficial, and constructive (Tyson, 2006). Avoiding the two pitfalls of implementation identified by Dufour, et al. (2008) requires management of the change process and a level of comfort with discomfort.

Bridges (2009) identifies the transition from the previous methods, operations, and structures to the new systems as the challenge of organizational change that is psychological. "Before you can begin something new, you have to end what used to be. Before you can learn a new way of doing things, you have to unlearn the old way" (Bridges, 2009, p. 23). The superintendent leading a systemic reform initiative needs to be attentive to the relationships and human capacities as staff transition from work in isolation to collaboration, from unknown outcomes to transparency of data, from blame to causality (Dufour, et. al., 2008; Dufour and Marzano, 2011; Hord and Sommers, 2008; Wells and Keane, 2008).

However, superintendents cannot mistake congenial cultures and conversations as true collaboration (Dufour and Marzano, 2011; Nelson, et al., 2010). "Congenial cultures preserve the status quo" (Nelson, et al., 2010a, p. 176). "Reflective and critical conversations about "ideas and actions reveals differences in beliefs and values and can lead to personal and emotional conflicts" (Nelson, et al., 2010a, p. 176). As teachers collaborate in meaningful ways and these differences begin to create discourse, there is a tendency to avoid the potential conflict, and therefore, the difficult conversations that lead to meaningful change dissolve into congenial discussions of practice where everything is fine the way it is (Dufour and Marzano, 2011; Nelson, et al., 2010a). Hord

and Sommers (2008) say, "Principals and other leaders must manage conflict, not necessarily eliminate conflict" (p. 36).

If the knowledge and capacity of those implementing the professional learning community model is not developed or is in contradiction to the existing cultural norms, then the resulting collaboration may be defined by compliance as opposed to true engagement (Leonard and Leonard, 2005). A study of 12 northern Louisiana school districts identified a disparity between building level leadership perceptions of professional collaboration and the existing cultures of schools where implementation of professional learning communities is required (Leonard and Leonard, 2005).

The contrast between leadership perceptions and implementation of professional learning communities can be understood in the context of order or degree of the change (Huffman and Hipp, 2003). Implementation of professional learning communities as part of a high-reliability coherent organization requires high levels of professional learning and systems to support effective collaboration (Childress, et al., 2007; Dufour and Marzano, 2011; Marzano and Waters, 2009; Reeves, 2010). There exists a contrast between superficial first order change and deep systemic second order change (Marzano, et al., 2005; Marzano and Waters, 2009). First order change is perceived as an extension of the past, fits within existing paradigms, consistent with the prevailing values and norms, does not require new knowledge or skills, uses currently available resources, and can be accepted by common agreement (Marzano, et al., 2005; Marzano and Waters, 2009). Second order change is perceived as break from the past, does not reside within existing paradigms, conflicts with existing norms and values, requires new knowledge acquisition and skills, and requires new resources, and encounters resistance because of

the need for a systems approach (Marzano, et al., 2005; Marzano and Waters, 2009). The shift from a focus on what is taught to how content is taught and whether or not student have learned is a distinct shift from the past (Marzano and Waters, 2009).

Reeves (2010) reports that "High professional learning has three essential characteristics: 1) a focus on student learning, 2) rigorous measurement of adult decisions, and 3) a focus on people and practices, not programs. Implementation of professional learning communities that improve student achievement requires deep implementation not just a claim of implementation that barely impacts the practices of teachers in classrooms (Cameron, et al., 2008; Dufour and Marzano, 2011). Leadership decisions and actions can impact student results when the leadership actions lead to deep implementation (Reeves, 2010). If these actions associated with deep implementation of professional learning communities are identified for the purpose of informing and replicating future leadership practices, then more students and staff could benefit from the effective implementation of professional learning communities.

Summary

This review of the literature identified the use of professional learning communities as a systemic reform initiative for improving teaching and learning, defining professional learning communities, identifying the problem with professional learning communities in action, the attributes of effective professional learning communities, the district leader as an instructional leader in general, and specifically as a leader of professional learning communities. "Professional learning communities requires continuous improvement, promotes collective responsibility, and supports alignment of individual, team, school, and school system goals" (Learning Forward, 2011, p. 24).

There is a misuse or overuse of the term because of the use of the term "professional learning community" to describe any staff teaming approach (City, et al., 2009; Dufour, et al., 2006). Productive professional learning communities that impact the way schools operate and improve student learning outcomes have attributes that indicate the use of professional learning communities as part of a continuous cycle of improvement (Dufour, et al. 2008; Dufour, et al., 2006; Hord, 2009; Hord, 1997; Fogarty and Pete, 2009). Professional learning communities that are effective, productive and professionally stimulating use a collaborative inquiry cycle, have deep conversations about instructional practice, and look at student work through the lens of continuous improvement (Nelson, et al., 2010).

District leaders have an impact on student achievement (Dufour and Marzano, 2011; Marzano and Waters, 2009). The actions of district leaders, that have the greatest impact on the implementation of professional learning communities, are associated with support of the classroom through building level leadership and authority to use resources in support of teacher collaboration (Leithwood, et al., 2004; Knapp, et al., 2010). District leaders support the conditions of school improvement by creating coherent and clear expectations and alignment of practice, (Childress, et al., 2007; Dufour and Marzano, 2011; Leithwood, et al., 2004).

Chapter Three

Methodology

This chapter describes the methodology for this study and includes the purpose and research questions, a description of the participants and selection process, the research process and instruments, and data collection and analysis plan.

Purpose and Research Questions

The purpose of this concurrent embedded mixed-methods research study was to determine if depth of knowledge of collaborative learning communities of district educational staff is related to urban superintendent leadership activities and perceptions of depth of implementation. The meta-analysis of research of district leadership impact on student achievement by Marzano and Waters (2009) indicates that the superintendent has a role in influencing instructional practices by establishing a clear mission and shared vision, setting expectations for performance, and in the allocation of resources. In addition, research indicates that systemic reform initiatives are capable of improving student achievement outcomes when the elements of the systemic reform model are clear to all members of the community, focused, and implemented with sufficient depth so as to influence the practices of teachers at the classroom level (Reeves, 2010).

While there have been studies linking district leadership to systemic reform and improvements of student achievement, these studies are limited in number (Marzano and Waters, 2009). This research proposal addresses the specific context of the urban district leader as an instructional leader through the implementation of collaborative learning communities. The intent is to add to the limited number of studies on the relationship

between urban district leadership and implementation of systemic reform initiatives. The complexity of the role of the urban district leader, and specifically those actions related to implementation of collaborative learning communities, requires the use of mixed-method research to provide sufficient detail to explain the impact of the district leader on the dynamics of implementation at the school and within the classroom.

Brannen (2005) indicates that mixed-methods research represents a distinct strategy that allows for more than one research strategy (i.e. qualitative and quantitative), but that also "means working with different types of data" (p. 4). One reason for using a mixed-method study includes "practical enquiry" (p. 6), where the purpose of the research study is to generate information that will inform policy, policymaking, and practice. Another reason to use mixed-method strategy is to provide research-oriented information, which meets the needs of users with an "emphasis on dissemination" (p. 6). According to Creswell (2009), the advantage of using a mixed-methods research design includes "utilizing the strengths of both qualitative and quantitative research. Also, the problems addressed by social and health science researchers are complex, and the use of either quantitative or qualitative approaches by themselves is inadequate to address this complexity" (Creswell, 2009, p. 203).

Creswell and Plano-Clark (2011) indicate, "qualitative data can provide a detailed understanding of a problem while quantitative data provide a more general understanding of a problem" (p. 8). The mixed-method strategy allows for sufficient evidence to be collected to tell a complete story where "the limitations of one method can be offset by the strengths of the other method, and the combination of quantitative and qualitative data provide a more complete understanding of the research problem than either approach by

itself" (Creswell and Plano-Clark, 2011, p. 8). The selection of mixed-method research strategy for this study is an attempt to add to the knowledge of the role of the superintendent as an instructional leader, and to specifically identify leadership activities that lead to systemic implementation of collaborative learning communities as a reform initiative. This study, with the level of implementation from the field through quantitative surveys related to qualitative interviews, intends to lead to understanding of the relationship between the actions of the superintendent and implementation of professional learning communities. A mixed-method analysis allows for the relationship between leadership actions and depth of implementation to be explored.

This study is of districts in a northeastern state of the United States. The Department of Education in that state supports the use of collaborative learning communities as a form of professional development to improve instructional practice, address student learning needs through the analysis of data, and to increase content knowledge as a condition of school effectiveness. The participating districts are evaluated on their improvement efforts as part of the department accountability process using the conditions of school effectiveness. In addition, the state regional technical assistance providers guide districts on the implementation of collaborative learning communities.

The participating district staffs were surveyed on the attributes and characteristics of professional learning communities to determine the level of knowledge of collaborative learning communities. Concurrently, the superintendents for these districts completed the Initiative Implementation-Professional Learning Communities (PLC) Audit Rubric (Reeves, 2010) (See Appendix B) on perceptions of the depth of implementation of professional learning communities as well as a structured interview

regarding the leadership activities that have been taken to implement collaborative learning communities.

The research questions are:

1) What is the level of knowledge of collaborative learning communities by staff in implementing districts?

2) Which district leadership activities do urban superintendents identify as supportive of implementation of collaborative learning communities?

3) In what ways does the urban superintendent's leadership activities relate to his/her perceptions of implementation of collaborative learning communities?

4) How does the urban superintendent's leadership activities contribute to the depth of knowledge of professional learning communities by district staff?

Participants

This section describes the selection of the participant superintendents and districts for the qualitative interviews and completion of the quantitative survey by district staff.

The state department of education has established and supported a network of urban district leaders, which includes the large urban districts with student populations exceeding 10,000 students. An additional fourteen smaller urban districts with student enrollments exceeding 4500 with a minimum of at least 40% of the student enrollment representing low-income subgroup populations, as measured by the number of students qualifying for free and reduced lunch under federal guidelines, are also included. The objective of this network is to develop a new paradigm for district leadership that promotes sharing of practice, collaborative learning, and the development of the system leader as a change agent.

The district superintendents from this network were contacted through a letter of invitation (See Appendix E). District size and demographics were used to determine control variables, so that districts were identified that are comparable based on size and demographic. Five superintendents from the 24 network districts agreed to participate in the study. The completion of the Initiative Implementation-Professional Learning Communities (PLC) Audit Rubric (Reeves, 2010) and interview regarding leadership activities were specific to participating superintendents. Pseudonyms of the participating superintendents and district names were used to maintain confidentiality.

All five districts had identified the use of professional learning communities as a professional development model for improving teaching and student learning in their interviews and in the district improvement or strategic plans. Three of these five districts had sufficient district staff representing a response rate of 31.8% for participation in the survey. One district had one school participate in the survey, and another district had the leadership team participate in the survey. The total number of surveys distributed was 1271 and the total number of surveys completed (n = 436) yielded a 34% response rate for the five districts collectively.

The districts have student enrollments between 4500 and 15,500 students. The range of percentage of students that are identified as low income was 53.4% to 90.8%, which is above the state average of 32.9%. Two districts have 100% of their schools identified as high poverty schools. One district has 50% of its schools identified as high poverty schools. The remaining two districts have 81.8% and 82.6% of their schools identified as high poverty schools. The percentage of students in participating schools representing minority subgroup populations ranged from 44.0% to 91.9%. The number of

students identified as Limited English Proficient (LEP) ranges from 10.2% to 17.7% and designated status of First Language Not English (FLNE) is 25.0% to 84.4%, as compared to a state average of 15.6 percent. Each district has been identified as being in the highest level of status under No Child Left Behind (NCLB) accountability standards with 72.7% to 90% of the district schools in corrective action status for failing to demonstrate achievement at the state performance or school improvement targets in order for all students to achieve proficiency by 2014.

Table 1

Participant District Demographics

District	Student Enrollment	Percentage of Minorities	Percentage of Low Income (32.9% State)	Percentage of Limited English Proficient (6.2% State)	Percentage of First Language Not English (15.6% State)	Percentage of schools in NCLB status
Austen	6,145	54.9%	71.0%	10.2%	44.7%	72.7%
Bennett	4,496	44.0%	53.4%	11.3%	25%	90%
Collins	15,502	71.5%	71.9%	17.7%	32.2%	91.3%
Darcy	5,638	91.9%	90.8%	16.4%	84.4%	88.9%
Fitzwilliams	4,842	60.3%	67.9%	16.0%	50.7%	63.6%

The staff was contacted to participate in an electronic survey on the attributes and characteristics of professional learning communities to determine the level of knowledge within each participating district. The survey was sent electronically to staff through the district email and the survey results were analyzed.

The staff completion of the survey was confidential and results reported represent statistical modes, and frequencies for each item in the survey for the quantitative component of the research study. An average for the frequency of response by dimension of the survey instrument was also determined. Indicators within a domain with a higher

than average response indicating agreement were compared, as were the two indicators

with higher frequencies of disagreement by applying inferential statistical methods.

Research Design

A visual model for a concurrent embedded strategy using mixed methods notation

(Creswell, 2009) is indicated by:

Figure 1. Visual Model for a Concurrent Embedded Mixed–Method Strategy
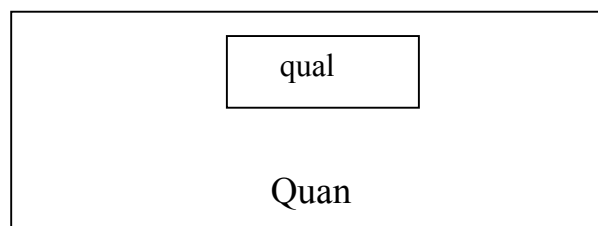
qual

Quan

Figure 1. The terms *Quan* and *qual* respectively represent the quantitative and qualitative portions of the mixed-method strategy, and the capitalization of *Quan* indicates the priority on the collected data, analysis, and interpretation with respect to the study purpose. The boxes highlight the data collection and the model shows that the qualitative data will be embedded in the study as a means of analyzing and interpreting the data with respect to the research purpose (Creswell, 2009).

The concurrent design is used to obtain different, but complementary data sets on

the same topic in order to synthesize the "results to develop a more complete

understanding of the phenomenon" (Creswell and Plano-Clark, 2011, p. 77). This mixed-

method research design is recommended when the "researcher has limited time for

collecting data" and when the "researcher feels there is equal value for collecting and

analyzing both quantitative and qualitative data to understand the problem" (Creswell and

Plano-Clark, 2011, p. 77).

This mixed-method research study utilized the concurrent embedded research

strategy (Creswell, 2009). The completion of the qualitative interview and the Initiative

Implementation-Professional Learning Communities Audit Rubric (PLC) (Reeves, 2010)

occurred concurrently with completion of the survey instrument, Professional Learning

Communities Assessment (PLCA) (Olivier, 2003) by the district staff. Weight is placed

on the quantitative aspect as the primary data source. The data were mixed by the

creation of a matrix through the analysis of the qualitative and the quantitative data with

the intent of integrating the information and comparing the two data sources (Creswell,

2009). "Often, this model is used so that a researcher can gain broader perspectives as a

result of using the different methods as opposed to using the predominant method alone"

(Creswell, 2009, p. 214-215).

Research Instruments

The quantitative survey, the audit rubric, and superintendent interview questions

used as data collection instruments are described in this section.

Quantitative survey data. District staff responded to the Professional Learning

Communities Assessment (PLCA) (Olivier, 2003) (See Appendix A). This survey

consists of forty-five items on the dimensions of professional learning communities:

shared and supportive leadership, shared values and vision, collective learning and

application, shared personal practice, supportive conditions - relationships, supportive

conditions - structures. The survey items are evaluated through the use of a four-point

Likert scale ranging from Strongly Agree (4), Agree (3), Disagree (2), and Strongly

Disagree (1) (Vogt, 2005). This survey was transcribed into an electronic format to

facilitate survey participation and analysis. Previously published test reliability for this

survey using Cronhbach's alpha coefficients indicates that it is a highly reliable

instrument for measuring faculty perceptions of characteristics and practices of

collaborative learning communities (Olivier, 2003). Cronbach's alpha is a measure of internal reliability and consistency of the items in an instrument and it is used for test items with more than one answer, such as Likert scales. Reliability coefficients range for 0 to 1.0 with coefficients above 0.70 suggesting that the "items in an index are measuring the same thing" (Vogt, 2005, p.71). Cronbach's alpha coefficients ranged from a low of 0.83 on two out of five dimensions (Collective Learning and Supportive Conditions), and a high of 0.93 for one dimension (Shared Values) (Hill, 2009).

Hill (2009) determined construct validity of the PLCA by completing a factor analysis of the items after expert evaluation of the instrument where each item criteria was evaluated based on relevance and importance to school level practices associated with the implementation of collaborative learning communities. Ninety-eight percent of the items were identified as high in importance.

The five participating district superintendents were sent an electronic link to the survey for distribution to staff through internal electronic communication methods. One district superintendent included the link in his weekly online journal (blog) for staff. Two others sent a district wide email encouraging staff participation. One superintendent sent the survey link to one school within the district where the principal was willing to participate, and one superintendent shared the survey link with his leadership team. The total number of potential survey completers was 1271 district staff, and the number of survey participants is 436 for a 34.3% response rate. All five districts indicated implementation of professional learning communities in district improvement and strategic plans.

Qualitative data collection from superintendents. The Initiative

Implementation-Professional Learning Communities Audit Rubric (Reeves, 2010) (See

Appendix B) was used in this study to determine the perceived depth of implementation

of collaborative learning communities as reported by the superintendent. The Initiative

Implementation-Professional Learning Communities Audit Rubric uses the definition and

characteristics of professional learning communities as defined by Dufour, Dufour, and

Eaker (2008). The rubric identifies the four guiding questions at the focus of the

professional learning community initiative within the school or district.

- What should students know and be able to do?
- How will the school determine that students have learned the essential knowledge and skills?
- How will the school respond when students do not learn?
- How will the school respond when they already know it? (p. 1)

In addition, there are identified qualitative characteristics of the school as a

professional learning community that are used as descriptors, which include:

1. The daily work of the school is driven by common purpose, shared vision and collective commitments.
2. There are high expectations regarding student achievement and a commitment on the part of staff to accept responsibility for student learning.
3. The learning of each student is monitored on a timely basis using common core curriculum and common assessments aligned with state standard.
4. School structures support student learning and provide additional time and support for students who initially do not achieve intended outcomes.
5. Job-embedded professional development leads to the collective identification of, reflection about, and implementation of "best practices" for improved student achievement.
6. Staff members work collaboratively in processes that foster continuous improvement in all indicators of student achievement.
7. The use of data promotes an action orientation and focus on results.
8. Leadership of school improvement processes is widely dispersed and helps sustain a culture of continuous improvement. (p.1)

The rubric has four criteria: Learning Context, Instructional Strategies, Professional Development, and Leadership Practices. Each criterion is measured within a five-point scale representing Deep Implementation (4), Full Implementation (3), Partial Implementation (2), Emerging Implementation (1), and No Implementation (0).

Open-ended structured interview questions developed by the researcher based on the suggested actions of district leadership from Marzano and Waters (2009) study (See Appendix C) were used in the superintendent interviews to determine specific leadership practices associated with the role of the superintendent as instructional leader, which include: collaborative goal setting, school committee alignment and support, allocation of resources, the use of defined autonomy, and modeling of shared leadership practices (Marzano and Waters, 2009).

Data Analysis

The analysis of the quantitative, qualitative and mixed method analysis is described in this section. "Data analysis in mixed methods research consists of analyzing separately the quantitative data using quantitative methods and the qualitative data using qualitative methods. It also involves analyzing both sets of information using techniques that 'mix' the quantitative and qualitative data and results - the mixed methods analysis" (Creswell and Plano-Clark, 2011, p. 203).

Quantitative data analysis. The Professional Learning Communities Assessment (Oliver, 2003) was administered electronically and the frequency of participants selecting a particular response was determined. The PLCA was developed to measure perceptions of professional learning community implementation across five dimensions: Shared and Supportive Leadership, Shared Values and Vision, Collective Learning and Application,

Shared Personal Practice, and Supportive Conditions (Hord, 1997). Descriptive statistics were used to determine, specifically the mode response and frequency, for each statement in the survey. The average frequency response was determined for each dimension and indicators with higher than average response were identified as being implementation activities or indicators that participants related as those with the highest level of experience or knowledge.

