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THE PERCEPTIONS OF ADMINISTRATORS IN THE IMPLEMENTATION OF PROFESSIONAL LEARNING COMMUNITIES: A CASE STUDY IN AN OKLAHOMA SCHOOL DISTRICT

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Abstract

In January of 2002, President George Bush implemented the No Child left behind act that required all students to be proficient on state standards by the year 2014. One way a school district in Oklahoma met these new requirements was through the implementation of the principles of a Professional Learning Community.

This case study was designed to investigate the perception of elementary principals in implementing professional learning communities (PLCs) in one school district's school-wide initiative. The PLC program initiative was implemented in June of 2006 as a way to build collegiality and collaboration among the staff through discussions about student learning and best instructional practices. Two schools were selected based on specific criteria. Although both schools began implementing PLC principles at the same time, one was fully implemented and the other was still in the initial stages. The study assessed the perceptions of the elementary school teachers and principals through the use of the Professional Learning Community Assessment Revised (PLCA-R), individual interviews with two elementary principals, and document analysis. The five domains of the PLC- shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions –relationships, and supportive conditions-structures (Hord 1997, 2004; Huffman & Hipp 2003), were used as the framework to examine this case. Four additional themes that emerged from this study were student needs, principal's role, components for sustainability, and obstacles.

CHAPTER 1: Introduction

On January 8, 2002, President Bush signed the No Child Left Behind Act (NCLB) into law, which holds states, school districts, and individual schools accountable for student achievement with the ultimate goal of closing the achievement gap. Passage of the NCLB Act ushered into existence a new nationwide policy on public education. Before NCLB, accountability in schools had been left up to the state and local governments. After NCLB, the federal government set up parameters for the state accountability systems. The NCLB Act requires that states adopt a single statewide accountability system that annually tests all students in grades 3-8 in reading and mathematics. School leaders are held accountable for achieving a certain level of performance. The assessments are aligned with state standards for student learning. Performance measures are frequently combined with other outcome measures, such as graduation rates and attendance. States are required to produce report cards making school assessment data available to the public. Leaders whose schools fail to make yearly progress for two consecutive years are identified for improvement. NCLB gives parents the right to transfer their student to another public school or district, and after a year to receive supplemental services, if progress has not been made.

Another aspect of the NCLB legislation is the formal identification of the local school principal as the instructional leader of the school and the person held accountable for student achievement. Pressure on the school staff for this increased school accountability has defined today's schools in their everyday practices. Accountability has been a driving force in educational reform (Elmore, 2004).

With this increased accountability on leaders in school districts to have all of their students performing at a certain level of proficiency by 2014, as created by the passage of the No Child Left Behind Act of 2001, leaders are forced to examine their practices and to evaluate all aspects of instruction and student learning. In response to this challenge school leaders have embraced the principles of a professional learning community (PLC). A PLC is made up of collaborative teams whose members work toward continuous school improvement through collective inquiry and action research (DuFour, Dufour, & Eaker, 2006).

Research suggests that implementing a professional learning community can lead to increased student achievement (DuFour & Eaker, 1998; Hord, 1997; Louis, Marks, & Kruse, 1996; McLaughlin & Talbert, 1993; Newmann & Wehlage, 1995; Senge, 1990; Smith, Lee, & Newmann, 2001; Theissen & Anderson, 1999; Williams, Atkinson, Cate, & O'Hair, 2008). Louis and Marks (1998) also found that when a school is organized into a professional community, teachers set higher expectations for student achievement; students count on their teachers and peers for help in achieving their learning goals; the quality of classroom pedagogy is higher; and there is evidence of increased student achievement. Professional learning communities have been identified as a core component of successful school-wide improvement for several reasons: they function as an effective strategy for building school capacity around core issues of teaching and learning (Bryk, Camburn, & Louis, 1999; Louis, Marks, & Kruse, 1996; Newmann & Wehlage, 1995); they foster the democratic practices required to undertake and sustain fundamental, systemic change; they emerge as the most agreed-upon means by which to continuously improve instruction

and student performance (Schmoker, 2006); and they serve as a mechanism for transforming school culture. Implementing a PLC is a promising framework for professional growth and change (McLaughlin & Talbert, 2001; Lambert, 2007).

Professional learning communities refer to schools in which there are frequent interactions among teachers. Their actions are governed by shared norms which focus on the improvement of instruction and on learning (Bryk, Camburn, & Louis, 1999). Components of a successful school-based PLC include reflective dialogue, de-privatization, and peer collaboration (Bryk, Camburn, & Louis, 1999). Reflective dialogue among teachers about instructional practices and student learning is a key component of a PLC. Reflective dialogue upon professional practices leads to deepened understandings of the process of instruction. This reflective dialogue also promotes de-privatization of practice in which teachers move outside of their classrooms to share and observe each other's teaching methods and collaborate with their colleagues through strategies such as team teaching and peer coaching. Professional learning communities help address the problem of isolation, which is a major impediment in translating school reform into the classroom. Working in isolation, teachers have great autonomy with little oversight, their goals are individualistic, and rarely do they discuss their classroom instruction with each other (Fullan, 2001; Schmoker, 2005). To reduce autonomy, peer collaboration is encouraged. Peer collaboration is when teachers engage in actual shared work, and through collaboration, cooperative relationships develop. In a professional learning community teachers collaborate on school-wide improvement efforts, student data, and are held responsible for student learning and achievement. Teacher collaboration

gives teachers the opportunity to discuss instructional strategies and to share knowledge and skills from colleagues, resulting in improved instructional practice and increased content knowledge (McLaughlin & Talbert, 1993). Through collaboration there is better decision-making, greater trust and morale among adults, increased and energized adult learning, and higher teacher commitment (Fullan, 2003; Sparks, 2002); there is even higher motivation among students who are taught by teachers who share (Barth, 1990). Teachers are collectively responsible for student learning through regular team meetings for learning (King & Newman, 2001; Lee & Smith, 1996; Louis, Marks, & Kruse, 1996).

The promise for successful educational reform through PLCs leaves school leaders no choice but to follow the research and implement the principles of a PLC. The responsibility for the implementation of school reform and restructuring initiatives such as PLCs traditionally has been left up to the building administrator. Therefore, school leaders establish conditions that advance new ways of thinking and interacting to build professional capacity and school-wide commitment for a shared vision (Stoll, 2009). Leaders nurture interdependent thinking in an environment where all people are connected and valued. By creating professional learning communities that are competent, caring, and collegial, school leaders are able to maximize their resources and meet the growing demands of accountability. A review of the literature reveals that there has been substantial research on the principles of PLCs, but "While the term professional learning community has become commonplace the actual practices of a PLC have yet to become the norm in education" (DuFour, DuFour, & Eaker, 2008 p. 14). Notably there is a lack of

research on elementary principals' perceptions and understanding of PLCs and of the influence professional learning communities have on their behaviors as instructional leaders in implementing and sustaining a PLC. This lack of research is the focus of this study.

Problem Statement

Professional learning community research has shown promise in bringing about change, improving instructional practices, and increasing student achievement. Although there is much research on the principles of PLCs and their benefits, the research is difficult to implement. The problem is that school leaders perceptions, whether the leaders are principals or lead teachers; go unnoticed and un-researched, and their specific and individual needs remain unaddressed. In an effort to determine the ways that the dynamics of the larger reform initiative impact their lives, this study was designed to examine the principal's perception, understanding, and reflections of implementing and sustaining PLCs, which was part of a district systemic initiative to improve instruction and increase student achievement.

Purpose of the Study

This study addresses the gaps in the literature on the role of the principal and the principal's perception in implementing and sustaining a PLC. The purpose of the study is to explore the lived phenomenon of elementary principals who have developed and sustained PLCs and to offer new insights into this process. By revealing more about the principals' experiences, the information gained offers insights and illuminates new meanings that expand the reader's understanding, which

in turn may affect or perhaps improve practice within the district and the reader's context.

Research Questions

This study builds on and furthers existing research by examining a school-wide initiative of implementing and sustaining PLCs and the role of the principal in implementing and sustaining the PLC. Guiding this study were four research questions:

1. How do principals describe their experiences in the development of PLCs?
2. How do they describe their role in developing PLCs?
3. How do they implement and sustain PLCs?
4. What strategies do principals use to overcome barriers in the development of PLCs?

Definition of Terms

"Collaboration is a systematic process in which people work together, interdependently, to analyze and impact professional practice in order to improve individual and collective results" (DuFour, DuFour, & Eaker, 2008, p. 464).

"Collective Inquiry is the process of building shared knowledge by clarifying the questions that a group will explore together. In PLCs, collaborative teams engage in collective inquiry into best practices regarding teaching and learning as well as the reality of the current practices and conditions in their schools or districts" (DuFour, DuFour, & Eaker, 2008, p. 464).

District Wide School Reform is reform not limited to one classroom or one campus, but rather system-wide reform including all aspects of the district (Fullan, 2003).

The No Child Left Behind (NCLB) Act of 2001 is the federal reauthorization of the Elementary and Secondary Act and was originally passed in 2001. NCLB is built on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works based on scientific research (United States Department of Education, 2007).

A Professional Learning Community (PLC) is made up of collaborative teams whose members work toward continuous school improvement through collective inquiry and action research (DuFour, Dufour, & Eaker, 2006).

Site Improvement Plan (SIP) is an effective school improvement planning process which allows schools to develop a strategic and continuous plan that focuses on quality education and high levels of student achievement.

Assumptions of Study

The following assumptions were made for this research study:

The respondents to the questionnaire, who were administrators or teachers in a school district in a Midwestern state during the 2008-2009 academic year, were honest in reporting their perceptions of the development of PLCs in their school.

The participants were willing to discuss their perceptions of implementing PLCs through a questionnaire survey and interviews. The participants' answers in the interviews and surveys were as complete as possible and were completed to the best ability of those who participated.

Chapter Summary

No Child Left Behind requires schools to be formally accountable for all students to succeed. For school districts and their leaders this means the school is the unit for the delivery of education and is the place where teachers and administrators are held accountable; schools are accountable for student performance on standardized achievement tests; student performance is evaluated against externally set standards that define acceptable levels of student achievement as mandated by states; and evaluation of school performance is accompanied by a system of rewards, penalties, and intervention strategies for the low-performing schools (Elmore, 2004). The principal's leadership is the key in maximizing teachers' and students' success in meeting these accountability standards. One way that shows great promise in meeting these accountability standards is through implementing PLCs. The responsibility of implementing a PLC falls to the administrator of the building. Research shows that the principal's leadership continues to be identified as the key factor in the success of a PLC (DuFour & Eaker, 1998; Huffman and Hipp, 2003; Sergiovanni, 2001). The principal's leadership also plays a significant role in large-scale educational reform (Fullan, 2002; Marzano, Walters, and McNulty, 2005).

This study used a conceptual framework associated with PLCs and examined the role of the principal in the implementation of a PLC. Research has shown that implementing a professional learning community improves teacher collaboration and student achievement. Other benefits are better morale, higher teacher commitment supported teaching practices, and improved instruction(Barth, 1990; Fullan 2003; Hord, 1997), reduction of isolation of teachers, collective responsibility for students'

success, lower rates of absenteeism, and higher likelihood of undertaking fundamental systemic change (Hord, 1997; Schmoker, 2005)

Organization of the Study

Chapter 1 presents the problem and the purpose of the research, and outlines the significance of the study as well as the conceptual framework that the school district used to implement a PLC. Chapter 2 provides the background for the study by examining the literature on PLCs, leadership in PLCs, and sustainability of PLCs. The literature highlights the complex nature of implementing PLCs, the role of the principal in this process, and the issues and benefits surrounding principals as they make their journey through creating and sustaining PLCs.

Chapter 3 focuses on the research methodology and on the population under study, while providing support for limiting the study to one school district. For this research, case study methodology was used. The data was collected through the use of a survey, individual principal interviews, and document analysis. This data was used to answer the research questions. The method chosen to evaluate the level of implementation for a PLC was through the use of the Professional Learning Community Assessment-Revised Survey (Olivier, Hipp, & Huffman, 2008). This quantitative data was used to determine the level of implementation of the PLC based on a Likert scale. The survey was broken down into five dimensions based on Hord's (1997) research. The five domains are shared supportive leadership; shared values and visions; collective learning and application of the learning; shared personal practices; and supportive conditions, structures, and relationships. The data was also used to determine which principals would be interviewed for this study.

The principal interviews were a source of data that was used to measure the factors the principals perceived as having impacted their efforts in implementing and sustaining a PLC. Analysis of the data was coded and themed to investigate the successful and not-so-successful implementation of a PLC. Document analysis was used to support the findings. The survey information, interview protocols, and document analysis for this study are discussed in detail in Chapter 3.

Chapter 4 includes the findings of the PLCA-R survey, along with the interviews and document analysis. The research questions are restated in addition to the themes and document findings. The findings in this chapter are organized based on the themes that emerged. Chapter 5 includes a research summary, findings of the study, interpretation of the themes, recommendation for practice, suggestions for further research, and conclusions based on the findings.

CHAPTER 2: Literature Review

The purpose of this chapter is to review the literature on professional learning communities (PLCs), which provided the framework for this research study. The idea of a PLC emerged from both business and educational settings (Schmoker, 2005). It had the most promise in bringing about systematic reform in schools (Dufour & Eaker, 1998) and it has become the supporting structure for schools to continuously transform themselves through their own internal capacity (Leithwood & Louis, 1998, Stoll, 2009).

Three major areas of literature are explored in this chapter, including:

- A review of research defining and exploring the development of PLCs as a strategy for educational reform in improving teacher effectiveness and improving student learning.
- An examination of the role the principal plays in successfully implementing a PLC.
- The sustainability of PLCs.

These three areas of the literature provide a rich context for framing the study and addressing the problem described in Chapter 1.

Defining and Exploring the Professional Learning Community

Reviewing the current literature on PLCs in schools resulted in numerous characterizations of the term. According to Stoll and Louis (2007),

> There is no universal definition of a professional learning community, but there is a consensus that you will know that one exists when you can see a group of teachers sharing and critically interrogating their practice in an

ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way. (Mitchell & Sackney 2000; Toole & Louis 2002, p. 2)

Professional learning communities started to become more defined in the early 1990s. Peter Senge (1990) promotes the idea of learning organizations made up of people who works together to get the results they desire and who learn together in the process. His ideas on learning organizations were accepted into the educational setting and the term *learning communities* was recognized (Hord, 2004). Senge concluded that successful organizations focus on learning. In 2000, Senge provides an even more in-depth review of his learning organizations through his five disciplines, which are; personal mastery, mental models, shared vision, team learning, and systems thinking. He suggests that for schools, which are facing change, it is crucial to create and implement PLCs.

Hord's (1997) studies are rooted in the research of many organizational theorists. Based on the synthesis of these researchers, Hord refined her work into a set of five related dimensions that defined the essence of a PLC. She emphasizes a learning organization as one that focuses on continuous inquiry and improvement. The five dimensions identified by Hord (1997) are; supportive and shared leadership, shared values and vision, collective learning and application of that learning, shared personal practice, and supportive conditions.

Many of the same characteristics of PLCs that are referenced by Hord (1997, 2004) are supported by Little (1993), Kruse, Louis, and Bryk (1995), McLauglin (2001) in their research, but they add reflective dialogue, de-privatization of practice, professional growth, mutual support, and mutual accountability as other important

components for developing a PLC. Kruse, Louis, and Bryk (1995) additionally found that PLCs lead to increased classroom motivation and teachers having a more positive attitude towards work. In 1998, Kruse and Marks did an intensive study of 24 schools that confirmed that schools operating as PLCs where teachers worked together productively and developed positive relationships had a significant impact on both classroom instruction and on student achievement. Andrews and Lewis (2007) also found that when teachers develop a PLC it enhances their knowledge base and has an impact on their classroom practices.

Newmann and Wehlage (1995) reported on their research of over 1,200 schools that schools who engage in a collective effort to achieve a clear, commonly shared purpose for student learning create a collaborative culture, and take collective responsibility for student learning. These schools are also associated with higher levels of student achievement.

In the Leithwood, Jantzi, and Steinbach (1998) study of organizational learning, they identified areas of transformational leadership which included (a) leadership, (b) high performance expectations for students, (c)a mission and vision that build consensus about school goals, and (d) structures that support a culture of shared decision-making.

DuFour (1998), and DuFour, DuFour, and Eaker (2008) described a school operating as a PLC as a place that reflects a shared mission (purpose), values (collective commitments), and vision (clear direction), the faculty also value collective inquiry (best practices) and collaborative teams (focused on learning), and are action orientated (learning by doing), continuous improvement, and results

oriented. DuFour, DuFour, and Eaker (2008) further identified three "big ideas" to guide the work of PLCs. They are a focus on learning, a culture of collaboration, and a focus on results. They state that PLCs should identify and pursue measureable, result-oriented goals and evaluate their success in meeting these goals through evidence of student achievement.

In the Stoll, Bolam, McMahon, Wallace, and Thomas (2006) review of the literature on PLCs, they identify three additional characteristics as being important to the development of PLCs. They are mutual trust, inclusive school-wide membership, and outside networks for learning. Mutual trust affects students' engagement because teachers feel more comfortable in taking risk when discussing students (Bryk & Schneider 2002). Stoll, et al. concludes that a PLC should be all-inclusive. According to Huffman (2001), more mature PLCs involve all stakeholders. A networked PLC has the potential for closer cooperation between schools and between their communities (Bolam & et.al 2007)

Some of the most commonly referred to researchers on PLCs and their ideas are illustrated in Table 1.

Table 1

Comparison of Noted Researchers in PLCs from 1998-2008

Kruse, Louis and Bryk (1995)	Newman and Wehlage (1995)	DuFour, DuFour, and Eaker (1998, 2004, 2008)	Leithwood, Jantzi, and Steinback (1998)	Senge (2000)	Hord (1997, 2004, 2008) Huffman & Hipp (2003, 2008)
Collaboration about effective instruction	Collaboration	Collaborative teams	Leadership	Improving team learning	Shared and Supportive leadership
Shared norms and values	Clear and shared purpose	Shared mission, vision, values	Mission, vision, school culture	Building a shared vision, systems thinking	Shared values and vision
Reflective Dialogue between teachers	Collective responsibility for school learning	Collective inquiry		Personal mastery, creating mental models	Collective learning and application of learning
De-privatization of practice					Shared personal practice
			Decision-making structures		Supportive conditions-relationships
			Strategies for change		
		Action oriented			Supportive conditions-structures
Sustained focus on student learning		Continuous improvement			
		Results orientation			

These PLC frameworks share common characteristics, reflecting a place where teachers learn best by sharing ideas, working collaboratively, evaluating each others' instructional practices and reducing isolation (O'Hair, McLaughlin, & Reitzug, 2000). PLCs have the potential to allow organizations or schools to focus on student

learning through the use of assessment data to evaluate progress over time (DuFour, DuFour, Eaker, & Many, 2000; Giles & Hargreaves, 2006; Newmann, King, & Youngs, 2000; Newmann & Wehlage, 1995). The most common theme that developed is that a PLC is the structure or framework set in place to help schools become places of continuous learning. A PLC is the most promising context for professional growth and change (McLaughlin & Talbert, 2001) and, in turn, for improving teacher instruction (Hargreaves & Fink, 2006).

PLCs support learning organizations so that they are "capable of productively responding, not only to such current initiatives in today's environment, but to the needless number of initiatives, including new definitions of school effectiveness that inevitably will follow" (Morrissey, 2000, p. 10). Professional learning communities are also characterized by many of the same attributes associated with high quality professional development (Hord, 1997; DuFour & Eaker, 1998; Hargreaves, 2003; Schmoker, 2006; Fullan et al., 2006). They shift the notion of professional competence from individual teacher expertise to professional community expertise. They foster a collective sense of responsibility for students' progress (Strike, 2007) and are inherently job-embedded and team-based (Darling-Hammond, 2001). Professional learning communities require a community of learners to strive for higher levels of learning for all (Sparks & Hirsh, 1997) and are embedded in school-wide goals for student learning specific to the school community (Darling-Hammond, 2001). The most successful schools are those that find a way to guide the staff toward a clear, commonly shared purpose for student learning and create opportunities for teachers to collaborate and take collective responsibility for student

learning. Schools with strong professional communities are more effective in promoting student achievement (Hord 2004, Hord & Sommers 2008, Newmann & Wehlage, 1995; O'Hair, McLaughlin, & Reitzug, 2000).

After various researchers' characterizations of professional learning communities were reviewed, Hord's (1997) model, which reflects the work of several researchers, was used as the conceptual framework for this study. Studies of individual schools that improved student achievement were noted as having developed Hord's five dimensions of a PLC (Hord, 1994, 1997, 2000, 2001; Huffman & Hipp, 2003; Hord & Sommers, 2008; Morrisey, 2000). A professional learning community operates along five dimensions: (a) supportive and shared leadership, (b) shared values and vision, (c) collective learning and application of learning, (d) shared personal practice and (e) supportive conditions (relationships and structures) (Hipp & Huffman, 2002; Hord, 1997, 2004, 2008; Huffman & Hipp, 2003). These five dimensions worked interdependently together. Even though each dimension impacts the other, they are discussed separately.

Shared and Supportive Leadership

A key element of a PLC is supportive and shared leadership (DuFour et al., 2004; Hipp, Huffman, Pankake, & Olivier, 2008). Shared leadership empowers the stakeholders to make decisions on behalf of the PLC. School administrators participate democratically with teachers, sharing power, authority, and decision-making (Sergiovanni, 2005). According to Fullan (2006), the more leaders build the collective capacity of teachers with good school leadership, the more likely schools are to see parents and communities as part of the solution.

In a PLC, administrators are seen as leaders of leaders (DuFour & Eaker, 1998). The staff is learning together and participating in decisions that affect student learning and is sharing leadership responsibilities (Hord, 1997). Sharing leadership responsibilities is more than delegating everyday school responsibilities; it is the interactions of leaders, followers, and their situation (Spillane, 2006). Leithwood (2007) offers these thoughts on shared leadership: "School leadership has a greater influence on schools and students when it is widely distributed. And school leaders improve learning indirectly and most powerfully through their influence on staff motivation, commitment, and working conditions" (p. 3). Distributing leadership responsibilities enables a school to draw on the collective wisdom of many in addressing school issues. Marzano, Water, and McNulty (2005) and Spillane, Halverson, and Diamond (2001) describe distributed leadership as an interactive web of leaders and followers who change roles as the situation warrants. Distributed leadership implies shared responsibility and mutual accountability toward a common goal or goals for the good of an organization. Distributed leadership is not a "program" or a "model." It is a condition that can be enabled and sustained through the PLC. Distributed leadership is important because it creates conditions for maximizing the collective strengths of all individuals within a coherent group that strives to learn and grow. It is important because the principal cannot do it all. Lambert (2002) believes that it is no longer possible for one administrator to serve as the instructional leader for an entire school without the substantial participation of other educators. Leadership is the professional work of everyone in the school. It requires each person to assume responsibility and take action for the good of the

whole (Leithwood & Mascall, 2008). Many researchers agree that leadership needs to be distributed across the school community (Elmore, 2004; Lambert, 1998; Sergiovanni, 2005). Professional learning communities are one way to accomplish this.

Shared Values and Vision

In a PLC, shared values and vision answer the questions of the what, why, who, and how of the community (Senge, 2006). A strong, focused leader provides the direction needed to develop the what, why, who, and how related to the school's shared values and vision (Huffman, 2003). Vision is an essential component of a PLC. It is the driving force of all school reform (Hord, 2004; Eaker et al., 2002). According to DuFour and Eaker (1998), the vision reflects what we want our students to achieve. The purpose is the mission, or the why we are here. Values describe how we want to act to reach our mission. Hord (2004) defines shared values and vision as the shared mental image of what is important to the organization and its members. A shared vision is "a force in people's hearts, a force of impressive power" (Senge, 2006, p. 192), and developing a shared vision is an ongoing daily process. Leaders build a vision of a student-centered community of care based on strong relationships, mutual respect, the importance of family, and of achieving balanced personal and professional lives (Sergiovanni, 2005).

Collective Learning and Application of Learning

Collective learning is based on the teachers' learning and the actions they take, based on their new knowledge, to affect student achievement (Huffman & Hipp, 2003). These collaborative relationships built on trust can encourage teachers to find

unique solutions to problems, build relationships between teachers and the principal, and strengthen their commitment to group goals (Morrissey, 2000). The teachers who work in this type of environment move from procedural staff meetings to productive meetings where they evaluate what is important in curriculum, instructional best practices, assessment data, and the school's culture. These groups tend to set higher standards and as a group took responsibility to ensure high levels of achievement for all students (Louis, Marks, & Kruse, 1996; Newmann & Wehlage, 1995; Printy, 2008). Teachers working collaboratively build trust in each other and built their self-confidence in taking risk and trying new instructional techniques (Huffman & Hipp, 2003; Leithwood, 2007).

Shared Personal Practice

Part of creating a PLC is to move beyond a community of individuals learning to create a network of learners (Carroll, 2000). This process requires mutual respect and trustworthiness to be established among staff members. This culture fosters an environment in which teachers find help and support from their colleagues. Peers review and give feedback on teacher instructional practices to increase individual and organizational capacity. The collective is committed to the work of increasing student learning. In a PLC, teachers are encouraged to share their experiences and instructional practices and to collectively solve problems through sharing knowledge and receiving support through mentoring, and coaching (DuFour & Eaker, 1998; Newmann & Wehlage, 1995). When teachers worked collaboratively, they are more likely to take risks to make improvement when supported by their administrators (Camburn, Rowan, & Taylor, 2003).

Supportive Conditions: Relationships, and Structures

Supportive conditions are structures that reinforce the vision of the school and the learning community (Morrissey, 2000; Williams, Atkinson, Cate & O'Hair, 2008). DuFour and Eaker (1998) and Hord (1997), first stated that two types of conditions are necessary to build effective PLCs: people capacities or collegial relationships and the physical or supportive structures that sustain the PLC. However, in 2004, Hord changed the wording to *human capacities* and *physical or structural factors*. Structural conditions include use of time, and opportunities to communicate and plan collectively. Principals support PLCs by providing teachers with blocks of time devoted to sharing their most successful instructional practices (Leithwood & Janzi, 1990). The collegial relationships include shared vision, sense of purpose, trust, and positive caring relationships.

Implementation Phases of a Professional Learning Community

Identifying what dimensions are present in a PLC determines the level at which the school is functioning and assists principals in diagnosing the strength of their current PLC. Principals devise a plan of action to improve based on their mission, vision, and goals. Fullan (1990) describes three phases of change in a PLC. Phase I, initiation, involves the process leading up to and including the decision to adopt a change. Phase II, implementation, involves putting the change into practice. Phase III, institutionalization, involves an ongoing process in which the innovation becomes part of the system. DuFour, DuFour, and Many (2006) use a four-level continuum to describe the maturity of a PLC. These levels range from pre-initiation, in which the school is not functioning as a PLC, to sustaining, in which the PLC is

deeply embedded in the school's culture and is the driving force in the school's daily operations. Implementing and sustaining a PLC is a process that takes time. The ability of administrators to identify their current school's level of implementation assists them in adding additional supports and structures to insure the success and sustainability of a PLC.

