Old Dominion University

ODU Digital Commons

An Investigation Into Building Level Leadership That Promotes Professional Learning Communities

James Michael Pohl
Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/efl_etds

Part of the Educational Administration and Supervision Commons, and the Educational Leadership Commons

AN INVESTIGATION INTO BUILDING LEVEL LEADERSHIP THAT PROMOTES

PROFESSIONAL LEARNING COMMUNITIES

by

James Michael Pohl
B.S. August 1996, Old Dominion University
M.S. August 1998, Old Dominion University

A Dissertation Submitted to the Graduate Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

DOCTOR OF PHILOSOPHY

EDUCATIONAL LEADERSHIP

OLD DOMINION UNIVERSITY
May 2012

_Approved by:

_____
Linda Bol (Director)

_____
Stephen Myran (Member)

_____
William Owings (Member)

ABSTRACT

AN INVESTIGATION INTO BUILDING LEVEL LEADERSHIP THAT MAKES PROFESSIONAL LEARNING COMMUNITIES SUCCESSFUL

James M. Pohl
Old Dominion University, 2012
Director: Dr. Linda Bol

The extent to which principals in suburban elementary and secondary schools lead schools to be ready to transform into professional learning committees was investigated. Data were collected through the use of the Professional Learning Communities Assessment – Revised (PLCA-R) questionnaire administered to principals, assistant principals and lead teachers as identified by their principals. Findings from the PLCA-R determined a ranked order for the 45 schools that completed the questionnaire. Following the questionnaire, one-on-one face-to-face interviews were conducted with the six principals from the three highest ranked elementary schools and the three highest ranked secondary schools. Six lead teachers, one from each of the principal's schools, were also interviewed. Interview data were reviewed to develop five main themes and thirteen subthemes. The data collected primarily supported research conducted with PLC's. The findings further suggested producing seven ideals principals could use to help their schools become ready to transform to professional learning communities. These ideals were based on communication, development and understanding of school-wide goals, instructional based meetings, easy access to data, availability of the principal, administrative support for teachers and transparency of the decision making process. Implications for future practice and directions for further research are also discussed.

This manuscript is dedicated to my loving wife, Darcy and my two beautiful children, Matthew and Bailey. Without Darcy's constant encouragement and belief in my abilities I would never have educated myself this thoroughly. Without her willingness to allow me the time away from our family while she carried the extra workload, and while teaching full time, I would not have had the time to complete this arduous task. I owe her a great deal for putting her life on pause to allow our kids to grow and me to move forward. I will forever be in her debt for her selflessness over these past years. Thank you for everything Darcy.

ACKNOWLEDGMENTS

I would like to start by thanking Dr. Linda Bol. Her willingness to help me through this entire process was amazing. She never doubted that I would eventually move on to the next step, and she has become a friend through this entire process. Without her assistance, knowledge, encouragement and amazing editing skills I would not have survived the process. I would also like to thank Dr. Steve Myran and Dr. William Owings for their assistance with completing this work. They helped to keep me in-tune with current research and added a great deal of value to my dissertation.

I would also like to thank my parents, Becky White and Ken Pohl, for their encouragement and love, as well as my in-laws for their ongoing support and their encouragement. I would also like to thank all of my family, friends and colleagues for their continued support. Two people outside of my immediate family deserve an immense amount of recognition. First, I would like to mention my closest friend, Chris Fischer. Without his ideas and ability to edit my work, as well as his reassurance in what I was doing, I do not think I could have accomplished so much. His friendship is highly valued and treasured by me. Next, Sandra Brown, my wife's aunt. She opened her house to me on several occasions as a quiet place to concentrate and write. She also did an amazing job in helping to edit my work. Her willingness to continually push me along helped me stay committed.

Finally, I would like to thank my friend Dr. Dwight Allen. Dwight took me under his wing when I was a mere freshman in college. He helped me find my way to the field of education and continued to encourage me to go further. If I would not have crossed paths with Dwight in 1992 my life would not have the value to me that it currently holds.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I
INTRODUCTION

Improving student learning in schools across our nation is universally supported. One approach to improving student learning is to enhance the instructional practice of teachers (Elmore, 1996). At the core of improving student learning is professional development for teachers. Schools have continuously adopted strategies and programs that can positively impact student learning through various types of programs and professional development activities. These efforts to improve teaching and learning are central to educational reforms that have permeated our school systems (Tyack & Cuban, 1995). However, several reforms have failed either because they were difficult to implement or impossible to sustain (Hargreaves & Fink, 2006, p. 6).

According to Schmoker (1999), for some irrational reason isolation continues to keep professionals from learning from each other. In an effort to have teachers implement the professional development they receive, a new approach is needed. Professional learning communities (PLC's) are where educators are committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. They operate under the assumption that the key to improved learning for students is continuous job-embedded learning for educators (DuFour, DuFour, & Eaker, 2008, p. 469). PLC's are viewed as an effective way to bring about school reform by giving teachers the opportunity to collaborate, identify goals and obstacles, and formulate a plan for accomplishing those goals or overcoming the obstacles (Manthey, 2008; Noguera, 2004; Vescio, Ross, & Adams, 2008). Educators create an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot

accomplish alone (DuFour & Eaker, 1998, p. xii). This collaboration forms the "community" of a PLC. The authors also state, "the term 'community' places greater emphasis on relationships, shared ideals, and a strong culture – all factors that are critical to school improvement," (p. 15).

Increasing student achievement through staff development has been a challenge for many decades (Darling-Hammond, 1999). Many educators have recognized the need for schools to reorganize their approach to professional development by incorporating characteristics of a learning organization, such as professional collaboration (Barth, 1990; Eaker, DuFour, & DuFour, 2002; Eaker et al., 2002; Hord, 1997; Marzano, 2003). The PLC is one reform effort being proposed as a way to rethink the ways in which schools are organized for teachers' work (Eaker et al., 2002; Graham, 2007; Hord, 2004; Johnson & Donaldson, 2007; Wood, 2007). Arguably, PLC's currently represent a "hot" trend in educational leadership. Even one of the nation's top promoters of PLC's, Rick DuFour (2004), acknowledges that the term PLC is currently "in vogue" (p. 8). Although PLC's are a hot topic, the potential of the PLC model to impact student academic achievement has also been supported in the literature (Croasmun, 2007; DuFour & Eaker, 1998; Fullan, 2005; Hord, 2004). Huffman (2003) suggested, "The most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as a professional learning community" (p. 21).

With so many schools and educators working towards implementing PLC's there have been several recent studies that document the impact of PLC's on student learning. Collins' (2007) study of an urban elementary school found student academic achievement increased when teachers focused on a structured and scripted professional learning

community approach. Schwartz (2007) found improved math achievement when Vineyard High School, a high performing school, implemented the PLC factors of accountability, shared vision, teacher empowerment, leadership competency, instructional decisions based on performance data and collaboration. Bergevin (2006) studied a single school in southern California and also found that implementation of a professional learning community led to increased student academic achievement. Caron and McLaughlin (2002) conducted a study using four elementary schools and two middle schools and found that planning, support systems, shared leadership and decision making, cohesive expectations for all students, and a widespread culture of collaboration contributed positively to student success.

Research previously noted has suggested that professional development is a key ingredient to better learning for teachers and higher achievement for students. The studies related to PLC's will be addressed more extensively in the second chapter, but this method appears to be a successful way to implement professional development activities. Although PLC's have been linked to student achievement, studies have not been conducted on how to create the necessary culture to develop PLC's.

Background

Evaluations of staff development from the 1970's revealed that as few as 10% of the participants implemented what they had learned (Showers & Joyce, 1996, p. 24). Even when initiatives are adopted and teacher training is planned, little of what is learned transfers beyond the workshop setting. For many years, in-service education has essentially not changed. It has involved relatively low levels of participation by teachers, while they listen to an "expert" pass on new ideas (Sparks, 1994). Reform in the 1980s

encouraged teachers to participate in collective activities. Teachers began to share materials, plan together, and interact with one another in teams. The results of this collaboration led to increases in student achievement and whole school improvement in general (Hargreaves & Fink, 2003). More recent research has connected student learning to the development of greater collaboration among teachers about student learning (Eaker, DuFour, & DuFour, 2002). Teacher collaboration helps teachers to rethink disciplinary knowledge as well as their teaching strategies.

Many experts in the field of education advocate for teacher-directed professional development experiences that foster a professional learning community (Darling-Hammond & Sykes, 1996). Unless professional development activities can get adults to talk to each other about instruction, observe each other and help each other, very little will change (Barth, 1990. p. 32). Michael Fullan (2000) declared that, "school improvement will never occur on a wide scale until the majority of teachers become contributors to and beneficiaries of the professional learning communities" (p. 583). Graham (2007) suggests that the classroom teacher can have a significant impact on student learning and achievement and that PLC's respond effectively to teachers' needs and demonstrate a greater propensity to lead to changes in teacher instructional behaviors. Although the literature shows relationships among PLC's, increased student achievement and improved school culture (DuFour, DuFour, Eaker & Karhanek, 2004; Fullan, 2000; Graham, 2007; Kruse, 2001;Leithwood, Jantizi, Earl, Watson, Levin & Fullan, 2004a; Strahan, 2003; & Wood, 2007), it will be especially helpful to know how school leaders have created a culture to support PLC's and have effectively implemented PLC's. While a great deal of research has been conducted investigating strategies for

implementing PLC's and their general effectiveness using various metrics, there is a void in the literature regarding trends in the strategies building-level leaders have employed to foster a collaborative culture and successfully implement PLC's within their schools.

The conceptual framework for this study is drawn from the work of several researchers who have been studying PLC's in schools for many years and have linked PLC's and student achievement (DuFour et al., 2004; Eaker et al., 2002; Graham, 2007; Manthey, 2008; Scherer, 2004; & Strahan, 2003). Hord (2004) has studied PLC's for over ten years. One particular study focused on a school that was "markedly different in atmosphere and educational results" (p. 1). A close examination of this school and other schools with similar characteristics guided Hord in identifying five interrelated dimensions that are typical of schools that have successfully adopted a professional community model. She proposed that a school that organized itself as a PLC exhibited (a) supportive and shared leadership, (b) shared values and vision, (c) collective learning and the application of learning, (d) supportive conditions, and (e) shared practice (p.7).

Problem and Research Question

DuFour and Eaker (1998) discuss the lack of guidelines for establishing PLC's: "Concepts are great, but at some point most of us need practical suggestions on applying those concepts to our current situations" (p. 16). Another study by Dooner, Mandzuk, and Clifton (2008) demonstrates that little is known about how PLC's get started and how they are sustained. Fullan (2001) has noted that, "At the most basic level, businesses and schools are similar in that in the knowledge society, they both must become learning organizations or they will fail to survive" (p. vii). There is need for research on what leadership practices building administrators can implement to foster the necessary

atmosphere for the establishment of successful PLC's. While current research links

PLC's to higher levels of student achievement (Eaker et al., 2002; Graham, 2007; Hord,

2004; Kruse, 2001; Mullen & Sullivan, 2002; Phillips, 2003; Strahan, 2003; Wood,

2007), the leadership practices of principals who have successfully prepared their faculty

for the implementation of PLC's have not been extensively researched. This concern is

supported by Leithwood, Louis, Anderson and Wahlstrom (2004b) stating, "Research is

also urgently needed which unpacks how successful leaders create the conditions in their

school which promote student learning" (p. 22). This study contributes to the body of

knowledge needed to address this problem by examining the atmosphere surrounding

schools currently implementing PLC's and looking for trends among those schools that

prove most successful in their efforts, while examining how the principal created the

level of readiness within the building.

    As discussed earlier, PLC's help to create a culture that supports teaching and

learning. A paradigm shift is now emerging which changes the direction of staff

development. Professional development based on teacher collaboration helps teachers to

rethink content knowledge as well as pedagogy to create a better learning environment

for students. In addition, collaborative inquiry encourages teachers to listen to and value

different perspectives among their colleagues. Only then do teachers begin to realize that

gaining a common vision for their school would require them to observe and evaluate the

school culture from many perspectives.

    The purpose of this study was to examine the decisions and actions of principals

relevant to the development of professional learning communities in schools and identify

trends among those administrators most successful in their implementation efforts. The

findings of the study should offer principals specific, practical recommendations for transitioning from traditional schools to PLC's so their students may learn at higher levels and educators may find their profession more rewarding, satisfying, and fulfilling. This study explores how principals have promoted the development of PLC's within their school and will attempt to answer the following question:

1. What are the characteristics of principal leadership that promote effective implementation of PLC's?

Overview of Study

This is a mixed methods study. Data were collected by employing quantitative and qualitative strategies to determine the readiness of a school to implement PLC's and to determine what leadership practices were utilized by the principals of schools that have a high readiness level for establishing PLC's. The participants of the study were all of the principals, assistant principals and lead teachers in a large school division in southeastern Virginia. The school division has 5,742 full time teachers and 81 principals housed in 81 schools (56 elementary, 14 middle and 11 high). The Professional Learning Community Assessment Revised (PLCA-R) (Olivier, Hipp, & Huffman, 2008) was sent electronically to all principals, assistant principals and lead teachers in each of the 85 schools. This tool was used to assess each school's readiness level to transform to PLC's. Interviews with the principals at the six highest rated schools were conducted to gather information on their leadership behaviors pertaining to the six areas of readiness: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions-relationships and supportive conditions-structures.

CHAPTER II
LITERATURE REVIEW

This review describes research pertaining to professional development for

teachers and the role of school leadership in their professional development. First there

will be an overview of the research on traditional professional development. Next, the

relationship between PLC's and traditional professional development will be reviewed.

Third, the benefits of PLC's will be described. Finally, a summary of the relationship of

building-level leadership and professional development will be discussed. This chapter

concludes with the identification of gaps in this literature and how future research may

begin to address these gaps.

Professional Development for Teachers

Traditional Organization of Professional Development

Professional development in the world of education has been defined several

ways. Sparks and Loucks-Horsley (1989) described it as a process that improves job-

related knowledge, skills, or attitudes of teachers and other educators. Guskey (2000)

described professional development as activities that are designed to enhance

professional knowledge, skills, and attitudes of educators so that they can improve

student learning (p. 61). The underlying goal of professional development programs is to

improve the knowledge base and methodology of those involved in the training.

Programs may range in emphasis, from specific or more general pedagogical strategies,

to a focus on classroom management and discipline.

Many argue that traditional professional development programs, using outside

experts to share knowledge and skills with the teachers, are limited in scope with little

evidence to support their effectiveness. They often focus on the teacher and teaching

style without much regard for student learning. For example, Gall and Renchler (1985) found that most professional development activities do not focus on improved student achievement as a desired outcome of the activity. With professional development focusing on teachers and teaching styles, Hilliard (1997) identified a critical problem in that traditional forms of professional development do not always produce successful teachers. In one article on school reform, Sparks and Hirsh (1997) recognized that professional development tended to be one aspect of a complex system. Traditional professional development activities, consisting of a lesson delivered to teachers which usually took place over a few hours or a few days, rarely had any type of sustained focused follow-up activity. Evaluations of professional development programs were generally based on a one-shot questionnaire completed at the end of the program. Therefore, there is a lack of evidence regarding the degree of teacher learning as a result of participation in professional development activities or whether anything learned is actually implemented in schools and classrooms (Sparks & Hirsh, 1997).

In general, following a traditional professional development activity, teachers are expected to implement the ideas they learned with little to no support from their colleagues or their administrators. Generally, there are no documented expectations for teachers who attend various professional development activities; thus, it is not uncommon for administrators and teachers to view them as a waste of time (Oliva & Pawlas, 2004). Oliva and Pawlas (2004) also pointed out that the supervisor's role becomes more stringent when there is lack of agreement about the scope and nature of professional development. They argued that there is no consensus among administrators

or researchers that furthering teacher development in this manner is necessary or

effective.

Need for Revision of Professional Development

Because traditional professional development efforts may not be effective or

necessary (Oliva & Pawlas, 2004), there is a need to understand how they could be

successful. Desimone, Porter, Garet, Yoon, and Birman (2002), found that professional

development that actively engages teachers in discussions of pedagogy increases

teachers' use of those activities in the classroom. Wilson and Berne's (1999) research

helps to define effective professional development as an activity that ensures

collaboration and collective participation, focuses on aligning curriculum and instruction,

provides ongoing opportunities, is job-embedded, treats teachers as professionals and

empowers them through active learning opportunities. Other research has shown that

professional development activities that engage teachers in a discussion of the activity,

connect to prior learning experiences, allow sufficient time for the activity, and provide

follow-up support increase levels of teacher knowledge and have greater implementation

rates (Garet, Porter, Desimone, Birman, & Yoon, 2001; Penuel, Fishman, Yamaguchi, &

Gallagher, 2007).

Lieberman (1995) makes a strong connection between Adult Learning Theory

and the practice of effective professional development activities. By transforming teacher

training into teacher learning, teachers become more apt to go deeper into discussions of

student learning rather than pay cursory attention to new curricular or program topics.

The traditional form of professional development is being called into question as

educational leaders increasingly reconsider their role in professional development within

schools. This transformation from traditional forms of "sit and get" types of professional development with no true evaluation or follow through is long overdue. Professional learning communities seem to be one solution that relies on research-based practices that have shown greater rates of success than traditional professional development.

Professional Learning Communities

Need for and Benefits of PLC's

The literature suggests that the traditional form of professional development, using non-school or district personnel to share knowledge and skill with the teachers, is ineffective (DuFour, DuFour, Eaker, & Many, 2006; Joyce & Showers, 1987; Sparks & Hirsh, 1997). Zepeda (2008) found that many times district and site professional developers turn to outside facilitators to support their professional-development programs. In the process, they overlook available resources in the district or school building. Duggett, Farkas, Rotherham, and Silva (2008) conducted a study in which 85% of teachers surveyed agreed that what would benefit them is more time provided during the school day to prepare and plan for their classes, thereby creating a more job-embedded professional development program. While realizing traditional professional development is ineffective and that teachers would prefer a more job-embedded professional development program, the focus must stay on student achievement.

Wiggins and McTighe (2006) contend that "true professional practice requires continual, in-depth investigation into what is and isn't working locally, with on-going adjustments to instruction on the basis of analysis and best practice" (p. 29). In the traditional professional development workshop model, teachers do not have control over the learning process and they have little opportunity to study the theory behind the new

information or to practice the skills being taught in their own setting (Lumpe, 2007).

Traditional workshops give teachers instructional practices in isolation with little to no

follow-up, reflection, or collaboration that is central to PLC's. The reform of traditional

professional development into the collaborative professional learning community is

imperative to the success of schools (Campbell, 2004).

PLC's and student learning. The most important benefit of PLC's is that they

may promote student learning. Newmann and Wehlage (1995) analyzed the results of the

School Restructuring Study (SRS) of 24 elementary, middle and high schools as well as

the National Educational Longitudinal Study (NELS) of 1988, the Study of Chicago

School Reform and the Longitudinal Study of School Restructuring. From 1991 through

1994 each school was studied intensively for one year. Narrative reports were

supplemented by surveys of students and staff, conventional tests of student

achievement, and student achievement scores on two teacher-assigned assessments

aligned with standards of authentic performance. Their landmark meta-analysis of the

impact of school restructuring efforts offered a clear conclusion, supported by extensive

evidence. If schools want to improve student learning, they should transition to

professional learning communities that have a shared purpose, are collaborative and that

maintain a collective responsibility among the staff. The ineffectiveness of traditional

professional development programs suggests a need for a more sustained form of

professional growth such as that which is offered through a PLC model that provides a

process and opportunity for stakeholders to collaborate (Barth, 1990; Huffman, 2003).

With more collaboration through PLC's than in traditional professional

development, it is important to know if student achievement is impacted in a positive

way. Strahan (2003) conducted a study of three elementary schools that were implementing PLC's and found that each school demonstrated increases in the percentage of students performing at or above grade level. In a different study of a three-year project between a university and a large urban school district developed to promote and sustain learning communities, student test scores for both second and third graders showed gains over the three year period. These scores increased above the district average, making the greatest gains with the poorest readers (Hollins, McIntyre, DeBose, Hollins, & Towner, 2004). In Phillips' 2003 study on creating learning communities in an urban middle school, student achievement was also directly related to PLC's. Pass rates on state-wide tests increased to 90%, a 40% gain from two years prior. Louis and Marks (1998) studied eight middle, eight high and eight elementary schools purposefully chosen from across the nation based on increased level of performance. They found that students achieved at higher levels in schools with effective professional learning communities. They documented that the presence of a professional learning community in a school contributes to higher levels of support for achievement.