The Pearson product-moment coefficient, which is "a numerical index that reflects the relationship between variables" (Salkind, 2011, p. 431), was used to determine the statistically significant relationship between the high agreement indicators and indicators with greatest degree of variability in response. Correlation coefficients determine if the relationship between two variables exists and the level of significance of that relationship. For purposes of this study, correlations equal to 0.4 to 0.6 are considered to have variables with a moderate relationship while correlations of 0.6 to 0.8 have a strong relationship (Salkind, 2011). The Pearson correlation coefficient is a statistic that shows the degree of linear relationship between two variables (Vogt, 2005). Positive correlation coefficients show a direct relationship between the variables where as a negative correlation coefficient would indicate an indirect relationship between variables. The Pearson correlation coefficient is used to show the degree to which the indicator responses are related.

The high frequency indicators, where the combined frequencies for agree and strongly agree exceed the average frequency by dimension, are representative of the attributes of professional learning communities in which district staff have the most knowledge. The high frequency indicators were compared to the descriptors for the

change phase as identified by the Professional Learning Communities Organizer (PLCO) (See Appendix D), which identifies the school phase of development of professional learning communities by dimension (Huffman and Hipp, 2003). The descriptors for each change phase were determined based on interviews from a purposeful sample of school principals and district staff in a three-year study on professional learning community implementation (Huffman and Hipp, 2003). The school phase of development is similar to Fullan's (1990) change phases: initiation, implementation, and institutionalization. The change of phase by dimension was used to label the depth of knowledge of professional learning communities based on the high frequency indicators.

Qualitative data analysis. The Initiative Implementation-Professional Learning Communities (PLC) Audit Rubric (Reeves, 2010) generated numeric scores for each criterion regarding the superintendent's perception of professional learning community implementation. The four areas of the rubric are: Learning Context, Instructional Strategies, Professional Development, and Leadership Practices. The Learning context identifies supporting contextual elements. Instructional Strategies identifies the use of achievement data to inform instructional decisions. Professional Development identifies the level of support for the development of content and pedagogy. Leadership Practices evaluates the level of implementation and accountability for outcomes at the district and building level. Each score is self-reported and provided an assessment on the depth of implementation of professional learning communities based on the perception of the superintendent.

The superintendent responses to the interview questions were recorded with permission and transcribed. Each response to a question was coded for specific leadership

actions identified during the single interview process. The leadership actions were coded within the areas of collaborative goal setting, school committee alignment, allocation of resources, support for defined autonomy, and modeling of shared leadership (Dufour and Marzano, 2011; Marzano and Waters, 2009). The responses of the interviewees were coded and patterns identified. As patterns emerge, matrices were developed for leadership actions identified within each question associated with instructional leadership at the district level (Marzano and Waters, 2009). In order to limit the impact of observer bias, Gay and Airasian (2000) recommend that notes from the structured interview are recorded with the permission of the interviewee and then transcribed

Validity and reliability of the data collected through the rubric and interviews were established and improved by allowing the interviewees to review the transcripts and rubrics, and also through the use of a journal to record concerns and reflections following each interview and examining these notes holistically prior to interpretation of the transcript (Gay and Airasian, 2000).

Mixed-method data analysis. "Inferences in mixed methods research are conclusions or interpretations drawn from the separate quantitative and qualitative strands of a study as well as across the quantitative and qualitative strands, called 'meta-inferences'" (Creswell, and Plano-Clark, 2011, p. 212-213). The analysis of the data for this concurrent mixed-method study is presented in a matrix (Creswell, 2009) using the classified leadership actions identified in the interviews, the scores on each indicator of the Initiative Implementation-Professional Learning Communities Audit Rubric, and the criterion areas of the survey identified by high frequency indicators. Correlations between district leader perceptions and actions and the depth of implementation were determined

by a comparison between the numeric score assigned to the data obtained by section on the Initiative Implementation-Professional Learning Communities Audit rubric and the Professional learning Communities Assessment (PLCA) by high frequency indicators by section. This matrix focuses on the areas of similarity between the interview question categories of instructional leadership, the Initiative Implementation-Professional Learning Communities (PLC) Audit Rubric, and the items on the PLCA by section.

Summary

This chapter presented the methodology for the research study. The research questions and the data collection process for determining the response to these questions were also described, including the detailed description of the quantitative data obtained from the PLCA survey, the depth of perception of implementation by the superintendent as determined by the Initiative Implementation Audit Rubric (Reeves, 2010), and the interview questions based on the recommended actions of Marzano and Waters (2009).

The analysis plan for data included the statistical analysis of the survey data using descriptive statistics to determine high frequency indicators by survey domain of the PLCA. These high frequency indicators were compared using Pearson coefficients to determine the degree of relationship between the high frequency indicators within each survey domain. The analysis included the transcription and coding of the superintendent interviews and assessment of implementation from the Initiative Implementation-Professional Learning Communities Audit rubric. The data analysis for this mixed method study included the creation of a matrix to show patterns between high frequency indicators and superintendent perceptions and actions

Chapter 4

Findings

This chapter presents findings of the quantitative and qualitative data followed by a presentation of the combined results and findings for this mixed-method research study. The purpose of this study is to determine if urban superintendent leadership actions and perceptions of depth of implementation within the district impacts the depth of knowledge of professional learning communities for district educational staff. The research questions were:

1) What is the level of knowledge of collaborative learning communities by staff in implementing districts?

2) What district leadership activities does the urban superintendent identify as supportive of implementation of collaborative learning communities?

3) In what ways do the urban superintendent's leadership activities relate to his/her perceptions of implementation of collaborative learning communities?

4) How do the urban superintendent's leadership activities contribute to the depth of knowledge of professional learning communities by district staff?

The participants in the study participate in the state department of education network of urban district leaders, which includes the ten large urban districts with student populations exceeding 10,000 students. An additional fourteen smaller urban districts with student enrollments exceeding 4500 with a minimum of at least 40% of the student enrollment representing low-income subgroup populations, as measured by the number of students qualifying for free and reduced lunch under federal guidelines, are also included in the network. All five districts had identified the use of professional learning

communities as a professional development model for improving teaching and student learning in their interviews and in the district improvement or strategic plans.

This study is a concurrent embedded mixed methods study with the quantitative data as the primary data source and the qualitative analysis of the interviews as an embedded source to enhance the understanding and outcomes with respect to the research questions. As a mixed method study, the two data sources are merged using a matrix in a side-by-side comparison for data analysis in order to create a comparative summary of the data (Creswell and Plano Clark, 2011).

The quantitative data from the survey are presented by professional learning community dimension according to Hord (1997). The findings from the qualitative data analysis begins with the review of each participating district superintendent's perceptions of professional learning community implementation using the Initiative Implementation-Professional Learning Communities Audit Rubric. These findings are followed by a presentation of the interview findings that were coded according to themes. These sources of data are placed in a matrix to determine district leadership actions associated with high frequency indicators and perceptions of implementation.

Quantitative Findings

Professional Learning Community Assessment (PLCA)

The findings from the quantitative analysis of the Professional Learning Community Assessment (PLCA) survey data will be described in this section. The first research question asked what is the level of knowledge of collaborative learning communities by staff in implementing districts. The PLCA was developed as a means of evaluating the school culture "in which professional learning communities exist" based

upon the "critical attributes forming a PLC" (Olivier, 2003, p. 67). The PLCA evaluates the knowledge of staff based on the five dimensions of a professional learning community developed by Hord (1997): Shared and Supportive Leadership, Shared Values and Vision, Collective Learning and Application, Shared Personal Practice and Supportive Conditions (Relationships and Structures) (Olivier, 2003). The indicator statements within each dimension are evaluated using a four point Likert scale, where one is equal to "Strongly Disagree", two equals "Disagree", three equals "Agree", and four equals "Strongly Agree".

The data obtained by the survey have a scale of measurement referred to as the interval level of measurement, where "a test or an assessment tool is based on some underlying continuum such that we can talk about how much more a higher performance is than a lesser one" (Salkind, 2011, p. 104). The measure of central tendency used is the mode, and frequencies are used as the descriptive statistic to analyze the survey data by dimension and indicator. This study used an analysis by frequency and the average frequency for each dimension was determined based on the frequency response and the number of indicators within each dimension. Indicators within each dimension that have above average frequency agreement (combined "Agree" and "Strongly Agree" responses) and indicators with the greatest variability in frequency of response, as indicated by approximately equal distribution of agreement (combined "Agree and "Strongly Agree") and disagreement (combined "Disagree and "Strongly Disagree") were identified.

Shared and supportive leadership. The first dimension of professional learning community measured by the PLCA, Shared and Supportive Leadership, has ten indicators describing the school level culture of shared leadership and decision-making (See

Appendix G.1). The mode for each indicator was three ("Agree"). While the average

frequency (63.0%) of respondents selecting "Agree" or "Strongly Agree" indicates a

moderately high level of agreement with the dimension, Shared and Supportive

Leadership, some indicators had an above average frequency. Staff indicated agreement

(69.1%) with the statement "The principal shares responsibility and rewards for

innovative actions" (#6), and staff indicated agreement (66.1%) with "The staff have

accessibility to key information" (#3). The staff responding to the survey indicated strong

agreement with these indicators in the implementation of professional learning

communities. The indicator with the highest variability in response was indicator #10

("Stakeholders assume shared responsibility and accountability for student learning

without evidence of imposed power and authority"), with 49.6% of the respondents in

agreement and 50.5% responding "Disagree" and "Strongly Disagree". A moderate

positive correlation exists between the two high agreement indicators with $r = 0.605$ ($p <$

0.01). The high variability indicator had a moderate relationship with the high agreement

indicator #6 with $r = 0.531$ ($p < 0.01$) and indicator #3 with $r = 0.431$ ($p < 0.01$).

Figure 2. Shared and Supportive Leadership High Frequency Indicators
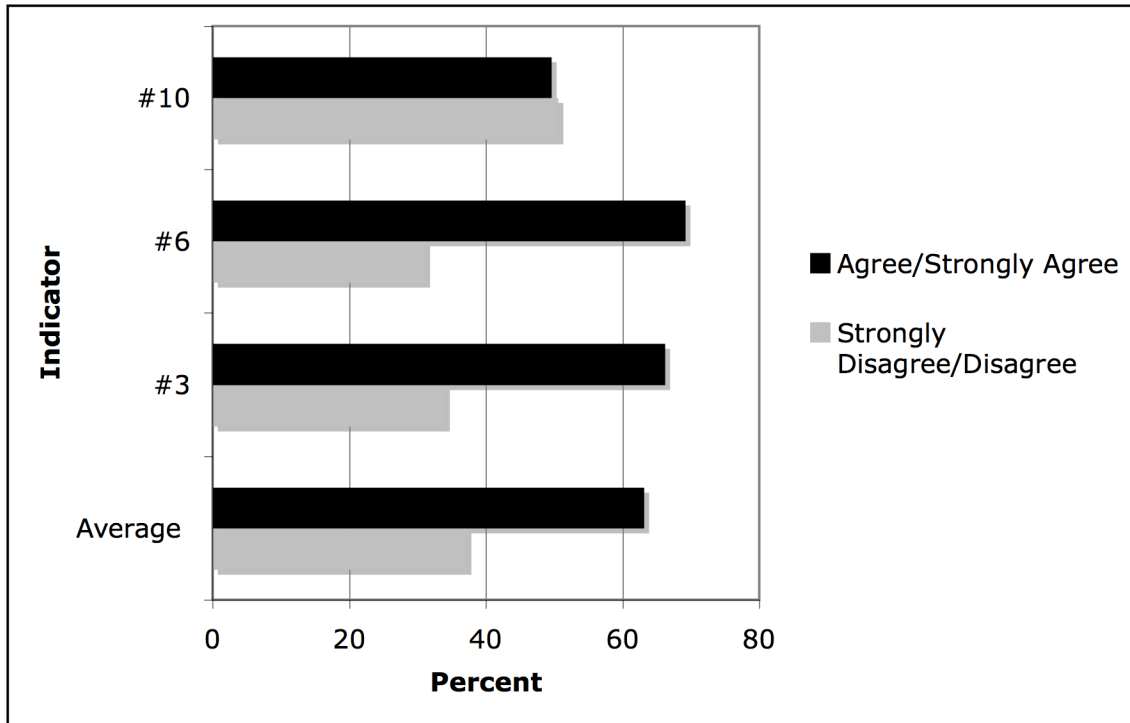
The Professional Learning Community Organizer (PLCO) (Appendix D)

indicates, that for the initiation phase, leadership is characterized as "nurturing", but the

implementation phase is described as "shared power, authority, and responsibility". The

high frequency indicators for this dimension ("The principal shares responsibility and

rewards for innovative actions"; and, "The staff have accessibility to key information")

align with the implementation phase. The institutionalization phase is described as

"Broad-based decision-making for commitment and accountability", which the high

variability indicator addresses ("Stakeholders assume shared responsibility and

accountability for student learning without evidence of imposed power or authority").

Shared values and vision. The second dimension of professional learning

communities measured by the PLCA is *Shared Values and Vision* that has eight

indicators, which describe practices that demonstrate the existence of a culture with

shared values and vision (Appendix G.2). The average frequency indicates a relatively high level of agreement with the dimension, Shared Values and Vision, with 69.1% of the respondents selecting "Agree" and "Strongly Agree". Three indicators had high frequency levels with frequencies above the average frequency for the dimension: "Policies and programs are aligned to the schools vision"(#17); "Decisions are made in alignment with the schools values and vision"(#14); and "Shared values support norms of behavior that guide decisions about teaching and learning" (#12), with combined "Agree" and "Strongly Agree" frequencies of 76.9%, 76.2%, and 73.0% respectively.

The indicator with the highest level of variability in response was "Stakeholders are actively involved in creating high expectations that serve to increase student achievement" (#18) with 53.1% of the respondents in agreement and the highest frequency for this dimension for "Strongly Disagree" at 12.5%.

The correlation coefficients for the high agreement indicators indicate a moderate positive relationship between indicators #17 and #12 with r = 0.554 (p < 0.01). A strong positive relationship is indicated with r = 0.677 (p < 0.01) for indicator #17 and #14, and r = 0.668 (p < 0.01) for #12 and #14. A moderate positive relationship between the high agreement indicators (#17, #12, and #14) and the high variability indicator was also indicated with r = 0.428, 0.429, and 0.402 (p < 0.01) respectively.

Figure 3. Shared Values and Vision High Frequency Indicators
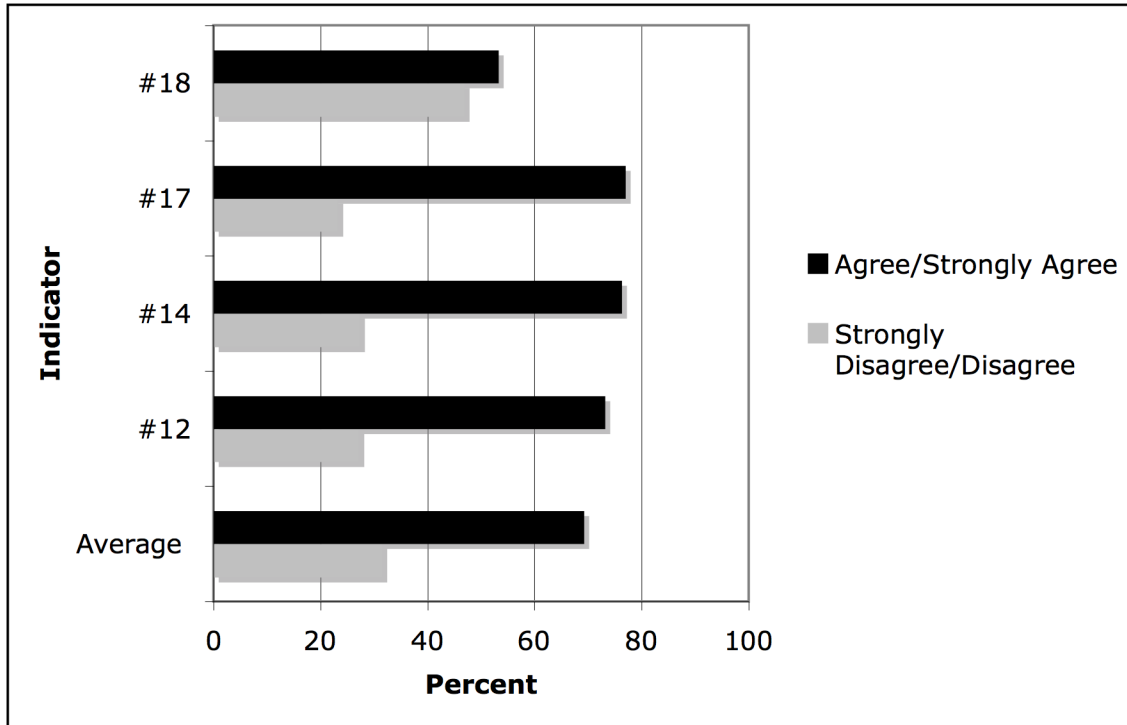
The PLCO (Appendix D) identifies the initiation phase for professional learning community implementation of shared vision and values as "Espoused values and norms." The implementation phase indicates that the work of the professional learning community is focused on students within a culture of high expectations, and the institutionalization phase is identified when the "Shared vision guides teaching and learning." The high frequency indicators for this dimension show that the staff perceptions of this dimension are high on the continuum moving from implementation into institutionalization. The indicators with the highest level of agreement ("Decisions are made in alignment with the schools values and vision" and "Policies and programs are aligned to the schools vision") demonstrate a strong alignment with the implementation phase of this dimension. However, the indicator that had the next highest level of agreement ("Shared values support norms of behavior that guide decisions about teaching and learning")

demonstrated the impact of this dimension on the culture of the school system and the institutionalization of shared values and vision.

Collective learning and application. The third dimension of professional learning community as measured by the PLCA is Collective Learning and Application with eight indicators describing the collaborative work of staff (Appendix G.3). The high frequency indicators for this dimension indicate that staff knowledge in this dimension demonstrate a high level of implementation on the PLCO continuum.

The average frequency for the dimension has a high level of agreement with 74.5 % of the respondents selecting "Agree" or "Strongly Agree". Two indicators, #19 and #26, had combined frequencies for "Agree" and "Strongly Agree" that indicate very high levels of agreement. Indicator #26, "School staff is committed to programs that enhance learning", had combined frequencies for "Agree" and "Strongly Agree" equal to 91.4 percent. Indicator #19, "The staff work together to seek knowledge, skills and strategies and apply this new learning to their work", had combined frequencies for "Agree" and "Strongly Agree" equal to 83.5 percent. Indicator #23 ("The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry") had combined frequencies for "Agree" and "Strongly Agree" close to the average frequencies for "Agree" and "Strongly Agree" with 74.9 percent.

The correlation coefficients for these three high agreement indicators indicate that a statistically significant ($p < 0.01$) relationship exists between these indicators ($r = 0.569$ for indicator #19 and #26, $r = 0.657$ for #19 and #23, and $r = 0.547$ for #26 and #23). Indicator number 25, "School staff and stakeholders learn together and apply new knowledge to solve problems", had the most variability with 51.7% agreement and 40.3%

selecting "Disagree" and 7.9% selecting "Strongly Disagree". The correlation coefficient for this indicator indicates a moderate relationship with the high frequency indicators ($r = 0.415$, 0.413, and 0.478 where $p < 0.01$).