Principal Leadership in a Professional Learning Community

The leadership in a school ensures the success or failure of a PLC (Fullan, 2008). The role of the principal in a PLC is important in that the principal must provide support and resources and put structures in place to promote continuous learning (Leithwood et al., 2004). It is important to note that leadership is the second most significant school-related factor that impacts student learning; classroom instruction is first, and the effects of leadership are frequently prevalent in settings where the needs are greater (Leithwood, 2007).

Leaders contribute to student learning indirectly, through their influences on the learning organization. They look for ways to support teachers and stress effective practices. One way to accomplish this task is to implement a PLC. In order for school districts and school administrators to implement a PLC a paradigm shift must occur in which teachers move from having autonomy to collaborating and working interdependently to achieve a common goal (Fullan, 2006). Research suggests that improved student performance can only occur when faculties function as teams and discontinue working in the traditional setting of isolation and individualism (Carroll, 2000; DuFour, DuFour, Eaker, & Karhanek, 2004; Fullan, 2001; Lambert, 1998; Speck, 1999, Schussler, 2003). An important task of the principal is to create a

culture where teachers view one another as equals. They respect one another, and one another's choices and cultures (Fullan, 2008; Strike, 2007). As Elmore (2000) states:

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

The principal's job then is to create a culture that works daily on purposeful, continuous learning. Principals who establish collaborative cultures generate greater student learning (Fullan, 2008).

In Morrissey's (2000) research, she found that one of the prominent aspects of the PLC is the role of the principal. Morrissey (2000) found that successful PLCs have principals who share decision-making with teachers on substantive issues and regard them as leaders in school improvement efforts. They develop and facilitate organizational structures for teachers to participate in decision-making, and they implement systems for obtaining input from a broad spectrum of the professional staff on a regular basis. It is clear that schools where principals disperse power, invite input into decisions, and nurture the capabilities of all staff to focus on a common vision are more likely to achieve their goals.

Principals also develop the capacities of others, so that direct leadership is no longer needed (Sergiovanni, 1992). This is achieved through team building, leadership development, shared decision making, and striving to establish the value of

collegiality (Huffman & Hipp, 2003). Another finding in Morrissey's research is that principals provide the conditions and resources needed to support the staff in collaboration and in continuous learning. The principals develop partnerships with external entities so that their school staffs have professional contacts outside of the school and district. Principals encourage collaboration among the staff by providing time for teachers to meet and discuss issues related to school improvement. The school leader provides support through embedding professional development to ensure the faculty and staff are aware of the most current theories and practices regarding effective schooling and makes discussions of those theories and practices a regular aspect of the school's culture (Marzano et al., 2005). The focus in the classroom shifts from teachers teaching to learners learning and from students as passive recipients to active creators of knowledge (Condie & Livingston, 2007). Principals promote and encourage communication among the staff. For this to be successful, an effective leader builds and supports a culture that positively influences teachers, who, in turn, positively influence students. The nature of relationships among the adults within a school has a greater influence on the character and quality of student accomplishment than does anything else (Barth, 2006). The principal's encouraging teachers to take ownership in instructional improvement matters because it provides a foundation for teacher leadership (Seashore, 2009; Wahlstrom and Louis, 2008). The principal's actions are significant in the development and sustainability of a PLC (Hord & Sommers, 2008). According to Dufour and Eaker (1998), Huffman and Hipp (2003), Sergiovanni (2001), principal leadership continues to be identified as the key factor in the success of professional learning communities.

Systemic Reform and Sustainability

Large-scale reform advocates such as Richard Elmore, Deanne Burney, Michael Fullan, and Ben Levin implemented a more coordinated system-wide systemic reform to find ways to develop the capacities of their teachers and to increase student achievement. According to Hargreaves (2009)

> This model of district-wide change developed a clearer, stronger and more pedagogically constructive focus on instruction backed-up by high quality materials, a network of high-quality instructional literacy coaches (many of them imported from Australia), a concentration on turning principals into instructional leaders who were also required to discuss their learning and difficulties together, a system of monitoring and inspection using administrative "walk-throughs," and a clear link to transparent test-score results. (p. 91)

For school districts to be successful in implementing systemic reform, significant support and structures had to be put into place. Systemic reform occurred at all levels and involved all members as co-collaborators. It involved transforming the system in a way that the conditions and capacity for continuous improvement became integrated within and across all levels (Fullan, 2003, 2009).

At the school level, the leadership created an environment of continuous learning; developed the capacity of teachers to assume leadership roles; and promoted strategies for teachers to become lifelong learners. At the district level it became more about managing the resources necessary to create conditions for learning at the school levels, rather than attempting to improve the performance of schools by

mandating them to improve (Elmore, 2007). Additionally, in Fullan, Bertani, and Quinn's (2004) research on school districts implementing systemic reforms, they identified major components that were interdependently linked and contributed to school districts' success. They found that district administrators built a cadre of leaders who worked towards the vision and put it into practice. The leaders fostered a high engagement with others in the district and had two-way communication that deepened shared ownership and commitment. Everyone shared responsibility for changing the larger education context for the better. District leaders promoted a culture in which the school principals were concerned about the success of every school in the district and not just their own district. However, district leaders had to be careful because competition among schools within school districts led to counterproductive behaviors. It undermined interdependence, trust, and loyalty. Thus, district leaders who encouraged an identity that goes beyond one's school identity made overall district wide improvement more likely. Like distributive leadership within a school, large-scale reform required leadership with a team of people who pursued a collective vision. Developing leadership capacity helped to carry on the vision and goals as superintendents, principals, and teachers moved on to other districts or retired.

Elmore (2000) identified five guiding principles in his research that were used to implement large-scale improvement. The schools maintained a tight instructional focus sustained over time; routinized accountability for practice and performance in face-to-face relationships; reduced isolation and opened up practice to direct observation, analysis, and criticism; exercised differential treatment based on

performance and capacity, not on volunteerism; and increased discretion base on practice and performance.

The first principle was to maintain a tight instructional focus sustained over time. This message came from school board members, superintendents, principals, and teachers. Elmore (2000) also suggested that school districts start with a single instructional area and achieve a high standard of performance before adding another area. This approach not only improved performance and practice, it taught the organization to think and act towards continuous improvement.

The second principle was to routinize accountability for practice and performance in face-to-face relationships. In other words the schools worked collaboratively in a professional learning community to build a strong normative environment in which the whole was responsible for best teaching practices that increased student learning. For this to occur, the organization had to internalize expectations and be held accountable for the implementation of this principle (Elmore, 2000). Principals who kept the vision of what the school was striving to become at the forefront had higher expectations, and these expectations were communicated to the teachers. Sub-par performance (in terms of student learning results) was not acceptable to the principals, and high expectations were modeled throughout the school day (Morrissey, 2000).

Thirdly, the schools reduced isolation and opened up practice to direct observation, analysis, and criticism. System-level administrators established a culture of trust in which they moved among schools and classrooms easily while focusing on teachers' practices and providing meaningful constructive feedback. The purposeful

feedback was centered on collaborative conversations about instructional practice and student achievement (Elmore, 2000). The school principal was responsible for helping with system cohesion by building relationships with district leaders and connecting the goals of the system as a whole while sustaining a professional learning community that included not only their school but other schools in the district (Fullan, 2008). Within PLCs, for example, leadership activity took place at the level of the community rather than at the level of individuals (Sergiovanni, 2005).

The fourth principle was to exercise differential treatment based on performance and capacity. The administrators acknowledged difference among communities, schools, and classrooms within a common framework of improvement. Each individual school was responsible for analyzing its student data and developing a plan of action to reach the districts vision of student performance. They did this by engaging in "differential treatment of high and low performing schools, varying both the content of their professional development and their process by which they deal with schools, depending on how well a given school is doing on instructional quality and performance" (Elmore, 2000, p. 33). According to Lambert (2007), broad-based participation means involving many people such as district level and building level administrators, teachers, parents, and students. Growth in individual capacity brought about change and new behaviors emerged. Teachers viewed themselves as being responsible for their classrooms as well as the school. Some form of differential treatment, based on judgments of quality and performance, seemed to be a requirement of large-scale improvement. Differential treatment made sense when it was embedded in a set of clear expectations and standards of learning that applied to

all schools, teachers and students as long as they followed the system-wide comprehensive plan and framework for continuous improvement (Elmore, 2000).

The final principle was to delegate responsibility based on practice and performance. Fullan (2008) refers to this as "purposeful peer interaction." It became the job of the leader to provide good direction and to connect peers with a purpose. The interaction was characterized by high-capacity knowledge and skills (Fullan, 2008). According to Fullan (2008), "The continuous development and flow of knowledge is the intellectual lens that focuses the work on effective practices" (p. 49). The organization became effective because leaders were investing in their staffs, and this investment increased their individual and collective commitment to their work.

In their research, Hargreaves and Fink (2006) lay out a framework for shaping the capacity of school systems to engage in continuous improvement, which supports the findings of other researchers. They maintain that "sustainable educational leadership and improvement preserves and develops deep learning for all that spreads and lasts, in ways that do no harm to and indeed create positive benefit for others around us, now and in the future" (p. 17). Their seven principles of sustainability offer solutions to systemic change and leadership. They are depth (sustained leadership matters), length (sustained leadership lasts), breadth (sustained leadership spreads), justice (sustained leadership does no harm to and actively improves the surrounding environment), diversity (sustained leadership promotes cohesive diversity), resourcefulness (sustained leadership develops and does not deplete internal and human resources), and conservation (sustained leadership honors and

learns from the best of the past to create an even better future) (Hargreaves & Fink, 2006).

Fullan (2003) suggests that for there to be sustainability in large-scale reform, districts had to establish the conditions for continuous reform. His research built upon his previous work and additionally he found that the eight lessons for change had three distinguishing characteristics: they were action oriented, they addressed large-scale reform, and they focused on sustainability. The eight lessons worked together to create change. The first two lessons of change for school districts to acknowledge are that the pace of change will not slow down and that the reform initiative must be protected. The fast pace of change caused mistrust and stress among the faculty. Administrators worked to help teachers cope with the pace of reform by aligning the mission and goals set forth by the district, and by working on coherence-building and reducing distracting requirements. Coherence making was never-ending and was everyone's responsibility. This was crucial for large-scale reform and sustainability. The lesson was for leaders to stop implementing piecemeal reform and create new policies and strategies that enabled people to enlarge their own worlds in order to provide meaning for their work in a larger perspective. Administrators promoted the "big picture" all the time.

The third lesson was changing the context, which were the existing conditions in which schools operate. Changing the context resulted in new behaviors. If there was something they wanted changed, they named it, gave it value, created supports that caused it to happen, and had a low tolerance for people who didn't follow through. Fullan (2003) states,

> The power of context is historically seen as a forceful constraint. In the new age the power of new contexts is treated deliberately as a necessary agent of change. Once people realize the change potential of context, and begin to direct their efforts at changing it, the breakthroughs can be amazing. (p. 28)

The power of context implies that human beings were sensitive to their environment (Gladwell, 2000). Small changes in the environment had huge effects. Professional learning communities provided for new context, which created the tipping points for change.

Lesson four in implementing change was not to use an off the shelf solution for a complex problem. "Premature clarity" could be dangerous (Fullan, 2003). When schools were faced with solving a problem, leaders resisted the urge to solve the problem by providing clarity from the top down, and helped the organization to struggle through the process of complex problem-solving toward shared solutions and collective responsibility and consequences. Sustainability involved the people in the organization working together to solve problems.

There was also the need for transparency within the organization. Organizations had to be clear about the information they shared with the public. In this day and age of accountability, the public demands evidence that was objective and measurable and demonstrated student achievement. Fullan (2008) insists that "There should be a clear and continuous display of the results, and clear and continuous access to practice (what is being done to get the results)" (p. 12).

Researchers such as Elmore, Hargreaves, Fink, and Fullan conclude that for large scale sustainability, high quality teachers are essential and leaders and teachers

working together focusing on student achievement is critical (Fullan, 2009). All four researchers essentially incorporated the same core principles of a sustainable PLC into their sustainable system wide reform. Fullan (2008) adds that large-scale reform was not achieved through a bottom-up approach; it took both top-down and bottom-up approaches. Large-scale reform was successful when the strategies for the initiative were top-down and the capacity building was bottom-up. Fullan (2008) states, "Capacity building entails leaders investing in the development of individual and collaborative efficacy of a whole group or system to accomplish significant improvements" (p. 13). Schools worked on capacity building by attracting talented people and then continued to develop them individually and collectively on the job (Fullan, 2008).

Culture of Change. Implementing a PLC can cause a school to go through a cultural change. Change is difficult because it challenges people's beliefs and values. When people believe they are doing something worthwhile, they are more willing to put in the effort to make the change. According to Gladwell (2000),

> If you want to bring about fundamental change in people's belief and behavior, a change that would persist and serve as an example to others, you need to create a community around them, where those new beliefs could be practiced and expressed and nurtured. (p. 173)

People needed to work together on quality knowledge and develop trust in each other through purposeful sharing of this knowledge. Fullan (2003) states that this was even more powerful than a moral purpose because people felt loyal to each other and had developed quality relationships.

The final lesson in Fullan's (2003) research, with which Elmore (2000), and Hargreaves and Fink (2006) agree, is the importance of having an effective leader who builds endurance and sustainability into the organization. Leadership is crucial to fostering conditions necessary to create new tipping points. Fullan (2003) recommends that there is a need for many leaders at many levels. Sustainability in organizations is the way in which they constantly generate leadership and commitment at all levels by nurturing the purpose and passion of all members in the organization.

According to Fullan (2003), there was not an exact way to accomplish sustainability or system transformation because it had never been done successfully. However, there was enough theoretical argument and instances of strategic evidence to build on. Fullan (2003) suggests that "we need a new generation of policy initiatives and grand experiments (inquiry-based with corrective mechanisms as we go), which were designed to produce much greater yields than even our best current large-scale reform efforts" (p. 34). Large-scale reform meant that administrators had to change the system if they wanted to go the distance. Administrators became more open to considering different alternatives, and it was essential to build ownership at all levels of the system to ensure sustainability.

Challenges in Systemic Reform. It was important to consider when initiating systematic reform that setbacks are to be expected when implementing change. Elmore (2007) suggests that learning organizations should be aware that schools go through different phases when implementing systematic reform. These

phases are initiative overload; middle phase, when practitioners are suspicious; and increased variability among schools.

Initiative overload occurs when a staff views a new initiative as a separate project or program instead of a piece of a steadily developing, coherent strategy of improvement. Elmore (2007) states that

> In a culture that is trained to view initiative from the top as unwarranted interruptions of the "real" work, it takes time for people to adjust to the idea that there might be a coherent storyline or narrative behind the various framework . . . The key element in this transformation is consistent modeling, engagement, and listening between the leadership of the system and on those who carry the strategy at the school and classroom level. (p. 4)

In order to counter act initiative overload, the leaders protected the mission and vision of the school and kept it in the forefront of the staff members' minds. The principal supported the reform and built trust among the staff.

In the middle phase, teachers were conditioned by their experience to be suspicious of ideas that came from outside their local context, and they seemed to be disconnected from their own experiences. The key was to create a common culture of leadership across the system and to model the desired activities. Sustaining and building on these early developments was critical to the success of the systemic reform (Elmore, 2007).

The third challenge in systemic reform was that "large scale improvement strategies increase variability among schools in quality and performance, before they decrease variability" (Elmore, 2007, p. 4). Within a school district there were schools

at different levels of readiness for change, and according to Elmore (2007) "When you apply a system-wide strategy to a diverse population of school . . . the initial distribution of growth in quality and performance actually spreads out, rather than close down" (p. 5). It was important to have explicit strategies of differential treatment for schools.

Large-scale reform occurred slowly. It took time to transform beliefs, practices, and performances in a steadily developing, deliberate strategy of improvement, confirming Elmore's observation that "Progress is never a simple upward linear progression; it typically is a process of fits and starts, small breakthroughs and mistakes, powerfully motivating success and discouraging setbacks" (2007, p. 3). Professional learning communities were flexible and adaptable enough to create and support sustainable improvements that lasted over time because through collaboration and distributive leadership they built the professional capacity to solve problems quickly (Senge, 2006).

Summary of Chapter

Three main areas of the literature were researched to inform this qualitative case study of the implementation of professional learning communities in a suburban district in a southern state. The first section of this chapter defines a professional learning community. The review of the literature creates a conceptual framework to evaluate a school's implementation of a professional learning community by using, Huffman, and Hipp's (2008) Professional Learning Community Assessment Revised (PLCA-R), which is based on Hord's (1997) five dimensional model of a professional learning community. It is important to note that evidence shows that schools

organized as learning communities provide powerful professional growth opportunities for staff and demonstrate improvement in student achievement (DuFour & Eaker, 1998; Hord, 1997; Louis, Marks, & Kruse, 1996; McLaughlin & Talbert, 1993; Newmann & Wehlage, 1995; Senge, 1990; Smith, Lee, & Newmann, 2001; Theissen & Anderson, 1999). Hord (1997) also found that professional learning communities reduce teacher isolation, increase commitment to the mission and goals of the school, share responsibility for student success, increase adult learning. In addition, teachers are well informed and more satisfied, morale is higher, and rates of absenteeism are lower, and fundamental systemic change is more likely.

The second section of this chapter defined the principal's role in implementing a professional learning community. The research shows that the role of the principal in a professional learning community is key to its success. In a successful professional learning community, the principal provides support and resources, and puts structures in place to promote continuous learning (Dufour & Eaker, 1998; Huffman & Hipp, 2003; Leithwood et al., 2004; Sergiovanni, 2001). The review of the literature also confirms that an important way for leaders to effectively influence people in the work force is to emphasize a shift from a traditional leadership model to a shared leadership model. Instead of a single individual leading to success, group members take on the responsibility for leadership (Fullan, 2001).

The final section of the literature review explored systemic reform and sustainability. Professional learning communities are sustained when the structures are built into the organization culture. Fullan's (2003) research on change and

sustainability provides leaders with a foundation for systemic reform. Fullan's (2003) research is used by principals as a guide in implementing professional learning communities. The next chapter, Chapter 3, describes the research design for this study. Using this review of literature as a foundation, the research questions guided the means by which the study was implemented.

CHAPTER 3: Methodology

Introduction

This research study utilizes a case study methodology. Case study is the desired approach for this study because it is "anchored in real-life situations," and the case study provides a rich and holistic account that offers insights and clarifies meanings that expands the readers' experience of the phenomenon (Merriam, 2009). Case studies present an in-depth data collection from multiple sources of information (Merriam, 1998), including interviews, questionnaires, journals, observations, and artifacts (Creswell, 1997). This case study use surveys, interviews, and documents to collect the data. The single school district for this study was selected based on purposeful sampling. According to Merriam (2009), "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). A set of three criteria was put in place to determine the selection of the case to be studied. The school district that was the subject of this study has implemented components of PLCs for the past three years, beginning in June of 2006. According to Fullan (2001), it takes three years for an elementary school and six years for a high school to fully implement a PLC. Since this particular school district started this process three years ago, this criterion eliminated looking at the high schools in this district. The focus was narrowed to the elementary school sites. Schools which have adopted these principles, according to Fullan (2000), are in the implementation stage. The second criterion for selection was that the principal had to be trained in a PLC seminar. The school district sent teams, which included the principals, to weeklong

PLC seminars for training from June 2006- June 2009. The third criterion was that the principal had to be at their school sites for the past four years. The schools that met the criteria were given the Professional Learning Community Assessment Revised (PLCA-R), which was administered to the school staffs by e-mail in May of 2009 school year. The survey was used to select two schools for comparison. The results of each section of the survey were used in this comparison. Documents, including site improvement plans (SIP), meeting agendas, and test scores were obtained from the State Department of Education and from the principals who were interviewed these results were used to add additional data to the case study.

The purpose of this study was twofold. First, research was conducted to examine the PLC model based on a review of literature. Second, research was conducted to explore the lived phenomenon of elementary principals and their perceptions' of implementing a PLC and to assess the effectiveness, and the sustainability of the PLC initiative. Despite the amount of research on PLCs, little is known about a systemic initiative of a PLC and its impact on principals, teachers, and their schools. This lack of research in the literature (on principals' experiences, reflections, and understandings) led to the following research questions:

1. How do principals describe their experiences in the development of PLCs?
2. How do they describe their role in developing PLCs?
3. How do they implement and sustain PLCs?
4. What strategies do principals use to overcome barriers in the development of PLCs?

These questions directed the study and the description of one district's systemic initiative of PLCs by examining two contrasting school sites that have implemented the principles of PLCs and have met the established criteria for selection. The research questions reflected upon the core components of PLCs as described in the literature. The principals' perceptions concerning PLCs in their schools were addressed through the survey and interview process. Documents were used to add additional information about the implementation of a PLC.

Research Design

Case study is appropriate for this study because case studies are intended to take the reader of the research into the world of the subjects and provide a much richer and more vivid picture of the phenomena under study than other, more analytical methods (Creswell, 2003). A case study approach is the best methodology for addressing critical problems of practice and extending the knowledge base in order to improve practice (Merriam, 2009). Like other traditions within the qualitative research paradigm, case studies are used primarily when researchers wish to obtain in-depth understanding of a relatively small number of individuals, problems, or situations (Patton, 1990). One of the drawbacks of case study is the issue of generalizability. Merriam (2009) addresses this issue by stating that the description in a case study can create a vivid image of a situation, from which the reader can learn vicariously through the encounter with the case. Merriam (2009) asserts that it is the reader, not the researcher, who determines what applies to their context.

In this case study, a survey, interviews, and document analysis were used as ways to convey the strategies, processes, values, and beliefs of the participants. There were three parts to the analysis of the data for this study. The first was the administration of the survey to the elementary schools to determine the level of implementation of PLCs. The survey contributed to the development of interview questions, which enhanced the information provided by the survey. The first phase of this study was a quantitative exploration of teachers' and the principals' perceptions of the PLCs in their schools. Both teachers and principals completed the PLCA-R survey, and the data was analyzed. The second phase was the semi-structured interviews with purposefully selected principals based on the results of the PLCA-R survey. The interview questions were designed to enhance the results of the survey. In addition to the survey and interviews, data collected from the State Department of Education (such as the school report card and Site Improvement Plans (SIP) from the principals) was used to add to the rich description of the case. Using multiple methods of data collection is a strength of case study research. According to Merriam (2009), the use of multiple methods of collecting data is identified as triangulation. Triangulation combines dissimilar methods of data collection such as interviews, observations, and physical evidence to study the same unit.

Location of the Study

Merriam (2009) asserts that in case studies, the sample selection occurs first at the case level, followed by sample selection within the case. For both levels of sampling, criteria must be established to guide the process. The case that was studied was a school district that implemented a PLC initiative in June of 2006.

The school district in this study has provided an education to students in the metropolitan area for over 100 years. The average household income for the district is $55,000. Twenty-three percent of the students come from a single-parent household. Twenty-eight percent of the parents have a college degree, 61% have a high school diploma without a college degree, and 11% have less than a 12th grade education. This particular district serves 21,000 students. The school district is made up of 30 individual school sites: 21 elementary schools (Pre-K through Grade 6), five junior high/middle schools (Grades 7 and 8), three high schools, (Grades 9 through 12), and one alternative school (Grades 7 through 12). The school district is 66% Caucasian, 14% Native American, 8% Hispanic, 7% Black, and 5% Asian. Thirty-two percent of the students are economically disadvantaged. The school districts demographics have remain relatively constant for the past four years. There is 1,670 certified staff employed in this district. Of the certified staff, 74% have a bachelor's degree, 25% have a master's degree, and 1% has a post-master's or doctoral degree. All of this information is based on the 2008 District Reports provided by the Office of Accountability.

Instructional Interventions

Prior to the PLC initiative many instructional interventions occurred in the district. The interventions involved various aspects of the curriculum, assessment data, and teacher collaboration (see Appendix A). One of the first interventions the district initiated was an audit review of the curriculum guides. The district originally developed curriculum guides for core subjects in the early 1990s. The district curriculum guides underwent the curriculum audit conducted by the Fenwick English

group so that deficiencies could be identified and corrected. From the updated curriculum guides pacing documents such as curriculum calendars were developed to assist teachers in implementing the curriculum and state objectives in a timely manner. The curriculum calendars outlined the district and state objectives into nine-week increments to allow for common assessments to be developed and administered. The common assessments were analyzed along with the state criteria reference test data and teachers used this information to guide their teaching or re-teaching of the objectives. Teams of outside experts on the Educational Development and Instructional Team (EDIT), which was funded by the state department of education to assist districts in curriculum alignment, were brought into the district to assist teachers in identifying chapters in the textbooks and other supplemental materials that matched the district curricula and state objectives.

The district recognized the importance of teachers working together to analyze the student's assessment data and discuss instructional practices. In response to this need, the district started a program called You Are Not Teaching Alone (YANTA). The YANTA program is dedicated to fostering communication and collaboration between teachers. The district dedicated state and federal monies to support these beginnings of what we now call PLCs. The district mathematics and science coordinators worked with a neighboring district that was similar in size, and wrote a two year grant for a lesson study with Algebra I and Biology I teachers. This two-year grant was used to bring teachers together to develop lessons based on the district's weakest objectives in these two subjects. Teachers designed lessons, taught the lesson, and then re-evaluated the lessons based on the students' responses.

Although these were all sound initiatives, the school district looked for a formal way to implement all of these principles into a framework that met the needs of the students they served, which would in turn result in improved instructional practices and hopefully improve student achievement. In June of 2006, the superintendent of the school district in which this study was conducted embarked on a program to transform the schools in the district into PLCs. Principals and key lead teachers were trained to lead their schools as PLCs beginning August of 2006. They were charged with creating improved job-embedded staff development that would promote a culture of collaboration among teachers and principals that focused on student learning. The district used Richard DuFour's (1998) model as a framework for training principals and teachers. In the first year of implementation, becoming a PLC was a voluntary or invitational process that allowed the principals at each site to decide if they wanted to participate in the first round of PLC training. The first group of principals who took advantage of the district invitation was looking for ways to improve the learning of their students and the teaching practices of their teachers. The district implemented a systematic plan of action for program implementation, which provided substantial funding with the use of Title II funds to train principals, teachers, and district curriculum coordinators. The first year, over 180 certified staff, along with their principals, attended the first training. The superintendent expected that principals and teachers who were trained would return to their schools and train their staff using DuFour's (1998) model of PLCs.