PLC's and teacher practice. In a meta-analysis of 11 research studies conducted by Vescio, Ross and Adams in 2008, all reported that participation in a learning community leads to changes in teaching practice. This shift in instructional practices may be the key indicator as to why student achievement is improving. Eight of the articles researched the connection between student achievement and PLC's; however, only five of these studies mentioned specific changes teachers made in their classrooms. One of the eleven studies in the meta-analysis was conducted with 5 high schools, 2 middle schools and 5 elementary schools, which had implemented Critical Friends Groups

(CFGs). A CFG is a professional learning community consisting of approximately 8-12 educators who come together voluntarily at least once a month for a structured meeting focused on student data. Group members are committed to improving their instructional practices through collaborative learning. The findings of the study indicated a shift from teacher-centered instruction to student-centered instruction in the classroom (Dunne, Nave & Lewis, 2000). The other four studies mentioned changes in practices such as teachers changing to more student-centered classrooms, developing lessons to raise the achievement level of African American students, increasing structural support which led to more authentic pedagogy and increasing levels of positive teacher attitudes.

There is large scale agreement among educators that student-centered instruction improves student achievement (Gonzales & Nelson, 2005), and teachers use a higher level of student-centered activities when they are involved in PLC's (Dunne, Nave & Lewis, 2000). According to research conducted by Cummings (2007), student-centered instruction raises student achievement by promoting democratic classrooms, complex thinking and joint production. Doherty and Hilberg (2007) and Nykiel-Herbert (2004) also point out that student-centered instruction improves student achievement. In further research conducted by Reynolds (2007) and Carbo (2008), student-centered instruction was again linked to student achievement.

Using meta-analysis, Cornelius-White (2007) examined 119 studies covering grades K-12. The results showed that student-centered teaching connected to positive student outcomes. The research findings indicated that student-centered teaching has an above average association with positive student outcomes (Cornelius-White, 2007). Another review of literature directly pertaining to professional learning communities by

Stoll, Bolam, McMahon, Wallace and Thomas (2006) found strong indicators of a correlation between PLC's and enhanced student outcomes, such as higher quality thinking, substantive conversations, deep knowledge and connecting with the world beyond the classroom. They explained these outcomes resulted from teachers' focus on a higher quality of thinking in classrooms.

PLC's and school climate. Beyond the link between PLC's, student achievement and teacher practice, it has been shown that structured teacher collaboration enhances professional morale in virtually any setting (Barlow, 2005). In their 2005 study of a rural elementary school, Berry, Johnson, and Montgomery reported that the entire school developed a strong community of collaboration around student learning. While working in PLC's, Strahan (2003) showed that over time, teachers' collaborative efforts were driven by data on student learning that led teachers to set higher expectations for their students (Englert & Tarrant's, 1995). When teachers work collaboratively, raise expectations for their students and focus more on student data they generally assume ownership and leadership with regard to their own teaching and learning efforts (Phillips, 2003). The ownership that develops over time could have a positive impact on the course of a teacher's professional development. Teachers involved with CFGs reported higher levels of opportunity, engagement, collaboration, expectations, and support than teachers in non-CFGs (Dunne, Nave, & Lewis, 2000). Overall, when a learning culture is developed, teachers form a culture of practice leading to shared meanings, a sense of belonging and an increase in understanding of curriculum and instruction (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Establishing PLC's contributes to a shift in the

way teachers perceive and act upon their daily work making the work environment more

positive (Vescio, Ross, & Adams, 2008).

Andrews and Lewis (2002) studied a high school in the process of changing to a

parallel leadership model as one aspect of their school reform. The researchers captured

data during two visits, the initial visit aimed at collecting data from multiple perspectives

through the experiences of the professional community members and a second visit for

individual and focus group interviews. Interviews were semi-structured exploring the

informants' perceptions and experiences. The data were also supplemented with material

drawn from the school's extensive documentation and the external facilitator's

recounting of the process during an interview. As the school realigned the leadership,

they realized that this concept developed into a professional learning community. There

was perception throughout the school that teachers as pedagogical leaders became more

rigorous in their instruction and produced higher levels of learning. They also showed

that the teachers had a higher rate of agreement to the questionnaire item stating their

school was a great place to work. Through regular collaborative meetings focused on a

common goal, PLC's create a job-embedded form of professional development that

produces important outcomes for students and school professionals (Crow, Hausman, &

Scribner, 2002; Toole & Louis, 2002).

Characteristics of Effective PLC's

Joyce (2004) believes that three initiatives spawned the current focus on PLC's:

team-teaching, the middle school movement, and the Coalition of Essential Schools.

Through these initiatives, teachers were forced to collaborate more often. This extended

collaboration then led to creating long term goals. According to Dufour (2004), PLC's

are created by focusing on learning rather than teaching, working collaboratively, and establishing accountability for results. He also specified the following core principles of PLC's: (a) ensure students learn, (b) create a culture of collaboration, and (c) focus on results. According to DuFour's PLC framework, all teachers must engage in conversation and exploration around the following three critical questions:

1. What do we want our students to learn?

2. How will we know when they have learned it?

3. How will we respond when students experience difficulty?

The core framework of this PLC is student learning (p. 6). The PLC model of professional development provides a process and opportunity for stakeholders to collaborate in order to ensure school improvement and student achievement (Barth, 1990; DuFour et al., 2006; Huffman, 2003). A major difference cited in the literature between PLC's and traditional professional development is that the mission of educators is not to simply teach students, but to ensure that they learn (Blankstein, 2004; Leo & Cowan, 2000; Strahan, 2003).

Hord (2004), working with the Southwest Educational Development Laboratory (SEDL), gathered empirical data over more than nine years that identified five characteristics of effective professional learning communities. These characteristics included: supportive and shared leadership, shared values and vision, collective learning and application of learning, supportive conditions, and shared practice. The study began with four years of research on the success of one school. In 1995, Hord, along with the rest of the SEDL research team, began to consider how they might generalize these findings to other schools. In 1997, a team was charged with transforming 22 schools into

professional learning communities. Based on her research, Hord suggested that in a PLC organizational model, adults should be continuous learners who are able to link research to practice. Trust must also be embedded within the professional learning community and all stakeholders must accept responsibility for the learning that occurs within the organization (2004).

Addressing the continuing professional development of teachers, Day (2004) noted that three principle functions are served by professional development in the educational setting: extension, renewal, and growth. Professional development should offer teachers the opportunity to transform their learning from knowledge to practice, renew what they have learned in the past and mature as professionals. Traditional professional development experiences in isolation may allow the professional to extend the knowledge they have about best practices, but PLC's under collaborative leadership provide the individual with the forum to extend that knowledge into the practical setting and use assessment data to determine its effectiveness.

School Leadership and PLC's

Although the research has shown PLC's to be effective forms of professional development, the work of implementing and sustaining PLC's in a building rests with the leadership of the principal and the leadership team and as Yukl (2006) states, implementing change is one of the most difficult of all leadership responsibilities. To bring about change, researchers argue that nurturing a culture that supports staff in becoming a professional learning community is the most promising avenue for sustained, substantial school improvement (Crow, Hausman, & Scribner, 2002; Hord, 1997, 2004; Toole & Louis, 2002). To create a more nurturing atmosphere a principal must model the

behavior so that it may have a positive effect on shaping the culture (Fiore, 2004; Yukl, 2006). McLaughlin and Talbert (2001) found that principals set the conditions for teachers to manage resources. They also revealed that based on the relationships built among the principal, faculty and the students, principals can either support or inhibit social interaction as well as leadership within the faculty.

Therefore, how a principal sets the conditions within the school is vital to the learning culture. In a large qualitative study examining professional development activities in nine elementary schools, Youngs and King (2002) found that effective principals can sustain high levels of capacity with a professional development activity by establishing trust, creating structures that promote teacher learning and by helping teachers generate reforms internally. Once these conditions are established by the principal, the foundation is in place for the type of reform that may be created within their school. Copland (2003) verified three factors a principal should consider while setting the stage for reform in his research on 16 schools undergoing a shift in their professional development process. He found that the principals of the schools that were successful at promoting change asked meaningful questions, explored data and continually engaged the faculty. With all of these tools in place it is necessary to focus on how to incorporate professional development. In reviewing another descriptive study of 6 middle schools as they transitioned to professional learning communities, researchers found that in order to be successful, the school's leader must be focused on job-embedded professional development where team learning is a key feature of the activity (Thompson, Gregg, & Niska, 2004).

Dufour (2004) states that to systematically change a school from traditional professional development styled learning to the PLC model it is upwards of a nine-year process. Within the transition it has been noted that building capacity is key not only to implementation, but to the sustainability of professional learning communities (Hargreaves & Fink, 2006). Therefore, educational leaders must grow teacher leaders within the school to support the success of professional learning communities. However, it should be noted that principals can only create the necessary conditions to allow professional learning communities to grow; they cannot ensure it will happen (Stoll et. al. 2006).

Principal's Leadership

In early studies on effective schools, strong building-level leadership was found to be a key factor. The critical role of the principal in creating the conditions for school improvement has been highlighted in the literature. "Indeed, there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader. Many other factors may contribute to such turnarounds, but leadership is the catalyst" (Leithwood, et al, 2004b, p. 5). Evans (2001) states, "Principals are widely seen as indispensable to innovation. No reform effort, however worthy, survives a principal's indifference or opposition" (p. 202).

Theories of Leadership

There has been a large amount of theoretical and empirical literature on school leadership. Studies have been conducted from multiple perspectives in an attempt to learn about effective leadership. Sergiovanni (1994) states, "Defining leadership is not easy, yet most of us know it when we see it" (p. 6). Although the general concept of

leadership is not easily defined (Leithwood & Duke, 1999; Yukl, 2006), three common

themes can be found in most definitions of leadership. The first theme is seen in efforts

to improve the organization (Leithwood, Day, Sammons, Hopkins, & Harris, 2006). The

second theme points out that leaders must set the direction for the organization in order

to facilitate improvement (Leithwood et al., 2006; Yukl, 2006). The final theme is the

importance of a leaders influence on the group in order to promote change (Leithwood et

al., 2006; Yukl, 2006). Yukl (2006) incorporates each of these threads by defining

leadership as "the process of influencing others to understand and agree about what

needs to be done and how to do it, and the process of facilitating individual and

collective efforts to accomplish shared objectives" (p. 8). Regardless of how leadership is

defined, it plays a critical role in organizational success (Ogawa & Bossert, 1995). The

debate becomes which type of leadership is best suited to bring about reform. In the

following section the literature on leadership models commonly cited in professional

publications that addresses promoting effective PLC's in schools: shared leadership

model, instructional leadership model and transformational leadership model is reviewed.

Shared leadership model. The shared leadership model in which decision-

making is shared with teachers and staff has been cited as an effective model in a school

operating as a community of learners. Ogawa and Bossart (1995) claim that shared

leadership across administrators and teachers alters traditional school structures by

generating coordinated efforts throughout a school staff. "The principal and teachers

share responsibility for staff development, curricular development and supervision of

instructional tasks" (Marks & Printy, 2003, p. 371). The principal is not the sole

instructional leader but the leader of instructional leaders (Glickman, 2003). The

principal seeks teachers' ideas and expertise in an effort of total collaboration towards school improvement. This inclusive approach to governance promotes effective methods of instruction and school conditions supportive of teaching and learning (Heck, Larsen, & Marcoulides, 1990).

Teachers exhibit leadership responsibilities when they collaborate with adults around school reform efforts, support others to improve their professional practice or learn together with their school peers (Marks & Printy, 2003). They are given the latitude to make their own curricular and instructional decisions based on the needs of their students (Hallinger, 1992). This level of authority to make decisions has been shown to improve both teachers' work life and student achievement (Marks & Printy, 2003). Principals and teachers converse about alternatives rather than directives or criticisms and work together as a "community of learners" committed to students (Blase & Blase, 1999). Principals promote teacher reflection and professional growth (Marks & Printy, 2003). The principal becomes less an assessor of teacher proficiency and more a catalyst of teacher growth. In tandem, teachers assume responsibility for their professional growth and for instructional improvement (Poole, 1995).

Instructional leadership model. In the instructional leadership model, the principal influences change as the school's instructional manager (Andrew & Soder, 1987). Instructional leadership focuses on the principal's role in managing school practices and procedures associated with instruction and supervision. The responsibilities of a person or persons providing instructional leadership include: helping the group develop a school mission and goals; coordinating, monitoring, and evaluating

curriculum, instruction, and assessment; promoting a climate for learning; and creating a supportive work environment (Marks & Printy, 2003).

Research analyses indicating that the greatest influence on student outcomes is teachers has led to more focused professional development for teachers (Bransford, Darling-Hammond & LePage, 2005; Scheerens, Vermeulen, & Pelgrum, 1989; Nye, Konstantanopoulos & Hedges, 2004). Teachers cannot achieve these changes alone. They must have conditions developed within their school in which learning from the use of student data becomes a major part of their practice. In a 2008 meta-analysis conducted by Robinson, Lloyd and Rowe, it was shown that through participating in and promoting professional learning for teachers, school leaders have the greatest influence on improving student outcomes. The school leader's role in professional development helps to create the necessary condition in schools in which teachers routinely use data to inform and improve their instructional skills. The teachers' improvement in instructional skills then benefits the learning experience of the students. The researchers also noted that such practices become part of the routines throughout schools where leaders are involved with professional development. This meta-analysis also implied that school leadership can impact student achievement by creating and sustaining an environment that builds capacity for change.

There are several similarities in teachers as adaptive experts and as leaders who need to develop organizational adaptive expertise (Bransford et al., 2005). Part of this adaptive expertise involves identifying the professional learning required to meet the challenges involved in improving what is not working so well. A high priority for an instructional leader is effective and clearly articulated school curriculum, instruction, and

assessment. The principal advocates for ways to integrate instructional planning and goal attainment and establish performance standards for instruction and teacher behavior. Staff responsibilities are made explicit and student performance is expressed in measurable terms (Hallinger, Bickman, & Davis, 1996). A principal providing successful instructional leadership needs to have knowledge of effective schools' research and provide staff with opportunities for training and reflection of practice (Bryk, Camburn, & Louis, 1999). Instructional leaders set expectations for continual improvement of instruction through staff development that enhances learning.

Successful principals typically value conversations that encourage teachers to become conscious of and reflective of their learning and professional practice. Specific feedback strategies used to promote reflection include making suggestions, giving feedback, modeling, using inquiry and soliciting advice and opinions, and giving praise (Blase & Blase, 1999). The principal as instructional leader establishes a problem-solving approach founded on trust and respect, discusses issues regarding student behavior, addresses classroom interactions and relationships, and maintains availability for follow-up discussion (Blase & Blase, 1999). This model holds the principal responsible for the climate of the school both as a place of learning and positive place to work. The principal, as instructional leader, has an active role in the daily functions of the school. A principal who maintains high visibility increases her opportunities for interactions with staff which may provide her information on the needs of teachers and students. This visibility has been shown to positively impact teacher and student attitudes (Hallinger & Murphy, 1985).

Transformational leadership model. The 1990s brought about an evolution of the educational leadership role in which leaders focused on changing the organization's normative structure (Leithwood & Duke, 1999). A leadership model frequently associated with change is called transformational leadership. Transformational leadership emphasizes identifying problems, solving problems, and collaboration with the objective of improving school performance as measured by student outcomes (Hallinger, 1992). Leaders in transformational leadership roles seek to elevate teachers' degree of commitment, to support them to attain their fullest potential, and to encourage them to surpass their own self-interest for a larger good (Marks & Printy, 2003).

Geijsel, Sleegers, Leithwood, and Jantzi (2003) identified four dimensions of transformational leadership:

- Idealized influence—role modeling of high morals, putting others' needs first
- Inspirational motivation—elevating goals and inspiring enthusiasm and optimism
- Intellectual stimulation—developing colleagues' capacities, innovation, and creativity
- Individualized consideration—coaching, mentoring

Transformational leadership focuses on the importance of the principal's role in initiating entrepreneurship and influencing school culture (Leithwood & Duke, 1999) to promote the capacity to advance and produce novel ideas (Hallinger & Heck, 1998). A transformational leader provides intellectual guidance and promotes innovation within the school, while empowering and supporting teachers as allies in decision-making (Leithwood & Duke, 1999).

Transformational leaders try to shape a positive school culture and contribute to school effectiveness by fostering collaboration and activating a practice of constant analysis of teaching and learning (Fullan, 2001). Transformational leaders encourage teachers to think about their beliefs about their work and to modify pedagogy. They institute expectations for quality instructional process and support teachers' professional growth (Marks & Printy, 2003).

Transformational school leaders focus on the individual and collective knowledge, competence, and dedication of teachers (Hallinger, 1992). The existence of transformational leadership within a school has direct effects on teachers' commitment to school reform and the extra effort they allocate to the reform (Geijsel et al., 2003). It has indirect effects on teachers through teacher motivation (Geijsel et al., 2003). A model of transformational leadership is in place when staff members engage with others in such a manner that leaders and followers elevate each other to "higher levels of motivation and morality" (Geijsel et al., 2003). Greater teacher capacities and commitment have been shown to generate extra effort and increased productivity (Leithwood & Jantzi, 1999). The transformational model has been criticized for merely extending greater autonomy to classroom teachers (DuFour et al., 2006). A concern has surfaced that the model lacks a focus on factors that increase student achievement (Barnett, McCormick, & Conners, 2001).

ISLLC Standards and Effective Leadership

Whichever style of leadership a principal follows or integrates into their daily routine, student achievement should be at the forefront of their vision. Therefore, developing methods that match a principal's actions to student achievement is paramount

to the success of a school. The Interstate School Leaders Licensure Consortium (ISLLC) standards have been developed by the Council of Chief State School Officers in collaboration with the National Policy Board on Educational Administration (NPBEA) to help strengthen preparation programs in school leadership (Van Meter & Murphy, 1997). These standards can be found in Table 1. A study conducted by Kaplan, Owings, & Nunnery in 2005 compared principal quality, the ISLLC standards and student achievement. This study used the six ISLLC standards to develop an instrument to assess principal quality. Using principal quality ratings, these researchers assert that their findings suggested the following:

> "...global assessments of principal quality in relation to the ISLLC standards may not accurately discriminate among principals. However, overall judgments of principal quality based on a summation of scores across ISLLC standards do provide for some discrimination with respect to overall school leadership quality" (p. 37).

Basically, principals who have a greater mastery of the ISLLC standards have higher achieving schools than those who do not have as great a mastery. This implies that principals who practice and build skills for teaching and learning can positively impact student learning in their schools. Since the PLCA-R has been shown to be an effective, common measure and it is used as a framework in this study, the alignment it has with the six ISLLC standards helps to add value to this study. Table 1 displays this alignment.

Table 1

PLCA-R and ISLLC Standards Correlation

ISLLC Standard	PLCA-R Item Number
Standard 1: A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.	1, 4, 5, 9, 12, 14, 16, 18, 19, 20
Standard 2: A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.	6, 8, 10, 13, 22, 26, 28, 30, 31, 32, 33, 35, 39, 41, 42, 43, 45, 47
Standard 3: A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.	24, 43, 44, 45, 46, 47, 48, 49, 52
Standard 4: A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.	17, 23, 25, 51
Standard 5: A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.	2, 3, 38, 39, 42
Standard 6: A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.	15, 51

Leaders as Change Agents

In recent years, the phrase "leadership for learning" has become used internationally (Robinson et al., 2008). Leadership for learning likely represents the combination of instructional leadership and transformational leadership (Hallinger,

2003). It emphasizes the significant role of school-level leaders of in creating and sustaining a school-wide focus on learning (Hallinger et al., 1996a, Marks & Printy, 2003). Combining the strengths of these leadership behaviors helps to create leaders as change agents and sets the stage for the successful implementation of PLC's. The PLC concept is anchored in the notions that it is the principal's responsibility to enhance the attitudes, skills and knowledge of staff; to create a culture of expectations around the use of those skills and knowledge; to mesh pieces of the school into a productive relationship with each other; and to additionally hold individuals accountable for their contributions to the collective result (Elmore, 2000). According to Macmillan, Meyer, and Northfield (2005), trust between a principal and teachers in a school is a reciprocal relationship that is not automatic but is negotiated and earned. They claimed that without trust some teachers might retreat to the minimal requirements with regard to instruction and resist becoming involved in school improvement efforts. Morrissey (2000) pointed to both a culture of trust and mutual respect within relationships together with the collective engagement of teachers and administrators as components of successful schools.