Figure 4. Collective Learning and Application High Frequency Indicators
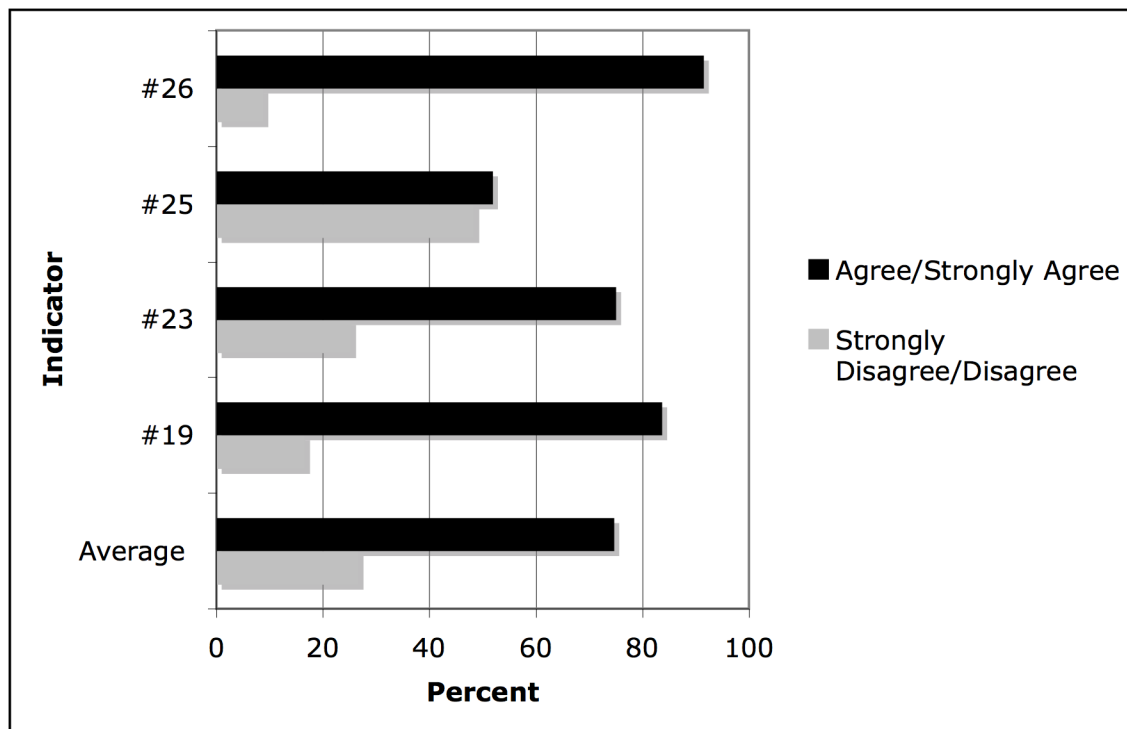
Indicator # 26 ("School staff is committed to programs that enhance learning") had 91.4% of the respondents in agreement, with 25.9% indicating "Strongly Agree". The other high frequency indicators ("The staff work together to seek knowledge, skills and strategies and apply this new learning to their work" and "The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry") align to the institutionalization phase, which is described as the "Application of knowledge, skills, and strategies". Indicator #25 ("School staff and stakeholders learn together and apply new knowledge to solve problems") had the highest variance and seems to be contradictory to this description of the phase with 51.7% in agreement and 48.2%

disagreeing. However, the Pearson correlation coefficient between Indicator #26 the other high frequency indicators (r = 0.569 and 0.547, p < 0.01) demonstrates that the response has strong relationship for this dimension of professional learning communities and staff knowledge of the attributes associated with collective learning and application is high.

Shared personal practice. The fourth dimension of professional learning communities as measured by the PLCA is Shared Personal Practice with six indicators representing various aspects of formal and informal sharing of professional practice (Appendix G.4). The combined average frequencies for "Agree" and "Strongly Agree" of 63.3% indicates moderate agreement with the indicators of this dimension, but two of the indicators in this dimension have disagree identified as the most frequent response or mode.

These two indicators (#27 and #28) also have a high level of variability. Indicator #27 ("Opportunities exist for staff to observe peers and offer encouragement") had a combined frequency for "Agree" and "Strongly Agree" of 43.8% with 41.4% selecting "Disagree" and 14.8% selecting "Strongly Disagree". For indicator #28, ("The staff provide feedback to peers related to instructional practices") had a combined frequency for agree and strongly agree of 44.1% with 43.2% selecting "Disagree" and 12.7% selecting "Strongly Disagree". These two indicators had a strong positive relationship as determined by the correlation coefficient, r = 0.721 (p < 0.01).

Indicator #29, "The staff informally share ideas and suggestions for improving student learning", had a combined frequency for agree and strongly agree of 87.6% indicating a high level of agreement. Two indicators (#31 and #32) also had a high level of agreement, exceeding the average combined frequency for "Agree" and "Strongly

Agree" for the dimension. Indicator #31, ("Opportunities exist for coaching and mentoring") had a combined frequency for "Agree and "Strongly Agree" of 72.2%, and indicator #32, ("Individuals and teams have the opportunity to apply learning and share the results of their practices") had a combined frequency for "Agree" and "Strongly Agree" of 70.3 percent.

Indicator #29 had a moderate relationship with indicators #31, and #32 as indicated by the correlation coefficient, $r = 0.442$ and $r = 0.472$ ($p < 0.01$) respectively. A strong relationship between indicator #31 and #32 as indicated by the correlation coefficient, $r = 0.656$ ($p < 0.01$), was indicated. For the high variability indicators (#27 and #28) moderate correlations at $p < 0.01$ ranging from $r = 0.302$ to 0.502 were indicated with the highest positive relationship between indicator #28 and #32. However the relationship between indicator #27 and #28 had a strong positive correlation with $r = 0.721$ ($p < 0.01$).

Figure 5. Shared Personal Practice High Frequency Indicators
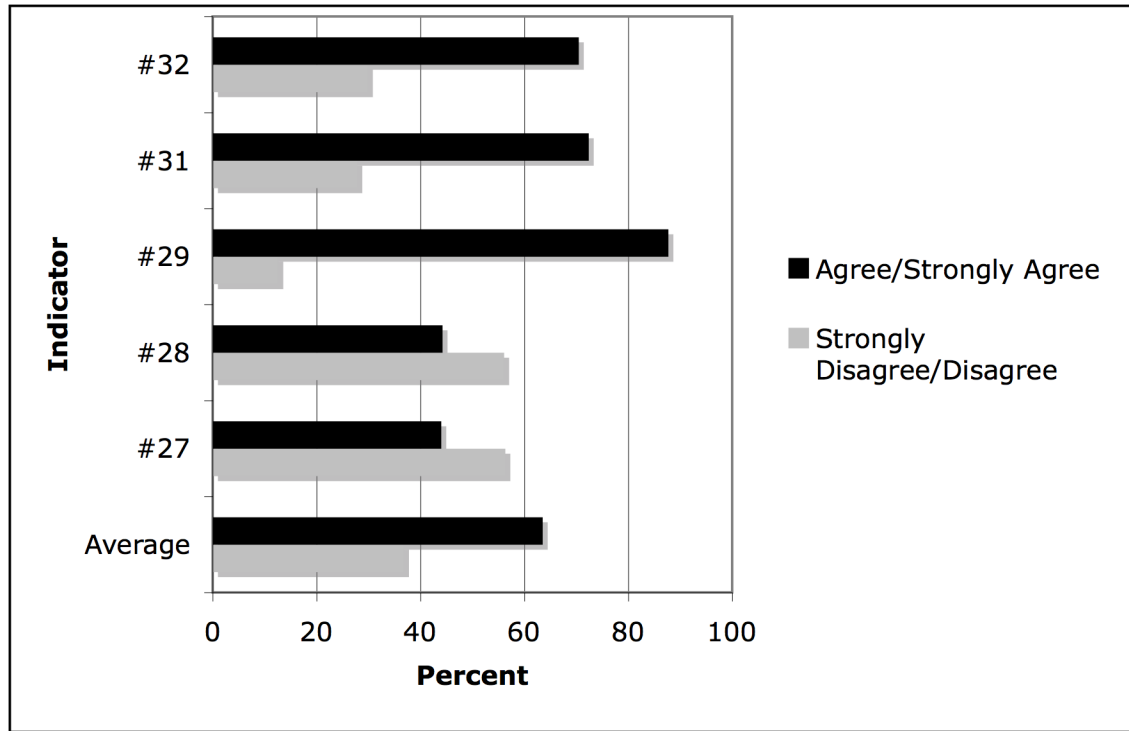
The PLCO description of the institutionalization phase for this dimension includes two descriptors, "Analysis of student work" and "Coaching and mentoring." The implementation phase is described as the sharing of outcomes of new practice and providing feedback. The high frequency indicators for this dimension (i.e. "The staff informally share ideas and suggestions for improving student learning"; "Opportunities exist for coaching and mentoring"; and "Individuals and teams have the opportunity to apply learning and share the results of their practices") would indicate the institutionalization phase of the PLCO.

The only two indicators for the survey that did not have a frequency distribution or mode indicating overall agreement were within this dimension. Indicator #27 ("Opportunities exist for staff to observe peers and offer encouragement") and indicator #28 ("The staff provide feedback to peers related to instructional practices") were

attributes of professional learning community implementation that staff reported a higher level of disagreement, and therefore, less knowledge of in practice based on experience. The initiation phase of professional learning communities is described by the PLCO as "Observation and encouragement". Therefore this dimension cannot be assigned a change phase using the descriptors from the PLCO for this dimension based on the survey results.

Supportive conditions. The fifth dimension of professional learning communities is Supportive Conditions, which in the PLCA is divided into two subcategories: Relationships and Structures. These two aspects of the dimension "are, in reality, highly interactive and interdependent, yet key to maintaining the growth and development of a learning community" (Huffman and Hipp, 2003, p. 81).

There are four indicators for Relationships, which includes risk-taking, trust, celebrations of achievement and commitment to change (Appendix G.5). There is combined average frequency for "Agree" and "Strongly Agree" of 67.5% for the dimension, Supportive Conditions-Relationships, which indicates a moderately high level of general agreement with the indicators. Indicator #33 ("Caring relationships exist among staff and students that are built on trust and respect") had a high level of agreement with a combined frequency for "Agree" and "Strongly Agree" of 84.4 percent.

Indicator # 36 ("School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school") had the highest variability in response with a combined frequency for "Agree" and "Strongly Agree" of 52.5% with 38.2% of respondents selecting "Disagree" and 9.3% selecting "Strongly Disagree".

Indicators #33 and #36 had moderate positive relationship as indicated by the correlation coefficient, r = 0.418 (p < 0.01).

Figure 6. Supportive Conditions - Relationships High Performance Indicators
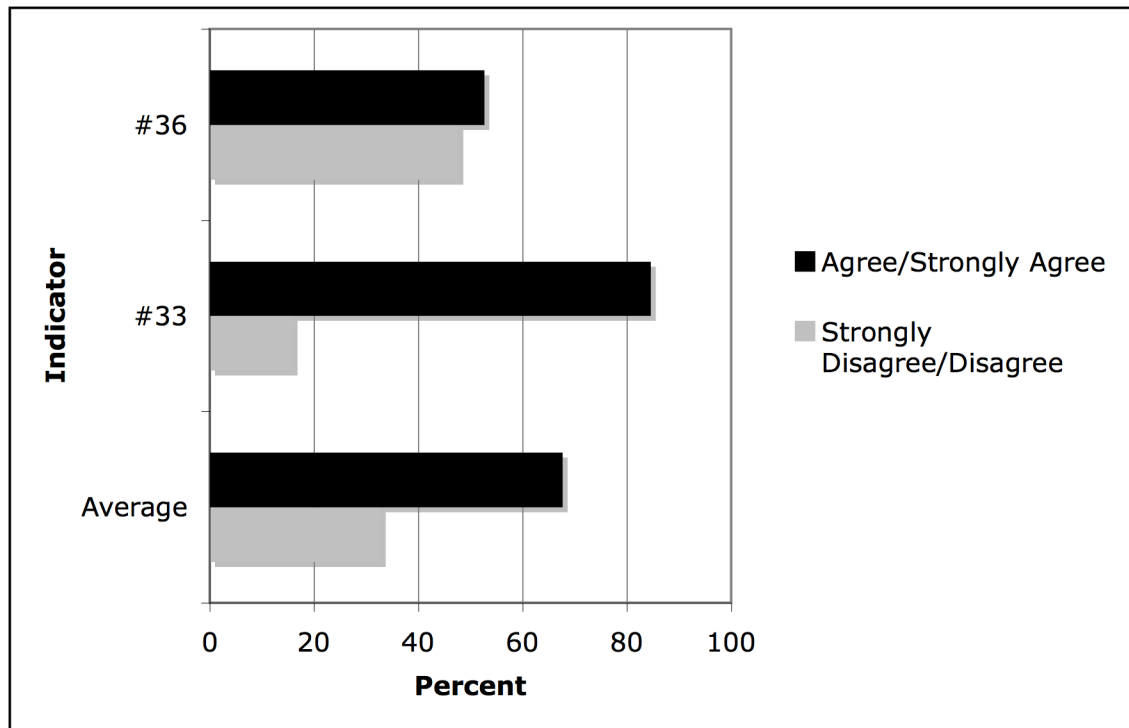
The nine indicators for Supportive Conditions-Structures represent the type of resource allocation that supports the work of professional learning communities including time, financial support, supplies, staff, and the physical space (Appendix G.6). There were three indicators in this dimension of professional learning communities that exceeded the combined average frequency for "Agree" and "Strongly Agree" of 67.5 percent. Indicator #43 ("The proximity of grade level and department personnel allows for ease in collaborating with colleagues") had a high level of agreement with a combined frequency for "Agree" and "Strongly Agree" of 75.8%. Indicator #41, ("Resource people provide expertise and support for continuous learning"), had a high level of agreement with a combined frequency for "Agree" and "Strongly Agree" of 73.1%, and indicator

#44, "Communication systems promote a flow of information among staff", had a combined frequency for "Agree" and "Strongly Agree" of 72.4 percent.

The indicator with the highest level of variability in response was #38 ("The school schedule promotes collective learning and shared practice") with a combined frequency for "Agree" and "Strongly Agree" of 54.4% with 34.3% selecting "Disagree" and 11.3 % selecting "Strongly Disagree".

The high agreement indicators, #41and #43, have moderate positive relationship with r = 0.317 (p < 0.01), and #43 and #44 also have a moderate positive relationship with r = 0.423 (p < 0.01) as do #41 and #44 with r = 0.416 (p < 0.01). The high variability indicator, #38, also had a positive moderate relationship with indicators #43 and #44 as indicated by the correlation coefficients, r = 0.460 and 0.442 (p < 0.01) respectively. However, indicator #38 had a weak positive relationship with indicator #41 as indicated by r = 0.359 (p < 0.01).

Figure 7. Supportive Conditions - Structures High Frequency Indicators
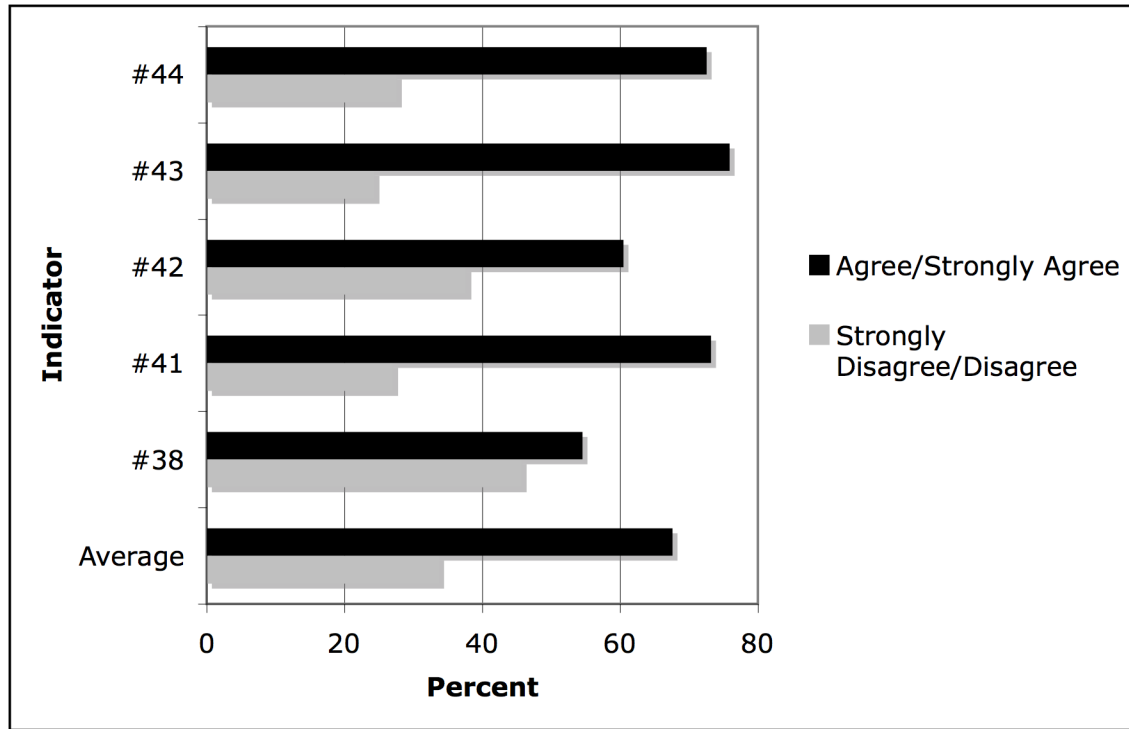
The PLCO describes an initiation phase for the professional learning community's supportive conditions as having "Caring relationships", and the implementation phase described as having "Trust and respect" and "Recognition and celebration." The survey respondents had a strong level of agreement (84.4%) with indicator # 33 ("Caring relationships exist among staff and students that are built on trust and respect"). The supportive conditions-structures dimension of the PLCA had three high frequency indicators ("The proximity of grade level and department personnel allows for ease in collaborating with colleagues"; "Resource people provide expertise and support for continuous learning"; and "Communication systems promote a flow of information among staff"). These high frequency indicators would indicate that the staff knowledge of these attributes of professional learning community implementation aligns with the

implementation phase of the PLCO with some attributes aligned with the institutionalization phase.

Summary of analysis. The PLCA survey data analysis demonstrated a high level of staff knowledge of the attributes professional learning communities and depth of implementation of professional learning communities as indicated by the PLCO change phase. The average frequency for all professional learning community dimensions exceeded the combined frequencies of "Disagree" and "Strongly Disagree".

The mode for 43 of the 45 indicators was three or "Agree". The mode for two indicators (#27 and #28) was two, or "Disagree". The relationship between these two indicators is identified as a strong positive relationship with $r = 0.721$ ($p < 0.01$). These indicators refer to peer observation practices. Pearson correlation coefficient values for a comparison of these two indicators with all other survey indicators indicated a positive weak to moderate relationship with r values exceeding 0.2, but less than 0.6 ($p < 0.01$).

Indicator #28 had a positive moderate correlation with indicator #30, "The staff collaboratively review student work to share and improve instructional practices", with $r = 0.503$ ($p < 0.01$) and indicator #32, "Individuals and teams have the opportunity to apply learning and share the results of their practices", with $r = 0.502$ ($p < 0.01$). There is also a positive moderate correlation between indicator #27 and #28 and indicator #31, "Opportunities exist for coaching and mentoring", with $r = 0.487$ and 0.499 ($p < 0.01$) respectively.

The data analysis indicated that certain indicators had a higher than average level of agreement as determined by the combined frequencies of the "Agree" and "Strongly Agree" responses. These high agreement indicators were determined to have a

statistically significant moderate to strong positive relationship through correlation analysis with correlation values (Pearson correlation coefficient, r) exceeding 0.4, but less than 0.8 (p < 0.01).

There were also indicators with higher levels of variability with close to a 50/50 split between agreement and disagreement in response. These indicators were also determined to have weak to moderate positive relationships through a correlation analysis with r values exceeding 0.2, but less than 0.4 (p < 0.01). This would indicate that the high agreement indicators represent descriptors of these dimensions of professional learning communities where staff had higher levels of knowledge in professional learning community implementation.

The PLCO was used as a means of determining the phase of implementation. The depth of staff knowledge of the attributes by professional learning community dimension defined by Hord (1997) was summarized as a function of the change phase and the staff experience with the attributes of the dimension. Four of the five dimensions aligned with the implementation phase of the PLCO with three of the dimensions (shared vision and values; collective learning and application; and supportive conditions) on the continuum toward the institutionalization phase. The staff depth of knowledge of professional learning communities for these four dimensions was indicated to be high.

Qualitative Findings

Initiative Implementation-Professional Learning Community Audit

Research question two asked what the urban superintendent's activities does the urban superintendent identify as supportive of implementation of collaborative learning communities and research question three asked in what ways do the urban

superintendent's leadership activities relate to his/her perceptions of implementation of collaborative learning communities. The superintendents' perceptions and supportive actions of implementation of professional learning communities were expressed in the interviews and measured using a rubric, the Initiative Implementation-Professional Learning Community Audit rubric (Reeves, 2010) (See Appendix B). This rubric has four criteria and descriptors for each criteria for a five-point scale ranging from 0 = no implementation, 1 = emerging implementation, 2 = partial implementation, 3 = full implementation, to 4 = deep implementation. These rubrics were sent to the superintendents in advance of the interview in order to allow them time to reflect on their district implementation level. Each superintendent assigned a score based on the descriptors for each criterion and an overall implementation score.

Learning context. The descriptors for the first criterion, the Learning Context, include:

- Having a shared vision
- Membership to a PLC for all staff
- Regularly scheduled meeting times with agendas and established norms
- Resources and accountability for the work of the PLC
- Opportunities to display student achievement data and practices learned.