The participants of this study were teachers and principals in the selected school district. Two schools within the district that met the criteria established were

selected to be more closely examined. The two schools were deliberately chosen to be contrasting ones, and they were initially defined as contrasting cases because of the large differences in their level of PLC implementation based on the results of the survey. According to Yin (2003, 2005),

> The key to extreme cases design is that you must confirm the existences of the contrast based on data collected prior to doing the case study. Once you have established the contrast you then proceed to do the complete data collection analysis and case study. (p.150)

The two elementary sites were deliberately chosen for this case study by the following criteria:

- The principal had been employed at their school for at least four years.
- The principal attended the DuFour training in June of 2006.
- The principal took a group of teachers to the June 2006 DuFour training.
- Implementation of the PLC principles began in August of 2006.
- According to the results of the PLCA-R survey, the respondents agreed that their school was functioning as a working PLC with an overall mean score of 3.0 or better.
- At least 50% of their certified staff responded to the survey.

The two elementary schools selected for closer examination were working towards creating successful PLCs. Both of these elementary schools had two or more of the Hord's PLC dimensions, but they were at different ends of Richard DuFour's

PLC Continuum Rubric (See Appendix B). School A was at the initiation level where as School B was at the sustaining level.

- School A: Suburban, Elementary, Title I, Initiation
- School B: Suburban, Elementary, Title I, Sustaining

Data Collection

The district superintendent granted written permission to conduct the case study on March 31, 2009 (see Appendix C). The three sources of data used for this study were a quantitative survey, interviews, and documentation analysis. The quantitative survey was given first in May of 2009 and then the data was analyzed. The participating schools had completed three full years of implementation of PLC principles. Based on the results of the PLCA-R survey, two elementary schools were chosen to be examined for this case study. Principals from these two schools were interviewed. According to Tierney and Dilley (2001), "Qualitative interviewing can be used to gather information that cannot be obtained using other methods. Surveys might offer mass data about a particular issue, but they lack the depth of understanding that a qualitative interview provides" (p. 454). The interview questions were designed to gain deeper insight into the participants' responses to the survey. Documentation was gathered and analyzed to add additional data to this study.

Survey. The survey chosen for this study was developed by Olivier, Hipp, and Huffman (2008), and was used to assess the perceptions of school community members based on a five-dimensional model of PLCs. These five dimensions, as discussed in Chapter 2, are shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive

conditions in both organizational structures and relationships. The Professional Learning Community Assessment Revised (PLCA-R) is a tool that is used to accurately assess the level of effectiveness of the PLC characteristics (Olivier, Antoine, Cormier, Lewis, Minckler, & Stadalis, 2009). Written permission by the authors to use this survey instrument was obtained (see Appendix D). The survey contains statements about practices that occur at the school level. The PLCA-R is made up of 52 questions (see Appendix E). The questions are rated using a four-point Likert agreement response scale (Strongly Disagree, Disagree, Agree, and Strongly Agree), with opportunity at the end of each section for comments on each dimension. According to Olivier et al. (2009), "The refinement of this PLC measure incorporates seven new statements directly addressing the utilization of data as a school level practice" (p. 6). For this study, demographic questions were added to the beginning of the survey to collect data on the participants' role in the district, location, PLC training attendance, number of years in education, number of years employed by the district, ethnicity and gender (see Appendix F).

The statistically validated survey was chosen to gauge the presence of a PLC in each school in this case study. The PLCA-R was designed to assess perceptions about the school's principal, staff, and stakeholders (parents and community members) based on the five dimensions of a PLC and the critical attributes. The questionnaire contained statements about practices, which occur at the school level. This measure served as a more descriptive tool of those practices observed at the school level relating to shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive

conditions, both relationships and structures. According to Huffman and Hipp (2003), the initial PLCA demonstrated good reliability and construct validity. Evidence of content validity was supported through the literature (DuFour, 2004; DuFour & Eaker, 2002; Fullan, 2001; Hord, 1998) and the judgment of the content experts. An expert panel of 76 educators examined the assessment and rated each item on its relevance (Huffman & Hipp 2003). These educators were from various levels of professional practice including classroom teachers, principals, assistant principals, district and regional administrators, university faculty members, and educational researchers. The panel found 98% of the items to be high in importance. One item was rated medium by the expert panel. The intercorrelation coefficients for the five PLCA dimensions ranged from a low or r = .83 to a high of r =.93, indicating strong internal reliability. Construct validity was examined using a factor analysis of data obtained by the respondents. In addition, frequencies, percents, means, and standard deviations were derived, to determine the distribution of scores and any patterns of responses. The refined measure, PLCA-R, continues to serve as an effective formal diagnostic tool. Initial and subsequent studies have provided ongoing validation of this diagnostic tool. Olivier and et al. 2009 stated

> Our most recent analyses of this diagnostic tool has confirmed internal consistency resulting in the following Cronbach Alpha reliability coefficients for factored subscales (n-1209): Shared and Supportive Leadership (.94); Shared Values and Vision (.92); Collective Learning and Application (.91); Shared Personal Practice (.87); Supportive Conditions-Relationships (.82); Supportive Conditions-Structures (.88); and a one-factor solution (.97). (p. 5)

The survey instrument for this study was administered online using the district e-mail accounts and School-wires, a web-based survey tool, to gather and store the data. The PLCA-R questionnaire was accompanied by an informed consent form (see Appendix G). When the participants clicked on the accept link, they consented to taking the PLCA-R. Once the surveys were completed, they were combined and averaged for each campus in order to select the most qualified schools for this study. The survey was set up on the district's website for ease of use for the participants and to get a greater number of responses. As suggested by Creswell and Plano Clark (2007), "The sample needs to be large enough for statistical procedures to be used that will make it possible for the researcher to draw inferences with some confidence that the sample reflects the characteristic of the entire population score" (p.113). Since the survey was anonymous, a follow-up e-mail was sent out to remind participants of the survey deadline.

The survey population consisted of all certified staff, which included principals, teachers and specialty teachers such as counselors, and media assistants. Surveys were anonymous and self-administered via an online survey instrument. Sampling error was reduced by including administrators and all certified staff meeting the selection criteria. According to Dillman, Smyth, and Christian (2009), coverage error occurs when not all members of the population have a chance of being included in the survey. To reduce the coverage error, each participant already had his or her own computer and e-mail account provided by the district. Additionally, the district had administered other online surveys for which participants clicked on radio buttons to give an opinion, so the concept was not foreign to the existing staff.

According to Dillman (1999), a return rate of 80% was desired. Since the survey was anonymous, follow-up e-mails were sent to all staff members encouraging them to respond. According to Dillman et al. (2009), multiple contacts are the most important determinant of response in Internet surveys.

Interviews. In qualitative case study research, the main purpose of an interview is to find out what is "in and on someone else's mind" (Merriam, 2009). The purpose of in-depth interviewing in this case study was to gain greater insight about how a principal implements and sustains a PLC. Interviewing the principals assisted in gaining understanding of the lived experience and the meaning principals make of that experience (Seidman, 2006). Additionally, Tierney and Dilley, (2001) state that

> The most interviewed in educational research are: teachers, administrators, and policy makers. These persons have traditionally been viewed as being 'in the know' and, as a result, have been considered to be the general respondents of choice in educational interview studies. (p. 459)

The participants for the interviews in this study were purposefully selected based on the results of the PLCA-R survey. According to Merriam (2009), "Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). These participants were intentionally selected because they have experience with the central phenomenon or the key concept being explored, which was the implementation of PLCs. Six criteria were used in the selection of the participants. They were: (a) the principal had been employed at their

school for at least four years to ensure that each participant understood the school's culture, (b) the principal attended a DuFour training in June of 2006, (c) the principal took a group of teachers to the June 2006 DuFour training, (d) implementation of the PLC principles began in August of 2006, (e) according to the results of the PLCA-R survey, the respondents agreed that their school was functioning as a working PLC with an overall mean score of 3.0 or better, and (f) at least 50% of the certified staff responded to the survey. Interviewing the principal was important because, according to Merriam (2009), "human beings are the primary instrument of data collection and analysis in qualitative research, interpretations of reality are accessed directly through their observations and interviews" (p. 214).

The semi-structured interviews were conducted with a fairly open framework, which allowed for focused, conversational, two-way communication. According to Merriam (2009), in semi-structured interviews the questions are more flexibly worded and can be a mix of structured and unstructured questions. The interviewing process for this study was more open-ended and less structured. The less-structured format assumed that the individual respondents defined the world in unique ways, and it allowed for their perspective to be expressed (Merriam, 2009). This type of questioning allowed the researcher to respond to the situation and to address new ideas on the topic as they arose (Merriam, 2009). The principals were invited to be interviewed, person-to-person by e-mail. Individual interviews were preferred because they produce significant amounts of information from an individual's perspective (Hancock & Algozzine, 2006). A time and place was selected for the interview by the principal. Each interview lasted thirty minutes to one hour in length.

The interviews were taped and conducted in a single session. Before the interview took place the principals signed the informed consent to be recorded (see Appendix H). This process was similar to the most widely-used format in interviewing participants (Tierney & Dilley, 2001). This practice ensured that everything spoken was preserved for analysis (Merriam, 2009). The principals were asked a series of pre-determined questions (see Appendix I) and the principals' responses were recorded and transcribed at a later date for analysis and comparison. The transcript of the interview was e-mailed to each participant, and this member check verified that the information had been correctly gathered and gave the participants an opportunity to clarify their answers. The researcher then allowed the participants to add any additional comments they felt were pertinent to the study.

Open coding was used at this point in the study because the researcher was open to any possibilities. Open coding occurs when the researcher assigns codes to pieces of data in the margins of the transcript to identify themes or categories (Merriam, 2009). Once the transcripts were coded, the information was grouped into categories. Member checks were used for insuring internal validity. Member checks are a process whereby the researcher solicits feedback from the participants. This eliminated misinterpreting the meaning of what participants said and did and provided their perspective of what is going on (Creswell, 2003; Merriam, 2009). In qualitative research, interviewing is often the major source of the qualitative data for understanding the phenomenon under study.

Development of Questions for the Interview. The interview questions for principals were developed to address the specific research questions of this study as

well as provide follow-up to the questions posed in the survey instrument. All participants were asked basic questions which required open-ended responses. Merriam (2009), in referring to Patton (2002), states that there are six types of questions that can be used to stimulate response in an interview. They are experience/behavior, opinion/values, feeling, knowledge, sensory, and background/demographic. For this case study, three types of questions were used: experience/behavior, opinion/values questions, and background/demographic. An experience and behavior question often, "gets at the things a person does or did, his or her behaviors, actions, and activities" (Merriam, 2009). In opinion and values questions, the researcher is interested in the person's beliefs or how they feel about something. Background/demographic questions are questions that refer to the participant's particular demographics (Merriam, 2009). The interview questions are categorized in Table 2.

Table 2

Types of Interview Questions

Interview Questions	Type of Question Based on Patton 2002	Correlation to PLCA-R
Tell me about how you decided to become a principal in this school district and why.	Background/ Demographic	
Please describe how the idea of professional learning communities was initiated in your school.	Experience/ Behavior	Shared Supportive Leadership Shared Values and Vision Collective Learning Supportive Conditions
In your opinion, what is the principal's role in a professional learning community?	Opinion/Values	Shared Supportive Leadership
Describe your own involvement in the implementation of professional learning community.	Experience/ Behavior	Supportive Conditions-Relationships and Structures
What action steps have you put into place to start, support, and sustain your school's PLC? Give examples.	Experience/ Behavior	Supportive Conditions-Relationships and Structures
What influence does the state mandated test (CRTs) have on your behavior as a leader (i.e. implementing a PLC, selection curriculum, determining school goals, hiring practices and other influences such as the API)?	Experience/ Behavior	Shared Supportive Leadership Shared Values and Vision Collective Learning and Application Shared Personal Practice Supportive Conditions
Tell me how collaboration time is managed in your school and in what ways. Possible follow up questions: Are the meetings grade level/subject specific? Tell me about the strengths and weaknesses. How do you share small group information with the whole group?	Experience/ Behavior	Shared Values and Vision Collective Learning and Application
What barriers did you encounter in implementing a PLC? How did you address them?	Experience/ Behavior	Supportive Conditions-Relationships and Structures
In your opinion, what helped or hindered you to sustain a professional learning community in your school?	Opinion/Values	Shared Supportive Leadership Shared Values and Vision
Is there anything else you would like to tell me that we haven't discussed?	Experience/ Behavior	

These questions were used to gain a deeper understanding of the principal's lived phenomena.

Document Review. Documentary data are "objective" sources of data that have stability as compared to other forms of data such as interviews and observations and are unaffected by the research process because the presence of the researcher does not alter what is being studied (Merriam, 2009). Merriam (2009) states, "Documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem" (p. 163). Document analysis in this study consisted primarily of public documents, such as State Department of Education reports, demographic information as published in the district's annual report, and the school's Site Improvement Plan. The information was collected from the Office of Accountability website (www.schoolreportcard.org), and the Oklahoma State Department of Education (www.sde.state.ok.us). It was used to add richness to the findings. Additionally, the school wide Site Improvement Plan was obtained from the site principal.

Data Analysis

Data collection and analysis are simultaneous activities in qualitative research (Merriam, 2009). Analysis is an interactive process throughout the study that allows the researcher to produce believable and trustworthy findings. In a qualitative study, the reader is not able to generalize in the statistical sense. The most common understanding of generalizability in qualitative research is to think in terms of the reader of the study (Merriam, 2009). As Merriam (2009) states,

> Reader or user generalizability involves leaving the extent to which a study's findings apply to other situations up to the people in those situations. The person who reads the study decides whether the findings can apply to his or her particular situation. (p. 246)

To enhance the possibility of the results of this qualitative study's transferring to another setting, several strategies were utilized. They were triangulation, maximum variation, member checks, rich thick descriptions, researcher's position, peer review, and an audit trail.

In order to decrease dependence on a single source of data and increase trustworthiness, multiple methods of data collection and comparing and cross-checking collected data were used to increase validation of the findings in this case study. The multiple sources used for triangulation were survey, interviews, and documents, which addressed the research questions for this study. The data from the PLCA-R survey and the collected documents were used to support the results of the principal interviews. For the survey sample, maximum variation is used. Maximum variation was "purposefully seeking variation or diversity in sample selection to allow for a greater range of application of the findings by consumers of the research" (Merriam, 2009). This strategy was used for enhancing transferability.

The three sets of data used were the PLCA-R survey, principal interviews and document analysis. The first set of data used was the results of the PLCA-R survey. All of the certified staff members of the elementary schools in this district who met the established criteria were sent the PLCA-R survey via e-mail. Once the data from the survey was analyzed, two contrasting schools were selected for examination. The

second source of data was the interviews with the selected principals. The principals for these schools were interviewed and these interviews helped to provide rich thick descriptions of the phenomena for this study. The rich thick descriptions included in this study involved a description of the setting and participants as well as a detailed description of the findings, with adequate evidence presented in the form of quotes from participant interviews and documents (Merriam, 2009). Once the interviews were transcribed, coded, and themed, member checks insured that the principals' perceptions about implementing PLCs were accurately depicted. The third set of data was the use of documentation which included the schools' Site Improvement Plan (SIP) and State Report Cards. Documentation was used to support the principal interviews and PLCA-R findings. Analysis of the principal interviews provided the primary data set. Once the themes emerged from the interviews the documents and PLCA-R survey results were re-examined and analyzed for the emergences of data that could be used to support the findings in the interviews.

Throughout this process, peer review was provided through discussions with dissertation committee members regarding the process of study, congruency of emerging findings with the raw data, and tentative interpretations. The reliability of the results of this study refers to the extent to which research findings can be replicated. Merriam cautions that "Reliability is problematic in the social sciences simply because human behavior is never static" (2009, p. 221). As long as the results are consistent with the data collected, the expectation is not to replicate the findings but for the reader to conclude that the given data makes sense and the results are

consistent with the data collected (Merriam, 2009). If the findings of a study are consistent with the data presented, the study can be considered dependable.

Limitations of the Study

This study has certain limitations identified and taken into account when considering this study and its contributions. The presence of self-biases, the survey instrument, the teachers, and the principal interviews all have inherent restrictions. The researcher is employed as an elementary principal in the district where this study took place. She is actively developing and sustaining a PLC in an elementary school while researching PLCs. The researcher is using DuFour, DuFour, and Eaker's principles of PLCs along with Hord's five dimensions of a PLC in her own practice. This is considered a strength in this researcher because of the unique perspective the research could bring to this case study. The researcher made a conscious transition into the role of researcher as an observer. The biases were alleviated by meticulous recordkeeping in the audit trail and impartial analysis. Keeping an audit trail in a qualitative study adds to its trustworthiness by describing in detail how the data was collected, how categories were derived, and how decisions were made throughout the inquiry (Merriam, 2009). The survey was pretested to maximize its validity, but in terms of the instrument, there was the risk of misinterpretation of questions by the participants or a lack of understanding of terms used in the survey. In addition, data analysis was subject to misinterpretation, bias, and error of the researcher. The researcher made every effort to reduce the effects of these limitations.

There was no longitudinal evidence to indicate teachers' and principals' perceptions of PLCs prior to the administration of the survey. Therefore, it was not

known to what extent teachers collaborated within their schools prior to their schools' formally implementing PLC practices. Teachers and principals with a heightened perception of their schools as PLCs may have been engaging in collaborative practices prior to the school district's implementation of PLCs.

Summary of Chapter

This chapter presents the research methodology for this study. Three data sources were used for triangulation to create validity. This case study used data from the survey, interviews, and documents to decrease dependence on a single source of data. By triangulating of multiple data sources, the likelihood of producing valid findings was increased. The PLCA-R survey was sent out to all certified staff in the district to identify their perceptions of their schools' progression as PLCs. Based on the responses to the survey, principals were then selected to be interviewed. The interviews were themed and coded to find common ideas about PLCs and the implementation and sustainability of PLCs. Document analysis was used to identify whether or not there was a presence of PLC principles in the schools.

Chapter 4 analyzes the data from this case study using both quantitative and qualitative methods. The study provides data about the implementation of PLC principles in two elementary schools. The data collected and analyzed addresses the proposed research questions in the study and examines the experiences of the principals concerning how they implemented and sustained PLCs in their schools.

CHAPTER 4: Results

Introduction

This study was designed to understand the experiences of principals implementing PLCs in a suburban school district. This chapter describes the findings from the research questions.

1. How do principals describe their experiences in the development of PLCs?
2. How do they describe their role in developing PLCs?
3. How do they implement and sustain PLCs?
4. What strategies do principals use to overcome barriers in the development of PLCs?

In addition, the study identifies the challenges in implementing PLCs in these schools, as well as their successes. By using a case study approach, this study explores the conditions that affected PLCs with an analysis of the data from three sources: the PLCA-R survey, principal interviews, and documents obtained from the state department of education and the principals at each site. This chapter summarizes the research findings. In Chapter 5, the data is analyzed through the lens of the research questions and the literature review.

Two schools in the district were chosen to for this study based on a set of pre-determined criteria. The six criteria were:

- The principal had been employed at their school for at least four years.
- The principal attended a DuFour training in June of 2006.
- The principal took a group of teachers to the June 2006 DuFour training.

- Implementation of the PLC principles began in August of 2006.
- According to the results of the PLCA-R survey, the respondents agreed that their school was functioning as a working PLC with an overall mean score of 3.0 or better.
- At least 50% of their certified staff responded to the survey.

The first set of data collected was the responses to an anonymous survey of the elementary schools that qualified under the set requirements put in place for this study. The PLC process had to be in place for at least three years for the school to be considered as a school with the potential of possessing the five dimensions of a PLC. This narrowed the study down to seven elementary schools out of 21. Of the seven elementary schools that had teachers who responded to the survey, two were chosen for principal interviews. Three schools (E, F, and G) were eliminated because of the low response rate on the PLCA-R survey. School C was eliminated because the researcher was the principal at that site during time of this study. School D was eliminated because in this case study, contrasting cases were used to make the comparisons. School D was in the developing stage of its PLC implementation. Schools A and B were at opposite ends of the implementation continuum.

Table 3

Information on Respondent Schools 2008 School Report Card Office of Accountability Data

School	Number of Certified Staff	Average Years of Experience	Size Number of Students	Total Minority Population	Free and Reduced	Years of Principal at School	Number of Principal's Years in Education	Percent Response
A	36	10	494	34%	59%	14	15 or more years	78%
B	45	12	641	43%	51%	6	10-15 years	69%
C	38	10	560	27%	39%	5	15 or more years	84%
D	33	15	490	42%	69%	5	5-10 years	64%
E	31	11	443	35%	14%	5	15 or more years	8%
F	57	13	720	30%	64%	10	15 or more years	.19%
G	42	13	620	23%	25%	15	15 or more years	.16%

The purpose of the PLCA-R survey was to gather data from the instructional staff as to whether characteristics of a PLC were in place at their school. The survey instrument provided school-wide data about how the teachers and principal viewed their school based on the core components of a PLC as suggested in the research literature (Hord, 1997). For school A, there was a possible sample size of 36 certified staff members. Of that group 28, responded to the survey for a 78% response rate. For school B, there was a possible sample size of 45 certified staff members. Of that group, 31 responded to the survey for a 69% response rate. Because an 80% return rate was desired, many follow-up e-mails were sent to the responders to encourage

them to participate in the study. Information about the schools as displayed in Table 2 added additional information about the schools that participated in the survey. This information was used to narrow the selection of the principals who would be interviewed. The additional information was obtained from the school report card, which was available from the state department of education office of accountability. Both schools selected were Title One schools with their teachers having on average 10-15 years of experience.

Table 4

Community Characteristics for School A and B from the 2008 School Report Card

	Community Characteristics		
	School A	School B	District
Enrollment	494	641	21,000
Ethnic Makeup		Socioeconomic Data	
Caucasian	66%	57%	66%
Black	9%	10%	7%
Asian	3%	8%	5%
Hispanic	13%	14%	9%
Native American	9%	11%	13%
Students Eligible for Free/Reduced Lunch	59%	51%	34%
	Preparation, Motivation and Parental Support		
1st-3rd graders receiving reading remediation	29%	37%	28%
Mobility Rate	8%	9%	9%
Parents Attending Parent Teacher Conferences	98%	87%	77%
Patrons' Volunteer Hours per student	5.3 hours	.7 hours	2.7 hours
	Classroom and Administration Characteristics		
Non-Special Ed. Teachers (FTE)			
Number of Teachers	27	33	1,000
Average Salary (w/Fringe)	$42,000	$44,000	$44,000
Teachers with Advanced Degrees	13%	19%	23%
Average Years of Experience	10	12	12
Students in Special Ed.	15%	16%	14%
Special Education Teachers (FTE)	4	7	178
Counselors (FTE)	1	1	48
Other Certified Staff (FTE)	3	2	94
Administrators (FTE)	1	1	70

According to the survey results, the number of classroom teachers in the two elementary schools ranged from 36 teachers in school A to 45 teachers in school B. The number of students ranged from 494 in school A to 641 in school B. The percentage of novice teachers with less than five years of teaching experience in the selected schools ranged from 10% in school B to 18% in school A. Teachers with 5-10 years of teaching experience ranged from 14% in school A to 41% in school B. In the category of 10-15 years in the education profession, the percentages ranged from 10 % in school B to 29% in school A. Veteran teachers with greater than 15 years of teaching experience were the same for both schools A and B with 39%. The veteran teachers were equally represented. This data suggests that the teacher distribution of levels of experience is well balanced and there is longevity in the field of education.

Table 5

Years Experience in Education from the 2008 School Report Card

School	0-5 years experience	5-10 years experience	10-15 years experience	15 years or more
School A	18%	14%	29%	39%
School B	10%	41%	10%	39%

The majority of the items in the survey, questions 8-65, were from the PLCA-R (Olivier, Hipp, & Huffman, 2008). The survey provided school-wide data about how the certified staff, including the principal, viewed their school based on the five dimensions of a PLC. In Table 6, the results from the selected schools are listed.

Table 6

PLCA-R Results from Selected Respondent Schools Mean Score and Standard Deviation

	Shared and Supportive Leadership	Shared Values and Vision	Collective Learning and Application	Shared Personal Practice	Supportive Conditions Relationship	Supportive Conditions Structures	Overall Mean Score
				Mean Score			
School A	2.95	2.96	3.09	2.95	3.04	3.20	3.03
School B	3.38	3.46	3.53	3.22	3.64	3.31	3.42
				Standard Deviation			
							Overall SD
School A	.72	.75	.71	.71	.88	.70	.75
School B	.73	.58	.55	.64	.50	.55	.59

A complete report of the survey responses may be found in Appendix J. The following summaries are based on a synthesis of the findings from each of the five dimensions of a PLC that were addressed by the survey. Qualitative comments added by respondents in the comment section of each dimension on the PLCA-R are included when appropriate (see Appendix K).

Shared and Supportive Leadership

Twelve items, questions 8-19 from the survey, were directly linked to this category. These questions determine the staff's involvement in making decisions and initiating change. The mean score for this area for each school was school 2.95 for school A, and 3.38 for school B. In this category, school B had an overall agreement on this dimension. School A had the lowest mean in this area. Only three of the questions out of 11 in this category scored a mean score of 3.00 or better.

Shared Values and Vision

Shared values and vision were the second aspect measured by the survey. Nine items, questions 20-29, were targeted in this area. These questions were designed to learn about the collaboration process, who was involved in creating the vision, and whether these goals were aligned with the school vision. The total mean reported for school A was 2.96, and school B was 3.46. In this category, school A had the lowest mean score. Seven of the nine questions scored below the 3.00 mean average. School B had one question scoring below the 3.00 mean.

Collective Learning and Application

Questions 30-40 covered the category of collective learning and application. These questions were designed to determine to what degree the staff perceives itself as working together, building relationships, and the ability to focus on teaching as well as learning. The mean scores for this category were 3.09 for school A and 3.53 for school B. Although school A had a mean score of 3.09, three questions from the survey scored below a 3.00.

Shared Personal Practice

This part of the survey, questions 41-48, looked at peers sharing with peers. These questions were designed to determine whether or not there was evidence that the staff had opportunities to share their work with each other through peer observations and to give relevant feedback that improved their teaching practice. The mean score for school A was 2.95 and 3.22 for school B. This category had the lowest mean for both schools. School A had the same mean score for the shared

values and vision category, but four of the seven questions scored under a 3.00. School B had a mean score of 2.77 for question 45.

Supportive Conditions- Relationships

The final category of the survey was broken down into two sub-categories by the developers of the survey: Relationships questions 49-54 and Structures 55-65. The relationships section of the survey questions were targeting whether or not the staff believed that the relationships in their PLC culture exhibited trust and respect for one another. The mean score for school A under Relationships was 3.04, and for school B was 3.64. This category yielded the highest mean for school B: 3.64. School A had two questions with a mean under 3.00.