The principal may be the single most important factor in initiating and sustaining change that affects students' performance (Jackson & Davis, 2000). There is a critical need for leaders who can create a culture that fosters both adult and student learning and expand the definition of leadership to include all stakeholders in the school. Louis, Kruse and Raywid (1996) identified the supportive leadership of the principal as one of the necessary human resources for schools to become a professional learning community. Prestine (1993) suggests that it is necessary for principals to lead in the following three ways in order to create professional learning communities in schools: they must share

authority, they must facilitate the work of the staff and they must participate without dominating.

Research has been conducted on the effects leadership has on schools. In one study, Thompson, Gregg, and Neska (2004) conducted a mixed methods study by collecting quantitative and qualitative data through questionnaires and interviews. The study examined the work of middle school principals and teachers in six different school districts, four schools in a large metropolitan Midwestern city and two schools in a midsize New England city. They found that all of the principals and a majority of the teachers believe their school is a learning organization. The teachers reasoned that successful learning organizations hinge on strong leadership coupled with job-embedded professional development determined by the staff. They concluded that it takes a leader who understands and encourages data informed decisions, develops and sustains relationships and takes risks to create a learning organization (2004).

In another study investigating relationships between leadership and school quality, Wahlstrom and Louis (2008) analyzed results from a database housing 4,165 surveys from U.S. teachers in grades K – 12. The collection of surveys was a part of a larger research project entitled Learning from Leadership. They employed stepwise linear regression to examine the relationships among practices such as shared leadership and professional community with variables such as trust and efficacy. Their findings supported the need for a leader to ensure there is shared leadership and trust among the faculty. Their results further suggested that expanding the decision-making process in schools to include non-administrators is a vital step principals can take to improve

instruction. The study's authors concluded that principals at each level of schooling can have a significant effect on instruction (2008).

Summary and Directions

The research literature revealed several indicators of effective professional development. Studies show the need to engage teachers and have follow-up activities in order for professional development to be effective (Desimone et.al., 2002; Garet et. al., 2001; Penuel et. al., 1999). Numerous other studies provide information on the effectiveness of professional learning communities. Research shows a positive relationship between PLC's and student achievement (Barth, 1990; Hollins et. al., 2004; Huffman, 2003; Louis & Marks, 1998; Newmann & Wehlage, 1995; Phillips, 2003; Strahan, 2003). Another positive relationship found was between teacher practice and PLC's. Teachers use more sound pedagogical instruction with a higher level of student-centered activities when they are involved in professional learning communities (Dunne, Nave, & Lewis, 2000; Stoll et. al., 2006; Vescio et. al., 2008). Studies have further suggested that schools characterized by effective use of the PLC process have an improved school climate (Andrews & Lewis, 2002; Barlow, 2005; Dunne, Nave, & Lewis, 2000; Englert & Tarrant, 1995; Strahan, 2003; Vescio et. al., 2008). Fewer studies have been conducted on the relationship of the building leader and PLC's; however, those conducted have shown that the effectiveness of job-embedded professional development relies greatly on the leadership in the building (Copland, 2003; McLaughlin & Talbert, 2001; Thompson, Gregg & Niska, 2004; Youngs & King, 2002)

Although many studies have been conducted on PLC's, few have been published that relate school leadership to the quality and effectiveness of PLC's. The studies

reviewed in this paper did find that the principal must be supportive, willing to share leadership and build high levels of trust with their faculty (Thompson, Gregg, & Niska, 2004; Wahlstrom & Louis, 2008). The studies conducted have mainly been qualitative studies relying on interview data or they have been quantitative relying on survey data and standardized test scores. The scarcity and limited methods used in this line of inquiry limits practical applications to a variety of educational settings. The study conducted by Wahlstrom and Louis (2008) analyzed survey data from a prior study conducted nationwide. The results of the study were based on post hoc analyses using self-report data. Thompson, Gregg, and Niska (2004) conducted a mixed methods study using interview data as well as questionnaire data; however, their research was conducted in six middle schools that had already been shown to have effective PLC's in place. Therefore, their findings do not pertain to a wide array of schools nor do they address what made the schools successful. Further research could be completed to investigate trends among schools that implement successful PLC's. Conducting a study that examines how principals lead through the process of developing a learning culture adds to the current body of studies on professional development. The present study relies on quantitative data from a questionnaire as well as qualitative data from interviews to provide more valid findings by reviewing more in-depth information about leadership. The study also surveys teachers as well as administrators to produce a sample across all grade levels to further the generalizability.

This literature review examined traditional professional development, PLC's and leadership practices. The literature supports the idea of developing PLC's in schools. The lack of empirical research on what behaviors a principal possesses and utilizes when

preparing a school to transform into a PLC is apparent. This study helps to fill the void in the current literature by including all grade levels in one study as well as including both the administrative and teacher perspective in the same body of work. Improving schools and student achievement requires the facilitation of change. Administrators play a critical role in employing change that leads to these goals through the implementation of PLC's (Louis, Kurse, & Raywid, 1996). Also, DuFour's (2004) three critical questions listed earlier in this chapter promote a focus for individual and collaborative learning within the school community. Administrators and teachers working together to implement PLC's can allow a school community to put forth a collaborative effort to promote change as a team in order to increase student performance and total school improvement.

CHAPTER III
METHODOLOGY

Introduction

This chapter describes the methodology used to compare the qualities and

behaviors of principals who have led their schools in a way to best prepare the faculty to

transform into professional learning communities. It begins with the design of the study

followed by a detailed description of the participants, measures, data analysis and

procedures used to carry out the study.

Design

Research Question

This study is focused on the following research question:

1. What are the characteristics of principal leadership that promote effective

    implementation of PLC's?

This descriptive comparative study utilized a mixed methods approach and relied

on both results from a questionnaire and interviews. The first phase of the study included

a Likert-type scale questionnaire that explored the readiness of a school to transform to a

professional learning community. In addition, the questionnaire included sections asking

for open-ended feedback for each of the six areas of concentration;

- Shared and Supportive Leadership,

- Shared Values and Vision,

- Collective Learning and Application,

- Shared Personal Practice,

- Supportive Conditions-Relationships, and

- Supportive Conditions-Structures.

During the second phase of the study, the researcher interviewed three elementary school principals, three secondary school principals as well as six lead teachers, one from each school where a principal was interviewed. A phenomenological analysis (Patton, 2002, p. 482) was used to gain an understanding of the leadership behaviors of principals in schools that indicated a high level of readiness according to the questionnaire. Qualitative findings related to the degree to which the school displays a readiness to transform to professional learning communities were based on the interview data collected from principals and lead teachers as well as the various comments made throughout the questionnaire by all participants.

Participants

District Demographics

Participants in this study were from a large urban school division in south eastern Virginia. The division houses 69,469 students and 16,788 employees within its 81 schools and various administration buildings. The student body consists of 48.9% females and 51.1% males that have an ethnic breakdown of 55.4% Caucasian, 27.1% African American, 6.1% Hispanic, 5.8% Asian, 0.9% Native Hawaiian/Pacific Islander, 0.4% Native American and 4.2% who are unspecified. Approximately 11.4% are classified as special education students, while approximately 12.2% are classified as gifted, and 30.6% are considered economically disadvantaged. For the 2008-2009 school year the dropout rate for the division was 1.32% and the graduation rate was 85%. Students scored an average of 503 on the SAT reasoning test for reading and an average score of 511 for the SAT reasoning test for math. A total of 6,722 advanced placement exams were administered in the 2008-2009 school year. The division had a per pupil

expenditure of $11,020 for the 2009-2010 school year. Within the 81 schools there are 56

elementary schools, 14 middle schools, 11 high schools. The range of enrollments at

each level can be seen in Table 2.

Table 2

Student Enrollment by Level

	Minimum	Mean	Maximum	Range
Elementary School	314	565	973	659
Middle School	588	1122	1544	956
High School	1689	1911	2340	651

There are 5742 teachers across the division with an average experience of 14.57

years in the classroom. The diversity of the teachers is 75% Caucasian, 18.7% African

American, 6.3% in other categories. Just over 50% of the teaching staff hold graduate

degrees. All core courses in the division are taught by teachers who are 99.13% highly

qualified for their area of instruction. There are 217 school-based administrators across

the division. The diversity of the administration is 77% Caucasian, 14.9% African

American and 8.1% in other categories.

Purposeful Sample

The district was conveniently selected since the researcher is a principal in the

division being studied. The sampling for the questionnaire was all principals, assistant

principals and lead teachers, as identified by their principal, across the division. Based on

the results of the PLCA-R, interviewees were purposefully selected to represent extreme

cases (Patton, 2002). Interviews were conducted with principals and lead teachers from

schools that show the highest level of readiness to transform to PLC's based on

information gathered from the PLCA-R. Since the establishment of PLC's occurs over

time, principals with less than two years of experience at their current school were not

considered for interviews and their lead teachers were not asked to participate in this

study.

Measures

Professional Learning Community Assessment - Revised

Initially, the *Professional Learning Community Assessment* (PLCA) was created

to assess everyday classroom and school level practices (Oliver, Hipp, & Huffman,

2008). This assessment has been successful in assisting educators and researchers in

determining the strength of practices within each PLC dimension. Recognition of a need

to more inclusively assess levels of practice relating to utilization and analyses of data

has resulted in an extension of the original measure (Oliver, 2009). This refined measure,

Professional Learning Community Assessment-Revised (PLCA-R), now serves as an

effective formal diagnostic tool for identifying school level practices that enhance

intentional professional learning (Appendix A). The PLCA-R measures perceptions of

the staff relating to specific practices experienced at the school level with regard to

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

application, shared personal practice, and supportive conditions, including both

relationships and structures (Oliver, 2009). A blueprint for the PLCA-R appears in Table

3.

Table 3

Blueprint for PLCA-R

	Item Numbers
Shared and Supportive Leadership	1 – 11
Shared Values and Vision	12 – 20
Collective Learning and Application	21 – 30
Shared Personal Practice	31 – 37
Supportive Conditions – Relationships	38 – 42
Supportive Conditions – Structures	43 – 52

The PLCA-R has been administered to educators in a number of school districts at all grade levels across the nation, providing opportunities to review the dimensions for internal consistency (Oliver, 2009). The assessment utilizes a four-point, forced Likert-type rating scale ranging from 0 = Strongly Disagree to 3= Strongly Agree. Initial and subsequent studies have provided ongoing validation of this diagnostic tool. Oliver (2009) reported that the analysis of PLCA-R has confirmed internal consistency (see Table 4).

Table 4

Cronbach 's Alpha Reliability Coefficients for PLCA-R

	N	*Items*	*Coefficient*
Shared and Supportive Leadership	1209	11	.94
Shared Values and Vision	1209	9	.92
Collective Learning and Application	1209	10	.91
Shared Personal Practice	1209	7	.87
Supportive Conditions – Relationships	1209	5	.82
Supportive Conditions – Structures	1209	10	.88

This latest analysis (Oliver, 2009) also provided an opportunity to review descriptive statistics for each item. Mean scores for the measure resulted in a high of 3.27 within the Collective Learning and Application dimension (*School staff is committed to programs that enhance learning*) to a low of 2.74 within the Shared Personal Practice dimension (*The staff provide feedback to peers related to instructional practices*) (Oliver, 2009). The PLCA-R incorporates seven new statements addressing the utilization of data as a school level practice. To develop construct validity for the relevance of the new items, an Expert Opinion Questionnaire was designed to assess and analyze responses from individuals within the education field having knowledge about the original PLCA measure and/or attributes of professional learning communities (Oliver, 2009). This questionnaire requested that respondents read each proposed measure statement and rate each item in terms of its relevance to more directly speak to data practices within a professional learning community assessment.

The 3-point rating scale included the following responses:

- H/(3) = high level of importance and relevance to PLCA instrument revision;

- M/(2) = medium level of importance and relevance to PLCA instrument revision; and

- L/(1) = low level of importance and relevance to PLCA instrument revision.

Thus, the proposed items were assessed in terms of the importance and relevance to data utilization and the appropriate fit within the PLCA dimensions. The panel of experts consisted of school administrators and teachers, district and regional education supervisory personnel, university faculty and staff, educational consultants, and doctoral students studying professional learning communities. Findings from the Expert Opinion Questionnaire resulted in 51 usable surveys in which the seven items were rated from a high of 2.94 (*Staff collaboratively analyze evidence of student learning as critical data for improving teaching and learning*) to a low of 2.69 (*Data are organized in a way to provide easy access to staff*). As noted by ratings and comments from panel members, overall strong support was indicated for the inclusion of all proposed items. Numerous comments expressed approval (Oliver, 2009).

The PLCA revision process also sought feedback from several researchers and doctoral students who had utilized the measure, as to their perceptions of the viability of the instrument. Responses were overwhelmingly positive and indicated the feasibility of utilizing the PLCA-R to assess the practices observed at the school level relating to the PLC dimensions (Oliver, 2009). The PLCA-R format now has sections asking for open-ended feedback following each of the six specific practices. This addition provides an avenue for teachers to offer more comprehensive feedback on critical attributes within each dimension allowing insight through qualitative data (Oliver, 2009).

Interview Protocol

The interviews were conducted in a semi-structured format with probes and

follow up questions to obtain more in-depth responses. The interviews were conducted

on an individual basis. The interview protocol was developed based on the PLCA-R

using the six areas of leadership as a basis for the items. With a total of 17 questions, the

first being general background questions, Table 5 contains the blueprint for the interview

protocol and Appendix B contains the interview protocol.

Table 5

Blueprint for Principal Interview Protocol

	Item Numbers
Shared and Supportive Leadership	3 – 5
Shared Values and Vision	6 – 8
Collective Learning and Application	9 – 10
Shared Personal Practice	11 – 12
Supportive Conditions – Relationships	13 – 14
Supportive Conditions – Structures	15 – 17

The instrument was piloted and minor changes were made. The first question was

amended to gain information from interviewees on their background in educational

leadership and parts A and B were used as probing questions. This helped guide the

interviews away from more general resume information to more in-depth information on

their experience as it related to their leadership positions. Question 13 was amended to

add the word conditions to go along with structures. The first writing of the question

confused participants in the piloting of the interview instrument as they were looking for

specific structures in place for taking risks. A sub-question to question 14 was removed asking about staff socials. Most interviewees discussed social aspects of their meetings within the main question. Finally, question 16 was rewritten totally to avoid confusion between available technology for use and the actual infrastructure. During the pilot, interviewees began talking about their network and internet access when the intent of the question was to gain information on instructional tools which they were provided.

Procedure

Questionnaires

After gaining Human Subjects Review Committee approval from the university (Appendix C), the researcher submitted the proposal to the public school system for permission to conduct research. Once the letter was received approving the research (Appendix D), all principals with more than two years at their current school were sent an email with an explanation of the study and a link to the PLCA-R (Appendix E). The questionnaire was conducted on-line. Once the principals had access to the questionnaire and the information pertaining to the study, they were sent an email requesting names of their lead teachers (Appendix F). Once the principals responded with the list of their lead teachers, the lead teachers and assistant principals were sent an email with an explanation of the study and a link to the PLCA-R (Appendix G). The participants were given a two week timeline to complete the survey. Reminder emails were sent to those who had not completed the survey after the first 7 days (Appendix H). As an incentive for completing the survey, they were entered in a drawing for four $25 gift cards to Amazon.com.

There were a total of 672 questionnaires sent to principals, assistant principals and lead teachers. The overall response rate for the 672 questionnaires sent was 60.9%.

After eliminating principals with too little time in their current school, a total of 70

principals from 50 elementary schools and 20 secondary schools were sent links to the

PLCA-R. Of those principals, 41 elementary school and 14 secondary school principals

completed the PLCA-R. In order to conduct the interviews there also had to be responses

from lead teachers within the school where the principals responded. Of the 55 schools

where principals responded to the PLCA-R, 45 principals responded with names of lead

teachers. Therefore, 32 elementary schools and 13 secondary schools were considered as

sources for interviews. Although the total response rate for principals was 78.6%, the

usable response rate was 64.3%. Eighty-four questionnaires were sent to assistant

principals with a total of 65 completed, creating a 77.4% response rate. A total of 518

questionnaires were sent to lead teachers with 287 completed, creating a response rate of

55.4% (see Table 6). The response rates for the top ranked schools that were used for

interviews can be found in Appendix I.

Table 6

Questionnaire Response Rates

	Questionnaires Sent	*Questionnaires Completed*	*Response Rate*
Total	672	409	60.9%
Principals	70	55	78.6%
Assistant Principals	84	65	77.4%
Lead Teachers	518	287	55.4%

Interviews

Once the questionnaires were completed, the data were analyzed to identify the

schools with the overall highest ratings on the PLCA-R. The researcher personally called

each of the principals at the top ranking three secondary and elementary schools to

request their participation in the interview data collection. During the conversation the

researcher asked for permission from the principal to interview one of the lead teachers

within their school that completed the survey. All of the principals agreed to be

interviewed and selected a lead teacher to be interviewed from the list of teachers who

had completed the questionnaire. While on the phone with the principals, the researcher

scheduled times to meet with each principal to conduct an interview. Likewise the

researcher contacted each of the lead teachers and scheduled times to conduct interviews.

During the interviews with the participants, he gave each of them a letter (Appendix J)

describing how the data will be used as well as a verbal overview of confidentiality

protection. The researcher also asked for permission to record the interviews on a digital

recording device for use as a backup to notes taken during the interview. All interviewees

agreed to be recorded. The longest interview was 48 minutes and the shortest interview

was 37 minutes.

Data Analysis

In analyzing the results of the PLCA-R, descriptive statistics were used to rank

the dimensions. Since the PLCA-R items illustrate actual school level practices, analysis

of the data was incorporated in a review of individual items to determine the strengths

and weaknesses of practices deemed essential within a professional learning community.

Each survey was coded by school. Descriptive statistics were then analyzed by school to determine which schools had the highest overall rankings.

Content analysis was used for the open-ended items on the PLCA-R and for the interviews. Interview data were analyzed to identify topics, categories, themes or patterns that occurred most frequently across schools. Responses were read carefully with notes made regarding themes, topics, and patterns written in the margins. This process yielded a coding system that facilitated categorization of data as seen in Chapter 4. Data were reviewed a second time to code into categories. Patterns or themes among or within categories were then identified. Interview notes were read until all relevant interview responses were coded. To further validate the reliability of the coding, the data were reviewed by an educational expert. Quotes were extensively used to illustrate responses by category and to enhance validity of findings.

CHAPTER IV
RESULTS

Results and findings are organized by data source. First, descriptive statistics of

data from the PLCA-R questionnaire were used to determine each school's readiness

level to become a learning community. Comments from the PLCA-R questionnaire were

also used to add depth to the quantitative findings. Then, data were collected from

interviewing principals and teachers. From these interviews, emergent themes based on

interview data were analyzed to determine similarities among the leadership

characteristics displayed by each school's principal.

Questionnaire Findings

Four hundred nine administrators and teachers across the school division

responded to the PLCA-R questionnaire. The questionnaire was composed of Likert-type

items across six categories assessing each respondent's readiness to be a part of a

Professional Learning Community. The findings were organized by scale: Shared and

Supportive Leadership, Shared Values and Vision, Collective Learning and Application,

Shared Personal Practice, Supportive Conditions-Relationships or Supportive Conditions

– Structures. A rating of zero indicated they *Strongly Disagreed*, a rating of one indicated

they *Disagreed*, a rating of two indicated they *Agreed*, while a rating of three indicated

they *Strongly Agreed.* It also included a section within each category for comments from

the user relating to that specific category. Results are presented for each scale and

include descriptive statistics from the quantitative data identifying high scoring schools.

For each scale on the questionnaire the scores were totaled and averaged to make

a composite score for that scale. Then each scale was totaled and averaged to make a

composite score for each school that completed the questionnaire. Based on a four point

scale, zero through three, the elementary school level with the lowest score for a school was 2.35 with the highest scoring school being a 2.83. At the high school level the lowest school scored a 2.34 and the highest school scored a 2.77. The means and standard deviations for each of the six categories of the PLCA-R including all schools that responded are displayed in Table 7.

Table 7

Descriptive Statistics for the Six Scales and the Combined Totals of the PLCA-R

	N	Mean	SD
1. Shared and Supportive Leadership	336	2.51	0.35
2. Shared Vision and Values	336	2.88	0.28
3. Collective Learning and Application	336	2.30	0.26
4. Shared Personal Practice	336	2.76	0.39
5. Supportive Conditions – Relationships	336	2.84	0.39
6. Supportive Conditions - Structures	336	2.79	0.31
Composite Total	336	2.65	0.24

In order to rank each school, their composite totals were reviewed which determined the ranking for all schools within the guidelines of having the principal and lead teachers included as completers. Each of the top three elementary schools' and secondary schools' means for each category and their composite total can be found in Table 8. A complete list ranking all of the schools is located in Appendix K. One interesting point to notice is that all of the schools had item 3, *Collective Learning and Application*, as their lowest ranked scores.