Each superintendent identified the level of implementation based on the descriptors. Two out of the five superintendents indicated the district as having emerging implementation, one out of the five indicated a partial implementation for his district, and two out of the five indicated full implementation for this criterion for their districts.

Instructional strategies. The second criterion, *Instructional Strategies*, has descriptors, which include:

- The expectation that at least 80% of the PLC team members have high expectations for all students

- These expectations are communicated clearly to the community

- Make collaborative decisions on essential learning outcomes, instructional strategies, and assessments

- Use formative assessments to measure student learning and make instructional decisions based on the data

- Collaboratively develop intervention strategies

- Use specific, measurable, achievable, results-oriented and time-bound (SMART) goals based on common formative assessment data.

Two out of the five district superintendents identified their districts as emerging in implementation for this rubric criterion. One district leader indicated the implementation level was partial for his district. One indicated full implementation, and one indicated deep implementation within their respective districts.

Professional development. The third criterion, Professional Development, was the area where the superintendents indicated the highest levels of implementation. For this criterion, the descriptors included:

- 100% of the staff participating in at least six hours of professional development on professional learning communities including what they are and how they function

- At least 80% of staff having at least six hours of professional development on the analysis of student achievement data, effective instructional strategies, and assessment development

- At least 80% of the staff have had additional professional development to support PLC teams

- Staff and whole school learning needs are identified through the use of a needs assessment

- Job embedded professional development opportunities are provided to staff at least three times per year.

Three of the five superintendents indicated full implementation and one superintendent indicated a deep implementation of professional learning communities on this criterion. One superintendent indicated that the district had partial implementation.

Leadership practices. The final criterion in the rubric, *Leadership Practices*, had descriptors that focused primarily on the building level leadership for implementation, and the researcher indicated that the superintendents should respond to this criterion in the role of building level leadership evaluator. The descriptors for this criterion included:

- Building level leadership communication of high expectations with a focus on teaching and learning
- Building leadership regular review and provide feedback of PLC team meeting minutes
- Building leadership schedules regular monthly meetings for PLC teams for sharing successes and challenges;
- Building leadership provision of the supports for PLC implementation
- Building leadership conducts classroom walkthroughs to monitor instructional decisions
- The district and school level collection and analysis of data to monitor implementation of PLC generated strategies to determine the effectiveness and there is documented evidence of adjustments when necessary.

Two of the five superintendents identified partial implementation of this criterion within their districts. Two of the five identified full implementation. One indicated deep implementation with respect to the criterion in his district.

Summary. Based on Table 2, that summarizes the superintendent assignment of rubric score for each criterion, two district superintendents indicated an overall emerging implementation of professional learning communities. One district had an overall partial implementation, and two districts have an overall full implementation of professional learning communities based on the perceptions of the district leader.

Table 2

Summary of Superintendent Perceptions of Implementation

<div align="center">Criterion</div>

District	Overall	Learning Context	Instructional Strategies	Professional Development	Leadership Practices
Austen	3	3	3	4	3
Bennet	1	1	1	3	2
Collins	2	2	2	3	2
Darcy	1	1	1	2	3
Fitzwilliams	3	3	4	4	4

Interview Data Findings

Each superintendent was interviewed using an open-ended semi-structured interview process with ten questions based on the recommended actions for district leaders associated with improvement in student achievement based on the recommended actions for district leaders by Marzano and Waters (2009) (See Appendix C). The interviews were recorded, transcribed, and then coded. The coded responses were organized into the following categories: PLC supportive actions, goal setting and nonnegotiable goals, defined autonomy, shared leadership practices, and resource allocation.

PLC supportive actions. Their respective superintendents reported the Bennet and Darcy Public School Districts as emerging in implementation of professional learning communities. The Bennet Public School District has implemented professional learning communities with school committee support. The superintendent indicated, "[School Committee] members are from professions that value professional interaction." However, as a district that is initiating the process of developing professional learning

communities, the investment by the school committee in the professional learning

community initiative "looks like planning time" according to the superintendent.

The Darcy Public School District superintendent indicated a "distinction between

teams and PLC used by Dufour, which is part of the long range plan." The Darcy district

leadership team has been trained (i.e. approximately 100 out of 421 staff) and the district

is using data from benchmark assessment data within the teams according to the

superintendent, but the implementation of the professional learning community model is

not consistent across the district schools. The district does have school committee

alignment and support for expansion of the initiative as indicated by the superintendent

when he said,

> Certainly the School Committee itself has regarded itself not as a PLC but
>
> as an emerging team. The way that we distinguish between teams is the
>
> team function is much broader, the PLC is generally direct curricular, in
>
> site, on site, made up of teachers who are delivering on the front. And, it's
>
> level of implementation depends on whether indeed we were in a pilot
>
> school – one of the elementary schools is much further along in full
>
> implementation of PLCs than the other three (Darcy District
>
> Superintendent, personal communication, May 11, 2011).

The Collins Public School District has been implementing "cross-functional work

teams with large numbers of staff involved at the district and school levels" according to

the superintendent. Also the superintendent indicated, "The development of the district

strategic plan …provided real empowerment and the use of data." While these "cross-

functional teams" have been in existence for the last two years and most schools are

using collaborative teams for shared decision-making, the superintendent indicated, "The level of expectation indicated… for full implementation is not where the district is at."

The Austen and Fitzwilliams Public School Districts have full implementation of professional learning communities according to the superintendents. The Austen Public School District superintendent indicated that professional learning communities are "a major systemic reform initiative in the district." This superintendent reports all functional groups, such as the administrative cabinet, principals, and all staff "operate" as professional learning communities with "shared facilitation and decisions re-shaped through conversation." This superintendent expects all working professional learning community groups to submit a log of the activities of the professional learning community group, which he reads and acknowledges with the school community on his weekly electronic journal or blog. He also indicated that major initiatives are "quantified in two ways-with the allocation of resources and student results." The allocation of resources and reorganization of the schools into Expanded Learning Time (ELT) schools with extended school days includes extensive common planning time. The superintendent said,

> How we are going to restructure the day? The teachers are going to have
> this time during the school day when they're not going to be with kids.
> They're going to be meeting with each other and collaborating. All of that
> common planning time will be actually professional development (Austen
> District Superintendent, personal communication, April 29, 2011).

The Fitzwilliams Public School District superintendent indicated that professional learning communities are supported in "every way possible." He reports use of a

decision-making model that is widely disseminated and used by building leaders "for the autonomy to address site-based needs through the allocation for existing resources." He also expressed that he defines the "CO [chief officer] as a responsive resource rather than directive." The district leader must "get the information from the people doing the work of teaching to create the instructional framework." The superintendent indicated that he expects meetings to be productive and problem solving. "Don't bring problems. Bring issues and solutions." He indicated being abrupt with conversations, referring to discussion without solutions as "Not-Going-Anywhere Conversations."

While all of the participating district leaders indicated support for professional learning communities, the Austen and Fitzwilliams district superintendents were able to articulate very specific expectations for accountability and outcomes of the PLC working groups. The Bennet and Darcy district leaders reported implementing professional learning communities in compliance with the state department of education expectations, but outside of using professional learning communities as a vehicle for collaborative professional development and analysis of student achievement data, there did not appear to be any consistent district wide expectations for the product or outcome of the professional learning community working groups based on the superintendents perceptions and responses to the interview questions. For districts reporting as fully implementing of professional learning communities, the superintendent reported developed systems of accountability and transparency for the work of the PLC teams quantified through student achievement data and resource allocation, which utilizes site-based management to support PLC teams (i.e. time to meet).

Goal-setting and nonnegotiable goals. The district superintendents identified the need for internal (i.e. district leadership, staff, parents, and school committee) as well as external stakeholder knowledge and/or input to the development of district improvement or strategic plan goals. The Bennet district leader said, "The engagement is, basically, through discussion and presentation of data to the people who need to implement, or well, need to either approve the district improvement plan or to implement the district improvement plan." The Collins superintendent indicated the use of cross-functional teams as,

> … a think tank of folks at all levels of the system, teachers, parents, etc. and then the input of the executive team kind of steered the process and then culminated in the approval of these goals with the School Committee (Collins District Superintendent, personal communication, May 2, 2011).

> The Austen superintendent reported,
> So you have Central Office ideas that go to staff mainly by cabinet level meetings, (which) go to parents by citywide parent meetings that [feedback] comes back, the parents come around, have their own parents meetings and participate in School Councils. Principals and cabinet go back into their building, share information with teachers that are on parent council and then, hopefully, the building comes together around the ideas of the district that have come at them from more than one angle. The district-wide PTA, everybody is invited to that, every parent is invited to attend that (Austen District Superintendent, personal communication, April 29, 2011).

Even if the district has more of a top-down development of the mission and vision, there are processes for gathering input for the development of goals at the district level. The Darcy district superintendent indicated,

They're [district administrators] engaged in the long-range planning effort by virtue of being on the District Leadership Team. They're the ones that helped forge the overall vision and mission statements. They in fact are, I mean, it's a case where it's a balanced leadership team. They take turns facilitating the meeting even though we in central office agree with that facilitator on an agenda and then we do, there's top down-bottom up. I mean we do some instruction about how the discussion must go. We participate generally as equals although there are times when a decision has to be made and we make that decision. So, it's a continuous, long-term process (Darcy District Superintendent, personal communication, May 11, 2011).

The Fitzwilliams District superintendent reported that a widely used format and process aligns all district and school plans.

We use a District Improvement Plan/School Committee goal setting process, and we use a standard-based form throughout the district for plans that include major goals, and then action steps, those who are responsible for the completion of the action steps, a projected date of the completion of the action steps, and then the evidence that we would use to evaluate whether the action steps were successful. Whether, you know, [a goal] got

shifted to the back burner and we have to re-establish it. So, we have a

horizontally landscaped grid that standardized [plans] like that with a goal

and then the action steps and all the columns that I just described to you

(Fitzwilliams District Superintendent, personal communication, May 17,

2011).

The use of data, for the development of a few focused measurable goals that all

district members will be held accountable to, was prevalent in all participating

superintendent interviews. In the Darcy district, the superintendent indicated,

The district-wide plan is informed by what has to go on in the individual

plans, and the District Leadership Team takes place in an office dedicated

just for that, or a room dedicated just for that. Each school maintains a

portion of a wall where all of their benchmarks and measures are kept, and

to the extent possible, that group functions as an emerging team, and it's

really emerging (Darcy District Superintendent, personal communication,

May 11, 2011).

The Collins superintendent uses an electronic data dashboard linked to the district

website to provide transparency and accountability that indicates progress toward goal

attainment. He said, "It rank orders school-by-school compared to each other; it's scary

for some people, but that was a way that we're showing that we're serious about

accountability. And now I also have a baseline to measure for next year." When probing

further with the Darcy superintendent with the question of how the focus is maintained

not on continuous data analysis, but on the improvement process, he responded,

The first thing is to, don't let your people on that District Leadership Team be the ones that have to keep massaging the data. You have someone else who's doing that for them, but secondly, you determine which data are relevant according to the deep-rooted causal analysis that you've engaged in as part of your significant planning. And that's of course, a continuous process…but what you're trying to do is always keep the nose straight north in order to focus on those data that are most telling and most relevant for your particular circumstance (Darcy District Superintendent, personal communication, May 11, 2011).

The Fitzwilliams District superintendent reported that the use of data based decision-making permeates the process.

Then the other thing we do is we use data to constantly reinforce what we're doing. So, for example, we hired, over the last few years, we've hired some coaches to work with the Instructional Leadership Team, and we then compared the student growth percentiles of the teachers who were working with the coaches to their colleagues in the same grade level and the same discipline who were not working with the coaches, and we saw a statistical difference in the student growth. Therefore, in this current budget that I'm developing, I put four more coaches in. Now we don't have any money, so what I'm doing is increasing class size using attrition to reduce the teaching staff and adding coaches because I also have data that shows that class size does not positively impact student learning. It's all over the place. I have classes with 15 kids who are not doing well, and

I have classes of 23 that are doing well. It's all about the instructional

quality, as we all know it would be, but I also have the data that shows that

now (Fitzwilliams District Superintendent, personal communication, May

17, 2011).

District improvement and strategic goals are aligned with school committee actions

through a variety of methods including the provision of data and information and school

committee retreats. In the case of one superintendent the district goals appear on the

agenda for each school committee meeting. However, the Bennet superintendent

cautioned,

They [school committee] want information, but they don't want all that

much information. In other words, they like things boiled down. Their

time is limited, the issues are complicated, a lot of it is jargon ridden, the

numbers are often not self-explanatory, and so what they like to receive

are, for want of a better term, executive summaries of what's going on…

(Bennet District Superintendent, personal communication, April 29,

2011).

In the Austen district, the superintendent said,

So they take more of a 'show us what you're doing' [attitude], explain that

to me, how does this fit, okay that sounds good, as long as we can justify

and rationalize and help them understand why we want to make certain

things our focus, they're on board with it [the goals]. We talk about

teachers teaming and working together and really doing curriculum

development and looking at student work, they're very much in support of

all of that kind of activity (Austen District Superintendent, personal

communication, April 29, 2011).

School committee approval and alignment of the goals is determined to be a

priority by the participating superintendents, despite the need for educating the school

committee as to the justification and anticipated outcomes of the measurable goals. The

Collins superintendent indicated, "The alignment of the School Committee in support of

systemic reform initiatives was really hand and glove with the long-range planning." The

accountability for achieving these goals extends to all stakeholders including the

superintendent in the Collins district. He indicated, "Our project management is built

around achieving the outcomes for each of those goals… at the end of the day the School

Committee evaluates me based on those goals."

School committee governance in alignment with the district goals insures that the

district leader and professional learning communities within the schools remain focused

on the issues associated with goal attainment. The Fitzwilliams district leader includes

the school committee approved goals on each meeting agenda, including subcommittee

meetings where more specific tasks are assigned and discussed ultimately leading to a

recommendation to the full school board for approval. He has also disseminated and

regularly refers to a decision-making model based on the work of Newman and Wehlage

(1995). This decision-making model with concentric circles identifies safety, student

learning, aligned instruction, capacity to achieve goals (resources), and community

support as the hierarchy for district, building, and teacher leadership for assessing and

determining priorities of actions within the district. On the back of the sheet with the

Circles of Decision Making framework, the values are listed, including:

- All students can perform at a high level.

- 90/90/90 schools are successful mainly due to building leadership and instructional quality and consistency.

- Quality of instruction dictates success.

- Successful team members possess complimentary skills not identical skills. Diversity is a strength.

- We succeed or fail together. Teamwork is crucial and is based on relationships. Relationships are built on communication, trust, and respect.

- We all have different jobs- all are important and everyone has opportunities for leadership.

This superintendent feels that this model also aligns school committee decisions and interaction with the district and schools.

One of the things I'm convinced of is that the transparency of how we

make decisions is critical to relieving the political pressure on the School

Committee that they have to do what a constituent wants them to do

because a constituent calls… Members of the School Committee are

elected. They have a tremendous amount of pressure as an elected

individual or an elected body, to keep their constituents happy to promote

them to vote for that member of the School Committee the next time

there's a election. I relieve some of that pressure by saying this is how we

make decisions in this school district (Fitzwilliams District

Superintendent, personal communication, May 17, 2011).

The superintendents use data driven decision making to develop measurable goals that are informed by all community stakeholders through the provision of information and communication of the mission for all of the participating districts, including districts identified as having full implementation of professional learning communities.

Defined autonomy. Marzano and Waters (2009) found that school autonomy has a positive correlation with student achievement, however little or no relationship between site-based management and student achievement. High reliability districts, where student achievement improvement occurs, "decrease the variability of the leadership across schools in the district" (p. 89). These authors "assert that in a high reliability district, the *right work* in every school is defined (at least in part) by the district" (p. 90). The right work is defined by non-negotiable goals at the district level, which guide the development of "clear and measurable goals for the school" (p. 96).

The Collins District superintendent referred to loose-tight coupling identified by Weick (1976). According to Weick (1976) loose tight coupling occurs when the advantages of locally controlled responsiveness to the environment allow for flexibility, adaptivity to change, and creative problem solving within a framework of tight expectations for productivity and outcomes. The Collins District superintendent indicated that taking the responsibility to provide leadership at the school level in his district comes with an expectation that the principal will act as an innovative change agent. He said,

> But that's where I want innovators and CEOs running schools rather than
> errand boys that just do what the central office wants. I want thinkers. I
> want doers, who are entrepreneurial and willing to accept the

accountability that comes with increased autonomy (Collins District

Superintendent, personal communication, May 2, 2011).

The Fitzwilliams District superintendent indicated that a framework for

collaboratively developed non-negotiable goals set the boundaries and defined the

limitations of autonomy in his district. "We try to build a framework that the department

supervisors, directors and building based leaders have autonomy to address the specific

needs of the building within that framework."

The Austen district leader expects principals to remedy site-based student

achievement gaps with innovation, and the district leader holds principals responsible and

accountable to meeting this expectation. The Austen District superintendent indicated,

> One of the biggest things I have to [do is] hold back even people in this
>
> [the central] office. If a principal has an idea of what they want to do, and
>
> they think it's going to work in their building, and we just can't see it yet,
>
> they have to be given that freedom. For if they're not given that freedom,
>
> they'll come back to me a year later and potentially say, that's why my
>
> [state] test scores went down (Austen District Superintendent, personal
>
> communication, April 29, 2011).

In this district, which has learning communities at every level within the

organization, this balance of entrepreneurship at the school level and the development of

model practices that can be shared and disseminated among schools are hand-in-hand.

The Austen District superintendent said,

When the Principal gets creative like that and something comes from it, [it can be shared] at the Learning Community meetings where we talk with principals about what's going good in their school, and [when] their talking about it with other principals those ideas get shared. Even district directors, that catch those ideas, start to talk about it with principals [and] then some ideas of independent programs that started or seeded in one school end up cross-pollinating other schools (Austen District Superintendent, personal communication, April 29, 2011).

All of the superintendents interviewed expressed the responsibility and risk associated with defined autonomy within defined non-negotiable goals. "In terms of allocation of resources, in terms of building management, in terms of what's going on in the classrooms, we hold the Principals accountable" (Darcy District superintendent). "[The] best analogy I can give is a Principal has to live with their decisions" (Austin District Superintendent). The Bennet District superintendent said,

I think the autonomy is valuable in the sense that it builds - if you can get a faculty to take responsibility for the education of the students - they're not just passing through something … that's coming from the administration through to the students and they're not just sort of feeding it to them. If they consider themselves a bunch of people who have tasks and problems to solve, and the responsibility for solving them really lies with them, that's a good exercise of autonomy because it makes people self conscious about what they're doing and it makes them reflective on what they're doing. So, the issue here really, I think, is asking Principals

and school personnel to look at autonomy in the right way (Bennet District

Superintendent, personal communication, April 29, 2011).

The Collins District superintendent said,

But that put people on notice, you know, if you're at the bottom, you don't

want to be at the bottom next year. Those are ways we kind of hold

people accountable, but it's really just face-to-face work of continuing

communicating, what's negotiable, what's non-negotiable and then how

are they working within those parameters to increase results (Collins

District Superintendent, personal communication, May 2, 2011).

The Darcy District Superintendent said that defined autonomy is a misnomer.

"Autonomy is a word that I don't think operates very well here. They have *defined*

authority, but they do not have autonomy. And I don't regard myself as having

autonomy, and deliberately so." Authority empowers the principal to make decisions, but

also requires that they have a responsibility and duty to act. Autonomy implies a level of

independence or choice. All members of a school community are accountable to the

attainment of district goals and priorities, but superintendents directly supervise

principals and hold building leaders responsible for the actions taken at the building level.

I believe that a coherent school system requires that there indeed be

delegated authority to the school leadership, but that authority is held in

consultation with all other officers of the district, and is informed by those

who deliver the services directly in front of the students, that is the

teachers (Darcy District Superintendent, personal communication, May 11, 2011).

All the district superintendents could provide examples of defined autonomy according to work of Marzano and Waters (2009). The district superintendents from districts with full implementation also indicated that with site management and local data based decision-making came responsibility and expectation to improve student achievement outcomes. Based on the findings of this research study, the superintendent develops a culture of defined authority, which empowers the principal to make decisions, but also requires that they have a responsibility and duty to act, and all staff members are personally invested in the outcomes for students.

Shared leadership practices. Hord (1997) describes professional learning within the educational system as requiring superintendents to be "democratic teachers" instead of "top-down agents of change" and no longer can leaders be "seen as visionaries of the corporation". Educational reform and closing persistent achievement gaps is complex. "No single person has the expertise, influence, and energy to initiate and sustain a substantive change process" (Dufour, Dufour, and Eaker, 2008, p. 310).