Supportive Conditions- Structures

The final survey questions were in place to determine if the staff perceived itself as having enough time for collaboration, adequate resources for their needs, and support in fostering good communications across the entire school community. School A had 3.20, which was their highest mean score of the survey, and school B had 3.31.

The aggregate data from the survey resulted in a total mean score of 3.03 for school A, 3.42 for school B. Based on the responses, the majority of the respondents generally agreed, which indicated a PLC existed at each school. Individual items pointed to specific areas of strength and weaknesses. Exemplars and non-exemplars were sited that supported or impeded school efforts under each of the five dimensions of a PLC, which were discussed in the individual school analysis section.

Interviews

The PLCA-R survey results showed an overall agreement that a PLC was established at School A and B. Principals from schools A and B were selected to be interviewed in September of 2009. The interviews finalized a three-year period of implementation of PLC principles at each site. The principals selected for the interview had been trained in the DuFour model of PLCs. Each principal participated in the same three-day training provided by Richard and Rebecca DuFour and Robert Eaker in June of 2006 and implemented the principles of PLCs in August of 2006. Interviews with the principals painted a picture of how the schools were functioning as PLCs. See Appendix L for transcripts of the interviews.

The themes that emerged from the interviews were congruent with the professional learning community framework that emerged from the literature. The themes were based on the five dimensions of PLCs as identified by (Hord, 1997, 2004; Huffman & Hipp 2003; Olivier, Hipp, & Huffman, 2008) which were (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning, (d) shared personal practice, and (e) supportive conditions- relationships and supportive conditions- structures. In addition to the five themes, four more themes were identified. They were student needs, principal's role, sustainability components, and obstacles. These nine distinct themes emerged from the three data sets--survey, interviews, and documents. These themes helped explain how the elementary principals developed and sustained PLCs. Together, the themes became a lens for understanding the perceptions of a principal who was implementing a PLC. Quotes from the interview participants were organized by theme along with supporting

statements from the Site Improvement Plan documents that were provided by the site principals. Results from the PLCA-R was correlated to the statements. Each dimension of the PLC was used as an organizer to report the interview and document data. Table 7 is a synthesis of the themes derived from the interviews.

Table 7

Themes of the Synthesized Interviews

Themes	Congruent Statements from the Interviews
Shared and Supportive Leadership	Trained the core leadership team. Set goals as a team. Shared responsibility which included special education teachers and mutual accountability.
Shared Values and Vision	Introduction of key components of a PLC. Buy in from the faculty and the teachers' value the PLC. Sustained focus on math and reading.
Collective Learning and Application	Alignment of the curriculum. Collaboration horizontally and vertically. Vertical teaming is subject specific. Disaggregating data and analyzing benchmark test data. Increased student achievement through tutoring, disaggregating data, analyzing test data. Focus on remediation and interventions through SMART Goals.
Shared Personal Practice	Teaming new teachers with mentor teachers. Sharing of ideas on how to meet the student's needs. Literacy Coach as a key component.
Supportive Conditions-Relationships	Open communication. Teachers feeling empowered to make decisions and the school runs itself. Developed relationships where they take care of problems themselves. Teachers as professionals doing what is right for students.
Supportive Conditions-Structures	Implementing schedule changes to accommodate the PLC. Required team meetings. PLC schedule embedded into the day for teams to meet. Special schedule for vertical team meetings.
Student Needs	Outside tutors from churches and businesses. Retired teachers hired as tutors. More enriched curriculum. Addressing student's needs based on the state assessment data.
Principals Role	Facilitator of a PLC and move from being the lead to letting the teachers lead. Empowering the teachers. Gatherer of information and resources. Protector of the "what's important", and time. Setting the tone. Data Pusher. Motivator/Salesman. Recognizing strong teachers and hiring of teachers that will work as a team and are knowledgeable in theory.
Sustainability Components	Continued PLC training for principals sponsored by the district. Title I money supported their efforts. Opportunities to meet. Additional Literacy coaches Teachers make the difference. Alignment of the curriculum. Development of outside relationships with other teachers and schools in the district. Time Key personnel changes needed. Data drives the instruction Attitude of the teachers. Teachers enjoying coming to work. Students enjoy coming to school.
Obstacles in a PLC	Teacher resistance. Teacher/Principal Collaboration Scheduling time to remediate students. Time to teach what needs to be taught. High stakes accountability systems that press for immediate test score gains in reading and mathematics. Involvement of the stakeholders.

Impressions from School A

School A was established in 1965. School A was named after a developer and builder who donated a portion of his farm to build a new elementary school in the district. During the late 1970s school A was the largest elementary school in the state housing over 1000 students. As of 2008 there were 494 students.

Principal A is a Caucasian female who has been a part of the community for most of her adult life. She started teaching in the district as an elementary teacher over twenty-nine years ago and has been the principal at school A for fourteen years. Principal A is proud of the district's reputation in the state and community. When she decided to become a principal, it was just a part of the natural process to remain a part of the district. Principal A is the veteran educator of the group.

School A started its journey to become a PLC in June of 2006. It was the first year the district sent a group of schools to the PLC convention in Saint Louis. School A's team came back from the conference, introduced the key concepts to the faculty, and implemented the program. The staff consists of 36 certified staff members with all instructional staff having met the "highly qualified" requirements as stated by the NCLB criteria.

Results of PLCA-R Along with Interview Comments for School A. School A had agreement on two of the dimensions of a PLC. The survey results ranged from a high on supportive conditions: relationships with a M= 3.20 to a low on shared and supportive leadership with a M=2.95 and additionally in the dimension of shared personal practice with a M=2.95. School A's overall mean score on the PLCA-R survey was a 3.03, showing an overall agreement that a PLC exists at school A. Even

though school A started its journey the same time as School B, school A has yet to make the sustaining status. Looking at Dufour's adapted Professional Learning Continuum Rubric (Appendix B), school A has more characteristics of a school in the initiation phase. Its effort has not yet begun to fully impact the "critical mass" of the staff.

Shared and Supportive Leadership (SSL). According to the PLCA-R, this dimension was one of the lowest scores for this school, tying only with shared personal practices. School A scored a mean score of 2.95. Results ranged from a high on items SSL 11 (the principal is proactive and addresses areas where support is needed) and SSL 18 (staff members use multiple sources of data to make decisions about teaching and learning), with a M= 3.14 to a low on item SLL 8 (staff members are consistently involved in discussing and making decisions about most school issues with a M= 2.82). There is little evidence that there is nurturing of leadership among staff or sharing of responsibility for student learning. Staff members' involvement in decision-making (item SSL 8; M= 2.82) appears to be a weakness in this dimension. However, there is evidence of the principal being proactive and addressing the areas where support is needed. This question on the PLCA-R (item SSL 11) scored a mean score of 3.14. The staff indicated that they agreed that staff members used multiple sources of data to make decisions about teaching and learning (item SSL 18, mean score of 3.14). There was supporting evidence of this in the school's Site Improvement Plan. The school used their assessment data to determine their weakest objectives and they planned how they would address these weakness. They used SMART Goals worksheets from DuFour, DuFour, Eaker, and Many's

(2006) handbook for each grade level to determine how they would teach these objectives, who would be responsible, and how they would evaluate whether they had met their goals.

Shared Values and Vision (SVV). Nine items on the PLCA-R reflected the dimension of shared values and vision. Results ranged from a high on item SSV 25 (school goals focus on student learning beyond test scores and grades; M= 3.14) to a low on item SVV 20 (a collaborative process exists for developing a shared sense of values among staff; M= 2.79). This school staff scored themselves a 2.96 overall for this dimension. One teacher provided insight with respect to item SVV 20:

> Our situation is rather unusual. It seems like we are cooperative and listened to, but the truth is, it is really not that way. I specialize in reading and I am never consulted about reading issues. When the DIBELS was instituted, I was not consulted. Our principal does what she thinks is right and only gives authority on issues cared nothing about. She is an authority on everything and she has a fantastically knowledgeable faculty and never uses them. She has a bird nest on the ground and she insists on micromanaging almost everything. The reason I agree with a lot of the PLC questions is because we, as a faculty, like each other and work well together.

There was reference made to the school's goals and of a vision statement in the school A's SIP. The respondents had agreement on item SVV 25 (school goals focus on student learning beyond test scores and grades; M=3.14). The school's goals were "to meet or exceed the Spring 2009 baseline API in the areas of math and reading comprehension." However, there was no evidence of whether or not the staff agreed

to the overall goal or whether they knew about the goal, according to SVV item 27 (stakeholders are actively involved in creating high expectations that serve to increase student achievement; M=2.86) and item SVV 28 (data are used to prioritize actions to reach a shared vision; M=2.96).

Collective Learning and Application (CLA). According to the PLCA-R, the school staff ranked themselves as having this dimension in place. The overall mean score was 3.09. Results ranged from a high on item CLA 35 (professional development focuses on teaching and learning; M= 3.46) to a low on items CLA 33 (a variety of opportunities and structures exist for collective learning through open dialogue; M= 2.89) and CLA 36 (school staff members and stakeholders learn together and apply new knowledge to solve problems; M=2.89). In regards to item CLA 32 (Staff members plan and work together to search for solutions to address diverse student needs; M=3.11), Principal A remarked

> The teachers meet as a grade level team as needed to discuss students and their needs. Throughout the semester teachers get together vertically to discuss concepts and share ideas on how to reach different students' learning styles and abilities. The vertical meetings are usually subject specific.

The SIP included a professional development plan for the school. This supported the school's overall agreement of professional development focusing on teaching and learning. Several workshops were planned such as Poverty Education Program, SuccessMaker Training, YANTA/PLC team meetings, and Homework Without Tears workshop. The faculty added additional workshops as the need arose and by teacher request.

Shared Personal Practice (SPP). This area was one of the lowest scoring areas of the five dimensions with a mean score of 2.95. This area included activities such as teachers visiting each other's classrooms to observe and discuss their observations, to peer coaching and feedback opportunities. Hord (2004) adds that

> The process is based on the desire for individual and community improvement and is enabled by the mutual respect and trust among staff members. Because of the amount of trust involved and the history of isolation most teachers have experienced, this is often the last dimension of a PLC to develop. (p. 11)

The results from this dimension ranged from a high on item SPP 43 (staff members provide feedback to peers related to instructional practices; M= 3.25) to a low on item SPP 47 (staff members regularly share student work to guide overall school improvement; M= 2.64). The responses to items in this subscale of the assessment indicate the lack of a formal process for peer observation, feedback, or for coaching and mentoring. There is little evidence in the SIP that these opportunities exist and the principal made no mention of these activities occurring during the interview.

Supportive Conditions-Relationship (SCR). The fifth dimension was divided into two sub-categories, relationships and structures. Hord (2004) calls this sub-category "human capacities" (relationships). Respect and trust are part of the PLC and are necessary for there to be a productive learning community. The principal supports and nurtures these human capacities by creating a caring environment. According to Hargreaves (2007), "The backbone of a strong and sustaining PLC is trust…Trust takes time and effort to build. It is an active process, established and reaffirmed through many small and repeated interactions" (p. 187).

For the first sub-category, relationships, the school had an overall agreement in this dimension with a mean score of 3.04. The results from this dimension ranged from a high on item SCR 49 (caring relationships exist among staff and students that are built on trust and respect; M=3.21) to a low on item SCR 50 (a culture of trust and respect exists for taking risks; M=2.89) and item SCR 52 (school staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school; M= 2.89). Principal A stated what had supported the PLC in this area was "open communication between the administration and the PLC team." She felt that the staff had been the greatest asset to the PLC movement and as a result they had been successful in creating a working PLC. She added that cooperation was important, and even though they had encountered resistance and that negative attitudes were hard to overcome, they continued to try and hoped that the negative teachers would see the good in the movement and move on with what was best for their school.

Supportive Conditions-Structures (SCS). The second sub-category for supportive conditions was Structures. The mean score for this area was 3.20. The school staff ranked themselves the highest in this dimension. The results ranged from a high on item SCS 60 (the school facility is clean, attractive and inviting; M=3.71) to a low on item SCS 63 (communication systems promote a flow of information across the entire school community including central office personnel, parents, and community members; M=3.04) with no individual items scoring below a 3.0. The principal provides time (structural) in the schedule for her staff to meet as described in her comment:

> Throughout the years we have implemented several schedule changes that allow the teachers to collaborate together. We have established a PLC schedule that allows the teachers time during the day to discuss/plan with their grade level team. We also have a special schedule that allows teachers to get together and discuss/plan vertically three times a semester. We also meet three times a semester for the teachers to work together as a staff after school. This is funded by the district. The students that need additional help get individualized/group tutoring from title one and RSA funds. We also have tutors that volunteer from area churches and businesses.

The structures the principal put into place support the PLC established in School A. This structure helps to reduce isolation, fosters collaboration, and provides the opportunity for open communication and embedded staff development.

Also noted was that stakeholder involvement item SVV 27 (stakeholders are actively involved in creating high expectations that serve to increase student achievement; M=2.96) was a weakness in the dimension Shared Values and Vision. The same was true in the Shared Supportive Leadership dimension item SSL 17 (stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority; M=2.93) and in Collective Learning Application item 36 (school staff members and stakeholders learn together and apply new knowledge to solve problems; M=2.89).

Although stakeholders are an important part of the PLC, Stoll and Louis (2007) caution schools on involving stakeholders, stating that

> The desire to make schools more responsive to stakeholders may be an admirable goal in itself, but lies outside of the primary purpose of professional learning communities. Adding stakeholders to a PLC must not dilute or deflect its purpose, but augment its capacities and what it can achieve. (p. 5)

It is important for schools to remember that the purpose of a PLC is to enhance student achievement. This should certainly be a goal of School A but consideration should be given to maintaining the PLC's core goals.

Impressions From School B

School B has been in existence for over 46 years. The staff is made up of 45 certified staff members of whom 96% are considered highly qualified by the federal guidelines. These teachers are a group of dedicated teachers that have high academic and behavioral expectations for their students. They follow the seventeen tenants of "Great Expectations" and a climate of mutual respect has been established in each classroom, allowing for optimum achievement.

Principal B is a Caucasian female who grew up in the district. She feels very comfortable in the district because she lives in the community and works in the school system. She became a principal because she loved the curriculum aspect of the job and she wanted to put her hands onto more than just her grade level and curriculum. She has been working in the district for over 15 years. She was an assistant for four years and principal at school B for six years. For the 2008-2009 school year, her school scored a 1500 on its API, which is a perfect score for the state test. The school was nominated to apply to become a Blue Ribbon school.

School B began its journey into PLCs by taking 14 core teachers to the first training in DuFour's PLC model that the school district offered in June of 2006. School B then had seven more teachers trained the second year, several more the third year and five repeaters in the Summer of 2009. They implemented the PLC principles in August of 2006.

Results of PLCA-R along with Interview Comments for School B. School B had a high agreement on all dimensions of a PLC. The survey results ranged from a high on supportive conditions: relationships with a M= 3.64 to a low on shared personal practice with a M=3.22. Their overall mean score on the PLCA-R dimensions was a 3.42. The components of a PLC are deeply embedded in school B's culture. The components serve as a driving force of the school's work. The PCL is so internalized that it can survive any changes in key personnel. This school has a reputation for engaging in whole-school reform and is distinguished by its commitment to building a school-wide learning community to improve student outcomes. These characteristics place School B in the Sustaining phase on DuFour's Professional Learning Community Continuum.

Shared and Supportive Leadership (SSL). On the PLCA-R, school B staff ranked themselves as having shared supportive leadership with a mean score of 3.38. Results ranged from a high on item SSL 11 (the principal is proactive and addresses areas where support is needed; M= 3.55) to a low on item SSL 17 (stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority; M=3.16). In school B, teachers see themselves as

responsible for all the school's students. One comment from one of the respondents on the PLCA-R indicated that leadership is shared. The respondent stated,

> It's a team-building effort. That's why our kids learn so much.
>
> I marked disagree that Stakeholders assume shared responsibility and accountability, but I wanted to clarify that this is because they choose not to, not because we do not give them the opportunity to.

Aligning and creating standards for students offers opportunities for meaningful collaboration within and across the grade levels. Curriculum alignment in the areas of reading and mathematics serves as a context for school B's PLCs. Principal B supported this belief by stating,

> We were already doing a lot of the things. It validated our practices. It is what we were already doing or trying to do. We weren't doing everything exactly like the PLC model and we still are not. We are trying to tweak it to our own needs. We were already doing collaborative teams by grade level and vertically. We were already looking at data and disaggregating it. We were already matching our benchmark assessments to our test scores. It really helped formalize some of that. We are more on track at our meetings. It gave us some strategies to help teams that were not quite on board. We had two teams that were several years behind the others as far as collaborating with each other or practices in the classroom. It helped us to energize those groups to get them caught up with the other groups.

These beliefs are also supported in school B's Site Improvement Plan. The district holds the grade level teachers responsible for monitoring use of the many available

curriculum programs. They use the CRT scores to identify their weakest objectives in Mathematics and Reading.

One of the highest means from the PLCA-R was 3.55 on "The principal is proactive and addresses areas where support is needed." This statement was supported by the principal's comment:

> My role is to facilitate and empower my teachers and give them the resources they need. They come to me and they need a resource, I need to move heaven and earth to get them what they need. Whether that be grants or fundraising, finding time for them to meet, working with their schedules, or protecting their teaching time.

Shared Values and Vision (SVV). According to the results from the survey, school B had a mean score of 3.46 for this dimension of a PLC. The results ranged from a high on item SVV 28 (data are used to prioritize actions to reach a shared vision; M= 3.68) to a low on item SVV 25 (school goals focus on student learning beyond test scores and grades; M= 3.13).

On item SVV 28 on the PLCA-R, one staff member responded, stating, "I answered agree, but I wanted to clarify that I interpret data as test scores." This is supported by the principal's comment on the importance of PLCs on test scores.

Principal B stated,

> Well it has obviously made a huge difference in my test scores. The scores have come way up. We are one of the highest Title I schools in the state. The focus on math and reading has taken away from other areas such as Science and Social Studies. Cultural things your holidays . . . we used to spend time

> on in reading. For example the Christmas Around the World theme. When I got here it was three weeks long and was taking too much time of the instructional time. I would like someday be able to add some of that back. Not all of it. I don't want it to monopolize the curriculum. I just think that there are just little things the kids miss out on when you have such a strict rigid standard. Trying to get all of your standards in by the end of the year is difficult.

This was one drawback that Hargreaves (2007) discusses as well:

> Popular PLC advocates, Dufour and Eaker (1998), rightly argue that PLCs should be given focus but, for political reasons, this focus is increasingly narrow, marginalizing all other areas of the curriculum like the environment, social studies or the arts. Demanding that PLC's be data driven ultimately leads most of them to concentrate only on mandated test. The result is a process that is not inspirational or stimulating for the teachers trying to develop their schools as learning communities. (p. 183)

In the schools SIP, there is evidence that data is used and actions were put into place to support this belief. An assessment, such as DIBELS, is given three times a year for grades K-3. Students at risk are monitored monthly, and students at severe risk are monitored every two weeks. Teachers in grades 4-6 requested that struggling students be monitored regularly by the literacy coach using the DIBELS. This process is formally evaluated yearly with state CRT assessment, quarterly DIBELS progress monitoring, quarterly STAR assessments, district nine-week assessments,

and through SuccessMaker data. Informal assessments occur daily in the classroom through guided reading groups and classroom instruction.

Although item SVV 27 (stakeholders are actively involved in creating high expectations that serve to increase student achievement; M=3.35) was not the lowest in this section of the survey, PLCA-R respondent one commented, "I disagree that stakeholders are involved in creating expectations. In most cases, we can't rely on our parents to back up the expectations we have ourselves, much less help us create them."

PLCA-R respondent two stated, "Our school does not have a very large number of stakeholders who want to participate." Keeping the stakeholders involved in the process is a difficult proposition. The principal's role in involving stakeholders is to keep reminding them of the school's vision and the high expectations set by the PLC.

Collective Learning and Application of Learning

The overall mean for this dimension was 3.53. The results ranged from a high on item CLA 35 (professional development focuses on teaching and learning; M=3.68) and item CLA 37 (school staff members are committed to programs that enhance learning; M=3.68) to a low on item CLA 34 (staff members engage in a dialogue that reflects a respect for diverse ideas that lead to continued inquiry; M= 3.39).

In regards to item CCL 32 (staff members plan and work together to search for solutions to address diverse students needs; M= 3.55) the principal commented

> We have seen change. We are still tweaking our remediation groups because we have such a high mobility school. It seems like the students we have to

raise from K-3 seem to do fine. It is the ones that move in at third grade. These are the kids we are remediating each year. With our high mobility rate, we will always be in the business of remediation. I think it will be a continuous cycle. It just comes with the high mobility, high poverty area.

Although the vertical teams are made up of different grade levels, the common goal of remediation provides them with a common reference point that allows for both collegial exchange and for calibration of expectations across the grade levels. The discussion of the assessment data and the literacy issues for all students creates a common language, which assists teachers in understanding school-wide reform and how these efforts can benefit them being a part of a PLC. Another comment made by the principal:

> Our vertical team meetings are subject or content specific for a goal we have in mind. Our horizontal meetings are broader in scope. In our monthly team meetings we talk about math and reading of course. We talk about where we are on our special education referrals and where we are in benchmark assessments. We dissect those very carefully. I come to the meeting with an agenda. I already have their scores printed out and highlight the areas that we are weak in. I will ask what happened on question number seven. Luckily we only have one or two that are below the district average. I ask them when are we going to re-teach those concepts because obviously we lack on that. The teachers usually come prepared to answer that because they know I am going to ask. Well, we are going to redo this or redo that.

The SIP provides support in fostering collective learning and application of that learning. Each team meets once a month to plan and align instruction. Each reading teacher meets once a week with the buildings reading specialist to communicate weekly reading instruction objectives. Teachers work together to attend and share professional development activities. Each grade level, along with administrators and literacy coaches, is responsible for identifying students not at grade level. They are then responsible for researching and seeking out specific instructional strategies to ensure that the child meets the benchmark goal.

Each grade level meets once a month to review assessment data and formulate remediation plans. This is a change from the traditional procedural meetings. Principal B uses e-mail to notify her teachers for this type of information. School B's meetings became more productive because of the time allowed for teachers to discuss students' progress. Each math teacher is held responsible for remaining within two days of the district's pacing guide. The vertical team meets once every nine weeks after receiving the nine-week benchmark results to discuss the results and to make plans on how to enrich and remediate. A focus on developing teacher expertise through professional development gives teachers a sense of professionalism and pride in their school, while helping the school create a sustainable PLC.

Shared Personal Practice (SPP). The school staff ranked themselves as having this dimension in place with a mean score of 3.22. The results ranged from a high on item SPP 43 (staff members informally share ideas and suggestions for improving student learning; M= 3.65) to a low on item SSP 45 (opportunities exist for

coaching and mentoring; M=2.87). This dimension was the lowest of the five dimensions.

One way the principal encouraged the teachers to share was through their school wide book study on Annette Breaux's Real Teacher's, Real Problems; Real Solutions. Each teacher was provided with a book and study guide questions which were discussed at each grade level meeting. When teachers studied and researched together, they tended to improve their assessment practices, raise expectations for traditionally under-performing groups, and create relevant and engaging curriculum (Darling-Hammond and Richardson, 2009). One PLCA-R respondent did agree but added "we share within the grade level, but we sure could use improvement vertically".

Although there was not agreement on the survey about opportunities for coaching and mentoring, the principal does believe that this is an important aspect. When hiring new teachers, she pairs them up with a strong mentor to help them make a smooth transition into the school. The principal also stated,

> The district needs more literacy coaches that are like the one I have. She is very knowledgeable in specific remediation strategies. We have four in the district. They are all excellent teachers. They all have different areas of expertise. Cindy's expertise is huge for School B. She diagnoses their reading deficits and researches the right materials to help that specific problem. It is priceless. A lot of my teachers go straight to her. I have been left out of the loop. Which is great. They have developed relationships where they take care of it themselves, which is what we want to happen. I am no longer the go

> between girl. They go visit with Cindy and she comes to me with a list of the teachers' needs. I figure how to get it for them. I will keep doing this as long as I keep getting good results.

Literacy coaches worked with all grade levels in facilitating the teaching of reading. The literacy coaches serve as the experts in the building. They are available to model lessons, observe and provide feedback, or organize workshops or book studies for their faculties.

Supportive Conditions Relationship (SCR). Five items in the PLCA-R reflected the subscale of supportive conditions-relationships. Results ranged from a high on item SCR 49 (caring relationships exist among staff and students that are built on trust and respect; M= 3.71) and item SCR 50 (a culture of trust and respect exists for taking risk; M=3.71) to a low on item SCR 52 (school staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school; M=3.45).

About caring relationships, the principal commented, "I am very blessed that my teachers get along so well. I don't spend my time refereeing. It might be the case some day, but it hasn't happened yet." According to Hargreaves (2007),

> Strong and sustainable PLCs are therefore characterized by strong cultures of trusted colleagues who value each other personally and professionally, who are committed to their students, who are willing to discuss and disagree about evidence and data that can inform them about how to improve their practices in ways that benefit their students, and who are willing to challenge one

another's practice in doing so. Culture, trust and relationships are the heart and soul of PLCs, and of all that will eventually sustain them. (p. 188)

Principal B finds this to be true. She commented on what she was proud of in her PLC:

> The overall attitude of my teachers. It's fun. It is a fun place to work. People enjoy coming. There is a lot of laughter. I am not saying we are all sunshine and roses. I mean we have bad days but for the most part just walking up and down the halls during the days, even if our test scores were not as high as they are, I will still count it successful because I am hearing wonderful things and the wonderful instructional opportunities my kiddos are having. When you walk up and down the halls you are getting hugs and smiles and the kids are excited about coming to school.

Item SCR 51 (outstanding achievement is recognized and celebrated regularly in our school; M=3.68) was evident to a certain degree with this PLCA-R respondent's comment:

> The state does not "celebrate" schools like School B that work extremely hard to get high achievement and then are not compensated like the NOT at risk schools are. State goals do not recognize the outstanding achievements students from our school make compared to students from more privileged peer groups. Although I believe that outstanding achievement is often recognized and celebrated at my school, it often depends on the PERSON receiving the recognition as to the level of celebration that occurs. It would be

nice to have some kind of a quarterly recognition for teachers who are doing extraordinary things. These teachers could be nominated by their peers. Principal B did have a celebration for her staff and students when they received the news that they had scored a 1500 on their API. She had "1500" t-shirts made for the teachers to wear and a big celebration that included the students as well as the teachers.