Table 8

Means for each Scale of the PLCA-R by Schools Interviewed

	N	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6	Composite Total
Elementary School 1	3	2.73	3.00	2.40	3.00	3.00	3.00	2.83
Elementary School 2	3	2.67	3.00	2.40	3.00	3.00	3.00	2.81
Elementary School 3	5	2.71	2.96	2.36	2.94	3.00	3.00	2.80
Secondary School 1	9	2.64	2.95	2.38	2.87	2.96	2.80	2.77
Secondary School 2	21	2.66	2.94	2.36	2.90	2.88	2.92	2.75
Secondary School 3	12	2.53	2.91	2.34	2.95	2.93	2.88	2.72

Shared and Supportive Leadership. Table 9 describes the percentage by response category for each item making up the Shared and Supportive Leadership scale. As evident in Table 9, responses were predominantly geared toward *Agree* and *Strongly Agree*. This indicates that most respondents perceive that school leaders interacts with and supports their staff. For example, it may indicate that the staff's advice and comments are integrated into the principal's decision-making processes.

Table 9

Percentage by Response Category for Shared and Supportive Leadership

	N	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
Staff is involved in discussing and deciding on school issues	409	2.19	0.64	2%	7%	61%	30%
Principal incorporates advice from staff members to make decisions	409	2.35	0.64	1%	5%	51%	43%
Staff has accessibility to key information	409	2.30	0.64	2%	5%	55%	38%
Principal is proactive and addresses areas where support is needed	409	2.38	0.63	1%	5%	49%	45%
Opportunities are provided for staff members to initiate change	409	2.27	0.63	1%	6%	57%	36%
Principal shares responsibility and rewards for innovative actions	409	2.35	0.63	1%	6%	51%	43%
Principal participates democratically with staff sharing power	409	2.14	0.70	1%	14%	54%	31%
Leadership is promoted and nurtures among staff members	409	2.35	0.65	1%	8%	48%	44%
Decision-making takes place through committees and communication across grade and subject areas	409	2.27	0.63	1%	8%	56%	36%
Stakeholders assume shared responsibility and accountability for student learning	409	2.02	0.68	2%	16%	60%	22%
Staff members use multiple sources of data to make decisions about teaching and learning	409	2.39	0.59	1%	3%	52%	44%

Although all of the items are overwhelmingly in the *agree* and *strongly agree* categories on the rating scale, it is worth noting the two items with the lowest means. The items *Principal participates democratically with staff sharing power*, with a mean of 2.14, and *Stakeholders assume shared responsibility and accountability for student learning*, with a mean of 2.02, are two of the areas that were accentuated in the comments section of the survey. Comments from this section of the questionnaire were used in an attempt to capture a richer understanding of the differences between the low ranking and high ranking schools.

Comments from the higher ranking schools demonstrate how leadership is shared throughout the building as well as how plans are in motion to strengthen processes already in place. In one school a teacher wrote,

> "Our staff is offered opportunities to lead. Not all of the staff
> necessarily take advantage of doing so. Our principal is also
> working on creative ways to compensate teacher leaders by
> investigating dormant stipend money or by reconfiguring other
> stipends which will distinguish the managers from the
> invested/active staff leader."

In this case, the respondent perceives the principal as truly spearheading an effort to create leaders and to support those who are willing to take on the role. Another teacher simply wrote, "At our school, teacher leadership is valued and appreciated." Such comments are indicative of the atmosphere of the highly ranked schools.

Looking at statements from schools on the lower end of the PLCA-R, we find comments such as, "Opportunities exist for staff members to become involved; however,

there is complacency among veteran teachers to do anything different." Another comment from a different school reflects a similar sentiment, "Some staff members are reluctant to take part in decision making even when the administrators ask for their input." Comments such as these imply that although the principal may be attempting to implement reforms, the culture has not changed. In low-ranked schools, there were a significant number of teachers who feel their input is neither requested nor needed. One such teacher commented, "Although there is opportunity for shared decision making, many of the decisions are made by the principal and staff input is not considered in some of the decisions."

Shared Values and Vision. Again, responses to items on this scale resulted in data skewed heavily towards the *Agree* and *Strongly Agree* responses (see Table 10). These data clearly show that there was a process in place for creating the school's values and vision as well as how the values and vision are embedded into the culture of the school. More in depth, this implies the shared responsibility among stakeholders in the use of data within the development of the school's values and vision. Although only one item received over 10% in the disagree response category, *Stakeholders are actively involved in creating high expectations that serve to increase student achievement,*(M = 2.18), the differences in the comments between the high ranking schools and the low ranking schools tell a different story.

Table 10

Percentage by Response Category for Shared Values and Vision

	N	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
A collaborative process exists for developing a shared sense of values among staff	409	2.25	0.57	0%	5%	63%	31%
Shared values support norms of behavior that guide decisions about teaching and learning	409	2.22	0.54	0%	5%	67%	28%
Staff members share visions for school improvement that focus on student learning	409	2.20	0.57	0%	8%	64%	28%
Decisions are made in alignment with the school's values and vision	409	2.45	0.54	0%	1%	51%	47%
A collaborative process exists for developing a shared vision	409	2.27	0.61	0%	7%	57%	35%
School goals focus on student learning beyond test scores and grades	409	2.37	0.64	0%	7%	47%	45%
Policies and programs are aligned to the school's vision	409	2.42	0.55	0%	2%	53%	44%
Stakeholders are actively involved in creating high expectations that serve to increase student achievement	409	2.18	0.68	0%	14%	53%	33%
Data are used to prioritize actions to reach a shared vision	409	2.37	0.56	0%	4%	55%	41%

One teacher from a high ranking school remarked, "Collaboration is a strong point at our school. There are many shared ideas and values." Multiple comments from low ranking schools do not illustrate the same atmosphere. One teacher simply stated,

"Visions are presented by the administrative staff," implying that there is no apparent

input from the instructional staff. Another teacher stated, "While there is discussion

among staff members regarding changes needed, it is not always heard by

administrators." In one of the low ranking schools a teacher wrote, "I believe there is a

disconnect between our values and vision and our actual practice." Some comments

suggest principals may concentrate on decision making among a small group of teachers,

for example, "Most decisions are made by one particular staff member and her opinion is

valued way over anything that anyone else brings to the table." The disparity in the open-

ended comments written by teachers in high and low-ranked schools suggests that the

differences that emerged from the quantitative data on this scale may be greater than the

descriptive statistics imply.

Collective Learning and Application. Again, responses in this category are

negatively skewed towards *Agree* and *Strongly Agree* as seen in Table 11. This outcome

was not as surprising as it focuses on how staff members work together to improve

instruction. This does not directly rely on the strength of the building principal. The

comments made within this section, no matter the rating of the school, tended to be

positive.

Table 11

Percentage by Response Category for Collective Learning and Application

	n	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
The staff works together to seek skills and apply this to new learning	409	2.31	0.58	1%	4%	59%	36%
Collegial relationships exist among staff that reflect commitment to school improvement	409	2.35	0.56	0%	3%	57%	39%
Staff members plan and work together to address diverse student needs	409	2.31	0.61	0%	7%	54%	39%
A variety of opportunities and structures exist for collective learning	409	2.22	0.59	0%	8%	62%	30%
Staff members engage in dialogue that reflects a respect for diverse ideas	409	2.19	0.60	1%	8%	63%	29%
Professional development focuses on teaching and learning	409	2.46	0.63	1%	4%	42%	53%
Staff members and stakeholders learn together to solve problems	409	2.16	0.64	1%	11%	59%	29%
Staff members are committed to programs that enhance learning	409	2.42	0.55	0%	2%	54%	44%
Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices	409	2.26	0.61	0%	8%	57%	34%
Staff collaborates to analyze students work to improve teaching and learning	409	2.23	0.66	1%	9%	56%	34%

One comment from a teacher at a low-ranked school was, "Opportunities exist for

collective learning and application; however, not all staff members take advantage of

those opportunities." More comments such as, "We have begun to incorporate the collaboration to address effectiveness of instruction and to analyze student work." and "…groups are still growing to the point that they are now using their time to analyze student data" show that teachers not only rated their schools high on the Likert scale they followed up with positive comments about the processes within their schools that promote collaboration. Of course it is possible teachers saw this section as a self-reporting portion of the PLCA-R; therefore, they felt obligated to remain positive.

Shared Personal Practice. Although Table 12 shows the majority of the responses are Agree and *Strongly Agree*, this is the first category where we have combined *Disagree* and *Strongly Disagree* ratings above 20% and means below 2.00. Therefore, there was less agreement among respondents regarding how they felt about opportunities staff members have to observe one another and provide feedback, as well as share ideas and suggestions to improve student learning. This section combines a teacher's work with the drive of the principal.

Table 12

Percentage by Response Category for Shared Personal Practice

	n	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
Opportunities exist for staff to observe peers and offer encouragement	409	2.30	0.65	1%	8%	52%	40%
Staff provide feedback to peers related to instruction	409	1.97	0.65	0%	22%	58%	20%
Staff informally share ideas and suggestions for improving student learning	409	2.45	0.56	0%	2%	50%	48%
Staff collaboratively review student work to share and improve instruction	409	2.17	.067	1%	13%	55%	32%
Opportunities exist for coaching and mentoring	409	2.28	0.61	0%	8%	56%	36%
Individuals and teams have the opportunity to apply learning and share their results	409	2.26	0.55	0%	5%	64%	31%
Staff regularly share student work to guide overall school improvement	409	1.96	0.68	1%	23%	56%	21%

Comments collected from this section of the questionnaire help to reinforce the greater variance within this category. Teachers from the highly ranked schools made comments such as, "A strong mentorship program with trained, seasoned staff willing to work with new teachers is in place." and "Teachers are encouraged to do peer observations and meet before and after the observation to discuss the lesson." While teachers from low ranked schools made comments such as, "Analyzing student work to improve teaching and learning is still an ideal. Teachers are not routinely doing this practice." and "Sharing of personal practice exists among only small pockets of the staff

members here." Although these comments may not be viewed as negative, the respondents seem to lack direction in these areas.

Supportive Conditions-Relationships. The questionnaire data again trended towards *Agree* and *Strongly Agree* as seen in Table 13. This scale illustrates teachers' feelings about their school's atmosphere towards risk-taking and the extent of support and nurturing from the administration. Comments from respondents in low ranked schools revealed a tension between administration and veteran teachers. When reviewing the comments made in this section, a principal from a low ranked school wrote, "Again, we have found veteran teachers' willingness to change as the biggest barrier to affecting change. Often, discontent is created with younger staff when they hear the complaints or witness 'status quo' teachers." While teachers wrote comments such as, "...nor do I feel that enough caring relationships are developed..." and " I do not believe recognition occurs often enough, especially for teachers."

Table 13

Percentage by Response Category for Supportive Conditions-Relationships

	N	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
Caring relationships exist among staff and students	409	2.42	0.58	1%	3%	50%	46%
A culture of trust and respect exists for taking risks	409	2.27	0.62	0%	8%	55%	36%
Outstanding achievement is recognized and celebrated regularly in our school	409	2.41	0.59	0%	5%	49%	46%
Staff and stakeholders exhibit a sustained and unified effort	409	2.09	0.65	2%	12%	62%	25%
Relationships among staff support honest and respectful examination of data	409	2.23	0.58	1%	6%	63%	31%

However, the comments from highly ranked schools illustrated a strong sense of support. For example, in one highly ranked school, a respondent commented, "Building relationships among the staff is one of our strongest points. We regularly celebrate the successes and treat each other with respect." Another respondent mentioned the strong sense of community among staff members, "At every meeting there is an opportunity for everyone to catch up with folks in other grade levels to help us build our relationships across grade levels – since we do not get to see each other very often" she went on to say, "At each faculty meeting we start by thanking teachers for what they do and by giving awards that may have been earned." In general, the difference between the low and high ranked schools could be narrowed down to the availability of the principal. In all of the high ranking schools the teachers and principals all noted that the principal had an open

door policy while few of the lower ranked schools made any mention of how accessible the principal was to the teachers.

Supportive Conditions – Structures. On the final category within the questionnaire the responses are again skewed towards *Agree* and *Strongly Agree* as seen in Table 14. Therefore, teachers predominantly feel they are supported with resources necessary for teaching. These resources could be technology, time, fiscal resources for professional development, easily accessible data, and a system for general communications.

Table 14

Percentage by Response Category for Supportive Conditions-Structures

	N	Mean	SD	Strongly Disagree	Disagree	Agree	Strongly Agree
Time is provided to facilitate collaborative work	409	2.21	0.76	2%	13%	46%	39%
The schedule promotes collective learning and shared practice	409	2.03	0.79	3%	19%	48%	29%
Fiscal resources are available for professional development	409	2.12	0.61	1%	10%	65%	24%
Appropriate technology and instructional materials are available to staff	409	2.39	0.70	1%	8%	40%	50%
Resource people provide expertise and support for continuous learning	409	2.42	0.59	0%	5%	48%	47%
The school facility is clean, attractive and inviting	409	2.42	0.65	1%	5%	45%	49%
The proximity of grade level and department staff allows for ease in collaborating with colleagues	409	2.39	0.67	1%	7%	44%	48%
Communication systems promote a flow of information among staff	409	2.31	0.61	1%	5%	56%	38%
Communication systems promote a flow of information across the school community	409	2.18	0.59	1%	6%	66%	26%
Data are organized and made available to provide easy access to staff members	409	2.22	0.59	0%	9%	60%	31%

Although comments from the questionnaire have some of the same themes, the

general tone varies from the low ranked schools to the high ranked schools. Comments

from the low ranking schools focused on a lack of time for collaboration as well as a lack

of availability of necessary data. Comments such as "Communication across grade levels

is difficult with time constraints" and "Exploratory teachers have little or no

collaborative planning time and are often disregarded in collaborative learning

opportunities." were prevalent throughout this section on the PLCA-R. Others went on to

say, "data is [sic] not available for all content areas and sometimes it is unavailable

altogether" and "some technology resources are inadequate and prevent learning outside

of the classroom." Comments from the high ranking schools were generally focused on

the creative ways the principal allocated resources for teachers. There were comments

such as, "Although there are many limitations for common meeting time during the

school day, our principal secures time at the end of the day and allows us to leave early

once a week to balance our time" and "We have access to all the data, but it all needs to

be put in one place to simplify access" as well as "This is probably our greatest area of

strength." The variance among the comments made by respondents from high and low

ranking schools displays a greater disparity than the quantitative data. As seen in the

quantitative section of these data, generally teachers in this division seem prepared to

become a PLC. However, when reviewing the comments within each section it can be

noted that obstacles still may exist in some schools.

Interview Findings

Although the previous section included comments from both high and low

ranking schools on the PLCA-R, the purpose of the interviews was to ascertain what

principals are doing in high ranking schools to create the necessary culture for PLC's to

exist. Therefore, the interview data were analyzed to find similarities in leadership

behaviors and building cultures to better understand how to offer direction to principals

in schools that were low ranking on the PLCA-R. Data for this analysis were derived

from seventeen interview questions that were created from the blueprint of the PLCA-R.

As noted in Chapter 3, the instrument was piloted and minor changes were made.

Interviews were conducted with 6 principals, one from each of the top 3 ranked

elementary and secondary schools, and 6 lead teachers, one from each of the top 3 ranked

elementary and secondary schools. Interview notes and recordings from the twelve

interviews were analyzed to identify emergent themes that occurred most frequently

across schools. First, all of the notes were carefully read, highlighting ideas relevant to

the six categories of the PLCA-R. From these concepts, categories were identified into

which interview data were coded during subsequent readings. Patterns within categories

were then identified. Direct quotes were utilized to illustrate responses by category.

Generally, emergent themes were consistent across all of the interviews. The

emergent themes in this section are derived from the categories in the PLCA-R: Shared

and Supportive Leadership, Shared Values and Vision, Collective Learning and

Application, Shared Personal Practice and Supportive Conditions. Table 15 includes

each theme and its subthemes.

Table 15

Interview Themes and Subthemes

Theme	Subtheme
Shared and Supportive Leadership	Collaboration Culture of Responsibility for Student Data
Shared Values and Vision	Common Development of Values and Goals Focused on Pedagogy
Collective Learning and Application	Job-embedded Professional Development Consistent and Meaningful Data Review
Shared Personal Practice	Shared Results of Teaching Practices Availability and Use of Peer Observation A Direct Focus on Student Work
Supportive Conditions	Schedules Allow Time for Collaboration Culture that Supports Risk Taking Availability of Necessary Materials Communication Among all Stakeholders

Shared and Supportive Leadership

This category focuses on how the principal interacts and supports his staff and how the staff's advice and comments are integrated into the principal's decision-making techniques. While interview comments from the principals and teachers related to the subthemes may have been in response to other questions, the specific interview questions addressing these subthemes were:

- What opportunities are offered to the faculty to initiate change?

- How is the staff involved in making decisions about curriculum, instruction and assessment?

- How is the responsibility for accountability shared?

Collaboration emerged as a central theme from the interviewees responses. Most of the respondents incorporated some comments about varied levels of collaboration and communication during this section of the interviews.

Collaboration. Members from each school interviewed stressed the importance of shared leadership through collaboration. There are many common platforms of communication across these high-ranked schools such as the principal's advisory committee (PAC), the school planning council (SPC) and the instructional lead team (ILT). Teachers interviewed mentioned these methods several times as well as emerging forms of communication such as social media including email, blogging, on-line newsletters and the like. The consistent message across the interviews was simply that communication flowed in both directions and was open to all. One teacher from an elementary school stated, "Our PAC meets monthly. We place a form on Share Point for concerns that is accessible to all for added contributions to the meetings. We use the PAC not just for staff morale, but for any questions or concerns for the good of the school."

When interviewing one of the secondary principals about methods of communication they stated, "There are many opportunities through the leadership collaborative learning culture (CLC) for input and there is still an active PAC." This leadership CLC is a method the principal developed in an effort to create a PLC for his lead teachers and administrators. He explained that, "most involvement happens through the leadership CLC. As a team we sit and pour over data and talk about professional development. As a group we work to guide the school." This is a newer approach to leadership for this principal and many of the principals interviewed. This style moves

beyond the traditional meeting format and creates groups of leaders within the school who can collaborate and help facilitate change.

Within these CLC's, or leadership teams comprised of teachers and administrators, ideas emerge that help direct the school. Another example of the increased methods of communications within these schools is the use of online surveys. Interviewees from four of the schools have put this form of data collection in place. One teacher stated, "there are a lot of surveys conducted here to help guide decision making. Each year we conduct a reflective retreat of the school year and we review a survey given for input on how the year has gone. At these meetings we decide what changes need to be made for continuous improvement." Another school uses surveys more frequently to "ask for feedback on performance tasks specifically" so they can bring feedback to the leadership team to make decisions that "best address student needs." Respondents from two of the schools, one elementary and one secondary, mentioned using the surveys as a way to plan for the needed training and professional development.

Through the modeling of collaboration among the administration and the lead teachers, leaders in two of the secondary schools have created building-wide PLC meeting times. One teacher reported, "Collaboration is huge with PLC's in place every Monday afternoon, teachers are required to take part in these meetings." Even though this seems paradoxical to the sentiment of collaboration, the teacher said it with all sincerity. The teachers appreciated the time that was reserved for these sessions as well as the administration's willingness to flex the time they spent beyond their contractual obligation. The general feeling among the two schools is that the PLC's will help to bring about the necessary change to keep up with trends in education. The teachers and

principals in these two schools stressed the importance of these meetings to share student data in an effort to create the best direction for the school.

Culture of Responsibility for Student Data. Common across both elementary and secondary levels was a feeling that every teacher and administrator was accountable for student performance. Even within the elementary level where all grades are not tested on the state test one principal said, "part of the accountability is the culture that has been created. No matter what grade level you teach you are responsible for all students." He expects his teachers to plan vertically and horizontally in an effort to create the best assessment tools and lessons for all students. He also stated that, "teachers are expected to do a lot of informal assessments." These assessments are reviewed for consistency during school-wide walk-throughs and lesson plan reviews.