Superintendents identified specific ways they model, cultivate future leadership, and use shared leadership practice strategically to build capacity in response to a question on how they model shared leadership in keeping with professional learning communities as a systemic reform initiative. The Bennet District superintendent said,

> Well, I guess I model it by asking them to help me. I mean I can't solve
>
> the problems here by myself. I don't know enough, and even if I did
>
> know enough just me dictating stuff to people wouldn't accomplish

anything. So, I think a lot of what the Superintendents do is just try and recognize when good stuff is going on and find ways to support it (Bennet District Superintendent, personal communication, April 29, 2011).

The Austen District superintendent responded,

I don't believe in making decisions alone. I can get pig headed and say, 'No it's not going to happen.' I certainly can do that. But, for the most part, I think almost a vast majority of decisions are made collaboratively and in consultation with everyone (Austen District Superintendent, personal communication, April 29, 2011).

The Fitzwilliams District superintendent encourages a culture of risk-taking as part of the process of improvement.

… Staying out of other people's areas of expertise; asking questions rather than giving directives; making recommendations and suggestions that have options. You know, I believe that what I know about adult learning is that most adults learn in very different ways and in very different timeframes. So, and I think the standard line is eight times, [in] eight ways, that if I make a recommendation and someone doesn't do it, that doesn't mean they're not interested in the result or what the recommendation tried to improve. It simply means that there may be another process that needs to happen, and that to develop buy-in and empowerment, particularly in well-established educational leaders, but anyone including kindergarten students, have to be given a voice in their actions on a daily basis. If I am trying to avoid a mindless organization

then I have to create a process, and I hope [that] I have, that's mindful that

people intellectually are given options, decisions, trial and error – it's okay

to fail, don't worry about it (Fitzwilliams District Superintendent, personal

communication, May 17, 2011).

The Darcy District superintendent indicated, "We're very frank. We're very

collegial. The principal has no problem telling me that I'm out of my mind. That kind of

candor is essential in the way it works."

Two superintendents specifically mentioned the use of shared leadership as a

means of developing school and district leadership capacity. The Austen District

superintendent included in his response, "We definitely have a philosophy as a district

that we need to groom future administrators, and, you know, empower teachers who

make decisions…" He further explained that he had supported the implementation of a

program where teachers could apply to facilitate workshops for their peers.

Any teacher, regardless of whether your first year or have been here for

thirty years, can submit a proposal. It goes to the Curriculum Directors

who review it and either approve it or deny it. Generally they get

approved. I don't think there have been too many that have been denied.

And what the teacher has to submit is a proposal of ten hours of

professional development around a particular topic and, once it gets

approved, we put it out to the staff as a whole and, as long as at least five

teachers register for that [program], it will run. It's a great way to

empower teachers and let them say this is what we need and we give it to

them. And I feel like that's shared leadership (Austen District

Superintendent, personal communication, April 29, 2011).

In the Darcy District, the superintendent indicated,

I'm not so sure that you really share leadership; you cultivate leadership

for your people. You cultivate the leadership for which people have the

competence and, you know, we do try to have a good number of clear

ladders within the district so that, ideally, at least half of our promotions

are from within. And that's been largely true in the past several years

(Darcy District Superintendent, personal communication, May 11, 2011).

The Collins District superintendent used shared leadership practice in order to

develop an initial strategic plan for the district, which needed systemic reform to meet the

challenges of this high need district.

I think an example [of shared leadership] is all these think tanks [that] I

put together. That's a perfect example of people coming in and me

saying, 'You know, there's no rules here and we're going to talk about

issues and we're going to come up with ideas and suggestions and

solutions, and then we're going to try and see if they stick on the wall.' I

think that's a good form of shared leadership. Another one is continuing

being out in the field, in schools, in classrooms, asking people questions

and talking about things that we need to do better. Getting people to feel

that they can say whatever they want and empower them to be decision

makers I think is a good example of that - the cross-functional teams

overall (Collins District Superintendent, personal communication, May 2, 2011).

The Fitzwilliams District superintendent indicated that the use of central office staff as experts in a shared leadership model promotes action. "… That's part of also what I try to get Central Officers to do – don't bring problems to the table, bring issues and solutions, which is a much different, you know it's a much different level of dialogue." He also said," So I view the Central Office as a responsive resource group rather than a directive group."

The Darcy District superintendent cautioned that a leader needs to be careful of getting stuck in cycles of conversation and communication about an issue in a shared leadership practice and not getting to actionable items.

> There are certain portions of leadership that simply cannot be shared. You know, it's not necessarily always the best end in itself. You obviously want people to feel that they're heard and they're being heard, but at the same time there are points when decisions have to be made and, you know, you can be in the model of listening to people for too long when you have to make some decisions. So, it's always a balance. It's always a balance (Darcy District Superintendent, personal communication, May 11, 2011).

All of the participating districts superintendents report that the role of the superintendent is to create conditions for shared leadership practices by cultivating

leadership in formal and informal ways, and model collaborative decision-making while insuring that collaborative conversation leads to action.

Resource allocation. Marzano and Waters (2009) noted, "Resources are the lifeblood of any reform effort" (p. 77). Professional learning community implementation requires an allocation of resources including consistent time, dedicated space, supplies, and financial support for all of these, as well as for additional staff, to be able to provide content expertise and coverage for teachers to meet (Hord, 1997; Hord and Sommers, 2008; Huffman and Hipp, 2003). Superintendents responded in ways that addressed allocation of resources in alignment with district priorities, site-based management of resources with accountability to district priorities, preservation and re-assignment of human resources, and use of time as a resource.

The Austen District superintendent said,

All of our major initiatives quantify what's needed? What's not? What's going to be its funding source? Can we do it? How much money does it need? So, I mean it takes coordination, it takes some estimating, it takes some guessing of what our budget would be like (Austen District Superintendent, personal communication, April 29, 2011).

He further described the district's resource limitations by adding,

We're a foundation budget community. We don't get a penny more than what comes up in foundation. So I more or less know what my budget is… It would be a futile effort, a waste of time, to approach the City Council or the community in general to give me a penny more. So, we live within our means and I'm just a function of what that state number

comes out to be. And, I think that one of the things that we do well in

[Austen] is we invest at the ground floor (Austen District Superintendent,

personal communication, April 29, 2011).

Within these limitations he makes choices based on data and projected outcomes.

So, we know that a lot of our kids struggle because of demographic

challenges that we face. So, we have a full day kindergarten program for

all kids in the city, and that helps us because we have less support that we

have to deal with, as the kids get older. With our teachers when they

come in and they're *green*, every teacher's required to take [a course]

within their first three years and we pay for it. So, that's an investment in

resources for our teachers, but we get the bang for the buck because we

have better teachers. It's an investment that people would look at and say,

well you're spending $20,000 a year on that [program], cut that and hire

another teacher. It gives us better teachers in the end (Austen District

Superintendent, personal communication, April 29, 2011).

In the Collins District, the superintendent includes resource allocation as a focus

of the strategic plan.

Because our entire strategic plan is [about aligning resources to improve

student achievement] and our whole focus is how do we, as we go through

cuts and have to realign all of our resources, how do we put more money

in the schools giving them greater autonomy and control over how they

spend their dollars, decreasing the footprint of the central office? So that

schools become much more CEO based centers than one size fits all like

they were in the past (Collins District Superintendent, personal

communication, May 2, 2011).

He also mentioned that developing what this means for his stakeholders has required an

investment in training. "So, we've pushed hard to begin to communicate and teach people

what this means. So we've engaged in a ton of Webinars and on-line experiences."

The Darcy District superintendent referred to the distribution of resources within

the district in the context of site-based management and defined autonomy.

The ways, in which we ensure that the resource allocations are for student

achievement, is that the principals themselves put together their budget

proposals. Once those proposals are together, they sit down to meet with

generally the Deputy Superintendent, the Director for Administration and

Finance, and any other relevant people like the Title I Director or the

[Pupil Services] director or ELL [English Language Learner] Director to

discuss those priorities in light of the School Site Improvement Plan, and

then resources follow priorities (Darcy District Superintendent, personal

communication, May 11, 2011).

The Austen District superintendent indicated that with the ability to allocate

resources at the school level, principals also accept the accountability for insuring student

achievement improvement. "I may be a little bit more out there than even my colleagues

in this office in that, the best analogy I can give, is [that] a principal has to live with their

decisions."

The superintendent of the Bennet District likened the allocation of resources to the Hippocratic Oath. He said,

Resource allocation basically means manpower. It increasingly means technological support, [and] the specific actions to insure that resource allocations support student achievement is first of all, like the Hippocratic Oath says, first do no harm, it's kind of first make no cuts (Bennet District Superintendent, personal communication, April 29, 2011).

He also discussed the need to find time within existing scheduling structures to allow for teachers to meet and address student-learning needs.

There are several different things that we do to make time available for teachers to interact with one another. Principals convert some of their faculty meeting time to joint planning [time]…[and] interactions among staff in specific schools that are focused on instruction. If it's used systematically, I do think it gives teachers an opportunity, teachers and other educators, because you have counselors and so forth involved too, it gives them an opportunity to interact in specific activities to try to solve student learning issues or behavior issues (Bennet District Superintendent, personal communication, April 29, 2011).

The Fitzwilliams District superintendent indicated that the budget is developed in priority tiers based on the decision-making model and data.

Show me the data; show me why you need that person [staff position] and then, if we have the data from the principals or the school councils, then

during the budget development we put that as a priority item for our next

budget (Fitzwilliams District Superintendent, personal communication,

May 17, 2011).

The Austen District superintendent agreed that time is a resource with financial

consequences.

Money is a big driver of professional development. It's a driver in the

sense that, do we have to do it during the school day? Do we have some

money to buy some time of teachers to sit? And how can we play

[community] partners to be in our schools actually doing some work with

us that help [improve] student achievement? So, I mean it takes

coordination, it takes some estimating, it takes some guessing of what our

budget would be like (Austen District Superintendent, personal

communication, April 29, 2011).

The Fitzwilliams District superintendent uses a predetermined compensatory

stipend to pay for teacher time outside of the contractual obligations.

We pay our full-time practitioners in each building a small stipend

annually to be a member of the Instructional Leadership Team that

supports the principal and the assistant principal and the [other] teachers in

a transition to a more effective instructional organization (Fitzwilliams

District Superintendent, personal communication, May 17, 2011).

The superintendent can support professional learning community implementation

through the allocation of resources as indicated by these reported actions of the

participating superintendents. The superintendents have aligned resource allocation with district priorities such as the use of a decision-making model and preservation of staff positions to support student learning. The superintendents reported support for site-based management of resources that promoted student achievement and the use of data as evidence of practices that should be preserved or eliminated.

Summary of findings for qualitative research. The findings of the study indicate that five specific leadership actions identified by the researcher are associated with implementation of professional learning communities based on the interview responses:

- Superintendents in this study cultivate leadership in formal and informal ways, and model collaborative decision-making while insuring that collaborative work leads to action.

- Superintendents in this study use data driven decision making to develop measurable goals that are informed by all community stakeholders through the provision of information and communication of the mission.

- Superintendents in this study develop systems of accountability and transparency for the work of the PLC teams quantified through student achievement data and resource allocation, which utilizes site-based management to support PLC teams (i.e. time to meet).

- Superintendents in this study develops a culture of defined authority, which empowers the principal to make decisions, but also requires that they have a responsibility and duty to act, and all staff is personally invested in the outcomes for students.

- Superintendents in this study allocate resources in alignment with district priorities, utilizing site based management of resources with accountability to district priorities, identify human resource needs, and use of time as a resource.

These leadership actions correspond to the recommended actions for district-level leadership identified by Marzano and Waters (2009).

Mixed Method Analysis

Introduction

Research question four asked how the urban superintendent's leadership activities contribute to the depth of knowledge of professional learning communities by district staff. In this section, the quantitative and qualitative data are merged in a side-by-side comparison matrix for each PLC dimension (Hord, 1997). A description of the PLC matrices is provided, followed by a presentation of the mixed method analysis for each dimension.

Creswell (2009) indicates that a concurrent mixing of data in a mixed methods research project allows for one form of the data, in this case the quantitative survey data analysis to be informed by the other form of data, the qualitative assessment through the use of the rubric and interviews by the participating superintendents. The suggested method for mixing and displaying the data is through the creation of a matrix.

Description of PLC Dimension Matrices

Through the merging of the quantitative and qualitative data in a side-by-side comparison matrix, the relationship between the leadership actions and the knowledge of staff regarding implementation of professional learning communities can be studied.

District staff participated in a survey, the PLCA, to determine their depth of knowledge of professional learning communities for this research project. This survey is based on five dimensions of professional learning communities with indicators that describe the attributes of each dimension. Indicators with high levels of agreement were identified as having higher than the average frequency for the combined "Agree" and "Strongly Agree" selections.

The superintendents completed the Initiative Implementation-Professional

Learning Communities Audit rubric (Reeves, 2010), which has four criteria with

descriptors defining the level of implementation of professional learning communities.

In addition, the superintendent interviews revealed actions that the

superintendents reported to have taken in order to implement professional learning

communities as systemic reform initiative based on the district leadership recommended

actions that support improved student achievement as indicated by Marzano and Waters

(2009).

The researcher connected each dimension of professional learning communities

with a criterion of the rubric in a matrix using the indicators with a high level of

agreement and the rubric descriptors associated with deep or full implementation. For the

purposes of this analysis the separate dimensions from the PLCA for Supportive

Conditions-Relationships and Supportive Conditions-Structures were condensed into one

category of Supportive Conditions in order to determine the relationship between the

PLCA and the Initiative Implementation-Professional Learning Communities Audit

rubric.

The researcher also identified interview-coding categories that have been

previously explained and aligned to the dimensions and criteria of professional learning

communities as identified by Hord (1997), Huffman and Hipp (2003) and Reeves (2010).

The qualitative findings from the interviews were summarized into an action of the

superintendent that leads to full implementation of professional learning communities.

Each dimension of professional learning community is considered separately in the

following subsections in a category/theme display, "that arrays the qualitative themes

derived from the qualitative analysis with quantitative categorical or continuous data from items or variables from the quantitative statistical analysis" (Creswell and Plano Clark, 2011).

Shared and supportive leadership. Table 3 shows the alignment between high frequency indicators, audit rubric criterion, level of implementation as perceived by the superintendent, and the superintendent actions identified by the interview findings. This mixed method matrix shows the participating superintendents as instructional leader have influence over the implementation of professional learning communities through the cultivation of leaders by providing all staff the information and skills to be part of the decision making process. This type of collaboration is productive and leads to actionable goals and is not limited by on-going discussions of issues without solutions. The study superintendents model responsibility for improving student achievement and encourage innovation in attaining student improvement goals.

Two indicators had high levels of agreement and a strong positive relationship as indicated by r = 0.602 (p < 0.01), "The principal shares responsibility and rewards for innovative actions" (indicator #6) and "The staff have accessibility to key information" (indicator #3) within this dimension of professional learning communities. These indicators aligned to the criterion descriptor, "Building leadership communicates daily, in words and actions, his expectations for students and staff focusing on teaching and learning to ensure the success of every student". The interview code category for shared leadership was used to identify the superintendent action.

Table 3

PLCA Survey Dimension-Shared and Supportive Leadership

High Agreement Indicators	Audit Rubric Criterion	Implementation Score	Interview categories	Superintendent Action
The principal shares responsibility and rewards for innovative actions. The staff have accessibility to key information.	Leadership Practices	3 Full Implementation	Shared leadership	Superintendents cultivate leadership in formal and informal ways, and model collaborative decision-making while insuring that collaborative conversation leads to action.

Shared vision and values. The superintendents in this study use data driven decision making to develop measurable goals that are informed by all community stakeholders through the provision of information and communication of the mission. Table 4 indicates that the shared vision and values dimension had three indicators with high agreement and moderate to strong positive relationships: "Policies and programs are aligned to the schools vision" (indicator #17), "Shared values support norms of behavior that guide decisions about teaching and learning"(indicator #12), and "Decisions are made in alignment with the schools values and vision" (indicator #14).

Indicator #14 had a strong correlation to indicators #12 and #17 with r = 0.678 and 0.668 (p < 0.01) respectively. Indicator #12 and indicator # 17 had a moderate relationship with r = 0.554 (p < 0.01). These indicators were identified as aligned to the criterion of the audit rubric called the Learning Context with the descriptor, "A shared vision of school and student success has been collaboratively developed and communicated to all stakeholders." These indicators and criterion were aligned to the

code category for goal setting and establishing nonnegotiable goals, which included the

development of measurable goals through the use of data based decision making and

alignment of goals through collaborative development of goals.

Table 4

PLCA Survey Dimension-Shared Vision and Values

High Agreement Indicators	Audit Rubric Criterion	Implementation Score	Interview categories	Superintendent Action
Policies and programs are aligned to the schools vision. Shared values support norms of behavior that guide decisions about teaching and learning. Decisions are made in alignment with the schools values and vision.	Learning Context	2 Partial Implementation	Goal Setting and Nonnegotiable Goals	The Superintendent uses data driven decision making to develop measurable goals that are informed by all community stakeholders through the provision of information and communication of the mission.

Collective learning and application. This dimension had a high average

frequency for all indicators with a combined average frequency for "Agree" and

"Strongly Agree" of 74.5%. The three indicators with higher than average levels of

agreement were: "The staff work together to seek knowledge, skills and strategies and

apply this new learning to their work" (indicator #19); "School staff is committed to

programs that enhance learning" (indicator #26); and, "The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry" (indicator #23).

Indicator #19 had a strong correlation with indicator # 23 with r = 0.657 (p < 0.01). Indicators # 19 and #23 had a moderate relationship with indicator #26 with r = 0.569 and 0.547 (p < 0.01) respectively. These indicators were matched to the descriptors for the criterion, Instructional Strategies, which includes the descriptor, "At least 80% of PLC team members make collaborative decisions on essential learning outcomes, instructional strategies, and assessments, etc." The interview code category used was PLC Actions. The superintendents interviewed indicated specific actions supporting professional learning community implementation, which provided the theme of accountability for the work of professional learning communities for the superintendent action. In two of the districts, with higher identified levels of implementation, having a system of communicating what is learned in the professional learning communities, and systemic formalized sharing of this information, develops a sense of responsibility to the practice of collaboration. The use of site-based management of resources in a spirit of educational entrepreneurship and innovation with accountability to student achievement creates a balanced expectation of accountability and risk-taking.

Table 5

PLCA Survey Dimension-Collective Learning and Application

High Agreement Indicators	Audit Rubric Criterion	Implementation Score	Interview categories	Superintendent Action
The staff work together to seek knowledge, skills and strategies and apply this new learning to their work. School staff is committed to programs that enhance learning. The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	Instructional Strategies	2 Partial Implementation	PLC Actions	The Superintendent develops systems of accountability and transparency for the work of the PLC teams quantified through student achievement data and resource allocation using site-based management to support PLC teams (i.e. time to meet).

Shared personal practice. The dimension, Shared Personal Practice, had three

indicators with high levels of agreement: "The staff informally share ideas and

suggestions for improving student learning" (indicator # 29); "Opportunities exist for

coaching and mentoring" (indicator #31); and "Individuals and teams have the

opportunity to apply learning and share the results of their practices"(indicator #32).

Indicator #29 had a moderate relationship with indicators #31 and #32 with r =

0.442 and 0.472 (p < 0.01) respectively. Indicator #31 and indicator #32 had a strong relationship with r = 0.656 (p < 0.01). These indicators were related to the rubric criterion, *Learning Context*, with the descriptor, "PLC teams have the opportunity to report and share student progress, effective strategies, and PLC successes with leadership and other PLC teams." In order for principals to be able to provide the context and opportunities for sharing of practices, superintendents need to empower principals through the use of site based management practices to implement these aspects of professional learning communities.

Marzano and Waters (2009) refers to the decrease in variability of student achievement across a district due to defined nonnegotiable goals with building based leadership operating in relative independence within the constraints of these goals as "defined autonomy" (p. 89). However, as the Darcy District superintendent indicated, defined autonomy may be an insufficient description preferring instead the concept of *defined authority*, which empowers the principal to make decisions, but also requires that they have a responsibility and duty to act.