Supportive Conditions- Structures (SCS). There were ten items in this sub-scale of the five dimensions, which reflected attributes of the supportive conditions-structures. Results ranged from a high on three items: SCS 58 (appropriate technology and instructional materials are available to staff; M=3.42); item SCS 60 (the school facility is clean, attractive, and inviting; M= 3.42); and item SCS 61 (the proximity of grade level and department personnel allows for ease in collaborating with colleagues; M=3.42) the low was on item SCS 55 (time is provided to facilitate collaborative work, M= 2.90).

Additional Themes from the Principal Interviews

Four additional themes emerged from the interviews, which were students' needs, principal's role, sustainability components for a PLC, and the obstacles principals encounter in the implementation of a PLC. Although the additional themes may be found partly in the five dimensions of the PLCA-R survey the interviews with the principals gave a more in-depth insight into these additional themes.

Students' Needs. Students' needs are a concern for both principals. Through the implementation of PLCs at both sites, the teachers and the principal stated that they need additional resources for hiring retired teachers to tutor students. The use of

frequent assessments to monitor student progress is a benefit as well. Student data is collected and analyzed to determine the amount of remediation needed for each individual student. Principal A stated that

> State testing is a factor in everything we do here at school. It is my goal to assist all teachers by providing the teachers with the necessary resources, materials, and tutors to make the students successful and reach the state goal for assessment. We must set our goals and select curriculum as a team so that everyone has an ownership in what we are doing here.

Principal B feels that the focus on student data has made a difference in their student achievement on the state test. Their percentage of students passing the state test has continued to increase each year. The difference in the two principal's approach to student data was in the way they presented the data to their teachers. Principal A would collect the data from the district nine weeks assessment and send it to the district coordinators to compile and analyze. She would then return the information to her teachers for them to decipher the needs of their students. There was no follow-up by her to ensure that remediation of the weak objectives were being addressed. Principal B took a more hands on approach with her teachers in deciphering the assessment data. Team meetings were dedicated to reviewing the student results on the assessment and plans were made to address the weak objectives. Principal B held her teachers accountable for finding the time to remediate their students.

Principal's Role. The principals' attitudes about their PLCs and their actions in implementing the PLCs made a difference in the level of implementation. The principals had a direct influence on the PLCs progress, deciding what to bring into the

school and what to buffer out. They set the tone for the PLC. The principals set boundaries for the interactions in the PLC and directed the teachers' conversations towards student data and their reaction to the data. Both principals saw their role as a facilitator in the PLC, and both saw themselves as the key person who set the tone for the PLC. Principal A stated, "I am the facilitator to the PLC program. I provide the necessary support, materials, and resources as needed to make the program successful." Principal B sees herself as a motivator or a salesperson who empowers her teachers. She sees herself as the person who secures the resources her teachers need to teach more effectively. She protects their time so they can teach "what's important." Printy (2008) states that leaders are the

> agenda setters, leaders establish direction for the school and take steps to ensure that goals and expectations are met. As knowledge brokers, leaders allow teachers to focus on their core responsibilities of teaching and learning and provide adequate resources for their work…as learning motivators, school leaders develop strong personal relationships with teachers, acknowledge their contributions, and seek their input before making decisions. (p. 204)

The principals in this case study created the conditions for rich interactions among the PLC team members, one with more success than the other. The scaffolding to build a strong PLC was in place. The approach the principals took to engage their staff affected the level of implementation.

Sustainability Components. In response to the sustainability of the PLC, the principals believe that the continued funding for training of staff in PLC principles is an important component to its sustainability. This was key in School B's success in

establishing its PLC. Principal B sent a group of teachers each year to the summer PLC training. Adding additional literacy coaches so that each Title I school could have a full time reading expert available would be beneficial in improving the instructional practices. Both principals believe teachers' attitudes make the difference in the PLC as well as in the success of the students. Teachers who enjoy coming to work influence the students' attitudes as well.

Obstacles in a PLC. Obstacles the principals encountered in the implementation of PLCs were teacher resistance, teacher and principal collaboration, time to teach and re-teach, and the involvement of the stakeholders. Principal A experienced resistance from some of her teachers in the implementation of the PLC. Her philosophy was to continue to do what was right for students and hope that teachers would do what was right. Principal B stated that changes in key personnel helped to move their staff to a functioning PLC. The teachers who did not buy into the shared mission and values left the school. When hiring new staff, both principals look for teachers who have the same philosophy as they do for their schools and who will work as a team.

Principal collaboration with the teachers is an obstacle in School A because the teachers believe their input is not valued and is most times dismissed. In a PLC, the interactions should focus on improving instructional practice and improving student learning. The key is for colleagues to develop trusting, supportive groups. Structured dialogue helps the group become more comfortable with each other and helps each member feel more valued, and "Change occurs as teachers learn to describe, discuss, and adjust their practices according to a collectively held standard

of teaching quality (Little, 2003)" (Darling-Hammond and Richardson, 2009, p. 50). The more opportunities teachers have to give input the more likely they are to take risks. They have the ability to act rather than react. Success is more likely when teachers are empowered and are involved in decision-making through a "transparent, facilitative and supportive structure, and are trusted, respected, encouraged, and valued" (Mulford, 2007, p. 177).

Time seemed to be a major concern with the principals as well as the teachers. Principal B's comments are reflected below:

> It always goes back to time. Our district is great about offering professional development but it pulls people out of the building constantly. I constantly have a teacher out doing worthwhile things attending a workshop and they always bring it back and share with everybody. For example, if I have team meetings on Monday, I really need everyone from that team there. What happens then, for example, is the fifth grade Social Studies teacher will be pulled out for a workshop and I am having team meetings. I will have to postpone my meeting. Then the meetings drag on. But really more than anything is time to meet with the teachers and time for the teachers to have more teaching time. That is what I hear all the time. We try to protect literacy. We have cut everything out. We have cut the fluff out. It is business from 8:15-3:00 every day. But it is still just time to teach. There is so much to teach.

A respondent comment from PLCA-R stated, "Time is an issue. We do not have release time to work out many issues, so it becomes one person deciding for the

mass." Finding time in the day requires leaders to change teachers' work structures and dedicate time for collaboration (McLaghlin &Talbert, 2007). Time for staff to develop a strong PLC and network with other schools and institutions is vital to PLCs (Hargreaves, 2009). Time to teach what needs to be taught and time to remediate students is an additional concern for the principals.

Stakeholder involvement was ranked low in the PLCA-R for both schools. The partnership between schools and parents had been shown to have a powerful impact on student learning but most of the time this was a neglected area. Creating a strong partnership with parents and families and including them in the PLC contributes to students' success and well-being in their school (DuFour, DuFour, & Eaker, 2008). Involving the community and other schools increases the capacity of the PLC. Involving all the players in a PLC, "networking" with others, school-to-school collaboration, and parental and community input are key parts of an established PLC. In order to bring in more of the stakeholders, the principals need to foster increased integration between the school and the community. The PLC needs to include not only the local stakeholders but other schools as well. Networked learning takes place when individuals from different schools in a network come together in groups to engage in purposeful and sustained collaboration (Jackson & Temperley, 2007). Networked learning communities work together in partnership to enhance the quality of student learning, professional development, and school-to-school learning. "The importance of school leaders looking beyond their schools for ideas and support has long been recognized in the school improvement" (Stoll, Robertson, Butler-Kisber, Sklar, & Whittingham, 2007, p. 63). School B did partner

up with another Title I school for several professional development workshops focusing on team building and communication among the faculty. This type of exercise lends itself to building the leadership capacity of both schools (Bolam et al., 2007).

CHAPTER 5: Interpretations and Implications

Purpose of the Study

This study led to a deeper understanding of the implementation of a professional learning community in a selected school district, explored teachers' and principals' perceptions concerning the establishment of a professional learning community and added research to the current literature. Although this single case study is not as strong a base for generalizing to a population of cases as other research designs, much was learned from this case, which added to the reader's knowledge base and created the opportunity to modify old generalizations (Stake, 1995). This type of generalization is called "naturalistic generalization" in which conclusions are reached through personal engagement in a well-constructed experience (Stake, 1995). It is important because of its embedding in the experience of the reader.

The purpose of this case study was to explore the principals' experiences in implementing a district-wide initiative of PLCs to improve teaching and increase student learning. Two elementary schools in one school district were chosen based a set of pre-determined criteria: (a) the principal had been employed at their school for at least four years, (b) the principal attended a three day summer institute training on PLCs, (c) the principal took a group of lead teachers to the summer institute, (d) implementation of the PLC principles were initiated in August of 2006, (e) the results of the PLCA-R survey indicated that a PLC existed at the school site, and (f) at least 50% of the certified staff responded to the survey. The two elementary schools were selected to show contrasting cases. The schools were at opposite ends of DuFour's implementation continuum and Fullan's stages of implementation. Although both

schools started the process at the same time, in August of 2006 one school was in the initiation phase (starting), and the second was in the institutionalization stage (sustaining). This case study used both quantitative (PLCA-R survey) and qualitative (principal interviews) methodologies. The PLC conceptual framework of: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions- relationships, and supportive conditions-structures (Hord, 1997; Huffman & Hipp 2003), was used as a lens to view the principals' experiences of PLC implementation in their schools. The information collected from this study informs the reader of the complex processes and decisions that resulted from a developing PLCs. Though it is important to understand that each PLC was as unique as the school, there may be lessons to be learned. These lessons are relevant for this case but may be viable for others seeking to implement a PLC.

Statement of the Problem

In the early 1990s, countries such as England, Australia, and New Zealand all embraced the concept of large-scale reform in response to the "educational progressivism" that the public associated with the economic decline of the 1980s (Hargreaves, 2009). This reform brought about the return to "traditional models of curriculum" in which the curriculum was prescribed, tied to standards, and was to be taught based on a timeline through the development of such documents as pacing guides. Additionally, the curriculum and standards were linked to high stakes testing. Schools that performed badly were threatened with closure and subject to public ridicule (Hargreaves, 2009).

Some years later, the United States' solution to the numerous challenges facing leaders was the replication of many of the same principles as their predecessors, such as the emphasis on test scores, and severe consequences for schools that failed to meet the legislation's timelines for improvement. This came about through the passage of the No Child Left Behind Act (2001). According to Fullan (2009),

> In its eight years of existence it has held out great moral expectations along with one of the weakest system reform strategies that one can imagine. Unattainable goals, little investment in capacity building, narrow and overloaded testing, ridiculously short timelines, and differing standards as each of the 50 states is allowed to establish its own (again, mostly limited) set. (p. 110)

The pressure on leaders for reform increased due to the urgency of this legislation. In theory, the implementation of this reform sounded easy, but in reality putting ideas into practice was a more difficult process than most educators realized (Fullan, 2009). In response to the pressure on leaders to be held accountable for the success or failure of their schools leaders found hope in the development of PLCs. International evidences suggested that the progress of educational reform depended on the teachers' collective capacity and the school-wide capacity for promoting student achievement (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). According to Hargreaves (2007)

> Drawing on the emerging evidence that PLCs have a systemic and positive effect on student learning outcomes (Louis and Marks 1998; McLaughlin and

> Talbert 2001; Anderson and Togneri 2002; Bolam et al. 2005), schools and systems are investing considerable energy in developing themselves as PLCs. (p.181)

Implementing PLCs was not an easy task. Developing PLCs was a process that required work and was subject to influences both internally and externally on schools that can either facilitate or severely inhibit the process (Stoll et al., 2006). Additionally, leaders internationally were faced with major challenges in sustaining improvement over time. The PLCs was the vehicle to school wide reform. According to Hargreaves (2007), "PLCs will be an educational force to be reckoned with for some years to come" (p. 181).

Research Questions

The following research questions provided the structure for data collection and analysis.

1. How do principals describe their experiences in the development of PLCs?
2. How do they describe their role in developing PLCs?
3. How do they implement and sustain PLCs?
4. What strategies do principals use to overcome barriers in the development of PLCs?

Methodology

This case study used both quantitative and qualitative methodologies to investigate the extent to which PLCs were being implemented in two elementary schools. The collection of quantitative data was through the Professional Learning Community Assessment-Revised (Olivier, Hipp & Huffman, 2008) survey

instrument. Qualitative data was collected through principal interviews. Documents such as the Site Improvement Plan and the 2008 School Report Card were used to corroborate the findings in this case study.

Summary of Findings

The district in the study implemented a systemic reform initiative to improve student achievement along with improving instructional practices. The district did this by implementing the principles of PLCs. According to Elmore (2000), to sustain the initiative, the district had to maintain a tight instructional focus, make teachers accountable, reduce isolation, differentiate treatment among schools, and delegate responsibility. The district in this study demonstrated many of these components.

The district devoted time and resources to tightening up the instructional focus of the teachers in the district. The superintendent and district curriculum coordinators aligned the curriculum and developed district curriculum calendars for teachers to follow. To hold principals and teachers accountable, the district leaders developed common assessments based on district curriculum guides. Students were assessed every nine weeks. The teachers sent their students' test results to the district curriculum coordinators, who then analyzed and compared the data. The data was used to identify the weakest curriculum objectives and were sent back to the principals. The principals were expected to share this information with their staff to develop a plan to address the weaknesses on the nine-week assessment. The district leaders initially focused on numeracy and literacy. Science and Social Studies followed shortly after.

The individual schools were required to work together in their PLC to analyze the data. They were expected to develop a plan to remediate the students who were below benchmark. Recently, the focus had shifted to concentrate on students who were on level or considered as performing satisfactorily and to push them to reach the next level of advancement. The district had dedicated professional development days for the individual school sites to develop their Site Improvement Plans. The SIP had to include the following items: mission and vision statement, goals for improving reading and mathematics, a plan for technology integration, and staff development plan. The district supported the principals' efforts through providing the assessments and support necessary to assist each individual site.

The reduction of isolation of teachers and the opening up of practice through direct observation were addressed to some extent through the district's development of YANTA and a lesson study grant with a neighboring district, which involved the Algebra I and Biology I teachers. The YANTA was developed and funded by the district staff development committee to pay teachers to meet together after school and focus on site improvement. This was a good start, but ideally, the professional development should have been embedded in the teachers' workday, which research has shown to be more effective (Darling-Hammond and Richardson, 2009). The lesson study initiative was funded by a federal grant that was shared by the district and a neighboring district. The two-year grant was used to develop lessons based on the state objectives for each subject. The teachers designed, taught, and analyzed the lessons. Their goal was to improve teacher instruction, which in turn improves

student learning. The reduction of isolation of teachers continued to be an area in need of improvement for the district.

The district identified the need to assist Title I school teachers in indentifying strategies for developing best teaching practices and improving student achievement. To address this need the school district hired literacy coaches for the Title I schools to share. The literacy coaches would split their time between two Title I schools. The literacy coaches were used to plan meaningful professional development based on the schools' individual needs. They were there to assist teachers in indentifying researched based programs to use with their below benchmark students.

The district in this study allowed each individual site to develop a plan based on its individual needs. Elmore (2000) identifies this as being a critical component for large-scale improvement. The two Title I schools in this study used their funds to address their specific students' needs. The district took action and was proactive in its attempt to implement large-scale reform. All of these are components that Fullan (2003) finds are needed for sustainability.

The district valued the principles of PLCs. The district leaders modeled this through funding the training of the instructional staff in PLCs and through their book studies with the principals. The focus was to provide direction for the leaders and to help them connect with their peers (Fullan, 2008). The goal of the district leaders was for their principals to share this knowledge with their staffs and to improve their staffs' instructional effectiveness and to increase student achievement. The district continued to develop the conditions necessary for continuous reform.

Synthesis of the PLCA-R for Both Elementary Schools. At the conclusion of the study, it was apparent that the five dimensions of the PLC identified by Hord (1997; 2004), Hord and Sommers (2008), Huffman and Hipp (2003) and Olivier, Hipp, and Huffman (2008) were fully applied in school B and not fully put into practice in school A. Based on the data gathered in this study, the components of collective learning and application, supportive conditions-relationships and supportive conditions-structures were most evident for school A. The respondents' recognized shared supportive leadership, shared values and vision, and shared personal practices less often in school A. The indicators from the shared personal practices domain were reported and observed less often than other components of the PLC process for both schools. School B identified itself as having all five dimensions of a PLC in place.

Synthesis of the Two Elementary Principal Interviews. The principals were interviewed to determine their experiences implementing PLCs and how that implementation impacted their schools. Based on the synthesis of the individual interviews, the following findings were noted. Both schools demonstrated working PLCs that were at different levels of implementation. Both schools had their own set of unique challenges for improving the teaching and learning process. In these schools, the principals set up the structures for the creation of PLCs, which provided a sense of purpose, clear directions, and a shared understanding of the goals. Both schools were committed to change and mutual accountability for the learning achievement of their students. The staff shared responsibility for school improvement, which allowed for the development of shared meaning to which

everyone could contribute. The principals focused on increased student learning through improved literacy and numeracy outcomes. Both schools indicated a change through engagement in the PLC process. The PLC provided a vehicle for reflection on teachers' practices and on student achievement. In team meetings, teachers were connected by the discussion of student data and the discussions involved teachers collectively in making decisions about student learning. The PLC changed the dynamics in the school with the teachers taking on new leadership roles within the school.

Synthesis of the Documents for Both Elementary Schools. Both schools' SIP contained components that supported a PLC. The SIP of both schools included a mission statement, school creed, technology plan, professional development plan, site improvement goals focusing on literacy and numeracy, and assessment data. The assessment data came from the state department of education report cards and the schools' annual results on the state Criterion Reference Test. The documents from both schools supported the PLC by formalizing the values and vision of the school and by documenting the strategies and steps necessary to reach the school goals that were set by the staff. The SIP is reviewed and updated annually by the principal and staff of both schools.

Interpretations of the Themes

Interpretations of data from each of the nine themes are discussed below. The themes are identified based on the principals' interview responses and documents from each school.

Shared and Supportive Leadership. In a PLC, the best hope for sustained school improvement is through shared leadership (Moller, 2004). Leaders develop the people in the organization and they are people-centered. Leaders make developing professional relationships and building trust priorities in sustaining the PLC (Mulford, 2007). Marks and Printy (2004) conclude that building organizational capacity along with instructional leadership (individually and collectively), are necessary components of a PLC. The influence of these components improves the quality of a school's teaching practices and the achievement of its students substantially (Marks & Printy, 2004). The schools in this study put the necessary structures in place to support shared leadership. These structures took forms such as training the core curriculum teams in PLC principles and expecting them to lead the school in the PLC and in vertical teams that analyzed assessment data and subject specific teaching strategies. These teams included the regular education teachers as well as the special education teachers. There was a sense of shared responsibility among the teachers. Sergiovanni (2005) suggests that "Viewing leadership as a group activity linked to practice rather than just an individual activity linked to a person helps match the expertise we have in a school with the problems and situations we face" (p. 45).

Although principal A implemented many of the necessary structures to share the responsibility of instructing students, the dimension Shared Supportive Leadership had the lowest mean for school A. The principal perceived herself as one who shared authority, but in reality the teachers felt as if the principal only shared her authority on issues that didn't really matter. The staff did not have a clear picture of

what they were responsible for. They developed goals for their grade level and their particular weaknesses, but they did not have an overall goal or strategies for their school. The teachers only felt responsible for the students they were currently teaching. According to Leithwood and Mascall (2008), every person on the staff must assume responsibility for all students learning.

Principal B held her staff accountable by incorporating accountability benchmarks for the whole school as well as the grade level teams. All grades were to meet with the literacy coach monthly to discuss strategies for at risk students. All grades implemented the Read Naturally fluency program for students below benchmark. The staff continued the implementation of the Tampa Reads and SuccessMaker programs as well. The continued staff development and implementation of guided reading programs was an important component for school B and resources were dedicated to these programs. The grade level teams were expected to meet once a month to plan and align instruction. Principal B placed a high priority on continuing to purchase research based materials for the school's Reading Resource Room. Principal B required that all of her K-3 teachers be trained in Structured Language Basics (SLB). She also required this of her new hires. Principal B assigned teachers to attend the National Mathematics Conference and National Reading Conference with the expectation that the teachers would return and share this information. The teachers were required to attend sessions that pertained to the weakest objectives for their students. Their task was to search for ideas at the conference to shore up the weakest objectives that were identified by their school

assessment data. When hiring new teachers, principal B looked for teachers who were willing to buy into the school's vision and mission.

Shared Values and Vision. According to Hargreaves (2007), "PLCs are a way of life that changes the entire school culture as leaders come forward from every part of the school in communities that inquire into teaching and learning practice, then create improvements which benefit all students" (p. 186). Both schools introduced the key components of PLCs to their staffs as a whole upon returning from the summer training. They set goals as a team with the use of the SMART goals worksheet and the state testing results. Both schools had a sustained focus on numeracy and literacy. They had key components in place such as teacher leaders involved in making decisions and principals who embraced the five PLC domains. Both schools had clearly stated learning outcomes as noted in their SIP. Along with external measures such as DIBELS, and state CRTs, teachers used disaggregated data and their own local measures such as the district nine weeks' test to set performance benchmarks for specific groups of students. This created internal standards that were accepted by both teachers and students. These standards created a new culture of accountability.

Even though both schools had the necessary components for shared values and vision, school B had greater success in this area. As stated in School A's SIP, their mission statement was considerably different from school B. School A's mission statement read

> The staff believes that each of our students deserves the very best we can give them. We dedicate ourselves to making learning exciting and meaningful to

> our students' lives. We believe that each of our students should feel self worth and accomplishment in the learning process. We pledge to help them make good choices and to teach them skills that will sustain them throughout their lives. We develop a relationship with our parents and community that is positive and productive. There is no limit to what we can achieve. We accept the challenges, which will make us the best of the best. (School A Mission Statement, 2009, pg.1)

School A focused on the relationship the teachers had with the students and on creating a positive environment for them to learn in. However, there were no clear steps for what they would do to help students reach their goals. As documented in School B's SIP, the mission statement was more specific. School B's mission statement:

> To see all students learn the district and state standards specific to each grade level, as well as the life principles necessary for positive character development. Our goal is to assist students as they work to reach their fullest potential. As a team, we will monitor student success through formal and informal assessments. Individualized and small group remediation, with the utilization of a variety of resources and techniques, will be enacted for each student who requires further support. (School B Mission Statement, 2009, pg.1)

The principal modeled these expectations daily with her staff by protecting their teaching time and by providing resources for their programs.

Another weakness for School A was its identification of goals. School A had attempted to identify the learning outcomes for students through the SMART Goals worksheet. However, the goals were broad and difficult to measure. School B's goals were more specific and the teachers were expected to document their progress in reaching the established goals.

School A did administer the nine-week assessment, which was required by the district. Even though the results of their student assessments were reported back to school A's staff, there was no evidence that the information was acted upon, whereas school B's staff held each other accountable for the performance of their students on the common assessments. School B used their data in a more purposeful meaningful way. Once the scores were analyzed, they discussed ways to re-teach the concept their students were weak in. Additionally, School B's learning outcomes were clearly articulated in its SIP and each student's attainment of the outcomes was carefully monitored through DIBELS progress monitoring, SuccessMaker assessments, teacher observation, CARS and STARS, state exams, Study Island, Renn Place, and Destination Reading assessment reports.

Collective Learning and Application. Both schools ranked themselves as having this component implemented into their school PLC. School A and B administrators and teachers from all grade levels worked together through their conversations about the students' assessment data. The staff members collaborated to establish long and short-term improvement goals that were aligned with the district and state learning objectives. Hargreaves (2009) states,

> Data-driven improvement has become an integral part of the movement to develop schools into being professional learning communities where teachers use data and other evidence to inquire into their practice and its effects on students and make needed improvements together to address the shortcomings that they find. (p. 95)

According to both schools' SIPs, the goals were measureable and were clearly linked to the schools' shared vision. The team meetings at both schools focused on student learning.

School B's principal focused her staff on aligning their curriculum, especially in the lower grades. She wanted her teams to be teaching the same programs so there would not be a gap in the students' learning. The staff on hand and the new hires all agreed that they needed a common literacy framework. Principal B made sure that her staff was trained in Read Naturally for fluency, Tampa Reads for vocabulary, and Structured Language Basics and Guided Reading for comprehension. Principal B felt that aligning her curriculum had the biggest impact on her students. This change provided a strong foundation for her students.

Shared Personal Practice. Shared personal practice was limited, even in PLCs that were at the institutionalization stage, which tends to be the last of the dimensions to develop (Hord, 2004; Morrissey, 2000). This area appeared to be a weakness for both school A and B in some characteristics of this dimension. Finding time for teachers for peer review of each other's practice and instructional behaviors seemed to be an obstacle in the PLC process for both schools. For teachers to observe each other there must be a culture of trust and mutual respect among the staff

because having peers observe each other's teaching makes the teachers feel vulnerable. Most career teachers have not experienced this level of scrutiny since they were students at the university. Elmore (2000) states that "schools and school systems that are improving directly and explicitly confront the issue of isolation by creating multiple avenues of interaction among educators and promoting inquiry-oriented practices while working toward high standards of student performance" (p.32). The principals at both schools did not have in place the structures necessary for teachers to go and observe each other. Providing opportunities for teachers to observe peers, and offering encouragement, is an area where both schools can focus their improvement efforts.

There was some evidence of shared personal practice in these two schools, which was best noted in the use of literacy coaches. Teachers were supported in their implementation of new programs through the literacy coaches giving the teachers feedback on their teaching practices. Teachers felt less threatened because an "expert" was assisting them in identifying the needs of the students and what was the best approach to address their students' needs. This was one means of confronting the issue of teacher isolation. According to the National Association of Elementary School Principals (2001),

> Isolation is the enemy of learning. Principals who support the learning of adults in their school organize teachers' schedules to provide opportunities for teachers to work, plan, and think together. For instance, teams of teachers who share responsibility for the learning of all students meet regularly to plan

lessons, critique student work and the assignments that led to it, and solve common instructional or classroom management problems. (p. 45)

Analyzing student work was a strength of School B. The teachers collaboratively reviewed students' work and revised instructional strategies based on their performance.

Supportive Conditions-Relationships and Structures. Both schools rank themselves as having this dimension in place. There was an overall agreement that structures and relationships were evident. The principals put into place the structures necessary to allow teachers to collaborate together because both principals placed a high level of importance in scheduling time for teachers to meet and collaborate. This was accommodated through common plan times during the day and required meetings after school for vertical teams. When whole grade levels were involved, they created a "critical mass" for change in instruction at the school level (Darling-Hammond & Richardson, 2009). Frequent and regular meetings were scheduled for discussion of student learning and for implementation of curriculum programs such as guided reading and Read Naturally.

Supportive Structures-Relationships was ranked the highest dimension for school B. The principal had success in developing the relationship between students and teachers. Outstanding achievement was recognized and celebrated regularly at her school through their monthly student assemblies and through classroom competitions. Coming up with motivational techniques to get her student population invested in their learning was one of Principal B's strengths.