The majority of the principals stressed varied types of data collection. They also stressed the importance of incorporating that data in a manner that led instruction to improved student achievement. One of the secondary principals stated that, "Accountability is layered through the levels of the entire faculty." Even though the majority of teachers at the secondary level are not tested at the state level, they are equally responsible for preparing students for graduation. She added, "We will pat them on the back as much as possible in a public venue and have a private conversation about accountability when needed." This principal also mentioned that an analysis of final grades teachers assign students is done each quarter and distributed through the PLC's. The PLC's then look at the data and report back to the leadership team. Although none of the principals interviewed wanted to rely solely on state test data, they all acknowledged that it is a significant factor of what drives their decision making.

One of the elementary school teachers stated that her administration tries "to make everybody a part of the conversation and the work when addressing the school's data." She also mentioned that it has been "made pretty clear that everybody is accountable for their performance with students at the center of this accountability." Across all of the schools interviewed, the principals provide appropriate data and techniques for evaluating the data at the teacher level. The principals also worked with their leadership teams to review data that encompassed the whole school while the teachers reviewed their classroom data.

Shared Values and Vision

This category refers to processes in place for creating the school's values and vision as well as how the values and vision are embedded into the culture of the school. More in depth, this category also includes the use of data and stakeholders within the development of a school's values and vision. The interview questions addressing shared values and vision were:

- Describe the process used when developing the schools mission, vision, values and goals. How was data used in the process?

- How do these values guide behavior and decisions about teaching and learning?

- How is a focus on student learning maintained?

Common Development of Values and Goals. All of the principals interviewed inferred that the development of a common mission and common goals took the longest period of time. One of the elementary school principals commented on how the school has to have a "solid foundation for the culture to be in place to agree on such ideals for the school." He went on to say that once he had been at the school for four years that,

"our goals and vision were created using input from the faculty." The process was done through teacher input with the final decision being made as a group. One of the high school principals said he started developing the mission and vision after his second year as a method to "help unite the staff and move them in the same direction." During the first year of creating a common mission and vision he read one of the Dufour's books and followed their plan step by step. He stated that it was not until his sixth year that he "started to see a large change in the way the staff treated each other and started to follow a common mission." Now each year they adjust the mission and continue to get feedback from all stakeholders.

Beyond the development of the mission, vision and values, schools in this division are required to develop a plan for continuous improvement (PCI) on an annual basis. Five of the teachers interviewed mentioned their involvement in this process. One secondary teacher described the process, "We ask departments by subject area to talk about the data and get input from teachers about specific goals. We then gather these goals through the lead team, then the school improvement specialist collates them to create a big group of goals. The ILT then narrows down the goals and presents them to the faculty and the SPC for a final copy." This allows all departments, teachers and stakeholders to be involved in the process. He went on to say, "we are teaching teachers to use data to inform instruction and the entire faculty becomes involved in implementing the goals."

The goals developed in the PCI were also referred to more throughout the interviews than each school's mission, vision and values. In fact, most of the teachers and principals interviewed stated that their professional development plan comes directly

from the school's PCI connecting all teachers learning to the specific goals developed by the faculty. One elementary principal summed it up well, "Everything, professional development, student learning and activities goes back to the goals in our PCI." Each of the high ranking schools has a plan in place to develop goals then to share them in an effort to improve student learning. These goals then help give direction to what data are collected and how the PLC's review data throughout the year.

Focused on Pedagogy. The collaboration in developing each school's goals helps to maintain a focus on student learning. With a clear focus on data one principal stated, "the emphasis is now more on what is taught and how it is taught, then just getting through the curriculum." He implied that the time when teachers could teach a favorite topic was no longer here and that all teachers have to focus on students learning the entire curriculum. In his school he said learning emphasizes "communication and collaboration and SOL scores have come up because of this." Grade levels are developing their performance tasks as teams versus individuals so they can "assess what was learned and not what was taught." These teams then form action plans and present the data to the whole faculty to receive more input. "Most importantly," he said, "we keep a focus on student learning."

One of the secondary school teachers said they bring both the tests and results to their regular PLC meetings. He went on to describe how reviewing results on a regular basis helps with planning future lessons. He stated that the culture in his school is to do "whatever we can do to help the students learn the material." He went on to say that they "try to make every decision based on what is best for every student." His general overview was that the work done within the PLC's helped teachers really know what was

learned and what was not learned. The principal of this school said he supports his teachers by "giving teachers the resources they need to help keep the teachers with their eye on the prize which provides students the best learning environment possible." He also said they "do all they can to maintain high expectations for every student in regards to behavior, grades and overall performance." Overall, interviewees from each of the six schools had a strong focus on student learning as their biggest driving force. They all commented on how they want students to be engaged and active learners and that it is all about the learning and not just about passing a standardized test.

Collective Learning and Application

This category focuses on how staff members work together to improve instruction. The specific questions addressing these subthemes were:

- What opportunities exist for staff to provide feedback to peers related to instructional practices?

- What opportunities exist for staff to collaboratively review student work and to share and improve instructional practices?

Job-embedded Professional Development. Five of the six schools interviewed commented on how their faculty meetings were no longer traditional "information dumps," as one teacher put it. One of the high school teachers stated that "Our faculty meetings are really just professional development sessions." She explained that the staff development team coordinates with various division level departments to create a "learning meeting" for the faculty. She also said, "the regular information we used to get at a faculty meeting is sent out electronically now so why not use the time to learn and perfect various teaching strategies." Her principal mentioned that at the beginning of the

year the faculty lays out the school's professional development plan for the year based on what is needed. She commented that, "there is always a direct connection to the school's PCI."

One of the elementary school principals stated that "training is now a part of the faculty meeting." He went on to say, "Our faculty meetings used to be sit and get. Now the information part is conveyed during the first 10 minutes so that a professional development activity can be included during every meeting. Some of our PD activities involve us showcasing an idea or some other forms of idea sharing." Idea sharing was another common theme with four of the interviewees from different schools stating that sharing ideas by some method occurs frequently throughout the year. Another principal stated they use various protocols for their meetings. She stated, "the protocols give everybody a chance for input and you cannot be a passive learner during the process." The teacher interviewed at this school said the meetings now have a "very hands-on type of approach and they are no longer information dumping."

At the one school that did not mention professional development as a part of the faculty meeting the teacher described a plan that was year-long and job-embedded. She explained that staff development sessions are offered throughout the year and they are offered repetitively all four blocks during the school day so that teachers can attend a session during their contractual time. She also made a point to say each session is "focused on teaching strategies and that these sessions have depth and complexity since they are smaller groups and job-embedded." She felt this type of professional development was more useful than previous whole group sessions. These sessions also focused on various methods of data review.

Consistent and Meaningful Data Review. One of the high school principals

stated, "The level of professional collaboration among teachers is strong, yet using

student data or collaboratively looking at student work needs improvement.

Unfortunately, this area requires time which is a precious commodity we do not have."

Although time is an issue across all levels, interviewees from four of the schools stressed

the importance of working with student data. A principal at one school has created grade

level meetings to run in a PLC format with a focus on student data and student learning.

Teachers at this school also utilize National School Reform Faculty (NSRF) protocols

when working in these groups. Teachers from another school have developed horizontal

teams that use common assessments as their main focus. Once the assessments are

administered they use the data to differentiate instruction and to assess a need for

remediation. With either point of focus, it is obvious that faculty at these schools are

using this professional development to review student work.

A principal from one elementary school said, "Through modeling, teachers have

been shown what a good data sharing session looks like." He further explained that

during faculty meetings he has teachers conduct a debriefing meeting in front of the

teachers to model the discussion expected. Varied levels of data were also discussed in

the interviews. A point made several times was simply stated by one of the high school

teachers interviewed, "There is easy access to data through the school improvement

specialist and through the use of our division's SchoolNet database." Basically, the

administration works to keep necessary data at the teachers' fingertips. From the building

level to the division level, teachers are surrounded by student data. These data are

reviewed throughout the year in these high-ranked schools which contribute to their job-

embedded professional development. Even though this was the lowest rated item on the PLCA-R for all of the top ranked schools, the principals all seem to have a solid vision of what needs to be done. Through the interviews, teachers explained that this was a newer process that started with the implementation of PLC's.

Shared Personal Practice

This category focuses on opportunities staff members have to observe one another and provide feedback as well as share ideas and suggestions to improve student learning. While comments related to these subthemes may have been from other questions, the specific interview questions addressing these subthemes were:

- What plans are in place for teachers to observe one another and to provide feedback on the observations?

- What kind of forums are in place for teachers to share ideas and make suggestions for improving instructional practices?

Shared Results of Teaching Practices. Each of the schools chosen for this part of the study had an atmosphere where teachers not only felt comfortable sharing instructional ideas, but they were encouraged to do so. In most cases some form of the comment "This is the kind of building that if you have an idea you just put it out there," was used in conversation. Most of the schools had forums for sharing best practices. Whether it was at a faculty meeting or monthly vertical meetings, teachers were encouraged to present their strategies. In two of the schools their faculty meetings have been changed to a format to be full running PLC's. The administration requires them to sit in instructional groups and follow protocols that "force conversation." All of the teachers interviewed mentioned, in some way, how the change was difficult at first, but

one teacher summed it up well, "once the teachers felt comfortable to ask for assistance and to share ideas, then the ball kept on rolling."

Ideas are also shared in non-traditional meeting format. Four of the six schools have set up electronic means to share ideas. Teachers can post their learning plans or ideas on SharePoint or on a blog. One school has even set up a Wiki space specifically designed to improve communication on instruction. Interviewees from two of the schools mentioned extensive use of the school division's video library of best practices. This is a library developed by videoing teachers utilizing best practices and posting their learning plans and activities used in the lesson. One principal even mentioned their own teachers posting videos on the school's Share Point site emulating the division's video library.

In all six of the schools, even if teachers have a fear of not being successful with sharing or trying new strategies, they are encouraged to do so by their peers and the administration. There is a sense of community that has been fostered where sharing is a key aspect of self-improvement. A statement by one principal, "I have been pleasantly surprised by the ideas that have been brought forward," has been the feeling through all of the interviews with the principals. With so many teachers used to working independently and not sharing results or best practices, this is a vital connection to PLC's. The trust that has been established within these high ranked schools has helped to nurture the growth of PLC's.

Availability and Use of Peer Observations. Every teacher and principal that was interviewed was very comfortable with using peer observations either through focused, planned observations or through quick glimpses with the use of learning walks. Learning walks were mostly done freely without involving the administration. This

method came across in the comments within the interviews as making the process much less stressful. One of the elementary school teachers said, "Any teacher that wants to participate in a learning walk just has to talk to the department chair, it is encouraged. Classrooms are open and learning walks are happening very often." Many of the interviewees commented on how they were not only encouraged to conduct learning walks within their own school, but they partnered with other schools to try and bring a greater variety of instructional tools into their own classrooms.

Introducing the concept of sharing your classroom is a sign of trust between colleagues and with the administration. One teacher brought this point across when she said, "at first, I was not sure about learning walks. First, I had to do them and people would be walking in and out of my classroom using my instruction for a learning walk. When I first started, I focused on teachers who I knew were good, but I did not know them well. I have to say, this process has taught me a lot about my own teaching style." Both the teachers and the principals said the purpose of the learning walk is not to give direct feedback, but to take knowledge with you. All of the schools had this philosophy; however, a couple of the schools had a policy in place to leave a note. "The notes we leave would simply be a compliment on their class. It could be something you learned or something that you noticed. The most important part of it was that it was a positive message," was what one principal explained. He went on to say that just by leaving the notes he saw, "a noticeable improvement in staff morale."

In addition to conducting learning walks, leaders from three of the schools, one secondary school and two elementary, had also developed a system for conducting peer observations. These observations were not ones where a teacher was instructed to visit

another "better" teacher's classroom to improve their own instruction; these were

designed to more deeply share the process of improving instruction. In one of the

elementary schools the principal explained that, "the teachers have the responsibility of

setting up and handling the peer observations. They decided this would be less stressful

and less intimidating by not having to go to the principal." The teacher from the same

school further explained the process, "we do a lot of peer observation and peer coaching.

All teachers must do at least one peer observation per year. We go through the school

improvement coordinator to select a teacher to observe with a specific reason in mind.

These are set up this way to build trust among the faculty members." Most importantly,

the "feedback is teacher to teacher so that we do not feel that this is a part of our

evaluations." The principals from these three schools all feel they have seen an

improvement in instructional strategies since they have started this process.

A Direct Focus on Student Work. Another item that was apparent in the

interviews was the teachers' focus on student work. Although at some schools their focus

was limited, the teachers are used to the practice and seem ready to increase their focus.

A teacher from one elementary school commented, "Twice a year we usually look at

student work, but the faculty wants to do this more." It was also clear that principals at

these high ranked schools had introduced protocols for viewing student work. One

principal stated, "we use a lot of the NSRF protocols to keep it narrowed down and look

at the work. This helps to provide a focused conversation around the student work."

Another interesting facet was teachers who teamed up not only with their subject/grade

level teams, but vertically. One of the elementary school teachers said, "we spend a good

deal of time vertical teaming and reviewing student work." Teachers in these schools all seemed excited about sharing student work.

During the interviews, both teachers and principals spoke about collaborating and reviewing student work, but it was the teachers' comments that resonated. The comments were authentic and enthusiastic about reviewing the work as a team in order to improve instruction. Another teacher said, "…we have looked at student writing samples in order to come up with a plan to improve instruction." Although most of the teachers may not have known a proper name for the protocols they used or the process that had been developed, they knew they were using data from student work to make a difference in their instruction.

Supportive Conditions

This category combines the last two categories within the PLCA-R, Supportive Conditions-Relationships and Supportive Conditions-Structures. The overall focus of Supportive Conditions is about the teachers taking risks and being supported, as well as what support structures are in place to ensure teachers are willing to take risks. While some comments related to these subthemes may have been in response to other questions, the specific interview questions addressing these subthemes were:

- What structures or conditions are in place so that teachers know they are able to take risks?
- Describe staff meetings at your school.
- What amount of time is built into the teachers' schedule for collaboration?
- Describe the availability of materials and technology at your school.

- Describe the communication among administration, teachers, students, parents and the community.

Schedules Allow Time for Collaboration. When reviewing the interview notes and the comments made by all of the respondents to the PLCA-R, it was obvious that teachers overwhelmingly felt time was their biggest constraint. In fact, only one out of the six schools had actually had a schedule that included common planning time for all of their core teachers, and that was a secondary school. The greatest difference between the general feeling of the comments on the PLCA-R and the comments made during the interviews was the willingness to try new ways to create time.

One of the elementary school principals said, "We were fortunate this year with use of stimulus monies, we were able to gain eight substitute days which were used for teachers to plan collaboratively." This allowed all teachers in their school to have time during the school day to collaborate during their contractual day at least two times a year. The use of extra funding for substitute teachers or reallocating existing funds to pay for substitute teachers was a common theme during the interviews at both levels. Another one of the secondary school principals stated, "we have tried to build in some common planning, but there have been roadblocks." When he and his staff stumbled on the roadblocks, they came up with a solution that was acceptable by the vast majority of his staff. This school now uses every Monday after school for collaborative planning time and the teachers are allowed to leave early on Fridays. Out of all of the sections this was the lowest ranked area for these six schools. Although it was low, the interviewees all seemed willing to experiment with their schedules in order to find time to collaborate.

Culture that Supports Risk Taking. In all of the interviews, risk taking was difficult for the interviewees to define. The teachers overwhelmingly felt supported in taking risks and the principals felt equally as enthusiastic about allowing teachers to take risks. Comments from the principals such as, "the administration rarely says no," "I feel as if the staff feels they can try anything, the teachers will run it by me and I will okay it," and "The culture is they have the freedom to think outside of the box" were common across all of the principal interviews. When interviewing one principal about allowing his teachers to take risks he said it took time to establish that culture. During that time he emphasized how it was vital to build trust throughout the faculty so taking risks would be a learning opportunity. He commented, "they have to have trust that you are going to support them and meet with those that do nothing. Everyone must be accountable and they must take risks in order to improve instructional practices."

When such comments are heard from the principals, there is need to hear what the teachers have to say to fully understand the general feeling of the staff. However, in this case the teachers' comments truly matched what the principals were saying. One of the teachers could not specify the process which was in place so she simply stated, "there is not necessarily a structure, but they are here to support us." Another teacher went as far as to say, "My principal invites us to take risks through their leadership style. Teachers are supported to try new things. If it does not work we try something different and if it does work then we share it." Another teacher summed it up with this comment, "Teachers feel comfortable here. I think a big part of this culture begins with the personalities from the top down to do things that challenge everyone. They encourage risks and know that it may not work, but it is always worth a try. They kind of have a

coaching mentality – it's okay if you mess up. The feeling is that we are allowed to take

risks and that there is no penalty for a do over." Overall the feeling within all of the

interviews could be summed up in one of the principal's comments, "the principal has to

be a facilitator and not a road block." Teachers in these schools knew they were

supported in taking risks; therefore, they took risks often.

Availability of Necessary Materials. In the current challenging economic times,

providing necessary tools for teachers is a constant battle. However, among all of the

interviews the outlook was positive when talking about supplies, opportunities and

technologies being made available. One teacher commented, "We feel we are very

supported, the principal gives us what we need within reason." The teacher mentioned

high dollar requests that had been tabled due to budget constraints, but then he went on to

say, "since the budgets have been tightened there has consistently been a plan to upgrade

our materials like technology and software." Another teacher said, "Most of our

materials, beyond paper clips, pens, and simple supplies have been focused around

technology. The administration is always willing to try and purchase the necessary tools

if they have the funds to do so."

When discussing the technology purchases with one of the principals he stated,

"it's not about using the technology, it is about good lesson planning and instructional

teaching and embedding the technology." He then discussed how each year he made sure

he allowed funding for "necessary professional development to integrate the tools we

have before we just buy more 'stuff' to throw at the teachers." Another theme beyond the

teachers having access to what they needed was that if they did not all have the necessary

items they worked out ways to share the items. As one teacher said, "by sharing the more

expensive items it allows us to learn how to integrate them before making unwise purchases." Teachers respected the purchases made since they felt their voices were heard and they seemed to understand or at least accept the budget constraints.

Communication Among all Stakeholders. Principals and teachers described a multifaceted approach to communication in their schools. One principal commented, "at least the picture I am seeing is positive. Our Principals Advisory Committee concerns have become simple solution information from what used to be several suggestions and complaints each month." This principal then went on to say, "our community seems very receptive and happy with the changes going on over the past few years. We keep everyone connected through our AlertNow phone messaging system on a monthly basis as well as messages sent via email on our list serve and simple messages on our marquee."

A teacher from a different school commented on how easy it is for parents to get in touch with the administration. She said, "Parents know they can talk to the principal." She also talked about the many avenues available to communicate with all of the school's stakeholders. Some of these avenues include multiple programs, newsletters and maintaining an active bank of email addresses. Another teacher commented on how they were using their class SharePoint site to make announcements to their parents and how parents have instant access to their child's grades. Common methods of communication mentioned were committees that included the administration and teachers, School Planning Councils with community members and parents, open door policies, consistent information sent to homes through email, newsletters and mass phone calls. Although all

schools interviewed did not mention each item, it was apparent that communication was imperative to their success.

Summary and Trends

In summary, this chapter brings together the qualitative and quantitative data from 409 questionnaires with the qualitative data from 12 interviews. While the questionnaire results were primarily used to rank the schools used for this research, they also provided insight as to how some of the respondents from low-ranked schools reacted to the questions. Through interviews conducted with principals and lead teachers at the high-ranked schools, five subthemes emerged: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions.

Comparing the interview data with the comment sections within the questionnaire there is a definite contrast between high ranking schools and low ranking schools. For example, let's compare results within the *shared and supportive leadership* subtheme. One teacher's comment from a low ranking school, "Although there is opportunity for shared decision making, many of the decisions are made by the principal and staff input is not considered in some of the decisions." develops an image of a school where the staff may seem to have input from what the principal implies, but they do not perceive themselves to have the ability to truly offer direction. At the high-ranked schools the interviewee's general response was very positive and supportive of how the principal allows the staff to help with decisions. When looking at how low and high ranking schools differ within *shared values and vision*, again the differences in the comments reinforce the ranking of the schools. In low-ranked schools the teachers posted comments

as to how the administration may conduct meetings to gain input from the staff; however, they do not use the information discussed when creating goals. Teachers interviewed from high-ranked schools believe they have an impact on the creation of goals for their schools. Within the subtheme *shared and supportive leadership* the comments supported the quantitative data that separated high and low-ranked schools. Teachers' comments from high-ranked schools were very supportive of what their principal was doing, they felt they had the necessary materials and time to do their best. Teachers from low-ranked schools felt their principals were unreachable and unsupportive of their efforts.