Table 6

PLCA Survey Dimension-Shared Personal Practice

High Agreement Indicators	Audit Rubric Criterion	Implementation Score	Interview categories	Superintendent Action
The staff informally share ideas and suggestions for improving student learning. Opportunities exist for coaching and mentoring. Individuals and teams have the opportunity to apply learning and share the results of their practices.	Learning Context	2 Partial Implementation	Defined Autonomy	The Superintendent develops a culture of defined authority, which empowers the principal to make decisions, but also requires that they have a responsibility and duty to act, and all staff members are personally invested in the outcomes for students.

Supportive conditions-relationships and structures. The dimension of

Supportive Conditions includes indicators for Relationships and Structures. The

indicators with the highest levels of agreement were: "Caring relationships exist among

staff and students that are built on trust and respect" (indicator #33); "The proximity of

grade level and department personnel allows for ease in collaborating with colleagues"

(indicator #43); and "Resource people provide expertise and support for continuous

learning" (indicator #41); and "Communication systems promote a flow of information

among staff" (indicator #44).

Indicator #44 had a moderate relationship with indicators #41 and #43 with r = 0.416 and 0.423 (p < 0.01) respectively. However indicator #41 and #43 had a weak relationship with r = 0.317 (p < 0.01). These indicators were related to the rubric criteria Learning Context and Professional Development with descriptors such as "Building leadership provides the necessary supports for collaboration (i.e. time), high quality professional development, teaming structures, etc." and "Job-embedded professional development opportunities (coaching, modeling, observing) are provided to staff at least three times a year." Superintendents allocate resources in alignment with district nonnegotiable goals. This includes flexibility with the use of time and scheduling, and identifying human resource needs and finding ways to accomplish goals with limited resources at the building level.

Table 7

PLCA Survey Dimension- Supportive Conditions-Relationships and Structures

High Agreement Indicators	Audit Rubric Criterion	Implementation Score	Code Category	Superintendent Action
Caring relationships exist among staff and students that are built on trust and respect. The proximity of grade level and department personnel allows for ease in collaborating with colleagues. Resource people provide expertise and support for continuous learning. Communication systems promote a flow of information among staff.	Learning Context and Professional Development	3 Full Implementation	Allocation of Resources	Superintendents allocate resources in alignment with district priorities, utilizing site based management of resources with accountability to district priorities, identify human resource needs, and use of time as a resource.

Summary of analysis. Staff members, who were surveyed for this study, identified specific criteria at a high frequency within each dimension of professional learning community. Staff response to these indicators demonstrates greater knowledge of these as implementation actions in districts using professional learning communities as

a systemic reform initiative. The district superintendents in this study articulated specific actions and values that they took to support professional learning community implementation associated with the recommended actions of district leadership for improving student achievement (Marzano and Waters, 2009). These actions can be summarized into district leader actions associated with each dimension. Through the merging of the quantitative and qualitative data in a side-by-side comparison matrix, the link between these leadership actions and the knowledge of staff regarding implementation of professional learning communities can be studied.

Summary

In this chapter the analysis of the results for the PLCA survey data, the Initiative Implementation Audit-PLC rubric, the interviews with superintendents, and the merging of the qualitative and quantitative data sources in a side-by-side matrix for each PLC dimension were presented. Based on the data analysis high frequency indicators of professional learning communities were identified for each dimension. Superintendents' perceptions of the level of implementation according to the Initiative Implementation Audit-PLC rubric for each criterion of professional learning communities as well as an overall perception of the depth of implementation were identified. Specific actions associated with district leadership and implementation of professional learning communities were identified and summarized through a categorical coding of the interviews of superintendents. These district leaders' actions were then linked to the high frequency indicators and perceptions of implementation through a merged analysis.

Only two indicators on the PLCA survey had a mode frequency of two indicating a higher percentage of respondents who indicated, "Disagree" or "Strongly Disagree".

These two indicators (#27 and #28) had a strong relationship with each other with r = 0.721 (p < 0.01). Both of these indicators are related to peer observation and peer feedback on instruction, indicating that these are indicators that staff have little knowledge of implementation as part of professional learning communities. Both of these indicators had moderate relationships with two other indicators that were high frequency indicators for the same dimension, indicators #31 and #32, with strongest relationship between indicator #28, "The staff provide feedback to peers related to instructional practices", and indicator #32, "Individuals and teams have the opportunity to apply learning and share the results of their practices", with r = 0.502 (p < 0.01).

Chapter 5

Summary of Findings, Conclusions, and Recommendations

Introduction

A summary of the research study, that includes analysis and findings, are presented in this chapter. Findings from the data are presented by research question. Relevant themes, significance of the research, and recommendations for the field of educational leadership are presented. Recommendations for consideration of future research are also presented.

The purpose of this mixed-method research study was to determine if urban superintendent leadership actions and their perceptions of depth of implementation impact the depth of knowledge of professional learning communities for district educational staff. A mixed-method study was selected in order to fully explore the relationship between district leadership actions and implementation of professional learning communities. District superintendents were self-selected from a network of urban districts in a northeastern state where implementation of professional learning communities is identified as one of the conditions of school effectiveness by the state department of education. The depth of implementation of professional learning communities was determined using the PLCA survey completed by district staff. District superintendents were interviewed and used the Initiative Implementation-Professional Learning Communities Audit rubric to characterize the depth of implementation from their perspective.

Summary Findings

The findings based on the data analysis are presented by each of the study research questions.

Research Question 1: What is the level of knowledge of collaborative learning communities by staff in implementing districts? The staff depth of knowledge of professional learning communities for four of the five dimensions according to Hord (1997) was indicated to be high. The depth of knowledge of professional learning communities was related to the change phase. Each of the participating districts in this research study were implementing professional learning communities as part of a systemic reform initiative, which was identified as a goal or strategy in a district improvement or strategic plan. Four of the five dimensions aligned with the implementation phase with three of the dimensions (shared vision and values; collective learning and application; and supportive conditions) on the continuum toward the institutionalization phase.

The dimension for Shared Personal Practice was not aligned to the descriptors for the initiation, implementation, and institutionalization phases. The only two indicators with a higher percentage of disagreement were in this dimension. These two indicators refer to peer observation and the provision of feedback on instruction.

Shared and supportive leadership. Staff knowledge of this dimension indicates that these five districts are identified within the implementation phase. The implementation phase has staff leadership opportunities, which are pervasive and persistent in the absence of the positional leadership (Huffman and Hipp, 2003). Professional learning communities in the implementation phase become part of the

operation of the school and staff assume leadership roles even in the event of change in school leadership. Staff knowledge of this dimension indicates that there is evidence of shared leadership practices in terms of shared information and recognition and it is associated with teacher leadership roles such as coaching and mentors. It is not embedded into the culture of the institution as evidenced by teachers without positional authority assuming responsibility for student learning.

Shared values and vision. The high frequency indicators and average frequency show that staff had a high depth of knowledge for this dimension. This dimension measures the level of shared values and vision for educational improvement based on student learning needs and high expectations.

Collective learning and applications. The high frequency indicators for this dimension indicate that staff knowledge in this dimension demonstrate a high level of implementation. The superintendent interviews revealed that each of the participating districts in this study had mechanisms for staff collaboration and accountability measures for the work within the professional learning community.

Shared personal practice. Staff knowledge of this dimension was not determined based on the change phase indicated by the PLCO. The assignment of phase using the PLCO for the high frequency indicators would indicate a change phase of institutionalization, but the two indicators with highest levels of disagreement reflect an initiating change phase. The difficulty of assigning a change phase to this dimension can be explained by the use of formal peer relationships, such as coaching and mentoring, where observation and the provision of feedback on instruction does occur.

Supporting conditions (relationships and structures). Staff knowledge of professional learning communities in the supportive conditions dimension indicates high levels of implementation with elements of the institutionalization phase on the continuum of change. Staff members are committed to the work of improving student learning and achievement through their relationships with each other, administration, and with students. Staff members do not agree that the change process is a sustained and unified effort indicating that collaboration in professional learning communities supports collegiality, but not to reform of the systems educational practices.

Summary. The depth of knowledge of the staff about professional learning communities for four dimensions was determined to be high. Four of the five dimensions aligned with the implementation phase. Three of the dimensions (shared vision and values; collective learning and application; and supportive conditions) are on the continuum toward the institutionalization phase.

The dimension for shared and supportive practice was not aligned to the descriptors for the initiation, implementation, and institutionalization phases indicating that staff knowledge of this dimension was high for some indicators, but limited with respect to the practice of peer observation and the provision of feedback to improve instruction.

Research Question Two: What district leadership activities does the urban superintendent identify as supportive of implementation of collaborative learning communities?

The collective review of the coded responses from the interviews identified superintendent actions that were used to support the implementation of professional

learning communities. The interview questions and coding of transcribed interviews used the identified district leadership actions correlated to improved student achievement by Marzano and Waters (2009) to determine district leaders actions that support the implementation of professional learning communities.

Goal setting and non-negotiable goals for student learning. All of the district superintendents participating in this research study identified these characteristics of goal setting: use of data for data-based decision making, informed goal setting through communication with stakeholders, and the development of board alignment and community understanding through provision of information, communication, and reinforcement of district goals.

Defined authority. All of the district superintendents participating in this research study indicated that they provided support for focused entrepreneurial risk-taking at the school level. Principals were encouraged to be creative and strategic in their methods addressing the student achievement gaps in the schools. The superintendents in this study were explicit in their expectations based on district priorities for improving student achievement, and held all members of the school community responsible for student learning. Principals and teachers did not make decisions independently or without calculated risk, and accountability to the decision-making of the building leader went beyond compliance or alignment to district non-negotiable goals. However, the responsibility for student learning remained a priority with accountability for building leaders' instructional decisions.

The interview data did suggest that the concept of defined autonomy by Marzano and Waters (2009), did not apply to what the superintendents implemented or intended to

implement in their respective districts. The superintendents in this study encouraged central office administrators and principals to work together to identify strategies, programs, and resources to address data based student-learning needs.

Shared leadership. The superintendents in this study modeled shared leadership practices in informal and formal ways. These superintendents included conversation and dialogue about issues, offering choices when possible, and allowing for idea generation and risk-taking with problem solving as examples of the informal methods of shared leadership with central office and school leaders. Formal methods for modeling shared leadership included shared responsibility for facilitation with the use of district leadership team meeting time, board subcommittees for addressing specific issues, and strategic plan development through committee participation by stakeholders.

Resource allocation. Superintendents participating in this study indicated that resource use needed to address district priorities. Site based management of resources were used in alignment with and held accountable to district priorities. Resource allocation prioritized the preservation and re-assignment of human resources, and the use of time as a resource. Current economic realities require superintendents to use resources in ways that support goal attainment and where instruction takes place, in the classroom.

Summary. There are specific leadership activities that urban district leaders in this study reported that they took to initiate and sustain professional learning community implementation. These actions can be summarized into the following superintendent actions:

- The superintendent cultivated leadership in formal and informal ways, and modeled collaborative decision-making while insuring that collaborative conversation leads to action.
- The superintendent used data driven decision making to develop

measurable goals that are informed by all community stakeholders through the provision of information and communication of the mission.

- The superintendent developed systems of accountability and transparency for the work of the PLC teams quantified through student achievement data and resource allocation, which utilizes site-based management to support PLC teams (i.e. time to meet).

- The superintendent developed a culture of defined authority, which empowers the principal to make decisions, but also requires that the principal has a responsibility and duty to act, and all staff is personally invested in the learning outcomes of students.

- The superintendent allocated resources in alignment with district priorities, utilizing site-based management of resources with accountability to district priorities, human resource needs, and use of time.

Research question three: In what ways does the urban superintendent's leadership activities relate to his/her perceptions of implementation of collaborative learning communities?

The superintendent perceptions of implementation of professional learning communities were measured using a rubric, the Initiative Implementation-Professional Learning Community Audit rubric (Reeves, 2010), which has four criteria for professional learning community implementation.

The learning context. The median superintendent response for implementation of the learning context for professional learning communities indicated a partial implementation. The professional learning communities in the participating districts followed an agenda, have collaboratively developed norms, and shared roles and responsibilities. Professional learning community meetings were provided resources including support for investigating instructional strategies and analysis of common assessments through central office staff and academic coaches according to the superintendents in this study. Professional learning community meeting minutes were

recorded and reviewed by principals, central office administrators, and in some cases the superintendent.

Three of the five district leaders participating in the study indicated that not all schools have achieved full implementation. Full implementation based on this rubric requires each faculty member, including support staff, is assigned to a professional learning community, and these meetings are scheduled weekly for at least forty-five minutes within the contractual workday. The superintendents' perception is consistent with the PLCA survey data results for indicator #37 (i.e., "Time is provided to facilitate collaborative work") where 39.5% of the staff responded "Disagree" and "Strongly Disagree", and indicator #38 ("The school schedule promotes collective learning and shared practice") where 45.6% of respondents indicated "Disagree" or "Strongly Disagree".

Instructional strategies. The superintendent median response for implementation of the instructional strategies for professional learning communities indicates a partial implementation. The superintendents perceived professional learning communities have high expectations for student learning with shared leadership and collaborative decision-making. Professional learning communities were using assessment data and developing measurable goals to monitor instructional strategies implemented in response to the data according to the superintendents. These perceptions are supported by the PLCA data with 91.4% of the survey respondents in agreement with indicator #26 (i.e., "School staff is committed to programs that enhance learning").

Two descriptors that impacted the superintendent perception of full implementation of instructional strategies within professional learning communities were

the use of common formative assessments and collaborative scoring of student work. These practices were not considered to be consistent work by the staff in professional learning communities throughout the district.

Professional development. The participating district leaders perceived this area to have full implementation with the highest rubric scores being assigned to this area for all participating districts. Professional development and training on attributes and supports for professional learning communities, analysis and use of data to inform instruction, and development of assessments were identified by the superintendents as part of the implementation of professional learning communities.

These districts did have job-embedded professional development through coaching and mentoring as indicated by the superintendent interviews, but not peer observation as indicated for deep implementation according to the rubric descriptors for this criterion. The PLCA survey data supports this perception by the superintendents with staff reporting that the opportunities for observation and provision of feedback not being a regular part of the professional learning community activities.

Leadership practices. The median response to the rubric for the participating district leaders indicates full implementation for this criterion of the audit rubric. The superintendents' perceptions indicated that principals were held accountable in a number of ways for how they communicated about expectations for student learning and for the implementation of professional learning communities. They reported that principals needed to regularly review and provide feedback to professional learning community teams. Principals also needed to provide a regularly scheduled monthly meeting time and a space with resources and supports for professional learning community teams.

Principals also needed to do regular classroom walkthroughs to monitor the implementation of instructional strategies informed by data analysis and professional learning community work. The PLCA indicator #6 ("The principal shares responsibility and rewards for innovative actions") with 69.1% of the respondents in agreement supports this perception.

Summary. The median overall score based on the rubric indicates a partial implementation of professional learning communities with the fullest level of implementation perceived to be in the areas of leadership practice and professional development. The urban superintendents, participating in this study, experiences of professional learning community implementation influence their perception of implementation. Superintendents evaluate the building principals and have knowledge of building leadership practices. Superintendents allocate resources for professional development. Professional learning communities are viewed as a professional development strategy for improving instructional practice of teachers.

Research question four: How does the urban superintendent's leadership activities contribute to the depth of knowledge of professional learning communities by district staff?

The depth of knowledge of professional learning communities as determined by the PLCA was at the high end of the continuum for implementation for four of the five dimensions. Three of the dimensions, shared vision and values, collective learning and application, and supportive conditions, were reported on the PLCO continuum progressing toward the institutionalization phase. The depth of knowledge of staff was determined to be high except for one dimension. A change phase of the PLCO could not

be assigned because of a disparity between the descriptors for change phase and staff response. These indicators refer to peer observation and provision of feedback to improve instruction.

Specific actions by the district leaders to implement professional learning communities were identified in this study using the interview data. Considered collectively these actions were summarized as actions for district leaders implementing professional learning communities as a district initiative.

Shared and supportive leadership. The participating district leaders perceived leadership practices that aligned with the district staff knowledge of shared and supportive leadership practices. Superintendents use the evaluation process with principals to provide critical feedback regarding performance and attainment of non-negotiable goals; and therefore, shape the implementation of professional learning communities at the building level.

Shared vision and values. The staff knowledge of this dimension was high, but the superintendent perceptions indicated a partial implementation in the learning context because of the degree of participation indicated by the descriptors. Superintendents with high perceptions of implementation reported in the interviews very specific actions that they had taken such as continuous messaging about district goals, alignment of school and professional learning community team goals with district goals, posting the district goals on each school committee agenda, and the development of a strategic plan goals with broad community representation. Superintendents also indicated providing at least annual updates of progress toward goal attainment with school committee and district staff.

Collective learning and application. The collective learning and application dimension of professional learning communities was aligned to the instructional strategies descriptors of the audit rubric. Staff depth of knowledge of this dimension was high and superintendent median perception indicates a partial implementation. Three of the five superintendents said that they developed district wide structures and tools for holding staff responsible for professional learning community work and outcomes. Accountability for professional learning community work leads to productive meetings and use of professional learning community time. One district leader used a form for all professional learning community meetings to record attendance, goals, minutes, and actions. These forms were submitted to the immediate supervisor for review and then copies are sent to the superintendent's office, where he reviews and provides feedback to the teams on a monthly basis. Another superintendent acknowledged the work of specific professional learning community teams in a weekly "blog", or electronic journal, to all staff.

Shared personal practice. Staff knowledge of this dimension of professional learning community was not determined as a function of change phase on the PLCO because three indicators had above average frequencies of agreement, but two indicators involving peer observation and the provision of feedback that improves instruction were the only two indicators for the survey with frequencies indicating that most respondents were in disagreement.

The superintendent perceptions of the learning context had a median score indicating partial implementation. The conditions for implementation of this dimension would be implemented at the building level under the direction of the principal. The

coded interview response for defined autonomy was linked to how superintendents established defined autonomy for principal management of schools and the depth of implementation for this dimension.

The superintendents in this study reported that they hold building principals accountable to achieve learning goals and improve student achievement. Two of the superintendents expressed a degree of flexibility in allowing principals opportunities for informed risk-taking in problem solving at the school level with the caveat that the principal would be held accountable. However, there was an expectation that these risks would be developed and evaluated in collaboration with district central office staff that would have particular expertise, such as curriculum and special populations coordinators. One superintendent did not even wish to use the term autonomy, instead preferring the concept of defined authority.

Supportive conditions – relationships and structures. Staff had a high depth of knowledge of this dimension of professional learning community implementation, and it was perceived by superintendents to be fully implemented. Actions of superintendents that led to a high level of implementation of professional learning communities in this dimension included: allocation of resources in alignment with district priorities, preservation of the instructional program, and site-based flexibility with the distribution of resources within district priorities and budgetary constraints and with accountability to student improvement.

Summary. Urban district leadership actions influence staff depth of knowledge, and therefore, the level of implementation of professional learning communities. Initial or superficial support of professional learning communities would have limited staff

experience of shared leadership and vision, collective learning and application, and knowledge of supporting conditions. For this study staff knowledge of the attributes of professional learning communities was high where superintendent actions were purposeful in supporting professional learning community implementation. Staff members have experienced these attributes as part of their professional learning community work.

This study did not find that district leaders developed expectations and conditions that supported the sharing of personal practice with a focus on peer observation. The actions of district leaders in this study were not specific to this attribute of professional learning communities. Staff knowledge based on their experience indicated that this activity was infrequent.

<div align="center">**Conclusions**</div>

This section will provide conclusions and summarize the relevant themes from the study for district level leadership actions that support implementation of professional learning communities as a systemic reform initiative.

Relevant Themes

All five districts are implementing professional learning communities, as part of a systemic reform initiative, and high levels of agreement would be expected for all indicators on the PLCA survey. However, some indicators had levels of agreement that exceeded the average for the dimension, and therefore, the staff members have the most experience with these high frequency attributes of professional learning community.

Staff knowledge of professional learning communities comes from two experiences: 1) professional development on what professional learning communities are,

encompass, and require for implementation; and 2) personal experience of professional learning communities through participation. The PLCA measures staff knowledge of professional learning community attributes by dimension as defined by Hord (1997), and indicators with high levels of agreement would indicate high levels of staff knowledge through professional development and experience.

Indicator #27 and #28 were the only two indicators where the combined frequency for "Disagree" and "Strongly Disagree" exceeded the combined frequency for "Agree" and "Strongly Agree". These results match those of previously published national studies on collaboration where only 22% of those surveyed indicated agreement with this form of collaboration (MetLife, 2010). Staff knowledge as indicated by the change phase of this dimension would indicate high levels of knowledge of some attributes of the dimension as indicated by the PLCA indicators including collaboration, mentoring and coaching, and problem solving. However, without a culture where peer observation and feedback is the norm, achieving the institutionalization phase of professional learning communities will not be fully realized.