Student Needs. Both schools saw the need to provide support for students who were below benchmark and had several practices in place for improving student learning. The teachers focused on the learning rather than the teaching. They had in place grade level and vertical teams to address the specific needs of the students. The students were monitored through ongoing checks for understanding through progress monitoring, guided reading groups, SuccessMaker, and nine weeks common assessments. Both principals provided funding to hire extra staff to provide students with additional time and support for learning the essential skills needed to succeed. The principals provided time for the teachers to collaborate so they had time to discuss the issues that relate to quality teaching and learning. The teachers used data to establish SMART goals as part of the SIP. Both schools used nine weeks common assessments to discuss their students' learning in comparison with other similar students. They contacted other colleagues across the district that had strengths in areas in which schools A and B were weak and collaborated on how to address those weaknesses. Reeves (2005) discusses the importance of holding teachers accountable for their teaching by stating

> The framework of a professional learning community is inextricably linked to the effective integration of standards, assessment, and accountability . . . the leaders of professional learning communities balance the desire for professional autonomy with the fundamental principles and values that drive collaboration and mutual accountability. (pp. 47–48)

Principal B held her teachers accountable for student learning and was very proud of the fact that her school attained a perfect score of 1500 on their API. She based their

success on her teachers working collaboratively together to analyze data and to monitor student progress. Principal B believed this collaboration helped them reach their goal of 1500. She held her students accountable as well. Principal B required them to attend Saturday school if they were below benchmark. She required their parents to come to the school and meet with her so she could go over their child's assessment data and provide the parents with homework packets so they could for work with their child at home. Principal B required that they return these packets to her weekly. She graded the work and discussed it with each student individually. Principal B also created testing themes each year to motivate her students to do their best on the state assessments. The reward for their hard work was a day of celebration that included games, pizza, swimming, and inflatables. Not only did Principal B hold students accountable for their academics, she held them accountable for their attendance as well. Students received monthly recognition for perfect attendance. Table 8 below illustrates School B's success on their API scores the last five years. Principal A did not hold her teachers or students accountable to the extent that Principal B did. School A scores stayed relatively the same, with a dip in 2007.

Table 8

2005-2009 Regular Students API

	2005 API Regular Students	2006 API Regular Students	2007 API Regular Students	2008 API Regular Students	2009 API Regular Students
School A	1412	1418	1372	1401	1404
School B	1317	1397	1429	1488	1500
District	1318	1356	1321	1388	1401

Table 9 lists School A's assessment data in Mathematics and Reading. At least 70% of school A's students scored Satisfactory or Above in all subjects.

Table 9

Office of Accountability School Report Card Data--Percentage of Students Scoring Satisfactory and Above in Mathematics and Reading

School A Assessment Data	Mathematics				Reading			
	2005	2006	2007	2008	2005	2006	2007	2008
3rd	94	90	85	89	97	100	94	91
4th	100	93	94	89	91	95	97	97
5th	92	97	90	100	89	94	97	94
6th	NA	90	72	90	NA	90	97	98

Table 10 lists School B's assessment data in Mathematics and Reading. At least 70% of school B's students scored Satisfactory or Above in all subjects. In 2008, the sixth grade students at School B scored at least 70% Satisfactory and Above and at least 25% of their students scored Advanced in all subjects.

Table 10

Office of Accountability School Report Card Data--Percentage of Students Scoring Satisfactory and Above in Mathematics and Reading

	Mathematics				Reading			
School B	2005	2006	2007	2008	2005	2006	2007	2008
3rd	96	94	92	100	90	100	96	100
4th	87	100	98	95	85	100	98	100
5th	95	89	98	100	74	85	96	98
6th	NA	89	91	100	NA	98	89	91

The next table illustrates the increase in attendance for School B. The attendance rates for school A stayed relatively the same.

Table 11

Attendance Rates for School A and School B

	2005 Attendance	2006 Attendance	2007 Attendance	2008 Attendance	2009 Attendance
School A	95.4	95.5	95.6	95.3	95.5
School B	95.1	95.4	95.8	96.0	96.7
District	95.0	95.1	95.0	95.2	95.5

School B's scores continued to improve and were higher than the district scores. Principal B believed that having her teachers meet in their collaborative teams on a weekly basis and with her on a monthly basis to discuss common assessments was making a difference in the students' achievement. During these meetings teachers discussed interventions for those learners who were below benchmark and provided students with more support in the classroom. According to Fullan (2009), successful programs "actively target the neediest children, begin early in child's lives, emphasize coordinated services, focus on boosting academic achievement through high-quality instruction, deliver instruction by trained professionals, acknowledge that intensity (depth, consistency) matters, and hold themselves accountable for results" (p. 111). Taking all of these interventions together, school B moved to higher student achievement.

Principal's Role. The major focus on school reform has been placed on the principal as the acknowledged leader of change in schools. According to Morrissey and Cowan (2004), "Principals have been referred to as the critical gatekeeper to school

improvement because they control structures and environments that determine how receptive teachers are to change" (p. 6). The dimension Shared Supportive Leadership describes behaviors the principal takes to develop the leadership capacity of the staff. The theme principal's role describes the actions the principal takes in supporting the PLC. The difference in the two themes is in Shared Supportive Leadership the principal is consistently involving staff in decision making and the sharing of responsibility. In the theme principal's role the principal becomes one of a hunter and gatherer. The principal hunts for teachers who support the PLC and hires them and is a gatherer of information or a data pusher. The principal is the protector of teaching time and of what is important. One principal commented on the importance she places on meeting with her teachers.

> My teachers love to meet. It is a time too when they tell me if they need something. We meet on their plan time in one of the classroom teacher's room. My secretary knows on team meeting days that I will be out of commission all day. I start with 6th grade because they have first plan. I don't meet with my kindergarten teachers. I probably should. That is a personal goal of mine. They probably need a little more attention. But their students are only here two and half hours and they have so much to squeeze in and my kindergarten teachers do a really good job. I usually let my literacy coach meet with them.

At both schools, the principal emphasized doing what is right for students. They modeled this belief through their actions and communicated their desires through their team meetings. Principal B commented,

> They meet with me once a month and their teams meet weekly. They try to meet in team meetings on Thursdays or Fridays, and I try to meet with them the first Monday or Tuesday of each month. We have a special ed representative at the monthly meetings with me. Then after school we do a lot of vertical team alignment; we make that more subject or program specific. We have been doing a lot of SuccessMaker vertical alignment to help monitor that and help the students get through it faster. We have kids that are lagging behind and taking too long. We try to come up with strategies to motivate the classes, maybe a competition. Also with the changes in Accelerated Reader, we have been meeting a lot. We have developed a committee to formulate a plan for grades 1-6 to help our average scores to go up. We have students earning a lot of points but our averages are not where they need to be. We want them to be at 85%.

The principals placed an emphasis on continuous learning for staff as well as students. Setting the tone for continuous learning was an important aspect of the PLCs. Professional development was provided for the entire staff during the school day as well as after school. The principals supported professional development by providing resources and the opportunities for teachers to participate. Teachers met during their plan times to work with grade-level team members, discussing classroom teaching strategies, sharing ideas, and planning together. Principal B provided professional development opportunities in the following areas; PLC, Great Expectations, Math PDI, Learning Style Differences, Guided Reading, Assessment

Training, and SMART Board Training. In discussing some of the training for her teachers the principal stated,

> Yes we did get everyone trained. Our kindergarten, through third grade phonics, fluency, and vocabulary programs are aligned. They are identical programs. We use Read Naturally for fluency, Tampa Reads for vocabulary, and Structured Language Basics and guided reading groups for comprehension. We are completely aligned K-3 in that area.

Principal B also recognized the value in sending her teachers to annual training in PLC. Every year since the implementation of PLCs she has sent a group of teachers to the summer PLC institute.

At both schools the teachers took their state assessment data, nine weeks assessment data, and DIBELS results, identified students scoring below a satisfactory mark, and targeted them for assistance in their weak areas. Additionally, retired teachers were hired to tutor these below benchmark students. The difference between the two principals was how they asked their teachers to interact with the data. Principal A left it up to her teachers to decide how they would address the students who were falling behind and had no follow-up plan to make sure that these interventions were taking place. Principal B was involved in the process of how they as a school would assist these students in reaching their goals and improving achievement. There was accountability benchmarks built in to evaluate the students' growth. Principal B would routinely check in with her teachers and students to ensure that they were making progress.

The principals at both of these sites placed a high priority on finding time for teachers to collaborate on student learning issues. Both schools had collaboration time built into the teachers' regular schedules. The principals communicated their expectations for the use of their time. In her SIP, one principal scheduled dates for teachers to monitor and adjust their instruction based on the students' performance.

The principal's role in a PLC is to focus on the learning instead of the teaching. Principals continue to observe instruction, but in a PLC discussion of student data and student results are the foci. "The power of focusing on data and dialogue in professional learning is evident in the success of elementary schools that consistently produce higher-than-expected student achievement", according to Darling-Hammond and Richardson (2009, p. 52).

In this case study, significant endorsement from the principals was what supported the development of the PLCs. According to Morrissey and Cowan (2004), "The principal's role is a critical one, orchestrating a delicate interaction between support and pressure, encouraging teachers to take on new roles while themselves letting go of old paradigms regarding the role of school administrator" (p. 56). Accordingly, successful and sustainable PLCs center on having an outstanding and supportive school principal who have longevity and stability (Hargreaves, 2007; Spillane 2006). Even though both principals had the structures in place to move their schools to an established PLC, one school had more success. School B was able to capitalize on the teachers' strengths. There was a level of commitment by all of the staff to nurture and sustain the common mission of increasing student achievement.

Sustainability Components. According to Hargreaves (2007), "Sustainable PLCs concentrate on what matters. They preserve, protect and promote achievement and success in deep and broad learning for all, in relationships of care for others" (p. 185). The principals in this study indicated that several components were necessary for the successful implementation of PLC principles and sustainability: continued training in the PLC principles for both teachers and principals, funding to support their efforts, continued opportunities to meet and collaborate, additional literacy coaches, quality teachers, continued alignment of the curriculum, key personnel changes, data driven instruction, teacher and student attitudes, and development of outside relationships with other teachers in the district. Principal B stated, "The PLC couldn't have happened without funding from the district. It has been a long process. It has been five years. It didn't happen overnight. It happened very methodically, slowly. There were some key personnel changes so that helped." The funds that were dedicated to the reform initiative paid for the supports that were vital to the development of the PLCs such as the summer institutes. From the comments made during the individual interviews, it appeared that the implementation of PLCs, expectations and vision setting from the superintendent, funding for training, and the literacy coach placement in the school supported successful implementation of the PLC program.

Obstacles in a PLC. According to the interviews with the principals, the factors that impacted PLC implementation negatively were a perceived lack of collaboration between the principal and teachers, teacher resistance, lack of time to

teach and re-teach students, lack of accountability for high stakes testing results, and low stakeholder participation in the PLC.

PLC members frequently cite the absence of trust as a barrier to productive collaboration (Hord, Roussin, & Sommers, 2010). School B had more success in the area of colleagues trusting each other, which supported their collaboration. Collaboration between the principal and teachers was addressed in some ways by School B's book studies and the development of a common language through discussing student data. The continued effort by the principal to empower her teachers, by involving them in decision-making, capitalizing on their strengths, and focusing on strategies that expanded the teachers' leadership helped to build a greater sense of trust among the staff so that teachers felt valued as being a part of the school community. When trust exists within the PLC, the instructional staff is more likely to think more creatively, take more risks, and share more information readily (Hord, Roussin, & Sommers, 2010). The collaboration between the principal and teachers is a critical condition for a successful PLC. Trusting the teachers, distributing the leadership, recognizing teacher strengths and capitalizing on those strengths goes towards the development of a culture of collaboration. According to Hord, Roussin, and Sommers (2010), "The only way we can get to our destination is to trust our teachers and allow them to guide us. Distrust derails the process." (p. 157).

School A's teachers were resistant to the notion of a PLC. The teachers who were resisting the change were teachers who wanted to do what comes easily, which was to keep the status quo. Resistant teachers focused on their needs, not the needs of the students. They design their day with what works best for them, not what is best

for students. Change was difficult because the teachers' beliefs and values were challenged. According to Fullan (2003), changing teacher behavior only comes about when the teachers feel what they are doing is worthwhile and has value. Another possibility for school A's resistance to change was that the teachers were on initiation overload (Elmore, 2007) because the district had implemented many accountability components for schools and teachers. Unless the principal creates a culture of support and mutual trust, the teachers remain suspicious of change.

Typically, an obstacle for PLCs was the designated time for teachers to meet and collaborate. Principals A and B addressed this particular issue by scheduling common plan times for their teams and by providing release time for professional development. The obstacle the two principals recognized was the time to teach and re-teach students the prescribed curriculum. To some extent, the district had addressed this problem by providing teachers with curriculum calendars with built in remediation days. This was where the principals protecting the teachers' time comes into play. The principal at school B made a conscious effort to protect the literacy and numeracy time. Scheduling of school wide assemblies during the day and field trips were eliminated and a high priority was placed on a 90-minute uninterrupted literacy block. There was approximately 30- minute whole group instruction and 60-minute small group instruction, with an additional 20-minute intensive intervention three times a week in grades K-3. Principal B recognized the importance a more diverse curriculum, but with the demands of the state testing requirements, she felt that they needed to focus on what was tested. Assigning priorities to what is important to be taught and learned was a valuable component to their PLC.

High stakes testing and the pressure of immediate test score gains in literacy and numeracy was an obstacle for the schools as well. Performance on high stakes tests has recently been used as the main indicator of the level of quality education students receive (Supovitz, 2009). Often the pressure of passing the state mandated test fosters competition among teachers and creates mistrust. To counteract this competition, all teachers at schools A and B were held accountable for all students' success. This was accomplished through the development of common goals for the school to work towards and common assessments. The constant revisiting of student data assisted the instructional staff in staying focused on the mission and goals they had set. The schools had this in place, which was evident in their SIPs.

Some positive effects of high stakes' testing were that school leaders were forced to align curriculum, standards, and assessments. It influenced principals' and teachers' behaviors and practices in numeracy and literacy. It also motivated teachers to some extent, but their responses were short-lived because the initiatives were looked upon as an added component to the already heavy-laden curriculum. Supovitz (2009) asserts, "High stakes testing has focused instruction towards important and developmentally appropriate literacy and numeracy skills. But it also resulted in a narrower curricular experience and more focus on test prep activities" (p. 221). Principal B expressed the same concerns. They have cut all of the "fluff" from the curriculum to ensure that there is plenty of time to cover the required standards. She believes that students miss out on some enriching curriculum that was tied to Science and Social Studies due to the concentrated focus on numeracy and literacy.

For both schools, stakeholder involvement was low. Partnerships with various stakeholders such as parents, local community members, business and industry, and higher education institutions had to be built and cultivated. Strong partnerships were not accidental. According to Stoll, Bolam, McMahon, Wallace and Thomas (2006), "They require new structures, activities and rethinking of the way each institution operates as well as how they might work as part of this partnership" (p. 421). There was not any evidence of an active effort to recruit and involve all stakeholders with school A. A more established PLC is all-inclusive and involves all of the stakeholders (Huffman, 2001). Principal B did reach out to the parents of her students who were scoring "unsatisfactory" or "limited knowledge". Although the parents were not part of the PLC, she recognized that their input would be crucial in their child's academic achievement. She required them to come to school on an individual basis and discuss their child's progress and the school's plan to help the child to succeed. She outlined her expectations of them as parents and what she expected them to do at home with their child. Principal B also collaborated with another Title I school when it came to professional development and building collaborative teams. She felt that this type of collaboration had potential but finding the time to work together with another school was difficult. Hargreaves (2007) suggests that strong PLCs share professional development with their peers and participate as learners alongside them.

Recommendations for Practice

This study's results documented several areas for improvement for the elementary principals in this district. Other school leaders who are considering

implementation of professional learning communities could benefit from this research. The following implications for practice for this study include:

Recommendation #1. The low level of involvement of stakeholders at both schools was noted. A more established PLC is all inclusive of its members (Huffman, 2001). Fullan (2006) adds that sustaining PLCs view parents as part of the solution and parents should be included in the PLC. Strong and sustainable PLCs network with others around them. They learn from the external members as well as the internal members of their PLC. According to Hargreaves (2007),

> Strong PLCs… network with other schools and institutions, consistently accessing other learning, challenging their own assumptions, and pushing themselves to even higher levels of performance. If they mentor other schools, they open themselves to learning from these schools as well as offering learning of their own (p. 191).

It is recommended that the schools continue to develop ways in which they can meaningfully involve stakeholders in the PLCs through networking with parents, community, similar schools in their area, and higher education institutions.

Recommendation #2. Results from the PLCA-R survey indicated that shared personal practice was the dimension least applied. This dimension had the lowest mean for both schools. Hord (2004) and Morrissey (2000) found this to be true in their research as well. Researchers found that teachers who made regular visits to one another's classrooms and provided feedback could change teacher practices, knowledge, and effectiveness (Darling-Hammond & Richardson, 2009). The district leaders and principals should encourage collegial learning, identify successful models

of peer observation, and create structures that allow for the majority of the staff to engage in this practice.

Recommendation # 3. As the schools continue to implement the principles of PLCs, a formalized structure to provide feedback and allow for evaluation of their progress would be beneficial. Implementing appropriate interventions to ensure more effective progression through the PLC stages would help to insure success and sustainability. DuFour's Professional Learning Community Continuum, or the Professional Learning Community Development Rubric (PLCDR) developed from Hord's dimensions of a PLC and Fullan's phases of change (as cited in Huffman and Hipp, 2003, p. 23), would be useful tools for schools to use to model their evaluation form. Setting up this evaluation tool as a survey to be administered to school staff at the beginning and end of the year would be beneficial for comparison data and for immediate feedback on the PLCs progress.

Recommendation # 4. According to the individual interview data, the school district is continuing to fund training for teachers and principals in PLC principles is an important component of sustaining a PLC. Ongoing professional development is important for teachers to continue to improve their content knowledge and insures that the principles of PLCs are deeply embedded in the school's culture and internalized.

Suggestions for Further Research

This case study provides detailed descriptions of the experiences of two elementary principals who were implementing the components of a PLC. The data provides information regarding the implementation of PLCs and raises additional

questions for further research. Questions for further study are recommended as follows:

Recommendation #1. Support staff has an important role to play in helping to enhance student learning. Their involvement in a PLC is essential (Bolam, Stoll & Greenwood 2007; Louis & Gordon, 2006). Traditionally, those exploring PLCs have focused only on teachers and school leaders. Further research on how support staff impact PLC is warranted.

Recommendation # 2. Another aspect for future research consideration is teacher and principal turnover rates and the hiring process used to sustain a PLC. According to McLaughlin & Talbert (2007),

> Teacher and administrator turnover presents huge difficulties at all school levels in terms of consistency of practice, school environment and supports for instruction . . . PLCs can provide a rudder in turbulent times and that turnover is not necessarily a bad thing…Turnover often signified the 'pushing out' of people opposed to change. It also presents opportunities to hire people who supported the school's vision and were both willing and able to participate in the reform work. (p. 163)

One principal explained, "I also believe in hiring teachers and assistants that are team players. They must be willing to work with all children and staff to make School A a success." The principal of School B stated that as teachers left her school she would hire teachers that supported a PLC. Turnover rates of teachers provided the opportunity to build and sustain a stronger PLC, but PLCs are vulnerable over time at

moments of high teacher turnover or when key leaders leave. Hargreaves (2007) states,

> The replacement of key leaders or of the principal can easily misinterpret the distinctive culture they are entering and, because they have not been part of that culture's history and its formation, their loyalty and commitment has to be actively encouraged; it cannot be assumed (p. 188).

Recommendation #3. It is recommended that a case study be conducted on elementary schools, that have similar demographics, and have achieved a perfect API for over a five-year period and how the use of student data effected student achievement and its' role in building a PLC. This qualitative research endeavor would provide a rich detailed understanding of the leadership behaviors of the principal and teacher leaders with respect to Hord (1997, 2004) and Huffman and Hipp's (2003) five PLC domains.

Conclusions Based on Findings

This case study shows that the school districts play a key role in supporting a PLC initiative. District-mandated initiatives are more successful when there is a strong continuous improvement focus (Kruse & Louis, 2007). Student achievement was higher in the districts that emphasize capacity for change among teachers. According to Stoll, Bolam, McMahon, Wallace, and Thomas (2006), "External support for professional learning communities comes mainly in the form of district support (p. 241). The district in this case study had begun implementing many of the principles and components of established PLCs. The district had undergone a curriculum audit so that its curriculum guides could be aligned to the state and

national standards, and pacing guides were established to assist teachers in pacing their instruction. The district developed common assessments for the core content areas using blueprints from the state department of education and from the expertise of the classroom teachers. The district also started a PLC type program called YANTA, You Are Not Teaching Alone, and devoted staff development money and Title II monies to support the effort. Data from the state Criterion Reference Test were used to identify the weakest and strongest objectives to help guide teachers in their presentation to their students. The natural progression, then, was for the district to invest monies into formalizing their efforts into PLCs.

This research provides evidence that a district initiative of PLCs shows that elementary school principals are succeeding in implementing working PLCs but are at different levels of implementation. Even though both schools started the process at the same time, their staffs did not respond at the same rate. Teachers' practices became more student-centered in School B because of the continued focus on student data; a discussion about students learning was evident based on their success in increasing student achievement on various assessments. They engaged in meaningful conversations about what kind of learning should take place. Both schools not only focused on literacy and numeracy, they also incorporated an enriching and engaging curriculum that expanded their students' understanding and deepened their connections to their learning.

Both principals recognized the importance of collaborative action in creating systemic change in their schools. Their goal was to improve student achievement and instructional practices, and their means were varied. A culture of trust was developed

with the grade level teams to discuss student progress, but the teams had not yet opened up to their shared practice. This could have been contributed to the lack of supports in place to secure the time necessary for teachers to observe each other and provide feedback. However, the teachers were willing to discuss the student data and use the information to improve their teaching practices.

The difference between Principal A and Principal B was that Principal B had the necessary components in place to establish and sustain the PLC. Table 12 identifies the differences.

Table 12

Differences Between Principal A and Principal B

Found at Both Elementary Schools	What Principal B Did Differently
Shared Supportive Leadership	
Structures in Place	Teachers Held Accountable for Student Performance
Training of Core Lead Teachers in PLC Principles	Expectations of Grade Level Team Meetings
Expectation of Teacher Leaders	Core Curriculum Developed to Meet Student Needs
Vertical Teams Analyzing Data	Purchase of Research Based Curriculum
	Purposeful Required Training for Grade Level Teams
Shared Values and Vision	
Introduced Staff to the PLC Principles	Mission Statement has Clear, Measureable Expectations
Set SMART Goals with a Focus on Numeracy and Literacy	Principal Modeled Expectations • Protected Teaching Time • Provided Resources • SIP Useable and Agreed Upon • Monitored and Teachers Held Accountable
Use of External Measures	
Collective Learning and Application	
Collaboration on Long and Short Term Goals	Curriculum Alignment in Lower Grade with Teacher Buy In
Conversations about Student Data	New Hires Expected to Be Trained in the Agreed Upon Programs
Faculty Meetings Focused on Student Learning	Analyzing Student Work
Shared Personal Practice	Book Studies
Literacy Coaches	Involved Teachers in Decisions About Student Learning
	Development of Common Language
Supportive Conditions Relationships	
Collaboration Between the Literacy Coach and Teachers	Recognition of Outstanding Achievement • Monthly Student Assembly • 1500 Party for Teachers • Themed Testing Competitions
	Professional Development with Sister School
Supportive Conditions Structures	
Common Grade Level Team Meetings	Require Team Meetings • Vertical • Horizontal • Focused Meetings
Vertical Team Meetings	
Student Needs	
Provide Support for Students Below Benchmark	Required Saturday School
Focus on Student Learning	Required Parents to Meet with Her About Child's Progress
Focus on Student Needs	Required Homework Packets for Students Below Benchmark
Monitored Progress	Celebration for Students Reaching Their Goals
DIBELS, AR, SuccussMaker, Common Assessments	
Funding for Additional Tutors	Recognition for Perfect Attendance
	Creating a Positive Student Centered Environment
	Constant Focus on Student Learning Through Data
	Increased Instructional Time for Numeracy and Literacy
Principal's Role	
Focus on Doing What is Right for Students	Focus on What is Important
Setting the Tone	Capitalize on Teachers Strengths
Professional Development	Focus on the Mission and Vision
Finder of Resources	Develop a Culture of Trust
	Hiring Quality Teachers
	Sustained Attention on What's Important
	Building Professional Capacity
Sustainability Components	
Continue Funding and Training in PLC	Opportunities to Meet
Hiring Additional Literacy Coaches	Continue Curriculum Alignment
Teacher and Student Attitude	Data Driven Instruction
	Development of Outside Experts
	SIP Living Guiding Document

Not only did Principal B's school have Hord's five dimensions in place with overall agreement from her staff, she implemented Hargreaves' (2007) seven principles of sustainability, which were depth, breadth, endurance (length), justice, diversity, resourcefulness, and conservation. She developed and established these principles to sustain her PLC. Principal B concentrated on what mattered to her staff. She protected and preserved the literacy and numeracy instructional time which created depth within her PLC.

The second component of breadth or sustained leadership manifested itself in the way Principal B set up her teams. They were not just a group of teachers sitting around after school discussing data-they were scheduled team meetings with a purpose. The data was managed and analyzed by her and shared with her staff, and through her modeling of this practice, her teachers eventually took over this responsibility. As a team, they came up with instructional strategies to improve their student's achievements. The teachers used this "real time" data routinely to diagnose and remediate their students.

School B's PLC had the potential to endure or to last. Hargreaves maintains that "Strong and sustainable PLCs cannot be rushed or forced. They can only be facilitated and fed. Professional learning communities take time" (2007, p. 188). School B's implementation of a PLC was a slow and methodical process that took time to develop. Principal B focused on the development of the relationships among her staff through various team building activities that centered around student learning. She was supportive and was mindful of the PLC shared mission and vision,

and she made sure that any initiatives or new programs that came across her desk supported the PLCs values.

Principal B strongly believed in providing equal learning opportunities for her students. Even though her school had a higher poverty rate than other schools in the district, she used all of the resources available to her to ensure her students' success. Their hard work in the PLC showed in their score of 1500 on the API and on the decreasing number of students needing remediation. Through her leadership, she actively improved their surrounding environment.

Principal B networked to some extent to create diversity in the PLC. She connected with others around her from shared professional development with other Title I schools, to hiring teachers from sister schools to run her Saturday school. She felt this networking would give her students exposure to other educators besides their normal teachers. Her staff was able to have discussions with the Saturday school teachers, and they could share successful teaching strategies with each other. Teachers from each vertical team were required to attend various professional development conferences with the expectation that they would share this information upon their return. Networking became a vital component to the PLC that empowered her teachers.