Within two subthemes the interview data and the comments from the questionnaire did not show a large discrepancy. When comparing data from low-ranked and high-ranked schools for the subtheme of *collective learning and application*, both levels of comments revealed a sense of accomplishment in this area. One possibility for this commonality is that this category focuses on how staff members work together to improve instruction. This category is more self-reporting rather than reporting on how the school is being led by their principal. Then, when looking into the subtheme of *shared personal practice* teachers from both the low and high-ranked schools made comments that suggested the schools were working towards ways to effectively move in the direction of this subtheme. The only differences were where some high-ranked schools had created schedules that allowed teachers time to meet within the school day.

CHAPTER 5
DISCUSSION

Introduction

The literature on professional learning communities suggests that PLC's are an effective method of improving the overall climate of a school and improving student achievement; therefore the idea of developing PLC's in schools is supported. The purpose of this study was to examine the decisions and actions of principals relevant to the development of professional learning communities in schools and identify trends among those administrators most successful in their implementation efforts. The findings of the study should offer principals specific, practical recommendations for transitioning from traditional schools to PLC's so their students may learn at higher levels and educators may find their profession more rewarding, satisfying, and fulfilling. By identifying the characteristics of principal leadership that promote effective implementation of PLC's, administrators can more consistently create the necessary culture for PLC's. It also provides additional research to the current body of research directed to leadership practices in implementing school reform that is "urgent for 21st Century learners" (Fullan, 2009).

This chapter first discusses characteristics of principal leadership within the five subthemes found in Chapter 4: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions. It then interprets relevant findings and describes their significance in the context of the present study and current literature. The chapter concludes with a

discussion of the study's implications and conclusions, then the limitations of the study

and finally directions for future research from the findings from this study.

Shared and Supportive Leadership

According to Moller (2004), the best hope for sustained school improvement is

through shared leadership. Principals develop capacity in their schools to where the

majority of the building shares the responsibility of student achievement. Building this

capacity and instructional leadership are necessary components of a PLC (Marks &

Printy, 2003). The high ranking schools utilized for the interview portion of this study

had structures in place to support shared leadership. One common theme throughout was

a high level of collaboration between teachers and the administration. All of the schools

had implemented principal's advisory committees and school planning councils. These

groups consisted of teachers, staff members and in some cases students and community

members. All of the meetings are held in open forums with full transparency. The

principals of these schools also model their expectations for teachers within their

instructional leadership teams, teachers then lead their departments or grade levels with

the same expectations. One key aspect to all of these groups is open communication and

a two-way flow of information. Wahlstrom and Lewis (2008) found that by providing

teachers with opportunities for decision-making the norms of a professional leaning

community are reinforced; therefore, the teachers feel comfortable offering guidance and

suggestions to the administration.

Within the PLC's that have formed among these high ranking schools there is a

common feeling that everyone is accountable for the success of all students. As

Leithwood and Mascall (2008) point out, every person on the staff must take on the

responsibility for the learning of all students in the school, not just their current students, in order to be most effective. With this level of accountability, teachers are forced into looking at their data more closely. If they are not as successful as their colleagues they must discuss what they could be doing to increase their level of student achievement. These established PLC's become accepted processes for collecting data, analyzing the data, reflecting on the data and creating change (McLaughlin & Talbert, 2001). There are varying types of data and methods for data collection used throughout the schools. All of the schools interviewed relied on more than standardized test data. Conversations about data happen on a regular basis and results, good or bad, are shared in order to continuously improve. The teachers and the administrators have developed a level of trust where they are comfortable sharing anything with each other if it will benefit the students' learning.

Shared Values and Vision

Creating shared values and vision occurs once there is a sense of shared leadership and trust. According to Hargreaves (2007), "PLC's 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). Although none of the principals had recently re-drafted their school's mission or vision statements, they all worked with teachers on a regular basis to develop annual goals for the school. When discussing the mission and vision, teachers and principals commonly felt that this responsibility took the longest period of time. Time to build relationships with the staff and time to implement a common direction were required to establish "a solid foundation for the

culture to be in place to agree on such ideals for the school," as one principal said. This reinforces research conducted by Andrews and Lewis (2002) where they found having a shared vision and a sense of purpose to be important to schools.

Teachers and principals mentioned the development of the school's Plan for Continuous Improvement (PCI) and five of the six teachers interviewed detailed their involvement in the process. Across all of the schools interviewed the development of their goals on the PCI was a whole school process allowing input from all levels. One principal said, "everything: professional development, student learning and activities goes back to our goals." Each of the schools tied a focus on student learning to their collaboration in developing their school's goals. With a clear focus on a variety of data, the high ranking schools emphasize how the curriculum is taught beyond simply looking at what needs to be taught. This helps to create an "undeviating focus" on all students' learning (Hord, 2004) since teachers working only as individuals may cause a reduction in teacher efficacy if they work individually because they feel they cannot count on their colleagues.

Teachers work collaboratively to develop common assessments, then they reconvene to review the results of the assessment in each other's classes. These shared values around the school's goals and assessments allow them to gain insight on strengths and weaknesses in particular areas of their classes. The teachers then develop lessons to focus on raising student achievement in the lower areas. This type of collaboration suggests that their shared values provide a framework for "shared, collective, ethical decision making" (Louis, Kruse & Bryk, 1995). The principals of the high ranking schools encourage and support this practice by making sure their teachers have what they

need, including time to meet and plan and they model this behavior through their meetings. These schools have shown to be established PLC's since they involve all stakeholders (Huffman, 2003).

Collective Learning and Application

The recurring theme from interviews in this section was job-embedded professional development. In 5 of the 6 schools interviewed, both the principal and the lead teacher commented on how "all school" meetings are no longer "information dumps." The meetings are now what one teacher called "learning meetings." Guskey and Yoon (2009) state, "educators at all levels need just-in-time, job-embedded assistance as they struggle to adapt new curricula and new instructional practices to their unique classroom contexts." This new method of conducting meetings was a key factor in this section of the interviews. The administrators send out regular information electronically in order to gain valued "face-time" with their faculty.

Beyond the meetings as learning structures, these high-ranked schools also had regularly established times for teachers to meet. These meetings focused on sharing concepts or ideas and improving upon them as a team. The main structure within all of these schools was a feeling that professional development had become a year-long event tied closely to the school's goals. According to Easton (2008), "if schools are to meet the increasingly urgent needs, teachers will have to move from being trained or developed to becoming active learners" (p. 755). Many of the teachers interviewed felt this type of professional development was more useful than the previous whole group sessions.

Teachers also stressed their access to data and their ability to produce needed data through alternative assessments. This flexibility helped them focus on data review to

improve instruction in an effort to improve student achievement. Hargreaves (2009) states, "Data-driven improvement has become an integral part of the movement to develop schools into being PLC's where teachers use data and other evidence to inquire into their practice." Although some of the schools have difficulty finding time for these meetings without adding to the teachers schedule, they are all finding ways to make the time they have more productive. Some principals are sharing meeting protocols with their teachers and the meetings have been focusing on accomplishing specific tasks; thereby, increasing productivity while limiting the actual time that would have been needed without the protocols. The literature suggests that members of a PLC consistently take responsibility for student learning as a group (King & Newmann, 2001; Kruse, Louis & Bryk 1995). It can be assumed the collective responsibility seen in the high-ranked schools helps to sustain commitment, places pressure on colleagues and accountability on those who do not contribute and helps to diminish isolation (Newmann & Wehlage, 1995)

Shared Personal Practice

According to Hord (2004), shared personal practice is one of the last dimensions to develop. Therefore, it is not surprising that although the results of the questionnaire show the teachers believe in this phase of the work, even in the low-ranked schools, they found it difficult to find the time to commit to the work. However, the greater finding through the interviews was the willingness teachers had to share instructional ideas. They were not only willing to share, they were comfortable in sharing ideas that may have needed improvement. As one teacher put it, "this is the kind of building that if you have an idea you just put it out there." Ideas are shared and built upon in every possible

format. They are shared in meetings, through email, in blogs and on the division's

curriculum database, SchoolNet.

The teachers and principals interviewed mentioned the dedicated focus they have

on student work. The focus is not simply on grades, but a more thorough understanding

of the curriculum. They have realized the importance of reviewing student work to drive

instruction rather than simply altering their lessons and curriculum to drive student

achievement. Although this study did not conduct any research on student achievement

in schools, Elmore (2000) states that schools that are improving "directly and explicitly

confront the issue of isolation." One of the major ways all of the high-ranking schools

have confronted isolation is by opening their doors to their peers and others to watch

them teach. All of the schools interviewed have implemented what they called "learning

walks." At any time teachers may walk in and out of rooms to get a snapshot of teaching

across the school. Some schools have also started to implement peer observations and/or

lesson study within their schools that will allow for more in-depth exposure and feedback

to the teaching and learning taking place in their buildings. All of the schools interviewed

have plans in place to work toward those larger goals.

Supportive Conditions

Being supported by the administration was a key comment through all of the

teacher interviews. Whether the support was with materials or through teaching, the

teachers all felt their principals and administrators supported everything they tried. Even

though all of the interviewees, principals and teachers alike, stated time was a major

issue, the general feeling was that the principals did all they could to provide time where

possible. The principals valued common planning and needed meeting times, and they

realized the current demands on teachers. Two of the high-ranked schools developed specific scheduling options to encourage collaboration. One secondary school created common planning time for all same-subject teachers. The other added time to every teacher's required work-day on Monday afternoons and reduced their work-day on Friday afternoons. Beyond these specific schedule changes, all three of the elementary schools utilized an increased number of substitutes to add unencumbered time to their teacher's schedules. All of the interviewees felt improved instruction would come from this additional structured meeting time. As current research reiterates, when entire grade levels or curricular teams are involved in common planning a "critical mass" for improved instruction at the school level is created (Darling-Hammond & Richardson, 2009).

Although none of the principals discussed any format or structure allowing risks, they all mentioned an open door policy and open conversation with teachers wanting to try new strategies. By developing and nurturing a climate in which professional growth is supported and encouraged, PLC's can become successful (Bryk et. al., 1999). The teachers interviewed felt they were able to try new strategies and to think outside of the box with lesson planning, while the principals all felt they allowed a high level of risk taking. The teachers comments were directed around the principals' leadership styles that helped them feel comfortable taking risks. They knew they would be supported if the risk was not successful and they felt they would be highly praised when a risk was successful. Principals and teachers interviewed discussed open and transparent communication in all of the high-ranked schools.

Patterns Across Themes

Across each of the five themes some commonalities were found. Three specific

areas seemed to have a place in each of the themes. They were collaboration and

transparency. Although the way they were integrated throughout was uniquely different,

these commonalities also seem to take parts from two of the three leadership styles

discussed in the literature review: Shared Leadership and Transformational Leadership.

Collaboration was seen through goal setting, within planning and meetings, as well as

within professional development activities. This brings in the core idea with shared

leadership where decision-making is shared with teachers and staff. Transparency was

seen through the interviews within the decision making process, with teachers opening

their doors to other teachers and with sharing student work/results. This form of

transparency has a direct connection to the transformational leadership model. Teachers

and principals are identifying problems through the transparency and solving them with

collaboration (Hallinger, 1992). Even though there did not seem to be a commonality that

emphasized Instructional Leadership, the philosophies of that leadership model were

threaded within the themes. With the principal establishing a problem solving approach

founded on trust and respect, better decisions can be made (Blase & Blase, 1999).

Implications and Conclusions

According to Morrissey and Cowan (2004), "Principals have been referred to as

the critical gatekeepers to school improvement because they control structures and

environments that determine how receptive teachers are to change" (p. 6). While change

of teacher behavior occurs only when teachers feel what they are doing is worthwhile and

has value (Fullan, 2003), it is up to the principals to lead the way. As the leaders of

professional learning communities, principals help "balance the desire for professional

autonomy with the fundamental principles and values that drive collaboration and mutual

accountability" (Reeves. 2005, pp. 47-48). Professional learning communities have the

potential to help schools meet current demands and future demands for student

achievement. The findings of this study provide examples of practices a principal can

implement that will support a school's readiness to becoming a professional learning

community. Findings suggest the following five suggested practices:

1. Within the data from the high ranked schools included in this study, collaboration

    among teachers and administrators was found to be a common aspect of their

    high readiness to become a PLC. Therefore, principals should develop organized

    structures that identify multiple opportunities for shared communication between

    teachers and administrators. These structures should be put into place to allow

    two-way communication following the shared leadership model discussed in

    Chapter 2. This clear and open communication should lead to a greater amount of

    trust which is paramount in creating PLC's (Blase & Blase, 1999; Hord, 2004;

    Morrissey, 2000; Wahlstrom & Louis, 2008).

2. Data collected through the interviews reveals that the development of all of the

    high-ranked schools goals for their Plans for Continuous Improvement was an

    entire school process allowing input from all levels. With this information,

    principals should involve the entire school and school community in developing

    goals for the school to ensure the established goals benefit all stakeholders. All of

    the high ranked schools also allowed their developed goals to drive the many

    programs within their schools; therefore, school leaders should ensure that the

goals are well known throughout the school. As other research reveals as well, it is the responsibility of the school leader to create goals and to ensure the school's goals are tied to instruction (Geijsel et. al., 2003; Marks & Printy, 2003).

3. Alter the format of all face-to-face group meetings to focus on teaching and learning. Within the high ranked schools, nearly all of the interviewees indicated that faculty meetings were no longer simply information sessions they were now learning meetings. Traditional faculty meetings should be held through on-line communication in order to create time for teachers to share best practices and improve overall instruction. This transition to meetings focused around professional development should lead to more of a job-embedded professional development program (Copeland, 2003; Thompson et. al., 2004; Youngs & King, 2002).

4. As noted in the interview data, the teachers and administrators interviewed viewed teaching as a collaborative effort and no longer saw it as an individual practice. The teachers interviewed believed in creating an open-door policy for all classrooms. Therefore, it is imperative for school leaders to develop a structure that allows teachers to flow in and out of colleagues classes. Whether it is as in-depth as a lesson study or peer observations, or as simple as learning walks, teachers need the ability to observe each other. Without getting teachers to observe each other and help each other, very little will change (Barth, 1990).

5. Finally, principals must be transparent. Across all of the categories, the teachers interviewed felt their principals had open door policies and that they shared decision making with the faculty. Therefore it is imperative that principals inform

everyone as to why a decision that affects them is being made by including them in the process. By integrating components of being a transformational leader and building trust within the decision-making process, principals can more effectively create effective PLC's (Leithwood & Duke, 1999; Morrissey, 2000).

Schools are continuously facing high levels of demands on accountability for increasing student achievement. Through an examination in principal leadership in schools with a high level of readiness to transform to professional learning communities, these data may help guide the actions and decisions of school administrators that support the development of professional learning communities. In the words of Eaker, DuFour, & DuFour (2007), "Leaders of PLC's must consistently communicate, through their words and actions, their conviction that people in their school or district are capable of accomplishing great things through their collective efforts" (p. 31).

Limitations

There are limitations associated with the research design, the questionnaire and the interviews. Because the division under study has been attempting to develop PLC's throughout the district, responses given on the questionnaire and in the interviews may not have been entirely candid due to social desirability. Principals were charged with creating PLC's in 2010; therefore, the principals and teachers may answer with more concern of appearance rather than practice. Also, this research may have been construed as a means of determining which schools have been more successful than others, raising concern about how self-report affected the validity of findings from both tools. As discussed in the context of the results, there was a varied response rate across the schools. This may call into question the rank order upon which the purposeful sample for

interviews was based and thus raise questions about the validity of the generalizations emerging from the analysis of the interview data. Also, the varying number of lead teachers selected by principals from each building may contribute to variance in results across the schools that participated. Some elementary principals selected only two lead teachers while some secondary principals selected up to 22 lead teachers. Therefore, even though the response rate with schools that had a lower number of lead teachers may have been higher, the actual results from the schools with greater numbers may paint a clearer picture.

As noted in Chapter 4, several principals either did not complete the questionnaire or they did not offer names of lead teachers. This limited the number of schools that could be used in the full study. Therefore, the number of schools ranked was well below the number of schools in the division. Another limitation would be the number of schools with principals who have been in the school for fewer than two years, particularly at the middle school level where five of the fourteen principals have served in the position for less than two years, as these schools were automatically eliminated from the rankings. Finally, responses on interviews are more difficult to generalize as they provide depth, but not breadth, and thus may not be applicable to all schools seeking to implement PLC's. The interviews were only conducted with high-ranked schools limiting the responses to be generally positive towards PLC's.

Directions for Future Research

This study suggests areas of possible future research. Although the sample for this study was taken from a large school division, the sampling of teachers was specific to the principals' choice. In an effort to gain greater insight, broadening the study to

include a random sampling of teachers across the division may provide a better source of data and rank the schools in different order. The 49 schools that met the full criteria for the study were all located in an urban setting. It may be valuable to investigate suburban and rural schools to see what those principals are doing to lead their schools to become professional learning communities. This would help to broaden the styles of leadership across multiple divisions. A broader geographical study with an even larger sample size would be valuable to confirm the findings of this study and to identify what actions by principals were identified as contribute to the development of a professional learning community.

With the twelve interviewees all coming from high-ranking schools, this study was effective with investigating the qualities of leadership utilized to create professional learning communities. However, an added aspect to the study may be to interview principals and teachers at mid- and low-ranking schools to see if they are lacking the leadership attributes seen at the high ranking schools. This aspect to the study may help edify the results. Although the one-on-one interviews helped to provide what seemed to be honest answers, adding a group interview portion to this study may add insight to the overall group dynamics of a high ranking school. Beyond conducting group interviews, adding a component of observing PLC's in action could add to the depth of the research.

Another direction for future research could be connecting these high-ranked schools with student achievement and possibly student engagement. With all of the current legislation moving towards teacher accountability through student performance, linking PLC's to student achievement may be beneficial. Also, comparing the levels of student engagement of teachers who are successfully involved with PLC's to studies

connecting student engagement to achievement would add to the current body of research. Finally, conducting a study to compare these results with varying types of professional development models may also add insight to the strength of professional learning communities.

This study has shown how principals of schools with a high readiness to transition to a PLC lead their school. In schools where planning time is limited and mandates can be overloaded, it is more imperative than ever before to strengthen current methodologies. By creating structures that allow teachers to collaborate, focus on student data, create more dynamic lessons and use their time more effectively schools can continue on a path to improvement. By using the five suggested practices a school leader may be able to help transform their school into a professional learning community.

REFERENCES

Andrews, D. & Lewis, M. (2002). The experience of a professional community: Teachers developing a new image of themselves and their workplace. *Educational Research, 44,* 237-54.

Andrews, R.L., & Soder, R. (1987). Principal leadership and student achievement. *Educational Leadership, 44,* 9–11.

Barlow, D. (2005). On common ground: The power of professional learning communities. *Education Digest, 70,* 76-77.

Barnett, K., McCormick, J. & Conners, R. (2001). Transformational leadership in schools—panacea, placebo or problem? *Journal of Educational Administration,39*(1), 24–46.

Barth, R. S. (1990). *Improving schools from within.* San Francisco: Jossey-Bass.

Bergevin, K. R. (2006). *A study of the nature and effects of application of the professional learning community model and powerful conversation in a high school.* (Ed.D. dissertation, Pepperdine University, United States — California). Retrieved September 5, 2009, from ProQuest Digital Dissertations database. (Publication No. AAT 3224148)

Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership, 62*(5), 56-60.

Blankstein, A. M. (2004). *Failure is not an option: Six principles that guide student achievement in high-performing schools.* Thousand Oaks, CA: Corwin Press.

Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly,35*(3), 349–378.

Bransford, J., Darling-Hammond, L., & LePage, L. (2005). Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp 1-39). San Francisco: Jossey Bass.

Bryk, A., Camburn, E. & Louis, K.S. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly, 35,* 751–781.

Campbell, A. (2004). *Practitioner research and professional development in education.* London: Paul Chapman Publishing.

Carbo, M. (2008). Best practices for achieving high, rapid reading gains. *The Education Digest, 73*(7), 57-60.

Caron, E. A., & McLaughlin, M. J. (2002). Indicators of beacons of excellence schools: What do they tell us about collaborative practices? *Journal of Educational and Psychological Consultation, 13(4),* 285-313.

Collins, D. L. (2007). *K—12 standards-based reform implementation: Site-level shared roles of leadership. A case study.* (Ed.D. dissertation, University of Southern California, United States — California.). Retrieved September 5, 2009, from ProQuest Digital Dissertations database. Publication No. AAT 3261835).