Indicator #27 had the lowest mean score in a field test of the PLCA (n = 247) by the survey creators (Huffman and Hipp, 2003). City, et al. (2009) notes that until educators use of the strategy of peer observation in regular and structured ways to provide feedback that improves instructional practice, then collaborative learning communities will be limited in challenging the isolationist tradition of the classroom teacher in schools. A professional learning community, including peer observations and feedback to improve instruction, achieves a level of practice based on trust and risk-taking, which impacts culture at the highest levels of the institutionalization phase.

The participating districts are implementing professional learning communities as a systemic education reform initiative. The district superintendents indicated development of shared mission vision, and goals through collaborative processes. The structures of support for professional learning communities were considered to be evident by staff. District and school leaders implementing professional learning communities would need to provide the time and resources for staff to meet and address the student learning needs identified as part of the collaborative work of staff members. This collaboration within the district ultimately impacts the values and norms of practice beyond vision and values statements and district improvement or strategic plans. Staff knowledge of professional learning communities would be reflected in the "norms of behavior that guide decisions about teaching and learning" (Huffman and Hipp, 2003, p. 39) in the institutionalization phase of systemic reform.

Professional learning community implementation requires that district staff share in the responsibility of improving student achievement through instruction (Dufour and Marzano, 2011; Hord, 1997; Hord and Sommers, 2008; Huffman and Hipp, 2003). Sharing leadership in the responsibility for improvement of student achievement also means that the decision-making goes beyond positional leadership, where approval for action is required. Shared leadership in professional learning communities does support the concept of distributed leadership, where decision-making is shared among the members of the organization (Spillane, 2005). The benefit of shared leadership results in decisions that are made based on the contributions and strengths of the members of the organization and increases the interdependence among the members for solving problems (Leithwood, et al., 2004).

Marzano and Waters (2009) explain defined autonomy as when "Building leaders must lead within the confines of nonnegotiable goals for achievement and instruction and the constraints of those goals place on principal leadership autonomy at the school level" (p. 89). Autonomy implies a level of independence or choice, whereas the superintendents in the study authorized the principal to make decisions, but required that the principal have a responsibility and duty to act collaboratively with other district administrators.

The pivotal role between the staff experience of professional learning communities and the superintendent perception of implementation is the principal (Dufour and Marzano, 2011; Hord and Sommers, 2008). The superintendent's evaluation of performance and expectations for accountability of building leadership leads to systemic implementation of professional learning communities (Dufour and Marzano, 2011).

The urban district context has multiple organizational levels between the classroom and the district leader's office (Knapp, et al., 2010). District staff knowledge of shared leadership practices is developed through experience, which occurs at the building level with the direct supervisor, the principal. The superintendent can influence the building leaderships' understanding of shared leadership by modeling shared leadership practices for decision-making, use of meeting time, and through the provision and transparency of information. This study suggests that the superintendent's ability to facilitate conversation and dialogue into problem solving and action determines the effectiveness of these interactions with principals and central office staff.

As Leithwood, et al. (2004) states:

More-successful district reform initiatives decentralize considerable authority to schools to define student-learning needs and to structure the use of professional development resources. The trick is for schools to do this in ways that do not fragment the coherence of overall reform efforts across the district.

This study suggests that superintendent influence of professional learning communities implementation is focused on coherence and alignment of school goal attainment with district non-negotiable goals. Marzano, et al. (2005) indicated that the implementation of professional learning communities at the deepest levels for the purpose of creating coherent systems to improve student achievement is viewed as a second order change.

Perception of superintendents participating in this study of the implementation of professional learning communities as a result of specific actions was influenced by several factors. First, the descriptors for each criterion specified a quantity of schools or staff implementing an activity associated with professional learning communities. Three out of five of the district superintendents indicated that assignment of implementation rubric score was due to the fact that not all schools or as many staff as indicated by the rubric have the same degree of implementation. Second, the two superintendents who assigned the highest levels of implementation had been in their districts the longest amount of time with 10 and 12.5 years experience. This would suggest that the length of service or the number of years implementing professional learning communities may be relevant to the perceived depth of implementation.

Leadership actions of superintendents who perceived full implementation of professional learning communities included modeling of collaborative decision-making, insuring that collaborative conversation leads to action, and using formal, as well as

informal, methods of promoting leadership talent. The superintendent actions for full implementation of the professional development criterion includes the allocation of resources in alignment with district priorities, utilization of site based management of resources with accountability, identification of human resource needs, and use of time as a resource.

Superintendent influence regarding how those within the organization learn and grow professionally is through the creation of a system culture of collective learning and insuring that principals are implementing and supporting professional learning community implementation (Dufour and Marzano; Marzano and Waters, 2009). The superintendent can support professional learning community implementation by monitoring the progress of student achievement data and allocating resources to support professional learning community actions that focus on improvement (Dufour and Marzano, 2011).

Urban District Leadership Actions

The results of this study suggest that there are specific superintendent actions adapted to district context and culture that support the implementation of professional learning communities in urban districts. The participating district superintendents reported actions and perceptions of implementation supporting dimensions for shared leadership practices, professional development, and supportive conditions. Staff also reported a high depth of knowledge of professional learning communities for these dimensions. Superintendents cultivate shared leadership practices in formal and informal ways, and model collaborative decision-making while insuring that collaborative conversation leads to action. Development of the supportive conditions for professional

learning community implementation includes actions by superintendents such as allocation resources in alignment with district priorities, utilizing site based management of resources with accountability to district priorities, identification of human resource needs, and use of time as a resource.

The survey results for shared vision and collective learning and application indicate a high depth of knowledge by staff, but the participating superintendents reported a partial implementation for the learning context and instructional strategies because implementation for these criteria was not consistent for all district schools. Hord and Sommers (2008) indicate, "The central task of the leader is to involve others in creating a shared vision for the organization" (p. 29). The development of vision and nonnegotiable goals for achievement and instruction establishes the parameters of the defined autonomy of principals and central office staff (Dufour and Marzano, 2011; Hord and Sommers, 2008; Marzano and Waters, 2009; Reeves, 2011). The principal needs to be the building level leader of collaborative learning and superintendents support this activity by providing training, shared leadership practices, modeling in district level meetings, and holding principals accountable to achieving district goals (Dufour and Marzano, 2011).

The superintendents participating in this study used various methods of communicating the vision including the use of a "blog" or electronic journal, placing the district goals on each agenda of the school committee, and using a published decision making model that places student achievement at the center and priority of actionable items. "Effective superintendents recognize the importance of ongoing communication" (Dufour and Marzano, 2011, p. 42). District leaders consistently provide the message of

the vision and district goals (Dufour and Marzano, 2011; Hord and Sommers, 2008; Marzano and Waters, 2009; Reeves, 2011). Hord and Sommers (2008) caution, "communication is the message others receive, not the message we think we are sending" (p. 33). Communication of district priorities is not only a consistent outgoing message from the superintendents office, but a conversation with an invitation from stakeholders to contribute to the development of the action steps that lead to accomplishment of goals (Dufour and Marzano, 2011). "For communication to be effective, however, it must go two ways" (p. 43). All five participating district superintendents reported processes for engaging a wide variety of stakeholders in developing goals and monitoring progress toward goals. All five participating district superintendents also reported the use of data based decision-making and the development of non-negotiable goals based on measurable outcomes.

For the dimension of shared personal practice, survey results indicated a disparity between the high frequency indicators and the only two indicators for the entire survey with a higher frequency for "Disagree" and "Strongly Disagree". Superintendent action with a focus on increasing opportunities for staff to observe peers and develop protocols that allow for peers to provide feedback to one another for the purpose of improving instruction would increase the depth of implementation in this dimension.

Professional Learning Communities and Second Order Change

An unexpected finding of this research study is that superintendents with the greatest tenure reported greater levels of implementation. This suggests that there is a long-term commitment required for professional learning community implementation where there is evidence of attainment of non-negotiable goals for student achievement

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and improved instruction.

Marzano, et al. (2005) defined second order change as innovation that is perceived as a break with how schools have operated in the past, tends to create conflict with existing norms, and requires new knowledge and resources for implementation. Professional learning community implementation as a systemic reform initiative by this definition is a second order change at the fullest levels of implementation. "Developing capacity to operate schools as PLCs demands not only an effort that is coordinated and focused but also one that is sustained over an extended period of time" (Dufour and Marzano, 2011, p. 41).

Summary. This section provided conclusions and summarized the relevant themes of this research study. This study found that leadership actions impacted the implementation of professional learning communities in urban districts. These actions included collaborative development of vision and goals, modeling through shared leadership practices, providing principals and other central office staff the authority with accountability to achieving district goals, and communicating consistently about the district goals with opportunities for input from stakeholders.

<div align="center">Recommendation for Educational Leadership</div>

This section describes the significance of the research findings with respect to deep implementation of professional learning communities as a systemic reform initiative.

Reeves (2011) identified district wide improvement of student achievement as being accomplished by three factors: focus, monitoring, and efficacy. It was determined that districts that created focused and aligned systems with deep implementation of an

initiative resulted in increased student achievement (Reeves, 2011). Efficacy was defined

as the leaders belief that student achievement gains were a direct result of "effective

teaching and learning, causes within their control" (Reeves, 2011, p. 37).

Implementation of Professional Learning Communities. The district

superintendents in this research study provided evidence of activities that supported the

implementation of professional learning communities based on the depth of knowledge of

staff for four of the five dimensions of professional learning communities based on

Hord's work (1997): shared and supportive leadership, shared vision and values,

collective learning and application, and supportive conditions

Professional learning community implementation requires collaboration and

clarity of district priorities (Dufour, 2003; Dufour, 2007; Dufour, et al., 2010; Dufour and

Marzano, 2011; Hord, 1997; Hord and Sommers, 2008; Huffman and Hipp, 2003;

Marzano and Waters, 2009; Reeves, 2011). However, the perceptions of superintendents

in this study suggest that if these foundational activities, collaboration by staff and clarity

of district priorities, are the limit of the implementation of professional learning

communities, then only partial implementation, as defined by the Initiative

Implementation-Professional Learning Communities, is achieved.

The superintendents that indicated full implementation of professional learning

communities reported formal and informal systems of communication, meeting

structures, engagement of stakeholders, and allocation of resources aligned to

implementation of professional learning communities. The depth of knowledge of staff of

professional learning communities supports the attainment of coherence by the districts in

the research study. Childress, et al. (2007) indicate that the connection of the instructional

core to a district wide strategy for improvement facilitates the attainment of coherence.

Coherence "means that the elements of a school district work together in an integrated

way to implement an articulated strategy" (Childress, et al., p. 43). This research study

suggests that there is a deeper level of implementation of professional learning

communities through peer observation that represents second order change (Marzano, et

al., 2005; Marzano and Waters, 2009) for full implementation of professional learning

communities. "The PLC process is specifically intended to create the conditions that help

educators become more skillful in teaching because great teaching and high levels of

learning go hand in hand" (Dufour and Marzano, 2011, p. 23). The sharing of personal

practice through peer observation allows the educational staff to develop mutual

interdependence, recognition of effective practices, and a learning environment (Hord

and Sommers, 2008). This stage of professional learning community encourages staff to

be contributors to the field. "Teachers systematically talking to one another about

instruction will go a long way to creating a culture that is focused on teaching. However,

nothing will put instruction in the spotlight as well as teachers observing other teachers"

(Marzano and Waters, 2009).

The results of this research suggests a visual model, Figure 8, which was

developed by the researcher to represent the four levels of professional learning

community implementation. The structural supporting conditions for collaboration and

the clarification of shared vision and values are foundational to implementation of

professional learning communities. District leaders strive for coherence in achieving the

goals through a systemic reform initiative, and implementation of professional learning

communities as a systemic reform initiative impacts student achievement through

instruction. This study suggests that the deepest level of implementation is achieved when staff shares personal practice and contribute to the advancement of the profession. District leadership actions impact the implementation of professional learning communities and the attainment of coherence and alignment.

Figure 8. Professional Learning Community Implementation Levels

```
                    ┌──────────────┐
                    │ Contribution │
                    └──────────────┘

                    ┌───────────┐
                    │ Coherence │
                    └───────────┘



┌───────────────┐                      ┌─────────┐
│ Collaboration │                      │ Clarity │
└───────────────┘                      └─────────┘
```
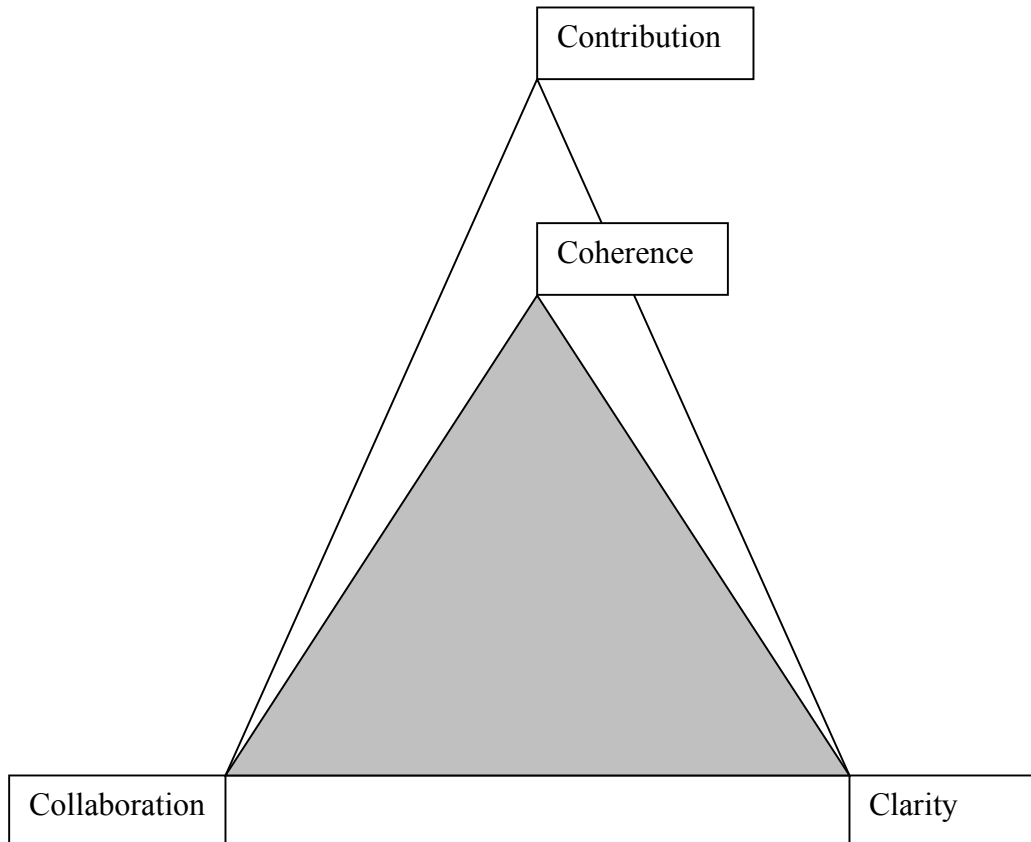
Figure 5.1 Shows collaboration of staff and clarity of district goals are foundational to the development of coherence of district improvement through professional learning community implementation. Professional contribution is developed through peer observation and provision of feedback as part of a learning environment associated with deep implementation of professional learning communities.

This research supports the recommendation that district leaders persist in the implementation of professional learning communities purposefully designing staff opportunities for peer observation and the provision of feedback to improve instruction.

Summary. The partial implementation of professional learning communities can be accomplished through the development of collaboration of staff and clarification of vision and goals, but full implementation of professional learning communities is realized in coherent systems (Childress, et al., 2007). The deepest level of professional learning community implementation is achieved when educational staff contributes expertise to the learning environment of the school through peer observation and provision of feedback to improve instruction (Hord and Sommers, 2008; Huffman and Hipp, 2003; Marzano and Waters, 2009). The results of this study indicate that districts implementing professional learning communities as a systemic reform initiative target coherence and alignment with district mission, vision, values, and goals, but when staff experience professional learning at the deepest levels then instructional improvement through collaboration leads to professional contribution to the learning culture of the school. Peer observation and the use of critical feedback for improvement becomes the norm.

<div align="center">

Recommendations for Future Research

</div>

This section describes recommendations for future research on the role of district leadership actions that impact the depth of knowledge and level of implementation of professional learning communities.

The study was representative of five small urban districts in one northeastern state where implementation of professional learning communities is endorsed by the state department of education as a condition of school effectiveness. There are three

recommendations for replicating this study. The first recommendation is to replicate this study where district leaders elect to develop professional learning communities to determine if the superintendent actions are the same as those actions identified in this study. A replication of the study in suburban and rural districts will determine superintendent supportive actions of professional learning communities with different demographics, available resources, and numbers of supporting central office staff. This study was limited by the self-selection for participation of five white male superintendents. Therefore a replication of the study with a diverse representation of superintendents may illuminate similarities and differences in implementation of professional learning communities.

This research did not study the depth of knowledge of professional learning communities with respect to role or tenure of the staff member. Staff depth of knowledge and student achievement was not studied as part of this research study. Staff depth of knowledge of professional learning community implementation as it relates to improved student achievement would add the dimension of student learning as it relates to professional learning community implementation.

The self-report nature of the superintendent actions supporting professional learning community implementation and perceptions of the depth of implementation is a limitation of the study. The development of an objective survey instrument that evaluates the occurrence and frequency of superintendent actions and perceptions of implementation would allow for data collection from a broader population of district leaders implementing collaborative learning communities.

A case study analysis, of a district implementing professional learning communities, would provide a more comprehensive understanding of the specificity of superintendent actions in response to a particular context.

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Appendix A
Professional Learning Communities Assessment (PLCA)

Professional Learning Communities Assessment

Directions:
This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the five dimensions of a professional learning community (PLC) and related attributes. There are no right or wrong responses. This questionnaire contains a number of statements about practices, which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement.

Key Terms:
Principal = Principal, not Associate or Assistant Principal #   Staff = All adult staff directly associated with curriculum, instruction, and assessment of students #   Stakeholders = Parents and community members

Scale:
1 = Strongly Disagree (SD)
2 = Disagree (D)
3 = Agree (A)
4 = Strongly Agree (SA)

STATEMENTS

Shared and Supportive Leadership
1. The staff is consistently involved in discussing and making decisions about most school issues.
2. The principal incorporates advice from staff to make decisions.
3. The staff have accessibility to key information.
4. The principal is proactive and addresses areas where support is needed.
5. Opportunities are provided for staff to initiate change.
6. The principal shares responsibility and rewards for innovative actions.
7. The principal participates democratically with staff sharing power and authority.
8. Leadership is promoted and nurtured among staff.
9. Decision-making takes place through committees and communication across grade and subject areas.
10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.

Shared Values and Vision
11. A collaborative process exists for developing a shared sense of values among staff.
12. Shared values support norms of behavior that guide decisions about teaching and learning.
13. The staff share visions for school improvement that have an undeviating focus on student learning.
14.   Decisions are made in alignment with the school=s values and vision.

15.   A collaborative process exists for developing a shared vision among staff.
16.   School goals focus on student learning beyond test scores and grades.
17. Policies and programs are aligned to the school=s vision.
18. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.

Collective Learning and Application
19. The staff work together to seek knowledge, skills and strategies and apply this new learning to their work.
20. Collegial relationships exist among staff that reflect commitment to school improvement efforts.
21. The staff plan and work together to search for solutions to address diverse student needs.
22. A variety of opportunities and structures exist for collective learning through open dialogue.
23. The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.
24. Professional development focuses on teaching and learning.
25. School staff and stakeholders learn together and apply new knowledge to solve problems.
26. School staff is committed to programs that enhance learning.

Shared Personal Practice
27. Opportunities exist for staff to observe peers and offer encouragement.
28. The staff provide feedback to peers related to instructional practices.
29. The staff informally share ideas and suggestions for improving student learning.
30. The staff collaboratively review student work to share and improve instructional practices.
31. Opportunities exist for coaching and mentoring.
32. Individuals and teams have the opportunity to apply learning and share the results of their practices.

Supportive Conditions - Relationships
33. Caring relationships exist among staff and students that are built on trust and respect.
34. A culture of trust and respect exists for taking risks.
35. Outstanding achievement is recognized and celebrated regularly in our school.
36. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.