One of principal B's strengths was her resourcefulness with funds and with the people she hired to be on her staff. She used her Title I monies to support the core mission of the PLC. The monies were used for professional development as well as for purchasing the necessary resources to teach students. When hiring new teachers, she looked for teachers who shared their schools mission and vision. She looked for

teachers who would work collaboratively and who demonstrated that they understood student learning and educational theory.

Principal B conserved what worked in the past. She acknowledged the more experienced teachers and leaned on them for leadership roles. She empowered school teams to work with resistant teachers to assist them in adopting the collectively shared values and mission. She valued all members of the PLC whether they were novice teachers or experienced teachers.

Principal B had more success because she was the driving force behind the creation of the PLC at her school and she did everything in her power to ensure successful implementation. One of her greatest gifts was that she recognized strong teachers. She had been able to hire from an "amazing talent pool and formalized really great teams." Her actions inspired teachers to actively participate in the collaborative teams, and her establishment of supportive conditions, such as providing time to meet, helped to make the PLC successful and to ultimately increase student learning.

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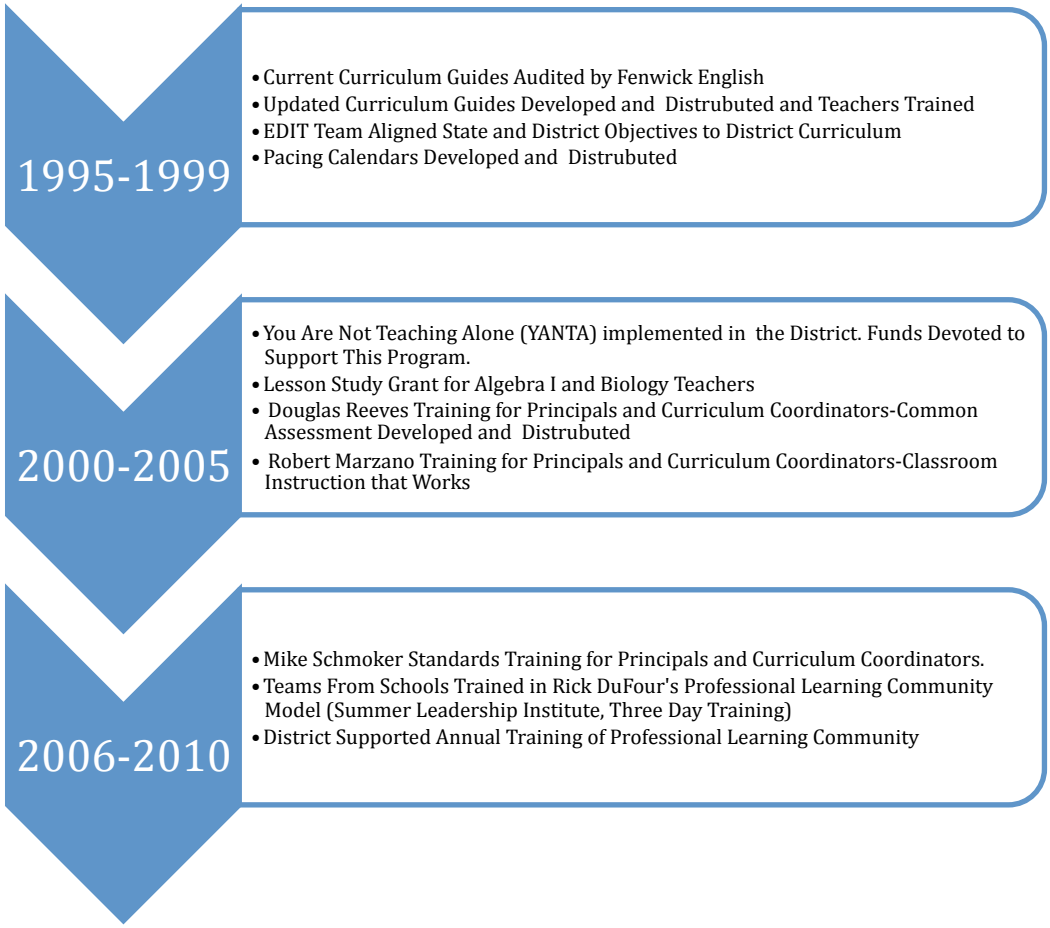
APPENDIX A

Timeline for the Development of a Professional Learning Community in One Suburban School District



APPENDIX B

The Professional Learning Community Continuum

Hord's PLC Principles	DuFour's Element of a PLC	Pre-Initiation Stage School has not addressed the principle.	Initiation Stage Starting "Critical Mass" has not been reached.	Developing Stage Doing School has aligned their structures and practices to the principle.	Sustaining Stage Embedded Principle is deeply embedded in the school culture. The principles are internalized and the school can survive key personnel changes.
Shared Values and Vision The what, why, who, and how of a PLC.	Shared Mission: Evidence that learning for all is the core purpose.	The focus is on teaching rather than learning.	An attempt has been made to identify learning outcomes for all grade levels or courses but this attempt has not impacted the practice of most teachers. Teachers respond to students who are not learning at their own discretion.	Teachers are clear regarding the learning outcomes their students are to achieve. Teachers are developing strategies to assess student mastery of these outcomes, monitor the results, and attempt to respond to students who are not learning.	Learning outcomes are clearly articulated and each student's attainment of the outcomes is carefully monitored. Practices, programs and policies of the school are continually assessed on the basis of their impact on learning.
	Shared Vision: Do we know what we are trying to create?	No effort has been made to engage faculty in describing preferred conditions for their school.	A vision statement has been developed for the school, but most staff is unaware of, or unaffected by it.	Staff members are aware of the vision statement, endorse it, and feel a sense of ownership in it.	Staff members routinely articulate the major principles of the shared vision and use those principles to guide their day-to-day efforts and decisions.
	Shared Values: Behaviors for advancing the Vision.	Staff members have not yet articulated the attitudes, behaviors, or commitments they are prepared to demonstrate in order to advance the mission of learning for all and the vision of what the school might become. If they discuss school improvement, they focus on what other groups must do.	Staff members have articulated statements of beliefs or philosophy for their school; however, these value statements have not impacted through day- to - day work or the operation of the school.	Staff members have made a conscious effort to articulate and promote the attitudes, behaviors, and commitments that will advance their vision of the school.	The values of the school are embedded in the school culture. These shared values are evident to new staff and to those outside of the school.

Hord's PLC Principles	DuFour's Element of a PLC	Pre-Initiation Stage School has not addressed the principle.	Initiation Stage Starting "Critical Mass" has not been reached.	Developing Stage Doing School has aligned their structures and practices to the principle.	Sustaining Stage Embedded Principle is deeply embedded in the school culture. The principles are internalized and the school can survive key personnel changes.
Collective Learning and Application of Learning Evaluating what is important.	School Improvement Goals: What are our priorities?	No effort has been made to engage the staff in setting and defining school improvement goals related to student learning. If goals exist, they have been developed by the administration.	Staff members have participated in a process to establish goals but the goals are typically stated as projects to be accomplished or are written so broadly that they are impossible to measure. The goals do not yet influence instructional decisions in a meaningful way.	Staff members have worked together to establish long and short- term improvement goals for their school. The goals are clearly communicated. Assessment tools and strategies have been developed and implemented to measure progress toward the goals.	All staff pursues measurable school improvement goals as part of their routine responsibilities. Goals are clearly linked to the school's shared vision. Goal attainment is celebrated and staff members are willing to identify and pursue challenging stretch goals.
	Continuous Improvement	Little attention is devoted to creating systems that enable either the school or individual teachers to track improvement.	A few people in the school are tracking general indicators of achievement, such as standardized tests. Results are then reported, but not acted upon.	Individual teachers and teaching teams gather information that enables them to identify and monitor individual and team goals.	Everyone in the school participates in reviewing data to identify discrepancies between actual and desired results, develop strategies to achieve the goals, and track improvement indicators.
	Common Assessments, both formative and summative.	Each teacher independently decides how to assess learning. Teachers have little awareness of what or how colleagues of what or how colleagues are assessing student learning.	Individual teachers design assessments. Student learning is documented as average achievement over time. Teachers compare school assessment data with their own students' data to determine the relative success of their students.	Teams of teachers design common assessments to monitor student performances. Results may be shared and analyzed collectively. Student learning is documented as average achievement over time.	Teams of teachers design assessments, and the data is analyzed collectively to inform their teaching.

Hord's PLC Principles	DuFour's Element of a PLC	Pre-Initiation Stage	Initiation Stage Starting	Developing Stage Doing	Sustaining Stage Embedded
Shared and Supportive Leadership Sharing of power, authority, and decision-making.	Collaborative Culture: Administrator/ Teacher Relations	Questions of power are a continuing source of controversy and friction. Relationships between teachers and administrators are often adversarial.	Efforts have been made to reduce friction by clarifying "administrator roles" and "teacher roles". Both parties are protective of intrusion on to their turf.	Administrators solicit and value teacher input as improvement initiatives are developed and considered but administrators are regarded as having primary responsibility for school improvement.	Administrators pose questions, delegate authority, create collaborative decision making processes and provide staff with the information and training they need to be involved in making decisions.
	Researched-based best practices.	Decisions about improvement strategies are made by "averaging opinions" or are externally mandated.	Teachers rely on others outside the school to identify improvement strategies and to supply additional resources for implementation. The effectiveness of improvement strategies is externally validated.	Teachers collaborative to set goals around prescribed improvement strategies. Individual teachers and teaching teams gather information to identify and monitor individual and team goals.	Decisions about improvement strategies are made by teams of teachers combing the research to identify best practices to affect student-learning goals. Approaches are internally validated.
Shared Personal Practice Collaboration among teachers on student learning and using best instructional practices.	Collaborative Culture: Teachers working together	Teachers work in isolation. There is little awareness of what or how colleagues are teaching.	Teachers recognize a common curriculum that they are responsible for teaching but there is little exchange of ideas regarding instructional materials, teaching strategies or methods of assessment.	Teachers function in work groups that meet periodically to complete certain "business" tasks such as reviewing intended outcomes and coordinating calendars.	Teachers function as a team. They work collaboratively to identify collective goals, develop strategies to achieve those goals, gather relevant data and learn from one another.
Supportive Conditions Structures and Relationships Time to collaborate and building of collegial relationships.	Focus on Results	The results the school seeks for each student have not been identified.	Results have been identified but are stated in such broad terms that they are impossible to measure. Improvement initiatives focus on inputs - projects or tasks to be completed, rather than on student achievements.	Desired results have been identified in terms of student outcomes and student achievement indicators have been identified. Data is being collected and monitored within the school system. Results of the analysis are shared with teachers.	Teams of teachers value and seek out information on results. They gather relevant data and use these data to identify improvement goals and to monitor progress towards goals.

APPENDIX C

Letter of Support

MOORE Public Schools
LEARNING FOR LIFE ADMINISTRATIVE SERVICE CENTER
1500 S. E. 4th Street • Moore, OK 73160-8232
405.735.4249 • Fax 405.735.4392

Office of the Superintendent

March 31, 2009

Shelley Jaques
1321 SW 129th Street
Oklahoma City, Oklahoma 73170

RE: Request to Conduct Research in Moore Public Schools

Your request to conduct the research described in your letter dated February 16, 2009 in Moore Public Schools is approved. Participation by Moore Public Schools employees remains voluntary.

Upon completion of your study, please provide this office with a summary of your findings.

Sincerely,

Deborah Arato
Superintendent

Title of Research: Principals Perceptions on Implementing a Professional Learning Community: A case study of one school district in Oklahoma.

APPENDIX D

Permission To Use Survey Instrument

From: Dianne Olivier [dolivier@louisiana.edu]
Sent: Tuesday, November 11, 2008 4:19 PM
To: SHELLEY JAQUES
Subject: RE: PLCA

Shelley,

Congratulations on your continued research. I think the study looks great and I will be anxious to hear about your results.

Yes, you do indeed have permission to use the Professional Learning Community Assessment for your dissertation study.

Question – What version are you using? The original PLCA or the revised version PLCA-R? The revised version has a few additional questions that specifically address utilization of data and the revision also includes place for additional narrative comments.

If you need the updated version, just let me know, but I may have originally sent you the revised form.

Best wishes on your continued research,

Dianne Olivier

Dianne F. Olivier, Ph. D.
Assistant Professor
Educational Foundations and Leadership
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
Office: 337-482-6408
Fax: 337-482-5262
Cell: 337-303-0451
Email: dolivier@louisiana.edu

APPENDIX E

Professional Learning Communities Assessment – Revised
Note: Survey is delivered via an online survey tool. The questions appear as below, with a radio button used to select a response.

Directions:
This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. 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. Comments after each dimension section are optional.

Key Terms:
Principal = Principal, not Associate or Assistant Principal
Staff/Staff Members = 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	**SCALE**			
	Shared and Supportive Leadership	**SD**	**D**	**A**	**SA**
8.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
9.	The principal incorporates advice from staff members to make decisions.	0	0	0	0
10.	Staff members have accessibility to key information.	0	0	0	0
11.	The principal is proactive and addresses areas where support is needed.	0	0	0	0
12.	Opportunities are provided for staff members to initiate change.	0	0	0	0
13.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0

14.	The principal participates democratically with staff sharing power and authority.	0	0	0	0
15.	Leadership is promoted and nurtured among staff members.	0	0	0	0
16.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0
17.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0
18.	Staff members use multiple sources of data to make decisions about teaching and learning.	0	0	0	0
COMMENTS:					
	STATEMENTS	**SCALE**			
	Shared Values and Vision	**SD**	**D**	**A**	**SA**
20.	A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0
21.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
22.	Staff members share visions for school improvement that have undeviating focus on student learning.	0	0	0	0
23.	Decisions are made in alignment with the school's values and vision.	0	0	0	0
24.	A collaborative process exists for developing a shared vision among staff.	0	0	0	0
25.	School goals focus on student learning beyond test scores and grades.	0	0	0	0
26.	Policies and programs are aligned to the school's vision.	0	0	0	0
27.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
28	Data are used to prioritize actions to reach a shared vision.	0	0	0	0

COMMENTS:					
	STATEMENTS	**SCALE**			
	Collective Learning and Application	**SD**	**D**	**A**	**SA**
30.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0
31.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
32.	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	0	0
33.	A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0
34.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0
35.	Professional development focuses on teaching and learning.	0	0	0	0
36.	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	0	0	0
37.	School staff members are committed to programs that enhance learning.	0	0	0	0
38	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	0	0	0
39.	Staff members collaboratively analyze student work to improve teaching and learning.	0	0	0	0
COMMENTS:					
	STATEMENTS	**SCALE**			
	Shared Personal Practice	**SD**	**D**	**A**	**SA**
41.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0

42.	Staff members provide feedback to peers related to instructional practices.	0	0	0	0
43.	Staff members informally share ideas and suggestions for improving student learning.	0	0	0	0
44.	Staff members collaboratively review student work to share and improve instructional practices.	0	0	0	0
45.	Opportunities exist for coaching and mentoring.	0	0	0	0
46.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
47.	Staff members regularly share student work to guide overall school improvement.	0	0	0	0
COMMENTS:					

	STATEMENTS	**SCALE**			
	Supportive Conditions – Relationships	**SD**	**D**	**A**	**SA**
49.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
50.	A culture of trust and respect exists for taking risks.	0	0	0	0
51.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
52.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
53.	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	0	0
COMMENTS:					

	STATEMENTS	SCALE			
	Supportive Conditions – Structures	**SD**	**D**	**A**	**SA**
55.	Time is provided to facilitate collaborative work.	0	0	0	0
56.	The school schedule promotes collective learning and shared practice.	0	0	0	0
57.	Fiscal resources are available for professional development.	0	0	0	0
58.	Appropriate technology and instructional materials are available to staff.	0	0	0	0
59.	Resource people provide expertise and support for continuous learning.	0	0	0	0
60.	The school facility is clean, attractive and inviting.	0	0	0	0
61.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
62.	Communication systems promote a flow of information among staff members.	0	0	0	0
63.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0
64.	Data are organized and made available to provide easy access to staff members.	0	0	0	0
COMMENTS:					

Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (In progress). Assessing and analyzing schools as PLCs. In K. K. Hipp & J. B. Huffman (Eds.). *Professional learning communities: Purposeful Actions, Positive Results.* Lanham, MD: Rowman & Littlefield.

APPENDIX F

PLCA-R Demographic Questions

1. Your role in the school district could be best described as

   Teacher

   Principal/Assistant Principal

   Central Office Administrator

   Paraprofessional or Staff Member

   Stakeholders- Parents and Community Members

   Other, please specify

2. Choose your current location.
3. Have you attended a summer PLC training with Moore Public Schools?
4. How long have you been in the education profession?
5. How long have you been employed with Moore Public Schools?
6. Ethnicity

   African American or Black

   Asian or Pacific Islander

   Caucasian or White

   Hispanic/Mexican American

   Native American or American Indian

   Other, please specify

7. Gender

   Male

   Female

APPENDIX G

Informed Consent for Survey Instrument

Dear Participant:

My name is Shelley Jaques and I am a graduate student in EACS at the University of the Oklahoma. I am requesting that you volunteer to participate in a research study titled Principals Perception on Implementing a Professional Learning Community. You were selected as a possible participant because you have completed the Professional Learning Community training within the past four years. Please read this information sheet and contact me to ask any questions that you may have before agreeing to take part in this study.

Procedures: If you agree to be in this study, you will be asked to do the following things: Participants will be asked to complete an on-line survey anonymously. The survey will include 65 questions. This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a (PLC) and related attributes. It will take approximately 25 minutes to complete, and the findings from this project will provide information on how school districts and sites may use strategies such as collaboration and shared decision making as a means of addressing growing accountability concerns.

Risks and Benefits of Being in the Study: The study has the following risks The only risk involved will be any discomfort that the participant may feel in participating in a survey. Participation may be discontinued at anytime without penalty.

The benefits to participation are: As a participant, you will have the benefit of sharing your educational experiences in becoming a part of a professional learning community.

Compensation: You will not be compensated for your time and participation in this study.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not result in penalty or loss of benefits to which you are otherwise entitled. If you decide to participate, you are free not to answer any question or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.

Length of Participation: It will take approximately 20 minutes to complete the survey. Participation is voluntary, and there will be no penalty for refusing to participate. Participation may be discontinued at anytime without penalty.

Confidentiality: The records of this study will be kept private and your supervisor will not have access to your responses. In published reports, there will be no

information included that will make it possible to identify you as a research participant. Research records will be stored securely. All participants will be assigned a pseudonym under which all online responses will be noted. Only approved researchers will have access to the records.

Contacts and Questions: If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at Shelley Jaques- 378-3775 or at shelley.j.jaques-1@ou.edu You may also contact Dr. Gregg Garn at 405-325-2228 or garn@ou.edu

In the event of a research-related injury, contact the researcher(s). You are encouraged to contact the researcher(s) if you have any questions. If you have any questions, concerns, or complaints about the research and wish to talk to someone other than the individuals on the research team, or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at (405) 325-8110 or irb@ou.edu.

Please keep this information sheet for your records. By completing and returning this questionnaire, I am agreeing to participate in this study.

I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

To agree to participate, click on the link below:

Accept

Click to Decline

Thank you for your interest in the survey.

"***The University of Oklahoma is an equal opportunity institution.***"

APPENDIX H

University of Oklahoma
Institutional Review Board
Informed Consent to Participate in a Research Study

Project Title:	Principals Perception on Implementing a Professional Learning Community
Principal Investigator:	Shelley Jaques
Department:	EACS

You are being asked to volunteer for this research study. This study is being conducted at Administrative Service Center, 1500 SE 4th Street, Moore, Oklahoma. You were selected as a possible participant because your teachers and you perceived your school as successfully implementing a Professional Learning Community based on the PLCA survey.

Please read this form and ask any questions that you may have before agreeing to take part in this study.

Purpose of the Research Study
The purpose of this study is to examine how school principals in this case study perceive a district wide initiative of putting professional learning communities into place and how it effects their decisions as instructional leaders. As a result of this study the researcher wants to see if there is a relationship between successful implementation of a professional learning community and student achievement based on a set of demographic variables and how if effects the principal's behavior as leaders.

Number of Participants
About 10 people will take part in this study.

Procedures
If you agree to be in this study, you will be asked to do the following:

Participants will be interviewed and asked questions about how their school has utilized the dimensions of a PLC over the past four years. Dimension topics will include: shared leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions.

All participants will be assigned a pseudonym under which all interview tapes and transcriptions will be noted. No reference will be made to name, address, email, or phone numbers. Interview tapes will be stored in a locked filing cabinet, and

transcripts will be saved on a secure password protected computer hard drive. At the conclusion of the study all tapes and transcriptions will be erased and destroyed.

Length of Participation
Interviews will last up to 45 minutes and will be audiotape recorded with permission. Breaks will be provided as needed. Participants will be provided with a transcript of the interview to indicate anything that cannot be quoted. Participation is voluntary, and there will be no penalty for refusing to participate. Participation may be discontinued at anytime without penalty.

This study has the following risks:
The only risk involved will be any discomfort that the participant may feel in participating in an interview. Breaks will be provided as needed. Participation may be discontinued at anytime without penalty. If the interview brings out any memories that cause stress or discomfort, you will be referred to a counseling agency.

Benefits of being in the study are
As a participant, you will have the benefit of sharing your educational experiences in becoming a part of a professional learning community.

Confidentiality
In published reports, there will be no information included that will make it possible to identify you without your permission. Research records will be stored securely and only approved researchers will have access to the records.

There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the Dr. Gregg Garn and the OU Institutional Review Board.

Compensation
You will not be reimbursed for you time and participation in this study.

Voluntary Nature of the Study
Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

Waivers of Elements of Confidentiality
Your name will not be linked with your responses unless you specifically agree to be identified. Please select one of the following options

_____ I consent to being quoted directly.

_____ I do not consent to being quoted directly.

_____ I consent to having my name reported with quoted material.

_____ I do not consent to having my name reported with quoted material

Audio Recording of Study Activities
To assist with accurate recording of participant responses, interviews may be recorded on an audio recording device. You have the right to refuse to allow such recording without penalty. Please select one of the following options.

I consent to audio recording. ___ Yes ___ No.

Contacts and Questions
If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at:
Shelley Jaques- 405-378-3775, Shelley.J.Jaques-1@ou.edu.
Dr. Gregg Garn, 405-325-2228, garn@ou.edu

Contact the researcher(s) if you have questions or if you have experienced a research related injury.

If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

You will be given a copy of this information to keep for your records. If you are not given a copy of this consent form, please request one.
Statement of Consent
I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

Signature Date

APPENDIX I

Principal Interview Guide

Principal:_____ School Level:_____

Date:_____ Time:_____

Interviewer: Shelley Jaques

Thank you for agreeing to participate in this interview. The purpose of this interview is to glean information about the processes and programs that affect student achievement at your school. This interview constitutes part of my research about your school for use in a doctoral dissertation through the University of Oklahoma. Please know that your participation is complexly voluntary and confidential. Your name will not be associated in any way to your responses. Before we begin, I would like to ask your permission to audiotape this interview. The tape will be destroyed at the conclusion of the study. I have ten questions for you. Please stop me at any time if I need to clarify or restate the question. Do you have any questions before we begin?

Principal Interview Questions

1. Tell me about how you decided to become a principal in this school district and why.
2. Please describe how the idea of professional learning communities was initiated in your school.
3. In your opinion, what is the principal's role in a professional learning community?

4. Describe your own involvement in the implementation of professional learning community.
5. What action steps have you put into place to start, support, and sustain your schools PLC? Give examples.
6. What influence does the state mandated test (CRT's) have on your behavior as a leader? i.e. implementing a PLC, selection curriculum, determining school goals, hiring practices and other influences such as the API.
7. Tell me how collaboration time is managed in your school and in what ways. Possible follow up questions: Are the meetings grade level/subject specific? Tell me about the strengths and weaknesses. How do you share small group information with the whole group?
8. What barriers did you encounter in implementing a PLC? How did you address them?
9. In your opinion, what helped or hindered you to sustain a professional learning community in your school?
10. Is there anything else you would like to tell me that we haven't discussed?

Do you have any questions? Do you wish to clarify any of your answers? Again, thank you for your participation.