Copland, M. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis, 25,* 375-395.

Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research, 77*(1), 13-142.

Croasmun, J. (2007). The impact of a professional learning community on student academic achievement gains: A case study. (Ed.D. dissertation, The University of North Carolina at Chapel Hill, United States — North Carolina.). Retrieved September 5, 2009, from ProQuest Digital Dissertations database. (Publication No. AAT 3263473)

Crow, G.M., Hausman, C. S., & Scribner, J. P. (2002). Reshaping the role of the school principal. In J. Murphy (Ed.), *The educational challenge: Redefining leadership for the 21st century* (pp. 189-210). Chicago: University of Chicago Press.

Cummins, J. (2007). Pedagogies for the poor? Realigning reading instruction for low-income students with scientifically based reading research. *Educational Researcher, 36*(9), 564-573.

Darling-Hammond, L. & Sykes, G. (Eds.) (1996). *Teaching as the learning profession: Handbook of policy and practice.* San Francisco: Jossey-Bass.

Darling-Hammond, L. (1999). Target time toward teachers. *Journal of Staff Development,* 20(2), 31-36.

Darling-Hammond, L. & Richardson, N. (2009). Teacher learning: Research shows how schools can create more powerful professional development experiences. *Educational Leadership, 66,* 46-53.

Day, C. (2004). *International handbook on the continuing professional development of teachers.* New York: McGraw-Hill Education

Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study [Electronic version]. *Educational Evaluation and Policy Analysis. 24*(2), 81-112.

Doherty, R. W., & Hilberg, R. S. (2007). Standards for effective pedagogy, classroom organization, English proficiency, and student achievement. *The Journal of Educational Research, 101*(1), 24- 34.

Dooner, A.M., Mandzuk, D., & Clifton, R.A. (2008). Stages of collaboration and the realities of professional learning communities. *Teaching & Teacher Education, 24,* 564-574.

DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. A. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn.* Bloomington, IN: National Educational Service.

DuFour, R. (2004). What is a "professional learning community?" *Educational Leadership, 67*(8), 6-11.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work.* Bloomington, IN: Solution Tree.

DuFour, R., Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student academic achievement.* Bloomington, IN: National Educational Service.

Duggett, A., Farkas, S., Rotherham, A. J., & Silva, E. (2008). Waiting to be won over: Teachers speak on the profession, unions, and reform. *Education Sector Reports,* 1-25.

Dunne, F., Nave, B., & Lewis, A. (2000). Critical friends groups: Teachers helping teachers to improve student learning. *Phi Delta Kappan, 28,* 9-12.

Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: Reculturing schools to become professional learning communities.* Bloomington, IN: National Educational Service.

Eaker, R., DuFour, R., & DuFour, R. (2007). *Inspiration for professional learning communities at work – a leader's companion.* Bloomington, IN: Solution Tree.

Easton, L. B. (2008). From professional development to professional learning. *Phi Delta Kappan, 89*(10),755–761.

Elmore, R. F. (1996). Getting to scale with successful educational practice. In S. H. Furman & J. A. O'Day (Eds), *Rewards and reforms: Creating educational incentives that work* (pp 294-329). San Francisco: Jossey-Bass.

Elmore, R. (2000). *Building a New Structure for School Leadership.* Washington, DC: The Albert Shanker Institute.

Englert, C. S., & Tarrant, K. L. (1995). Creating collaborative cultures for educational change. *Remedial and Special Education, 16*(6), 325-336.

Evans, R. (2001). *The human side of school change: Reform, resistance and the real-life problems of innovation.* San Francisco: Jossey-Bass.

Fiore, D. J. (2004). *Introduction to Educational Administration: Standards, theories, and practice.* Larchmont, NY: Eye on Education.

Fullan, M. (2000). The three stories of education reform. *Phi Delta Kappan, 81,* 581-584.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco: Jossey-Bass.

Fullan, M. (2003). *Change forces with a vengeance.* New Yory, NY: Routledge Falmer.

Fullan, M. (2005). *Leadership and sustainability: System thinkers in action.* Thousand Oaks, CA: Corwin Press.

Fullan, M. (2009). Large-scale reform comes of age. Retrieved September 2, 2009 from Change forces: Education in motion, http://www.michaelfullan.ca/Articles_09/LargeScaleReform.pdf

Gall, M. D. & Renchler, R. S. (1985). *Effective staff development for teachers: A research based model.* ERIC Clearinghouse on Educational Management College of Education, University of Oregon.

Garet, M. S, Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal. 38*(4) 915-945.

Geijsel, F., Sleegers, P., Leithwood, K., & Jantzi, D. (2003). Transformational leadership effects on teachers' commitment and effort toward school reform. *Journal of Educational Administration, 41*(3), 228–256.

Glickman, C. (2003). Holding sacred ground. *Essays on leadership, courage, and endurance in our schools.* San Francisco: Jossey-Bass.

Gonzales, A. H., & Nelson, L. M. (2005). Learner-centered instruction promotes student success. *T.H.E Journal, 32*(6), 10-13.

Graham, P. (2007). Improving teacher effectiveness through structured collaboration: A case study of a professional learning community. *Research in Middle Level Education Online, 31*, 1-17. Retrieved July 21, 2008 from http://www.nmsa.org/portals/0/pdf/publications/RMLE/rmle_vol31_no1.pdf

Guskey, T. (2000). *Evaluating staff development*. Thousand Oaks, CA: Corwin Press.

Guskey, T. R., Yoon, K. S. (2009) What works in professional development? *Phi Delta Kappan, 90*(7), 495-500.

Hallinger, P. (1992) School leadership development: evaluating a decade of reform, *Education and Urban Society*, 24(3), pp. 300–316.

Hallinger, P. (2003). Leading Educational Change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33(3)*, 329-351.

Hallinger, P., Bickman, L., & Davis, K. (1996). School context, principal leadership, and student reading achievement. *The Elementary School Journal, 96*(5), 527–549.

Hallinger, P. & Heck, R. H. (1996a). Reassessing the principal's role in school effectiveness: A review of the empirical research 1980-1995. *Educational Administration Quarterly, 32*(1), 5-44.

Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995, *School Effectiveness and School Improvement, 9*, 157-191.

Hallinger, P., & Murphy J. (1985). Assessing the instructional management behaviors of principals. *Elementary School Journal, 86*(2), 217–247.

Hargreaves, A. (2009). A decade of educational change and a defining moment of opportunity-an introduction. *Journal of Educational Change, 10*, 89-100.

Hargreaves, A., & Fink, D. (2003). Sustaining Leadership. *Phi Delta Kappan, 84*(9), 693- 700.

Hargreaves, A., & Fink, D. (2006). *Sustainable Leadership*. San Francisco: Jossey-Bass.

Heck, R.H., Larsen, T.J., & Marcoulides, G.A. (1990). Instructional leadership and school achievement: Validation of causal model. *Educational Administration Quarterly, 26*, 94–125.

Hilliard, A. (1997). The structure of valid staff development. *Journal of Staff Development, 18*(2), 28-34.

Hollins, E. R., McIntyre, L. R., DeBose, C., Hollins, K. S., & Towner, A. (2004). Promoting a self-sustaining learning community: Investigating an internal model for teacher development. *International Journal of Qualitative Studies in Education, 17*(2), 247 – 264.

Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement.* Austin, TX: Southwest Educational Development Laboratory.

Hord, S. M. (2004). *Learning together leading together: Changing schools through professional learning communities.* New York: Teachers College Press.

Huffman, J. (2003). The role of shared values and vision in creating professional learning communities. *NASSP Bulletin, 87*(637), 21-34.

Jackson, A. W., & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century.* New York & Westerville, OH: Teachers College Press & National Middle School Association.

Johnson, S.M. & Donaldson, M.L. (2007). Overcoming the obstacles to leadership. *Educational Leadership, 65,* 8-13.

Joyce, B. (2004). How are professional learning communities created? History has a few messages. *Phi Delta Kappan, 86(1),* 76-83.

Joyce, B. & Showers, B. (1987). *Student achievement through staff development.* New York: Longman.

Kaplan, L. S., Owings, W. A. & Nunnery, J. (2005). Principal quality: A Virginia study connecting interstate school leaders licensure consortium standards with student achievement. *National Association of Secondary School Principals Bulletin, 87,* 28-44.

King, M.B. & Newmann, F.M. (2001). Building school capacity through professional development: Conceptual and empirical considerations. *International Journal of Educational Management 15*(2), 86-93.

Kruse, S. D. (2001). Creating communities of reform: Continuous improvement planning teams. *Journal of Educational Administration, 39,* 359-383.

Leo, T., & Cowan, D. (2000). Launching professional learning communities: Beginning actions. *Issues...about Change, 8*(1), 1 - 16. Retrieved September 15, 2009 from http://www.sedl.org/change/issues/issues81/issues-8.1.pdf

Leithwood, K., Day, C., Sammons, P., Hopkins, D., & Harris, A. (2006). *Successful school leadership: What it is and how it influences pupil learning.* (Tech Rep. RR800). Nottingham, UK: University of Nottingham, Department of Education and Skills.

Leithwood, K., & Duke, D. (1999). A century's quest to understand school leadership. In J. Murphy & K. Seashore-Louis (Eds.), *Handbook of research on educational administration (2nd ed.)* (pp. 45-73). San Francisco, CA: Jossey-Bass.

Leithwoos, K. & Jantizi, D. (1999). Transformational leadership effects: a replication, *School Effectiveness and School Improvement, 4(10),* 451-479.

Leithwood, K., Jantizi, D., Earl, L., Watson, N., Levin, B., & Fullan, M. (2004a). Strategic leadership for large-scale reform: The case of England's national literacy and numeracy strategy. *School Leadership and Management. 24,* 57-79.

Leithwood, K., Louis, K.S., Anderson, S., and Wahlstrom, K. (2004b). *Review of research: How leadership influences student learning.* Learning from Leadership Project: Wallace Foundation.

Leithwood, K. & Mascall, B. (2008). Collective leadership effects on student achievement. *Educational Administration Quarterly, 44*(4), 529-561.

Lieberman, A. (1995). *The Work of Restructuring Schools: Building from the Ground Up.* New York: Teachers College Press.

Louis, K.S., Kruse, S. & Bryk, A.S. (1995). Professionalism and community: What is it and why is it important in urban schools? In K. S. Louis, S. Kruse & Associates (1995) *Professionalism and community: Perspectives on reforming urban schools.* Long Oaks, CA: Corwin.

Louis, K. S., Kruse, S., & Raywid, M. A. (1996). Putting teachers at the center of reform. *NASSP Bulletin, 80*(580), 9-21.

Louis, K. S. & Marks, H. (1998). Does professional community affect the classroom? Teachers' work and student experience in restructured schools. *American Journal of Education, 106*(4), 532-575.

Lumpe, A. T. (2007). Research-based professional development: Teachers engaged in professional learning communities. *Journal of Science Teacher Education, 18*(1), 125-128.

McLaughlin, M. W. & Talbert, J. E. (2001). *Professional communities and the work of high school teaching.* Chicago: University of Chicago Press.

Macmillan, R. B., Meyer, M. J., & Northfield, S. (2005). Principal succession and the continuum of trust in schools. In H. D. Armstrong (Ed.), *Examining the practice of school administration in Canada* (pp. 85 – 102). Calgary, AB: Detselig.

Manthey, G. (2008). Attaining 21st century skills in a complex world. *Leadership, 38,* 15.

Marks, H.M., & Printy, S.M. (2003) Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39*(3), 370–397.

Marzano, R. (2003). *What works in schools: Translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

Moller, J. (2005). Successful school leadership: the Norwegian case. *Journal of Educational Administration, 43*(6), 584 – 594.

Morrissey, M. S. (2000). *PLC: An ongoing exploration.* Austin, TX: Southwest Educational Development Laboratory.

Morrissey, M. S., & Cowan, D. E. (2004). Creating and sustaining a professional learning community: Actions and perceptions of principal leadership. In S. Hord (Ed.), *Learning together, leading together: Changing schools through professional learning communities.* New York City, NY: Teachers College Press.

Mullen, C.A. & Sullivan, E.C. (2002). The new millennium high school: Tomorrow's school today? *International Journal of Leadership in Education, 51,* 273-284.

Newmann, F. M., & Wehlage, G. G. (1995). *Successful School Restructuring: A Report to the Public and Educators.* Madison, WI: Center of Educational Research and Improvement.

Noguera, P.A. (2004). Transforming high schools. *Educational Leadership, 61, 26-31.*

Nye, B., Konstantanopoulos, S., & Hedges, L.V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis, 26*(3), 237-257.

Nykiel-Herbert, B. (2004). Mis-constructing knowledge: The case of learner-centered pedagogy in South Africa. *Prospects, 34*(3), 250-263.

Ogawa, R. & Bossert, S. (1995). Leadership as an organizational quality, *Educational Administration Quarterly,* 31(2), pp. 224–243.

Oliva P. F., & Pawlas, G. E. (2004). Supervision for todays schools (7th ed.). Hoboken, NJ: John Wiley & Sons.

Oliver, D. (2009). *Assessing schools as professional learning communities*. Paper presented at the Annual Meeting of the Louisiana Education Research Association, Lafayete, LA. Retrieved from http://ullresearch.pbworks.com/f/Olivier_Assessing_PLCs_Symposium_-_PLCA-R_Introduction.pdf

Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2008). Assessing and analyzing schools as professional learning communities. In K. K. Hipp & J. B. Huffman (Eds.). *Professional learning communities: A practical approach* (in progress). Lanham, MD: Rowman & Littlefield.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal. 44*(4) 921-958.

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18*(3), 240-258.

Poole, M.S. (1995). Explaining development and change in organizations. *Academy of management review, 20*(3), 510–540.

Prestine, N. A.(1993). Extending the essential schools metaphor: Principal as enabler. *Journal of School Leader, 3*(4), 356-379.

Reeves, D. (2005). Putting it all together: Standards, assessment, and accountability in successful professional learning communities. In R. DuFour, R. Eaker, & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 45–63). Bloomington, IN: Solution Tree.

Reynolds, P. R. (2007). The "pedagogy of the oppressed": The necessity of dealing with problems in students' life. *Educational Horizons, 86*(1), 53-60.

Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. Educational Administration Quarterly, 44 (5).

Scheerens, J, Vermeulen, C., & Pelgrum, W. J. (1989). Generalizability of instructional and school effectiveness indicators across nations. *International Journal of Educational Research, 13*(7), 789-799.

Scherer, M. (2004). Perspectives: Connected at the roots. *Educational Leadership, 61, 5.*

Schmoker, M. J. (1996). *Results: The key to continuous school improvement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Schwartz, K. H. (2007). *Leading the way: The effective implementation of reform strategies and best practices to improve student achievement in math.* (Ed.D. dissertation, University of Southern California, United States—California). Retrieved September 5, 2009, from ProQuest Digital Dissertations database. (Publication No. AAT 3261846)

Sergiovanni, T. (1994) *Building community in schools.* San Francisco: Jossey-Bass.

Showers, B. & Joyce, B. (1996, March). The evolution of peer coaching. *Educational Leadership,* p. 12-16.

Sparks, D. (1994). A paradigm shift in staff development. *Education Week, Forum, 42.*

Sparks, D. & Hirsh, S. (1997). *A new vision for staff development.* Alexandria, VA: Association for Supervision & Curriculum Development.

Sparks, D. & Loucks-Horsley, S. (1989). Five models of staff development for teachers. *Journal of Staff Development, 10*(4), 40-57.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the Literature. *Journal of Educational Change, 7,* 221-258.

Strahan, D. (2003). General patterns and particular pictures: Lessons learned from reports from "beating the odds" schools. *Journal of Curriculum and Supervision, 18,* 296- 305.

Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership, and student learning. *Research in Middle Level Education Online. 28*(1), 35-54. Retrieved September 15, 2009 from http://www.nmsa.org/Publications/RMLEOnline/Articles/tabid/101/Default.aspx

Toole, J., & Louis, K. S. (2002). The role of professional learning communities in international education. In K. Leithwood & P. Hallinger (Eds.), *The second international handbook of educational leadership* (pp. 245-280). Dordrecht, Netherlands: Kluwer Publishers.

Tyack, D., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public school reform.* Harvard University Press: Cambridge, Massachusetts.

Van Meter, E., & Murphy, J. (1997). *Using ISLLC standards to strengthen preparation programs in school administration.* Washington, DC: Council of Chief State School Officers.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching & Teacher Education, 24,* 80-91.

Wahlstrom, K. & Louis, K. S. (2008). How teachers experience teacher leadership the roles: Professional community, trust, efficacy, and shared responsibility. *Educational Administration Quarterly, 44*(4), 458-495.

Wiggins, G., & McTighe, J. (2006). Examining the teaching life. *Educational Leadership, 63*(6), 26-29.

Wilson, S. M. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education. 24,* 173-209.

Wood, D.R. (2007). Professional learning communities: Teachers, knowledge, and knowing. *Theory Into Practice, 46,* 281-290.

Youngs, P. & King, M. B. (2002). Principal leadership for professional development to build school capacity. *Educational Administration Quarterly, 38,* 643-670.

Yukl, G. (2006). *Leadership in Organizations (6th ed.).* Upper Saddle River, NJ: Pearson/Prentice Hall.

Zepeda, S. J. (2008). *Professional development: What works.* Larchmont, NY: Eye on Education.

APPENDIX A

Professional Learning Communities Assessment - Revised

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)

What is your current position with the division? (Principal, AP, Lead Teacher)

What is your home school? (schools will be listed for 1 choice)

Are you male or female? (M – F)

What is your highest level of education? (Bachelors, graduate courses, Masters, Post masters, Doctorate, post doctorate)

How many years have you been in your current position?

STATEMENTS		SCALE			
	Shared and Supportive Leadership	SD	D	A	SA
1.	Staff members are consistently involved in discussing and making decisions about most school issues.				
2.	The principal incorporates advice from staff members to make decisions.				
3.	Staff members have accessibility to key information.				
4.	The principal is proactive and addresses areas where support is needed.				
5.	Opportunities are provided for staff members to initiate change.				
6.	The principal shares responsibility and rewards for innovative actions.				

7.	The principal participates democratically with staff sharing power and authority.				
8.	Leadership is promoted and nurtured among staff members.				
9.	Decision-making takes place through committees and communication across grade and subject areas.				
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.				
11.	Staff members use multiple sources of data to make decisions about teaching and learning.				
Comments:					

	STATEMENTS	SCALE			
	Shared Values and Vision	SD	D	A	SA
12.	A collaborative process exists for developing a shared sense of values among staff.				
13.	Shared values support norms of behavior that guide decisions about teaching and learning.				
14.	Staff members share visions for school improvement that have undeviating focus on student learning.				
15.	Decisions are made in alignment with the school's values and vision.				
16.	A collaborative process exists for developing a shared vision among staff.				
17.	School goals focus on student learning beyond test scores and grades.				
18.	Policies and programs are aligned to the school's vision.				
19.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.				
20.	Data are used to prioritize actions to reach a shared vision.				
COMMENTS:					

	STATEMENTS	SCALE			
	Collective Learning and Application	SD	D	A	SA
21.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.				
22.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.				
23.	Staff members plan and work together to search for solutions to address diverse student needs.				
24.	A variety of opportunities and structures exist for collective learning through open dialogue.				
25.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.				

26.	Professional development focuses on teaching and learning.				
27.	School staff members and stakeholders learn together and apply new knowledge to solve problems.				
28.	School staff members are committed to programs that enhance learning.				
29.	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.				
30.	Staff members collaboratively analyze student work to improve teaching and learning.				

COMMENTS:

	STATEMENTS	SCALE			
	Shared Personal Practice	SD	D	A	SA
31.	Opportunities exist for staff members to observe peers and offer encouragement.				
32.	Staff members provide feedback to peers related to instructional practices.				
33.	Staff members informally share ideas and suggestions for improving student learning.				
34.	Staff members collaboratively review student work to share and improve instructional practices.				
35.	Opportunities exist for coaching and mentoring.				
36.	Individuals and teams have the opportunity to apply learning and share the results of their practices.				
37.	Staff members regularly share student work to guide overall school improvement.				

COMMENTS:

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

	COMMENTS:				

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

© Copyright 2008

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 B
Interview Protocol

Background Questions (1 – 2)

1. Tell me about your background in educational leadership.
   a. Leadership experience—when, where, what
   b. Recent professional development opportunities you have had
2. How is leadership structured in your school?

Shared and Supportive Leadership (3 – 5)

3. What opportunities are offered to the faculty to initiate change?
4. How is the staff involved in making decisions about curriculum, instruction, and assessment?
5. How is the responsibility for accountability shared?