Supportive Conditions - Structures
37. Time is provided to facilitate collaborative work.
38. The school schedule promotes collective learning and shared practice.
39. Fiscal resources are available for professional development.
40. Appropriate technology and instructional materials are available to staff.
41. Resource people provide expertise and support for continuous learning.
42. The school facility is clean, attractive and inviting.

43. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.
44. Communication systems promote a flow of information among staff.
45. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.

Source:

Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2003). Professional learning community assessment. In J. B. Huffman & K.K. Hipp (Eds.). *Reculturing schools as professional learning communities.* Lanham, MD: Scarecrow Press.

Appendix B
Initiative Implementation Audit Rubric and Permission

Initiative Implementation Rubric

Initiative: Professional Learning Communities

Description: A professional learning community is defined as "*educators committed to working collaboratively in ongoing processes of collective inquiy and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improved learnig for students in continuous, job-embedded learning for educators*" (DuFour, DuFour, and Eaker, 2008).

Professional learning communities see student learning, not teaching, as their mission. The policies, instruction, curriculum, programs, professional development, and other functions of the school all support student learning. In maintaining this constant focus on learning, four questions become paramount:

1. What should students know and be able to do?
2. How will the school determine that students have learned the essential knowledge and skills?
3. How will the school respond when students do not learn?
4. How will the school respond when they already know it?

WHAT DOES A SCHOOL THAT IS A PROFESSIONAL LEARNING COMMUNITY LOOK LIKE?
- The daily work of the school is driven by common purpose, shared vision and collective commitments.
- There are high expectations regarding student achievement and a commitment on the part of staff to accept responsibility for student learning.
- The learning of each student is monitored on a timely basis using common core curriculum and common assessments aligned with state standard.
- School structures support student learning and provide additional time and support for students who initially do not achieve intended outcomes.
- Job-embedded professional development leads to the collective identification of, reflection about, and implementation of "best practices" for improved student achievement.
- Staff members work collaboratively in processes that foster continuous improvement in all indicators of student achievement.
- The use of data promotes an action orientation and focus on results.
- Leadership of school improvement processes is widely dispersed and helps sustain a culture of continuous improvement.

	4	3	2
Criteria	**Deep Implementation**	**Full Implementation**	**Partial Implementation**
Learning Context **Score:**	**Everything in the full implementation category plus:** • PLC teams have the opportunity to report and share student progress, effective instructional strategies, and PLC successes with leadership and other PLC teams. (PI,S) • PLC teams display data in a common area for colleagues to view. (PI,O)	• A shared vision of school and student success has been collaboratively developed and communicated to all stakeholders. (PI, D) • All faculty members, including support staff, are members of a PLC team and are active participants. (PI, D) • PLC team meetings are regularly scheduled (day/time) at least once every week for at least 45 minutes during the contracted school day. (PI, , D) • PLC team meetings consistently follow an agenda, follow collaboratively developed group norms, and roles and responsibilities have been established. (PI, D) • PLC teams meet in a room that has resources to support PLC teams, including chart paper, markers, resources on instructional strategies and assessments. (PI,S) • PLC team minutes are recorded and kept in a team notebook/folder. (PI, D)	Four (4) of the six (6) "Full Implementation" criteria have been met.
			1
			Emerging Implementation
			One (1) to three (3) of the "Full Implementation" criteria have been met.
			0
			No Implementation
			No "Full Implementation" criteria have been met.

	4	3	2
Criteria	**Deep Implementation**	**Full Implementation**	**Partial Implementation**
Instructional Strategies **Score:**	**Everything in the full implementation category plus:** • Instructional focus is driven by multiple sources of data including state and local assessments. (PI) • At least 80% of PLC team members differentiate instruction based on common formative assessment data in order to target students' needs. (PI, D)	• At least 80% of PLC team members have high expectations for all students, and those are communicated clearly to students and parents. (PI, S) • At least 80% of PLC team members make collaborative decisions on essential learning outcomes, instructional strategies, and assessments, etc. (PI, D) • At least 80% of PLC team members consistently use common formative assessments several times per instructional unit to measure student learning and make instructional decisions based on the data to ensure learning for every student. (PI, D, S) • At least 80% of PLC team members collaboratively develop intervention strategies based on common formative assessments. (PI, S) • At least 80% of PLC team members create, implement, monitor and adjust SMART (specific, measurable, achievable, results-oriented and time bound) goals based on common formative assessment data. (PI, D)	Four (4) of the six (6) "Full Implementation" criteria have been met.

Additional right-column rows:

1
Emerging Implementation
One (1) to three (3) of the "Full Implementation" criteria have been met.

0
No Implementation
No "Full Implementation" criteria have been met.

Criteria	4 Deep Implementation	3 Full Implementation	2 Partial Implementation
Instructional Strategies (Continued)		• At least 80% of PLC team members collaboratively develop rubrics and collaboratively score student assessments using the rubric. (PI, S)	

	4	3	2
Criteria	**Deep Implementation**	**Full Implementation**	**Partial Implementation**
Professional Development **Score:**	**Everything in the full implementation category plus:** • Staff and whole-school professional learning needs are regularly and consistently identified through a needs assessment. (PI, S) • Job-embedded professional development opportunities (coaching, modeling and observing) is provided to staff at least three times a year. (PI, S)	• All members (100%) of the staff have participated in at least six (6) hours of professional development on professional learning communities: what they are and how they function. (PI, S, D) • At least 80% of staff members have participated in at least six (6) hours of professional development on analyzing data including student work. (PI, S, D) • At least 80% of staff members have participated in at least six (6) hours of professional development on effective instructional strategies. (PI, S, D) • At least 80% of staff members have participated in at least six (6) hours of professional development on developing assessments (formative and summative). (PI, S, D) • At least 80% of staff members have participated in additional professional development to support PLC teams. (PI, S)	Three (3) of the five (5) "Full Implementation" criteria have been met.
			1
			Emerging Implementation
			One (1) to three (3) of the "Full Implementation " criteria have been met.
			0
			No Implementation
			No "Full Implementation" criteria have been met.

	4	3	2
Criteria	**Deep Implementation**	**Full Implementation**	**Partial Implementation**
Leadership Practices **Score:**	**Everything in the full implementation category plus:** • Leadership, building and district, collects and analyzing cause and effect data to monitor PLC implementation effectiveness, at least 6 times a school year, and there is documented evidence that adjustments are made when necessary (PI, D)	• Building leadership communicates daily, through words and actions, high expectations for students and staff focusing on teaching and learning to ensure the success of every student. (PI, S)	Three (3) of the five (5) "Full Implementation" criteria have been met.
		• Building leadership regularly reviews and acknowledges PLC meeting records and agendas and gives feedback to PLCs/teachers. (PI, D)	**1**
			Emerging Implementation
		• Building leadership schedules monthly opportunities for PLCs to share data-driven successes and challenges. (PI)	One (1) or two (2) of the "Full Implementation" criteria have been met.
		• Building leadership provides the necessary supports for collaboration (i.e., time, high-quality professional development, teaming structures, etc.) (PI, D)	
			0
			No Implementation
		• Building leadership conducts classroom walkthroughs once every two weeks to monitor instructional decisions made by PLCs. (PI, D, S)	No "Full Implementation" criteria have been met.

<FCFORMSHEADER>
Message
Matt Minney <mminney@leadandlearn.com>

From: Matt Minney <mminney@leadandlearn.com>   August 6, 2010 1:25:00 PM
Subject: FW: doctoral dissertation work
To: Barbara Malkas
Attachments:
</FCFORMSHEADER>
Hello Barbara,

I wanted to follow-up with Doug's e-mail and send you the PLC Rubric you had
requested. It is attached to this e-mail- have a great weekend!

Regards,

Matt Minney
Director of Client Relations

The Leadership and Learning Center
317 Inverness Way South, Suite 150
Englewood, Colorado 80112

P) 303.504.9312 Ext. 217
F) 303.504.9417
T) 866.399.6019

MMinney@LeadandLearn.com
www.LeadandLearn.com

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-----Original Message-----
From: Douglas Reeves
Sent: Wednesday, August 04, 2010 10:00 AM
To: Barbara Malkas
Cc: Matt Minney
Subject: RE: doctoral dissertation work

        Thanks very much for your note. Our Director, Matt Minney, will send you
our PLC Rubric from our most recent Implementation Audit. Please let me know
your results.

Thanks.

Doug

Douglas B. Reeves, Ph.D.

The Leadership and Learning Center
225 Derby Street, Suite 503
Salem, Massachusetts 01970

Office: (01) (978) 740 3001, ext. 11
Fax: (01) (978) 740 3002
Cell: (01) (781) 710 9633
DReeves@LeadandLearn.com
www.LeadandLearn.com

Appendix C
Professional Learning Community Implementation Superintendent Interview Questions

Professional Learning Community Implementation Superintendent Survey Questions

1. How do you engage the district staff, school committee, and community-at-large in the district improvement plan goal setting?

2. What specific actions did you take to develop school committee alignment and support for systemic reform initiatives that are part of the district improvement plan?

3. What specific actions did you take to develop school committee alignment and support for implementation of professional learning communities?

4. What specific actions do you take to insure that resource allocation supports student achievement?

5. Marzano and Waters (2009) identified "defined autonomy" as an expectation by district leadership that building leaders will have site-based authority within the confines of non-negotiable district goals for achievement and instruction. In what ways do you support the 'defined autonomy" of the school leadership?

6. How do you hold building leaders accountable for explicitly and implicitly supporting the non-negotiable goals for achievement and instruction?

7. How do you use achievement data to measure progress toward attainment of non-negotiable goals?

8. In what ways do you model shared leadership within the district?

9. How long have you been a superintendent?

10. How long have you been in your current role?

Appendix D
Professional Learning Community Organizer

Professional Learning Community Organizer

Establishing Professional Learning Communities

School Phases of Development					
Administrator and Teacher Actions		**Initiation**	**Implementation**	**Institutionalization**	**Student Learning and School Improvement**
	Shared and Supportive Leadership	Nurturing leadership among staff	Shared power, authority, and responsibility	Broad-based decision making for commitment and accountability	
	Shared Values and Vision	Espoused values and norms	Focus of students High Expectations	Shared vision guides teaching and learning	
	Collective Learning and Application	Shared information Dialogue	Collaboration Problem-solving	Application of knowledge, skills, and strategies	
	Shared Personal Practice	Observation and encouragement	Share outcomes of new practice Provide feedback	Analysis of student work Coaching and mentoring	
	Supportive Conditions	Caring relationships	Trust and respect Recognition and celebration	Risk taking Unified effort to embed change	
External Relationships and Support **Central Office – Parents - Community**					

Huffman, J. and Hipp, K. (2003). *Reculturing schools as professional learning communities*. Lanham, MD: Scarecrow Press

Appendix E
Letter of Informed Consent – Superintendent

Letter of Invitation and informed consent

Dear Superintendent

I am writing to request your participation in a mixed method research study regarding the implementation of collaborative professional development in urban districts and district leadership actions that support the implementation. As part of this study, you would consent to an interview and completion of the Initiative Implementation-Professional Learning Communities (PLC) Audit Rubric developed by Douglas Reeves (2009), which will take approximately one hour of your time. In addition, your district instructional staff would be asked to complete the Professional Learning Communities Assessment (PLCA) survey, which would be provided to your staff in an electronic or print format and requires approximately 20 minutes to complete.

I am conducting this study to complete the requirements of doctoral research for the Sage College of Education located in Albany, New York. The title of the study is "The Urban District Leader and Systemic Implementation of Collaborative Learning Communities: A Mixed Method Study". While there is interest and a growing research base of building level leadership practices that support the implementation of collaborative learning communities in schools, there is limited research on the specific leadership activities at the district level that support systemic implementation of professional learning communities. This research proposal addresses the specific context of the urban district leader as an instructional leader through the implementation of collaborative learning communities. The intent is to add to the limited number of studies on the relationship between urban district leadership and implementation of systemic reform initiatives.

The complexity of the role of the urban district leader, and specifically those actions related to deep implementation of collaborative learning communities, requires the use of mixed-method research to provide sufficient detail to explain the impact of the district leader on the dynamics of implementation at the school and within the classroom. The selection of mixed-method research strategy for this study is to specifically identify leadership activities that lead to systemic implementation of collaborative learning communities as a reform initiative.

The minimal risk as a participant in the study will be limited. Based on demographic data of the district or the interview responses of the superintendent, the district leadership participant could be identified. In order to maintain the confidentiality of the participating superintendents, superintendent names will be altered to unrelated, pseudonyms. The districts each of these superintendents represents will also be altered to unrelated, pseudonyms. Any information obtained through this study that could identify individuals will remain strictly confidential and will be disclosed only with the permission of the participant or as required by law. Transcripts of the interviews will be provided to you for review for accuracy and a report of the statistical analysis of the cumulative survey data for the research project will be provided to you. This report may be of assistance to you in establishing district improvement goals and as a means of self-assessment of collaborative learning community implementation.

If you have any questions or concerns regarding this study please contact me at bmalkas@pittsfield.net or 413-499-9510.

The Sage Colleges Internal Review Board (IRB) has approved this research study and the researchers have met the requirements for conducting an ethical research study.

Your signature below indicates that you have read or have been read to all of the information provided in this letter and that you confirm the following:

- o The researcher has explained the purpose of the study to you and answered any questions that you have had. You have been informed of the potential risks and possible benefits to participation in this study.
- o You understand that you are under no obligation to participate in the study and your refusal to participate or a decision to withdraw will involve no subsequent loss of rights or benefits.
- o Your identity and the identity of the district you represent will not be disclosed as part of the research findings and your identity will be protected through the use of altered and unrelated pseudonyms.
- o All notes from the interview process will be kept on a password-protected laptop. Interviews will be recorded on a password protected recording device. Print copies of any notes will be kept in a locked file box.
- o The researcher may elect to discontinue your participation in the study at any time.
- o You understand how the study will be conducted and agree to provide access to your district staff through either electronic means or through print media.
- o You understand your rights as a participant and you voluntarily consent to participate in this study.
- o You will receive a report with the transcription of the interview, the qualitative and quantitative data analysis, and the research findings for your district.
- o You understand that you will receive a copy of the signed consent form for your records.

Signature of Participant _____

Printed Name of Participant _____

Date _____

I certify that I have reviewed the contents of this form with the named participant indicated above. I have explained the purpose, protocols, and instruments to be used, as well as any potential risks and possible benefits to participating in the study. To the best of my knowledge, the participant understands the explanation provided.

Signature of Researcher _____

Printed Name _____Barbara Malkas_____

Date _____

Appendix F
Survey Consent

You are being asked to participate in a survey research project entitled *The Urban District Leader and Systemic Implementation of Collaborative Learning Communities: A Mixed Method Study*, which is being conducted by Barbara Malkas, a student at Sage College of Education. The survey is the Professional Learning Community Assessment (PLCA). This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. It will take approximately twenty minutes of your time to complete.

This survey is anonymous. No one, including the researcher, will be able to associate your responses with your identity. Results of the survey will not be associated with your district and will be reported using unrelated pseudonyms for district names. Your participation is voluntary. You may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. Your continued employment is not contingent on your participation or completion of the survey. You must be a staff member of a school district to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are a school district staff member.

Questions regarding the purpose or procedures of the research should be directed to Barbara Malkas at 413-652-7238 or malkab@sage.edu. This study has been reviewed and approved by an Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants.

Appendix G
PLCA Survey Frequency Data

Table G.1

Shared and Supporting Leadership

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
1. The staff is consistently involved in discussing and making decisions about most school issues.	12.4	49.4	28.4	9.8	3
2. The principal incorporates advice from staff to make decisions.	19.0	49.6	20.3	11.2	3
3. The staff have accessibility to key information.	9.8	56.3	26.6	7.3	3
4. The principal is proactive and addresses areas where support is needed.	15.5	51.0	23.7	9.8	3
5. Opportunities are provided for staff to initiate change.	13.1	49.7	27.7	9.5	3
6. The principal shares responsibility and rewards for innovative actions.	15.8	53.3	22.6	8.4	3
7. The principal participates democratically with staff sharing power and authority.	11.5	46.5	28.1	13.9	3
8. Leadership is promoted and nurtured among staff.	15.1	47.4	26.4	11.1	3
9. Decision-making takes place through committees and communication across grade and subject areas.	16.4	48.5	27.6	7.4	3
10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	6.0	43.6	38.1	12.4	3
Average Frequency	13.5	49.5 (63.0)	26.9 (37.0)	10.1	3

Table G.2

Shared Values and Vision

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
11. A collaborative process exists for developing a shared sense of values among staff.	11.2	55.5	24.7	8.7	3
12. Shared values support norms of behavior that guide decisions about teaching and learning.	11.5	61.5	20.0	7.1	3
13. The staff share visions for school improvement that have an undeviating focus on student learning.	16.1	55.9	22.1	6.0	3
14. Decisions are made in alignment with the schools values and vision.	18.2	58.0	20.1	7.1	3
15. A collaborative process exists for developing a shared vision among staff.	14.1	51.0	27.0	7.9	3
16. School goals focus on student learning beyond test scores and grades.	17.3	52.2	21.5	9.0	3
17. Policies and programs are aligned to the schools vision.	13.9	63.0	19.9	3.2	3
18. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	7.9	45.2	34.3	12.5	3
Average Frequency	13.8	55.3 (69.1)	23.7 (31.4)	7.7	3

Table G.3

Collective Learning and Application

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
19. The staff work together to seek knowledge, skills and strategies and apply this new learning to their work.	17.1	66.4	13.4	3.1	3
20. Collegial relationships exist among staff that reflect commitment to school improvement efforts.	21.2	58.4	15.3	5.2	3
21. The staff plan and work together to search for solutions to address diverse student needs.	20.3	57.9	17.8	4.0	3
22. A variety of opportunities and structures exist for collective learning through open dialogue.	11.3	53.1	28.6	7.0	3
23. The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	13.2	61.7	20.8	4.3	3
24. Professional development focuses on teaching and learning.	15.7	56.4	21.3	6.6	3
25. School staff and stakeholders learn together and apply new knowledge to solve problems.	6.4	45.3	40.3	7.9	3
26. School staff is committed to programs that enhance learning.	25.9	65.5	7.2	1.4	3
Average Frequency	16.4	58.1 (74.5)	20.6 26.5)	4.9	

Table G.4

Shared Personal Practice

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
27. Opportunities exist for staff to observe peers and offer encouragement.	5.4	38.4	41.4	14.8	2
28. The staff provide feedback to peers related to instructional practices.	4.9	39.2	43.2	12.7	2
29. The staff informally share ideas and suggestions for improving student learning.	26.3	61.3	9.9	2.6	3
30. The staff collaboratively review student work to share and improve instructional practices.	8.6	53.2	30.6	7.6	3
31. Opportunities exist for coaching and mentoring.	14.1	58.1	22.1	5.6	3
32. Individuals and teams have the opportunity to apply learning and share the results of their practices.	10.3	60.0	23.6	6.1	3
Average Frequency	11.6	51.7 (63.3)	28.5 (36.7)	8.2	3

Table G.5

Supportive Conditions – Relationships

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
33. Caring relationships exist among staff and students that are built on trust and respect.	27.6	56.8	12.4	3.3	3
34. A culture of trust and respect exists for taking risks.	16.0	50.5	25.7	7.8	3
35. Outstanding achievement is recognized and celebrated regularly in our school.	15.5	51.0	26.0	7.6	3
36. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	9.0	43.5	38.2	9.3	3
Average Frequency	17.0	50.5 (67.5)	25.6 (32.6)	7.0	3

Table G.6

Supportive Conditions – Structures

Indicator	Strongly Agree	Agree	Disagree	Strongly Disagree	Mode
37. Time is provided to facilitate collaborative work.	11.5	48.9	25.9	13.6	3
38. The school schedule promotes collective learning and shared practice.	9.7	44.7	34.3	11.3	3
39. Fiscal resources are available for professional development.	5.7	53.4	31.4	9.5	3
40. Appropriate technology and instructional materials are available to staff.	14.9	55.9	21.5	7.8	3
41. Resource people provide expertise and support for continuous learning.	11.7	61.4	20.7	6.2	3
42. The school facility is clean, attractive and inviting.	20.4	42.0	24.2	13.4	3
43. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	14.2	61.6	18.7	5.5	3
44. Communication systems promote a flow of information among staff.	10.4	62.0	20.0	7.5	3
45. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	14.5	55.0	22.2	8.3	3
Average Frequency	17.0	50.5 (67.5)	25.6 (33.6)	7.0	3

Appendix H
Letter of Internal Review Board Approval