Concluding time_____

APPENDIX J

Dimensions and Descriptive Data for the PLCA-R

	School A Dimension Item	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Standard Deviation
	Shared Supportive Leadership						
8	Staff members are consistently involved in discussing and making decisions about most school issues.	0	11	11	6	**2.82**	**0.77**
9	The principal incorporates advice from staff members to make decisions.	0	6	16	6	**3.00**	**0.67**
10	Staff members have accessibility to key information.	0	8	15	5	**2.89**	**0.69**
11	The principal is proactive and addresses areas where support is needed.	0	4	16	8	**3.14**	**0.65**
12	Opportunities are provided for staff members to initiate change.	0	8	15	5	**2.89**	**0.69**
13	The principal shares responsibility and rewards for innovative actions.	0	11	9	8	**2.89**	**0.83**
14	The principal participates democratically with staff sharing power and authority.	0	9	12	7	**2.93**	**0.77**
15	Leadership is promoted and nurtured among staff members.	0	8	14	6	**2.93**	**0.72**
16	Decision-making takes place through committees and communication across grade and subject areas.	0	8	15	5	**2.89**	**0.69**
17	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	8	14	6	**2.93**	**0.72**
18	Staff members use multiple sources of data to make decisions about teaching and learning.	0	6	12	10	**3.14**	**0.76**
	Shared Supportive Leadership Average Mean / Average STD					**2.95**	**0.72**
	Shared Values and Vision						
20	A collaborative process exists for developing a shared sense of values among staff.	1	8	15	4	**2.79**	**0.74**
21	Shared values support norms of behavior that guide decisions about teaching and learning.	0	6	17	5	**2.96**	**0.64**
22	Staff members share visions for school improvement that have undeviating focus on student learning.	0	9	12	7	**2.93**	**0.77**
23	Decisions are made in alignment with the school's values and vision.	0	5	15	8	**3.11**	**0.69**
24	A collaborative process exists for developing a shared vision among staff.	0	10	10	8	**2.93**	**0.81**
25	School goals focus on student learning beyond test scores and grades.	0	7	10	11	**3.14**	**0.80**
26	Policies and programs are aligned to the school's vision.	0	6	17	5	**2.96**	**0.64**

27	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	3	4	15	6	**2.86**	**0.89**
28	Data are used to prioritize actions to reach a shared vision.	1	5	16	6	**2.96**	**0.74**
	Shared Values and Vision Average Mean / Average STD.					**2.96**	**0.75**
	Collective Learning and Application						
30	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	6	12	10	**3.14**	**0.76**
31	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	5	15	8	**3.11**	**0.69**
32	Staff members plan and work together to search for solutions to address diverse student needs.	0	4	17	7	**3.11**	**0.63**
33	A variety of opportunities and structures exist for collective learning through open dialogue.	0	9	13	6	**2.89**	**0.74**
34	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	7	16	5	**2.93**	**0.66**
35	Professional development focuses on teaching and learning.	0	1	13	14	**3.46**	**0.58**
36	School staff members and stakeholders learn together and apply new knowledge to solve problems.	3	5	12	8	**2.89**	**0.96**
37	School staff members are committed to programs that enhance learning.	0	3	16	9	**3.21**	**0.63**
38	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	1	4	16	7	**3.04**	**0.74**
39	Staff members collaboratively analyze student work to improve teaching and learning.	0	5	14	9	**3.14**	**0.71**
	Collective Learning and Application Average Mean / Average STD.					**3.09**	**0.71**
	Shared Personal Practice						
41	Opportunities exist for staff members to observe peers and offer encouragement.	0	10	12	6	**2.86**	**0.76**
42	Staff members provide feedback to peers related to instructional practices.	1	7	15	5	**2.86**	**0.76**
43	Staff members informally share ideas and suggestions for improving student learning.	0	3	15	10	**3.25**	**0.65**
44	Staff members collaboratively review student work to share and improve instructional practices.	0	5	17	6	**3.04**	**0.64**
45	Opportunities exist for coaching and mentoring.	1	6	15	6	**2.93**	**0.77**
46	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	4	17	7	**3.11**	**0.63**
47	Staff members regularly share student work to guide overall school improvement.	2	8	16	2	**2.64**	**0.73**

	Shared Personal Practice Average Mean / Average STD					**2.95**	**0.71**
	Supportive Conditions – Relationships						
49	Caring relationships exist among staff and students that are built on trust and respect.	2	1	14	11	**3.21**	**0.83**
50	A culture of trust and respect exists for taking risks.	2	5	15	6	**2.89**	**0.83**
51	Outstanding achievement is recognized and celebrated regularly in our school.	2	3	12	11	**3.14**	**0.89**
52	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	3	4	14	7	**2.89**	**0.92**
53	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	2	5	11	10	**3.04**	**0.92**
	Supportive Conditions - Relationships Average Mean / Average STD					**3.04**	**0.88**
	Supportive Conditions – Structures						
55	Time is provided to facilitate collaborative work.	1	2	17	8	**3.14**	**0.71**
56	The school schedule promotes collective learning and shared practice.	0	6	14	8	**3.07**	**0.72**
57	Fiscal resources are available for professional development.	3	1	19	5	**2.93**	**0.81**
58	Appropriate technology and instructional materials are available to staff.	0	1	18	9	**3.29**	**0.53**
59	Resource people provide expertise and support for continuous learning.	1	2	15	10	**3.21**	**0.74**
60	The school facility is clean, attractive and inviting.	0	0	8	20	**3.71**	**0.46**
61	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	2	12	14	**3.43**	**0.63**
62	Communication systems promote a flow of information among staff members.	1	6	10	11	**3.11**	**0.88**
63	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	2	4	13	9	**3.04**	**0.88**
64	Data are organized and made available to provide easy access to staff members.	0	4	17	7	**3.11**	**0.63**
	Supportive Conditions - Structures Average Mean / Average STD					**3.20**	**0.70**

	Summary Data:	**Mean**	**STD**
	Shared and Supportive Leadership	**2.95**	**0.72**
	Shared Vision and Values	**2.96**	**0.75**
	Collective Learning and Application	**3.09**	**0.71**
	Shared Personal Practice	**2.95**	**0.71**
	Supportive Conditions: Relationships	**3.04**	**0.88**
	Supportive Conditions: Structures	**3.20**	**0.70**
	Average Mean / Average STD	**3.03**	**0.75**

	School B Dimension Item	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	Standard Deviation
	Shared Supportive Leadership						
8	Staff members are consistently involved in discussing and making decisions about most school issues.	1	2	14	14	**3.32**	**0.75**
9	The principal incorporates advice from staff members to make decisions.	1	1	16	13	**3.32**	**0.70**
10	Staff members have accessibility to key information.	1	2	14	14	**3.32**	**0.75**
11	The principal is proactive and addresses areas where support is needed.	1	0	11	19	**3.55**	**0.68**
12	Opportunities are provided for staff members to initiate change.	1	2	16	12	**3.26**	**0.73**
13	The principal shares responsibility and rewards for innovative actions.	1	1	10	19	**3.52**	**0.72**
14	The principal participates democratically with staff sharing power and authority.	1	2	16	12	**3.26**	**0.73**
15	Leadership is promoted and nurtured among staff members.	1	1	10	19	**3.52**	**0.72**
16	Decision-making takes place through committees and communication across grade and subject areas.	1	2	11	17	**3.42**	**0.76**
17	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	1	5	13	12	**3.16**	**0.82**
18	Staff members use multiple sources of data to make decisions about teaching and learning.	1	1	10	19	**3.52**	**0.72**
	Shared Supportive Leadership Average Mean / Average STD.					**3.38**	**0.73**
	Shared Values and Vision						
20	A collaborative process exists for developing a shared sense of values among staff.	0	1	15	15	**3.45**	**0.57**
21	Shared values support norms of behavior that guide decisions about teaching and learning.	0	1	18	12	**3.35**	**0.55**
22	Staff members share visions for school improvement that have undeviating focus on student learning.	0	0	15	16	**3.52**	**0.51**
23	Decisions are made in alignment with the school's values and vision.	0	0	13	18	**3.58**	**0.50**
24	A collaborative process exists for developing a shared vision among staff.	0	1	14	16	**3.48**	**0.57**
25	School goals focus on student learning beyond test scores and grades.	1	6	12	12	**3.13**	**0.85**
26	Policies and programs are aligned to the school's vision.	0	0	14	17	**3.55**	**0.57**
27	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	3	14	14	**3.35**	**0.66**
28	Data are used to prioritize actions to reach a shared vision.	0	0	10	21	**3.68**	**0.48**
	Shared Values and Vision Average Mean / Average STD.					**3.46**	**0.58**

	Collective Learning and Application						
30	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	1	13	17	**3.52**	**0.57**
31	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	12	19	**3.61**	**0.50**
32	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	14	17	**3.55**	**0.51**
33	A variety of opportunities and structures exist for collective learning through open dialogue.	0	1	16	14	**3.42**	**0.56**
34	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	19	12	**3.39**	**0.50**
35	Professional development focuses on teaching and learning.	0	0	10	21	**3.68**	**0.48**
36	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	2	14	15	**3.42**	**0.62**
37	School staff members are committed to programs that enhance learning.	0	0	10	21	**3.68**	**0.48**
38	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	1	13	17	**3.52**	**0.57**
39	Staff members collaboratively analyze student work to improve teaching and learning.	1	0	12	18	**3.52**	**0.68**
	Collective Learning and Applications Average Mean / Average STD.					**3.53**	**0.55**
	Shared Personal Practice						
41	Opportunities exist for staff members to observe peers and offer encouragement.	1	4	19	7	**3.03**	**0.71**
42	Staff members provide feedback to peers related to instructional practices.	1	2	19	9	**3.16**	**0.69**
43	Staff members informally share ideas and suggestions for improving student learning.	0	0	11	20	**3.65**	**0.49**
44	Staff members collaboratively review student work to share and improve instructional practices.	0	3	14	14	**3.35**	**0.66**
45	Opportunities exist for coaching and mentoring.	1	7	18	5	**2.87**	**0.72**
46	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	1	18	12	**3.35**	**0.55**
47	Staff members regularly share student work to guide overall school improvement.	0	5	18	8	**3.10**	**0.65**
	Shared Personal Practice Average Mean / Average STD.					**3.22**	**0.64**
	Supportive Conditions – Relationships						
49	Caring relationships exist among staff and students that are built on trust and respect.	0	0	9	22	**3.71**	**0.46**

50	A culture of trust and respect exists for taking risks.	0	0	9	22	**3.71**	**0.46**
51	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	10	21	**3.68**	**0.48**
52	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	2	13	16	**3.45**	**0.62**
53	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	11	20	**3.65**	**0.49**
	Supportive Conditions - Relationships Average Mean					**3.64**	**0.50**
	Supportive Conditions – Structures						
55	Time is provided to facilitate collaborative work.	1	6	19	5	**2.90**	**0.70**
56	The school schedule promotes collective learning and shared practice.	0	2	23	6	**3.13**	**0.50**
57	Fiscal resources are available for professional development.	0	2	15	14	**3.39**	**0.62**
58	Appropriate technology and instructional materials are available to staff.	0	1	16	14	**3.42**	**0.56**
59	Resource people provide expertise and support for continuous learning.	0	1	18	12	**3.35**	**0.55**
60	The school facility is clean, attractive and inviting.	0	0	18	13	**3.42**	**0.50**
61	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	18	13	**3.42**	**0.50**
62	Communication systems promote a flow of information among staff members.	0	0	19	12	**3.39**	**0.50**
63	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	2	17	12	**3.32**	**0.60**
64	Data are organized and made available to provide easy access to staff members.	0	0	20	11	**3.35**	**0.49**
	Supportive Conditions - Structures Average Mean / Average STD.					**3.31**	**0.55**

	Summary Data:	**Mean**	**STD.**
	Shared and Supportive Leadership	**3.38**	**0.73**
	Shared Vision and Values	**3.46**	**0.58**
	Collective Learning and Application	**3.53**	**0.55**
	Shared Personal Practice	**3.22**	**0.64**
	Supportive Conditions: Relationships	**3.64**	**0.50**
	Supportive Conditions: Structures	**3.31**	**0.55**
	Average Mean / Average STD.	**3.42**	**0.59**

APPENDIX K

Comments from the PLCA-R Survey

Shared Supportive Leadership

School A: had no comments.

School B: It's a team-building effort. That's why our kids learn so much.
I marked disagree that Stakeholders assume shared responsibility and accountability, but I wanted to clarify that this is because they choose not to, not because we do not give them the opportunity to.

Shared Values and Vision

School A: Our situation is rather unusual. It seems like we are cooperative and listened to, but the truth is, it is really not that way. I specialize in reading and I am never consulted about reading issues. When the DIBELS was instituted, I was not consulted. Our principal does what she thinks is right and only gives authority on issues cared nothing about. She is an authority on everything and she has a fantastically knowledgeable faculty and never uses them. She has a bird nest on the ground and she insists on micromanaging almost everything. The reason I agree with a lot of the PLC questions is because we, as a faculty, like each other and work well together.

School B: On question 28, (Data are used to prioritize actions to reach a shared vision.) I answered agree, but I wanted to clarify that I interpreted data as test scores.

I disagree that stakeholders are involved in creating expectations. In most cases, we can't rely on our parents to back up the expectations we have ourselves, much less help us create them.

Our school does not have a very large number of stakeholders who want to participate.

Collective Learning and Application of Learning

Comments Question 40

School A: No comments.

School B: No comments.

Shared Personal Practice

Comments Question 48

School A: No comments.

School B: We share within the grade level, but we sure could use improvement vertically.

Supportive Conditions Relationship

Comments Question 53

School A: No comments.

School B: The state of Oklahoma does not "celebrate" schools like Fairview that work extremely hard to get high achievement and then are not compensated like the NOT at risk schools are.

State goals do not recognize the outstanding achievements students from our school make compared to students from more privileged peer groups. Although I believe that outstanding achievement is often recognized and celebrated at my school, it often depends on the PERSON receiving the recognition as to the level of celebration that occurs. It would be nice to have some kind of a quarterly recognition for teachers who are doing extraordinary things. These teachers could be nominated by their peers.

Supportive Conditions Structures

Comments Question 65

School A: No comments.

School B: Time is the enemy!

APPENDIX L

Transcripts of Face-to-Face Principal Interviews

Question 1: Tell me about how you decide to become a principal in this school district and why.

Principal A
I have been a part of the community most of my adult life. I started teaching at School A and then at the Junior High. When I decided to become a principal, it was just a natural process to remain a part of this district. I am proud of the districts reputation in the state.

Principal B
I grew up in this district and I was working here at the time and I felt comfortable. I wanted to be a principal because I love the curriculum aspect of the job and I wanted to put my hands onto more than just my grade level and curriculum. I have been an assistant for 4 years and principal at School B for 5 years.

Question 2: Please describe how the idea of professional learning communities was initiated in your school.

Principal A
The first year the district sent a group of schools to the PLC convention in Saint Louis Kelley participated. Our team came back and introduced the key concepts to the faculty and implemented the program. Throughout the years we have implemented several schedule changes that allow the teachers to collaborate together. We have also implemented additional tutoring for the students during the day.

Principal B
I took teachers the first year that the district started the PLC initiative. I trained 14 teachers the first year in Saint Louis, 7 teachers the second year, sent several teachers to Tulsa, and 5 repeaters this year in San Antonio. I pretty much trained my core leadership groups from each grade level team.

What did you bring back from the PLC conference?

We were already doing a lot of the things. It validated our practices. It is what we were all ready doing or trying to do. We weren't doing everything exactly like the PLC model we still are not. We are trying to tweak it to our own needs. We were already doing collaborative teams by grade level and vertically. We were already looking at data and disaggregating it. We were already matching our benchmark assessments to our test scores. It really helped formalize some of that. We are more on track at our meetings. It gave us some strategies to help teams that were not quit on board. We had two teams that were several years behind the others as far as collaborating with

each other or practices in the classroom. It helped us to energize those groups to get them caught up with the other groups. Implementing technology. Implementing a stronger phonics based program. Aligning our phonics based program K-3 aligning the fluency and vocabulary piece K-3.

Did you get everyone trained?

Yes we did. Our kindergarten through 3rd grade phonics, fluency, and vocabulary programs are aligned. They are identical programs. We use Read Naturally for fluency, Tampa Reads for vocabulary, and Structured Language Basics and guided reading groups for comprehension. We are completely aligned k-3 in that area.

Have you seen any growth?

We have seen change. We are still tweaking our remediation groups because we have such a high mobility school. It seems like the students we have to raise from K-3 seem to do fine. It is the ones that move in at 3rd grade. We consistently have turnover. In April we are feeling confident and by August we have a high number of turn-over. These are the kids we are remediating each year. With our mobility rate we will always be in the business of remediation. I think it will be a continuous cycle. It just come with the high mobility, high poverty area.

Question 3: In your opinion, what is the role of professional learning communities?

Principal A
The principal is the facilitator to the PLC program. Providing necessary support, materials, and resources as needed to make the program successful.

Principal B
My role is to facilitate and empower my teachers and give them the resources they need. They come to me and they need a resource I need to move heaven and earth to get them what they need. Whether that be grants or fundraising. Finding time for them to meet. Working with their schedules
Protecting their teaching time. I am very blessed that my teachers get along so well. I don't spend my time refereeing. It might be the case some day but it hasn't happened yet. Setting the example the tone. That math and reading are going to be a priority. Nothing is interfering with that. Protecting that teaching time. Making sure that our resources time and money goes towards those two goals.

Question 4: Describe your own involvement in the implementation of professional learning communities.

Principal A
I am an active member of the PLC team here at School A. The teams meet regularly to discuss goals that need to be met and focus items that need to be discussed/addressed in the PLC groups.

Principal B
Response is mixed in her other responses to the questions.

Question 5: What action steps have you put into place to start, support, and sustain your schools PLC? Give examples.

Principal A
We have established a PLC schedule that allows the teachers time during the day to discuss/plan with their grade level team. We also have a special schedule that allows teachers to get together and discuss/plan vertically three times a semester. We also meet 3 times a semester for the teachers to work together as a staff after school. This is funded by the district. The students that need additional help get individualized/group tutoring from title one and RSA funds. We also have tutors that volunteer form area churches and businesses.

Principal B
This question was answered in another question.

Question 6: What influence does the state mandated test (CRT's) have on your behavior as a leader? i.e. implementing a PLC, selection curriculum, determining school goals, hiring practices.

Principal A
State testing is a factor in everything we do here at school. It is my goal to assist all teachers by providing the teachers with the necessary resources, materials, and tutors to make the students successful and reach the state goal for assessment. We must set our goals and select curriculum as a team so that everyone has an ownership in what we are doing here. I also believe in hiring teachers and assistants that are team players. They must be willing to work with all children and staff to make School A a success.

Principal B
Yes I do. For example if I am interview an experienced teacher I ask them what does your room look like? If they start telling me about their bulletin boards I know that is not the teacher for me. When I ask what does your room look like I want to know about the instructional methods that is going on in that classroom. If they can quote good theory not textbook things but programs that they have used. How they assess

students then I know they know what they are talking about. If I am hiring a brand new teacher then I am looking for a personality that can be molded by my experienced teachers. I will pair them with someone extraordinary. I am looking for someone who is open to learning new ideas. I pair them with a really good mentor. When you hire an experienced teacher you have to be careful not to hire someone to over bearing. You have to look at personalities as well. I added a teacher last year and I needed to hire an older person for the team. I hired a 22 year old veteran. You need to keep in mind that they are going to be working with. I have a huge special ed population. 160 IEPs a year. We share the responsibilities. We are all in this together. I have seven special ed teachers. We have to work well with the reg ed teachers as well as with each other. It is really hard for them because they have a reg ed team and a spec ed team. I have a really great spec ed department head who keeps it really organized for me. I wouldn't make it without her.

Question 7: Tell me how collaboration time is spent in your team meetings. Are the meetings grade level/subject specific? Tell me about the strengths and weaknesses.

Principal A
The teachers meet as a grade level team as needed to discuss students and their needs. Throughout the semester teachers get together vertically to discuss concepts and share ideas on how to reach different student's learning styles and abilities. The vertical meetings are usually subject specific. Scheduling has been a concern with the Vertical Team schedule. We have tried several different schedules.

Principal B
We meet once a month. They meet with me once a month and their teams meet weekly. They try to meet in team meetings on Thursdays or Fridays and I try to meet with them the first Monday or Tuesday of each month. We have a special ed representative at the monthly meetings with me. Then after school we do a lot of vertical team alignment we make that more subject or program specific. We have been doing a lot of SuccessMaker vertical alignment to help monitor that and help the students get through it faster. We have kids that are lagging behind and taking too long. We try to come up with strategies to motivate the classes maybe a competition. Also with the changes in Accelerated Reader we have been meeting a lot. We have developed a committee to formulate a plan for grades 1-6 to help our average scores to go up. We have students earning a lot of points but our averages are not where they need to be. We want them to be at 85%. We also have been having a ton of SMART Board training. We now have SMART Boards in every classroom from grades K-6. I have a SMART board trainer. She has been doing a lot of research puts a lot of the lessons on her flash drive and sharing. So basically our vertical team meetings are subject or content specific for a goal we have in mind. Our horizontal meetings are broader in scope. In our monthly team meetings we talk about math and reading of course. We talk about where we are on our special ed referrals. Where we are in benchmark assessments. We dissect those very carefully. I come to the meeting with an agenda. I already have their scores printed out and highlight the areas

that we are weak in. I will ask what happened on question number seven. Luckily we only have one or two that are below the district average. I ask them when we are going to reteach those concepts because obviously we lack on that. The teachers usually come prepared to answer that because they know I am going to ask. Well we are going to redo this or redo that. My teachers love to meet. It is a time too when they tell me if they need something.
We meet on their plan time in one of the classroom teacher's room. My secretary knows on team meeting days that I will be out of commission all day. I start with 6th grade because they have first plan. I don't meet with my kindergarten teachers. I probably should. That is a personal goal of mine. They probably need a little more attention. But their students are only here two and half hours and they have so much to squeeze in and my kindergarten teachers do a really good job. I usually let my literacy coach meet with them. But we don't have benchmark assessments for them besides the DIBELS.
We talk about DIBEL data, RSA, remediation strategies; we try to hire retired teachers to remediate during the day. But that has been a scheduling nightmare. We are trying to find a time when the students are not receiving direct instruction. We are trying to find a time when she can work with students. We are hiring two more tutors. They will be working with my literacy coach on programs to use like Read Naturally for those tutors to do. I don't want it to be game time. I don't want them to practice on grade level readers. I want them to work on specific programs where we can measure the success.

My strength is being a motivator and selling my ideas. You have to be a sells man to sell your ideas to your staff. One of my biggest gifts is that I can recognize strong teachers. I have been able to hire an amazing talent pool and formalize really great teams.
My weakness is in-box and my clutter mess. I am not very fluffy. I have to have someone else add the clip art to my e-mails. I am not very warm and fuzzy except with the kids. I had an assistant a couple of years ago who made all my letters home look good. Very cutesy. She put borders around them. I need someone like that. I need to keep up with technology more. I feel like I am always a step behind. We got our SMART boards in. But my own personal use of technology, website designs that sort of thing I need to work on. I probably need to work on…I get a lot of great ideas on motivational techniques for the kids. I might need to slow down a little bit. I don't want to overwhelm my teachers with all the extras. Not really extras that take time out of teaching. Just classroom competitions among the kiddos. Sometimes I get ideas late at night and I want to implement them the next day. I probably just need to reel it back some.

Question 8: What barriers did you encounter in implementing a PLC? What was done to address them?

Principal A
Scheduling was the biggest barrier for our PLC. We experimented with several different schedules before we came up with the current one.

Principal B
Time. It always goes back to time. Our district is great about offering professional development but it pulls people out of the building constantly. I constantly have a teacher out doing worthwhile things attending a workshop and they always bring it back and share with everybody. For example if I have team meetings on Monday I really need everyone from that team there. What happens then for example the 5th grade Social Studies teacher will be pulled out for a workshop and I am having team meetings I will have to postpone my meeting. Then the meetings drag on. But really more than anything is time to meet with the teachers and time for the teachers to have more teaching time. That is what I hear all the time. We try to protect literacy. We have cut everything out. We have cut the fluff out. It is business from 8:15-3:00 every day. But it is still just time to teach. There is so much to teach.

Question 9: In your opinion, what helps to sustain the professional learning community in your school?

Principal A
Open communication between the administration, PLC team and the staff has been the greatest asset to PLC being a success at School A.

Principal B
We need to continue the PLC training. I probably need to retrain. You need to refresh your memory. You can't go and wait six or seven years. Because you forget. I think to sustain training. Like I am sending repeaters to a PLC training. Continue the resources, continue the professional development. My title budget is very generous and it allows for me to hire tutors for remediation. I think the district needs more literacy coaches that are like the one I have. She is very knowledgeable in specific remediation strategies. We have four in the district. They are all excellent teachers. They all have different areas of expertise. Cindy's expertise is huge for School B. She diagnoses their reading deficits and researches the right materials to help that specific problem. It is priceless. A lot of my teachers go straight to her. I have been left out of the loop. Which is great. They have developed relationships where they take care of it themselves. This is what we want to happen. I am no longer the go between girl. They go visit with Cindy and she comes to me with a list that these teachers need these things. I figure how to get it for them. I will keep doing this as long as I keep getting good results.

> **What if you were removed from School B? Could your school sustain the PLC?**
>
> Yes, as long as they put someone who will allow it to continue. It is pretty much runs itself. I am more of a facilitator. They don't receive a lot of direct instruction from me or directives from me. I do a lot of cheerleading and resource scrambling. As long as someone doesn't come in here and mess it up. It would be ugly. I think as long as someone with any experience came in

here they could take it and run with it because my teachers are so professional and do the right things for kids. They are very knowledgeable in pedagogy. They all work so well together. I am very blessed. I don't have teachers bickering in grade levels. My 4th grade team likes my 3rd grade team. Etc. I have a really cool mix of ages. I brought back a teacher from retirement. She is 63. She retired for three years. She is probably the most energetic teacher I have. I have a brand new teacher who is the age of 24 and there is everything in between.

Question 10: Is there anything else you would like to tell me that we haven't discussed?

Principal A
No response

Principal B
Has it increased your student achievement? You have focused a lot of time on PLC's. Well it has obviously made a huge difference in my test scores. The scores have come way way up. We are one of the highest Title I schools in the state. The focus on math and reading has taken away from other areas such as Science and Social Studies. Cultural things your holidays…we used to spend time on in reading. For example the Christmas Around the World theme when I got here was three weeks long and was taking too much time of the instructional time. I would like someday be able to add some of that back. Not all of it. I don't want it to monopolize the curriculum. I just think that there are just little things the kids miss out on when you have such a strict ridged standard. Trying to get all of your standards in by the end of the year is difficult.

What do you think has made the biggest difference?

Well a combination of things but I would say the teachers. It goes back to the teachers I have hired. It goes back to the teachers in the classroom. Really different programs work. You could have two different programs being taught by two different teachers and it still is successful. It is the teacher that makes the difference. I think it goes back to the hiring. I have just sort of lucked out. I won't have any good prospects and then the very next day someone will walk in perfect for the job. I often think what I done to deserve this. I also think that the alignment of the curriculum made a huge difference. When I got here every grade level was doing a different reading program. Not only that teachers on the same grade level were teaching different reading programs. So for the kiddos that did stick with us our 70% that are not mobile would have completely erratic curriculum in reading. The math was a great because have a district curriculum calendar. But for reading it was crazy. We had some teachers teaching the phonics based some teaching whole language based. They were moving in and out. I would have to say that aligning my K-3 grade was the biggest change. And we are now seeing the

fruits of that. It has taken about five years. Even the last couple of years. I have some 4th and 5th graders that have the luxury of an aligned curriculum. The next couple of years will be even better. They will have a strong foundation. There were so many holes in their reading foundation. You can still see it in my sixth graders today from them all having loosely goosey experiences.

What are you most proud of?
I would say my test scores. They rock! And the overall attitude of my teachers. It's fun. It is a fun place to work. People enjoy coming. There is a lot of laughter. I am not saying we are all sunshine and roses. I mean we have bad days but for the most part just walking up and down the halls during the days even if our test scores were not high as they are I will still count it successful because I am hearing wonderful things and the wonderful instructional opportunities my kiddos are having. When you walk up and down the halls you are getting hugs and smiles and the kids are excited about coming to school. And the test scores look great in the paper.

Work with any other schools? Other outside experts?

In the beginning we used EDIT quite a bit. It helped our teachers use their textbooks better. I have teamed up with other schools for motivational things. I think all our Moore schools partner well together. My teachers are on different district committee where they work with other teachers throughout the district. They have developed relationships with each other. For example is a school down the street scored 100 percent in an area and we scored and 85 percent in that same area on the benchmark assessment we will e-mail them about what they did.
I held Saturday school and I hired teachers from across the district. It was great. Those teachers started taking ideas back to their schools. They built relationships with my teachers and they starting sharing ideas. I took teachers from five different schools for the Saturday school. They bonded with my teachers so they continue to e-mail each other and share ideas. Our district offers so many great professional development opportunities my teachers are collaborating with other people.

Is there anything else you would like to tell me that we haven't discussed?

It has been a long process. It has been five years. It didn't happen overnight. It happened very methodically, slowly. There were some key personnel changes so that helped.