Shared Values and Vision (6 – 8)

6. Describe the process used when developing the school's mission, vision, values and goals.
   a. How was data used during the process?
7. How do these values guide behavior and decisions about teaching and learning?
8. How is a focus on student learning maintained?

Collective Learning and Application (9 – 10)

9. What opportunities exist for staff to provide feedback to peers related to instructional practices?
10. What opportunities exist for staff to collaboratively review student work and to share and improve instructional practices?

Shared Personal Practice (11 – 12)

11. What plans are in place for teachers to observe one another and to provide feedback on the observations?
12. What kind of forums are in place for teachers to share ideas and make suggestions for improving instructional practices?

Supportive Conditions - Relationships (13 – 14)

13. What structures or conditions are in place so that teachers know they are able to take risks?
14. Describe staff meetings at your school.

Supportive Conditions – Structures (15 – 17)

15. What amount of time is built into the teachers schedules for collaboration?
16. Describe the availability of materials and technology at your school.
17. Describe the communication between administration, teachers, students, parents and the community.

APPENDIX C
IRB Approval Letter

Old DOMINION UNIVERSITY

DARDEN COLLEGE OF EDUCATION
OFFICE OF THE DEAN
Norfolk, Virginia 23529-0156
Phone (757) 683-3938
Fax (757) 683-5803
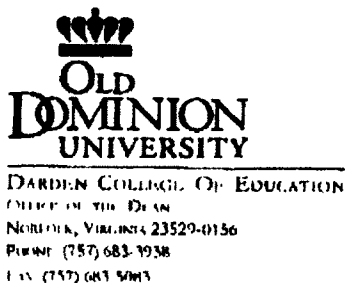
November 22, 2010   Proposal Number __201001032__

Professor Bol:

Your proposal submission titled, "An Investigation into Building Level Leadership that makes Professional Learning Communities Successful" has been deemed EXEMPT from IRB review by the Human Subjects Review Committee of the Darden College of Education. If any changes occur, especially methodological, notify the Chair of the DCOE HSRC, and supply any required addenda requested of you by the Chair. You may begin your research.

We have approved your request to pursue this proposal indefinitely, provided no modifications occur. Also note that if you are funded externally for this project in the future, you will likely have to submit to the University IRB for their approval as well.

If you have not done so, PRIOR TO THE START OF YOUR STUDY, you must send a **signed** and dated **hardcopy** of your exemption application submission to the address below. Thank you.

Edwin Gómez, Ph.D.
Associate Professor
Human Subjects Review Committee, DCOE
Human Movement Studies Department
Old Dominion University
2021 Student Recreation Center
Norfolk, VA 23529-0196
757-683-6309 (ph)
757-683-4270 (fx)

APPENDIX D
Division Approval Letter

March 25, 2011

Mr. James M. Pohl
2428 Lewis Drive
Virginia Beach VA, 23454

Dear Mr. Pohl:

This letter serves as the Department of Educational Leadership and Assessment's approval for your research study entitled "An Investigation Into Building-Level Leadership That Makes PLCs Successful." It is our understanding that you plan to survey principals, assistant principals, and one lead teacher in each school where the principal has been in their current position for more than one year. It is also our understanding that you plan to use the survey data to identify schools for follow-up interviews. Your request to contact principals using publicly available email addresses for the purpose of soliciting their participation in your study was approved with the understanding that you will not identify the names of the principals, individuals, schools, or the school division in your final report. As always, the final decision to participate rests with the individual principals that you contact.

Our approval for your study will expire one year from the date of this letter. If there are any changes to the methods or materials that you plan to use as part of your study, you must submit the changes to our office for review prior to proceeding. It is our expectation that you will submit an electronic copy of the final report upon its completion to the Department of Educational Leadership and Assessment. Please send the report to ▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆ If you have any questions, please contact me at ▆▆▆▆▆▆▆

Sincerely,

▆▆▆▆▆▆▆, Ph.D.
Administrative Coordinator

cc: ▆▆▆▆▆▆▆▆▆▆ Associate Superintendent
Department of Educational Leadership and Assessment

▆▆▆▆▆▆▆▆▆▆, Lead Director for Elementary School Education
▆▆▆▆▆▆▆▆ Director for Elementary School Education
▆▆▆▆▆▆▆▆▆▆▆, Assistant Superintendent for Middle School Education
▆▆▆▆▆▆▆▆▆▆ Assistant Superintendent for High School Education
Department of School Administration

All Principals

APPENDIX E

Email to Principals to Introduce Study

From: James M. Pohl
Sent: Tuesday, April 05, 2011 7:35 PM
Subject: Research Questionnaire

Good evening,

My name is James Pohl. Although I am the principal of Princess Anne High School, I am writing you today to seek input for the study I am conducting for my dissertation through Old Dominion University. The purpose of the study is to assess where each school in our division is during the transition to a professional learning community. Using the data, I plan to interview principals and lead teachers who are in schools that show a high level of readiness to become a learning community. It is imperative to my research that I have as many completed questionnaires as possible in order to have a thorough understanding as to where each school may be as far as readiness to becoming learning communities.

Please see the attached documents for further information about your participation in this study and granting me the approval to conduct this research. If you choose to participate in the study your name will be placed into a drawing for one of several gift cards to Amazon.com. Thank you for taking the time to read over the information and for considering taking place in this important work.

To start the questionnaire, please click here and select Respond to this Survey (see the graphic below). This questionnaire takes approximately 15 minutes to complete. You may have to log into the VBCPS Intranet since this was created using the SharePoint survey tool.

Thank you for your participation,

James

James M. Pohl > PLCA-R

PLCA-R

Professional Lerning Community Assessment - Revised
📧 Respond to this Survey ▾ Actions ▾ Settings ▾

Survey Name:	PLCA-R
Survey Description:	Professional Lerning Community Assessment - Revised
Time Created:	1/22/2011 10:45 AM
Number of Responses:	0

APPENDIX F
Email Sent to Principals Requesting Names of Their Lead Teachers

Needed Information

James M. Pohl

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

To:

Cc:

Attachments: 📎 James Pohl research approval letter.pdf(1MB)

Good evening,

In an effort to gather data for my dissertation I would like to include lead teachers from your school. You will soon be getting a link to the questionnaire I will be using to collect my data. I am asking that all principals, assistant principals and lead teachers complete the questionnaire. As a follow up to the questionnaire, I will be conducting interviews with a few principals and lead teachers to gather more data. In order to contact lead teachers I am asking for you to reply to this email with a list of your lead teacher(s) or department chairpersons.

Thank you for your assistance.

James

APPENDIX G
Email to Lead Teachers to Introduce Study

From: James M. Pohl
Sent: Friday, April 22, 2011 12:28 PM
Subject: Research Questionnaire

Good afternoon,

My name is James Pohl. Although I am the principal of Princess Anne High School, I am writing you today to seek input for the study I am conducting for my dissertation through Old Dominion University. The purpose of the study is to assess where each school in our division is during the transition to a professional learning community. Using the data, I plan to interview principals and lead teachers who are in schools that show a high level of readiness to become a learning community. It is imperative to my research that I have as many completed questionnaires as possible in order to have a thorough understanding as to where each school may be as far as readiness to becoming learning communities.

As a lead teacher, you were chosen by your principal to participate in this questionnaire. Shortly after receiving this email you will receive an official invitation to the questionnaire with a link – please be sure to check your junk mail folder as it may end up there. It is easiest to complete the questionnaire at school and it should take no longer than 10 to 15 minutes of your time. Please be sure to complete the questionnaire without clicking save at the bottom of any of the pages. On the final page there will be a button that reads "finish," once that is hit you have completed the entire form. Please see below for some screen shots of what you will see during the questionnaire.

Please also see the attached documents for further information about your participation in this study and granting me the approval to conduct this research. If you choose to participate in the study your name will be placed into a drawing for one of several gift cards to Amazon.com. Thank you for taking the time to read over the information and for considering taking place in this important work.

Thank you for your participation,

James

Click "Respond to this Survey" to start the survey

James M. Pohl > PLCA-R

PLCA-R

Professional Lerning Community Assessment - Revised

Respond to this Survey   Actions ▾   Settings ▾   View

Survey Name:	PLCA-R
Survey Description:	Professional Lerning Community Assessment - Revised
Time Created:	1/22/2011 10:45 AM
Number of Responses:	0

• Show a graphical summary of responses

• Show all responses

Click "Next" on every screen – please do not click save as it will not let you
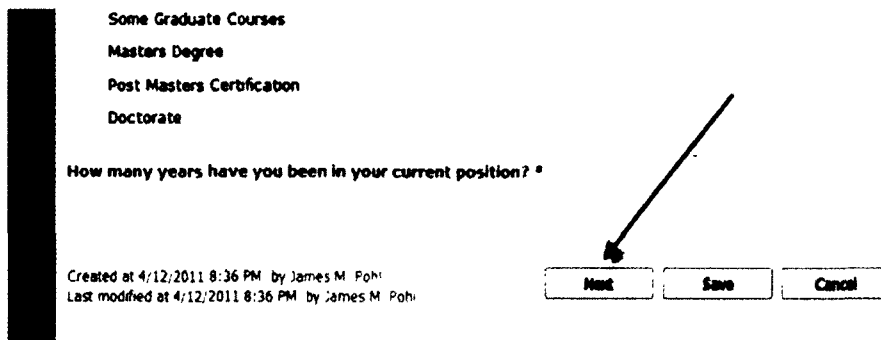
begin where you left off

Some Graduate Courses

Masters Degree

Post Masters Certification

Doctorate

How many years have you been in your current position? *

Created at 4/12/2011 8:36 PM by James M Poh'
Last modified at 4/12/2011 8:36 PM by James M Poh

| Next | Save | Cancel |

You will see the "Finish" button only on the last screen – please click that once you have completed the final page.

Agree
Strongly Agree

Supportive Conditions   Structures:
Comments:

Created at 4 12/2011 8:36 PM by James M Poh'
Last modified at 4 12/2011 8 38 PM by James M Poh

| Finish | Cancel |

APPENDIX H

Reminder Email Sent to Questionnaire Participants

From: James M. Pohl
Sent: Monday, April 25, 2011 4 50 PM
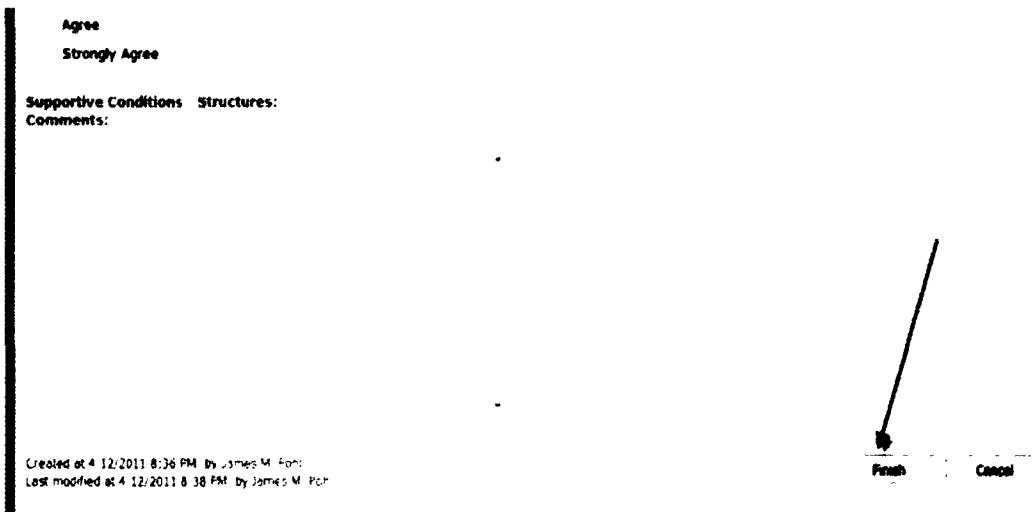**Subject:** Research Questionnaire Reminder

Good afternoon

Over the past few weeks I have sent several invitations to complete an online survey in an effort to gather data for my dissertation. In an effort to have the highest response rate possible. I wanted to send a friendly reminder to complete the PLCA R questionnaire. Several people have lost the link or did not see it in their junk folder so I will be sending another invitation through SharePoint. If you are receiving this email your survey was not completed properly or not started. I would greatly appreciate it if you would restart or start the survey – I assure you it only takes about 10 minutes. I will be closing out the data collection at the on May 1st and if you have completed the survey by then your name will be in a drawing for a $25 gift card to Amazon.com

Here are a couple of tips to completing the survey:

- Check your junk folder for the invitation if you do not receive one in your inbox
- This can be done at home or at school – it is just easier at school since you do not have to login to vbcps com
- Complete it all at one sitting – once you click save you cannot retrieve the information and I cannot gather the information
- Click next at the bottom of each screen
- Click finish at the end of the final screen
- Once you have completed the survey you should see a screen that has no buttons
- There are screen shots of what you will see in the email below this one

Thank you in advance for participating in my study. If you have any questions please feel free to contact me

James

APPENDIX I
Response Rates for top Ranked Schools

Questionnaire Response Rates for top Ranked Schools

	N	Total	Assistant Principals	Lead Teachers
Elementary School 1	6	66.7%	100%	50.0%
Elementary School 2	11	45.5%	100%	33.3%
Elementary School 3	4	75.0%	0%	100%
Secondary School 1	28	75.0%	100%	68.2%
Secondary School 2	16	56.3%	0%	72.7%
Secondary School 3	20	70.0%	75.0%	66.7%

APPENDIX J
Letter to Principal/Lead Teachers
Interviews

An Examination of the relationship between a school's readiness to transform into a Professional Learning Community and the leadership behaviors of the school's principal

The purpose of this exploratory study is to examine the relationship between a school's readiness to transform into a Professional Learning Community (PLC) and the leadership behaviors of the school's principal that support the development of professional learning communities. If you decide to participate in the study, you will be asked to be interviewed based on questions designed around the Professional Learning Communities Assessment - Revised Questionnaire.

While conducting my dissertation research, I feel it is important to focus on ways to continually improve. With your assistance in being interviewed I will be able to gain insight into how our schools are progressing towards creating PLC's. Although participating in the interview is voluntary, I am hopeful you will take the time, approximately 45 minutes, to be interviewed. By your willingness to be interviewed, I will assume your consent to participate in this study and to use the information you provide in the study write-up, presentations, and publications. You may benefit by knowing that you are contributing to the knowledge base about the progression of the formation of professional learning communities in your school division.

Please keep this form for your records.
If you have any questions about this study, you may contact:
James Pohl
2428 Lewis Drive
Virginia Beach, VA 23454
Telephone: (757) 689-8646
E-mail: jpohl1@cox.net

Thank you!

APPENDIX K
Complete Ranking of all Schools Qualified for Interviews

Means for each Category of the PLCA-R by all Elementary Schools

	n	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6	Composite Total
Elementary School 1	3	2.73	3.00	2.40	3.00	3.00	3.00	2.83
Elementary School 2	3	2.67	3.00	2.40	3.00	3.00	3.00	2.81
Elementary School 3	5	2.71	2.96	2.36	2.94	3.00	3.00	2.80
Elementary School 4	2	2.59	3.00	2.40	3.00	3.00	3.00	2.79
Elementary School 5	7	2.70	2.97	2.40	2.92	3.00	2.94	2.79
Elementary School 6	4	2.66	3.00	2.40	2.86	3.00	3.00	2.79
Elementary School 7	5	2.71	3.00	2.40	2.89	3.00	2.90	2.78
Elementary School 8	5	2.69	3.00	2.40	2.94	3.00	2.86	2.78
Elementary School 9	4	2.66	3.00	2.40	2.86	3.00	2.93	2.77
Elementary School 10	5	2.65	2.96	2.36	2.89	3.00	2.92	2.76
Elementary School 11	6	2.62	3.00	2.37	2.86	3.00	2.88	2.76
Elementary School 12	7	2.38	3.00	2.40	2.96	3.00	3.00	2.75
Elementary School 13	6	2.59	2.93	2.33	2.95	3.00	2.93	2.75
Elementary School 14	7	2.55	3.00	2.37	2.71	2.94	2.97	2.73
Elementary School 15	7	2.70	3.00	2.34	2.96	3.00	2.64	2.73
Elementary School 16	4	2.61	2.94	2.40	2.79	2.90	2.85	2.73
Elementary School 17	6	2.55	2.96	2.37	2.86	2.83	2.83	2.71
Elementary School 18	4	2.59	2.89	2.40	2.79	3.00	2.83	2.71
Elementary School 19	8	2.53	2.92	2.40	2.75	3.00	2.86	2.71
Elementary School 20	8	2.57	2.75	2.28	2.93	2.85	2.93	2.69

Means for each Category of the PLCA-R by all Elementary Schools (Continued)

	n	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6	Composite Total
Elementary School 21	9	2.63	2.95	2.29	2.71	2.82	2.84	2.69
Elementary School 22	3	2.64	2.93	2.40	2.81	3.00	2.57	2.68
Elementary School 23	4	2.64	2.94	2.15	2.93	2.25	3.00	2.66
Elementary School 24	6	2.41	2.89	2.37	2.62	2.87	2.90	2.65
Elementary School 25	4	2.45	2.78	2.30	2.79	2.80	2.75	2.63
Elementary School 26	9	2.58	2.83	2.67	2.68	2.82	2.59	2.60
Elementary School 27	5	2.40	2.91	2.12	2.77	2.76	2.84	2.59
Elementary School 28	10	2.43	2.91	2.30	2.29	3.00	2.66	2.56
Elementary School 29	4	2.27	2.94	2.40	2.57	2.70	2.53	2.54
Elementary School 30	9	2.31	2.83	2.27	2.14	2.64	2.81	2.49
Elementary School 31	3	1.85	2.70	2.27	2.62	2.87	2.93	2.47
Elementary School 32	5	1.98	2.42	1.90	2.54	2.76	2.80	2.35

Means for each Category of the PLCA-R by all Secondary Schools

	n	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6	Composite Total
Secondary School 1	9	2.64	2.95	2.38	2.87	2.96	2.80	2.77
Secondary School 2	21	2.66	2.94	2.36	2.90	2.88	2.92	2.75
Secondary School 3	12	2.53	2.91	2.34	2.95	2.93	2.88	2.72
Secondary School 4	6	2.59	2.93	2.33	2.67	2.87	2.80	2.68
Secondary School 5	5	2.49	2.87	2.36	2.89	3.00	2.70	2.67
Secondary School 6	7	2.60	2.89	2.26	2.80	2.83	2.76	2.66
Secondary School 7	8	2.59	3.00	2.10	2.91	2.70	2.79	2.65
Secondary School 8	11	2.36	2.74	2.33	2.92	2.71	2.88	2.63
Secondary School 9	7	2.60	3.00	2.34	2.39	2.94	2.57	2.61
Secondary School 10	10	2.49	2.73	2.29	2.71	2.88	2.63	2.59
Secondary School 11	20	2.29	2.77	2.20	2.57	2.57	2.73	2.49
Secondary School 12	12	2.40	2.69	2.27	2.48	2.55	2.63	2.49
Secondary School 13	11	2.37	2.68	1.84	2.56	2.53	2.26	2.34

VITA
James M. Pohl
Darden College of Education
Educational Leadership Program, Old Dominion University
Education Building, Room 120
Norfolk, Virginia 23529-0157
Email jpohl1@cox.net

Education

Expected date of completion, May 2012
Ph.D. in Education, Educational Leadership
Old Dominion University, Norfolk, VA

Master of Science in Education
Curriculum and Instruction
Old Dominion University, Norfolk, VA, August 1998

Bachelor of Science in Applied Math
Old Dominion University, Norfolk, VA, August 1996

Experience

1.	2010 – present	Principal, Princess Anne High School Virginia Beach, VA
2.	2007 – 2010	Principal, Princess Anne Middle School Virginia Beach, BA
3.	2004 – 2007	Assistant Principal, Frank W. Cox High School Virginia Beach, VA
4.	2002 – 2004	Assistant Principal, Pasquotank County High School Elizabeth City, NC
5.	1996 – 2002	Math Teacher, Lake Taylor High School Norfolk, VA

Presentations

Pohl, J. M. & Barton-Arnold, K. (2011). Looking for a Roadmap...? Creating a Job-Embedded Professional Development Plan that Really Works. Presentation for the EduStat Conference, Virginia Beach, VA

Accolades/Awards

- 2010 Virginia Beach Association of Secondary School Principals Middle School Principal of the Year

- 2000 Lake Taylor High School Teacher of the Year