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# Case study: The Effect of the implementation of Professional Learning Communities on Teacher Behaviors at Two Elementary Schools

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Case Study: The Effect of the Implementation of Professional Learning Communities on  
Teacher Behaviors at Two Elementary Schools

By  
Rachel N. Clarke

A Dissertation Submitted to the  
Gardner-Webb University School of Education  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Education

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2009

## Approval Page

This dissertation was submitted by Rachel N. Clarke under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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## Abstract

Case Study: The Effect of the Implementation of Professional Learning Communities on Teacher Behaviors at Two Elementary Schools. Clarke, Rachel N., 2008: Dissertation, Gardner-Webb University, Educational Improvement/Professional Learning Communities/Staff Development/Collaboration/Supportive Conditions

This study examined the impact of the implementation of a Professional Learning Community (PLC) model on teacher behaviors in two elementary schools. The research questions underlying and providing a research framework for the study were as follows: How does establishing a PLC change teacher instructional behavior? How does the implementation of a PLC encourage teacher professional growth? How do grade level meetings affect the instructional behavior of classroom teachers?

Written documentation and perceptions of principals and teachers, solicited through interviews and focus groups, were used to provide data for the study, along with survey data and grade level meeting documentation. The approach that was used for coding the qualitative data provided by the interviews and the grade level minutes was Renata Tesch's interpretational analysis. This is defined as the process of examining the data collected closely to find themes and patterns that can be used to describe the phenomena (in this case, the effects of implementing the PLC) being studied (Gall, Gall, & Borg, 2003). Creswell's recommended six steps for organizing data, as explained in the third chapter, was used to make an interpretation of the data.

The data collected demonstrated that School A did not experience a change in teacher behaviors as a result of the implementation of the PLC model. A lack of a clear vision and a culture of trust along with a weak understanding of what a PLC is was evident in School A. School B did not show a change in teacher behaviors as a result of the implementation of the PLC model, but the school clearly demonstrated a shared vision and growth in the collective understanding of the PLC model. Recommendations for future study include revisiting these schools after another year of implementation.

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## Chapter 1: Introduction and Problem Statement

### *Introduction*

The No Child Left Behind Legislation (NCLB) of 2001 (Public Law 107-110) was passed to ensure that all children, regardless of background, will succeed in our nation's public schools. This legislation not only took student achievement into consideration through benchmark testing, but it also addressed teacher quality through licensure requirements and other criteria. Therefore, it addressed accountability on two levels: student achievement and teacher quality.

The importance of teacher quality is not a value simply held by those who create policy, but also by parents, researchers, and even teachers themselves (Leigh & Mead, 2005). Darling-Hammond (1995) stated that teacher quality "is what makes the difference in student performance" (p. 42). Other researchers concur with Darling-Hammond, saying that teacher quality is the most important educational input predicting student achievement (Annenberg, 2004; Finance, 2004; Goldhaber & Anthony, 2003; McRobbie, 2000; Mrozowski, 2002; Rice, 2006).

### *Teacher Quality*

But what is teacher quality? The most basic definition of teacher quality is the ability the teacher has to help students reach high standards (Reichardt, 2001). The National Research Council defined teacher quality as the "knowledge, skills, abilities, and dispositions of teachers" that enable them to "engage in rigorous, meaningful activities that foster academic learning for all students" (cited by Lauer & Dean, 2004, p. 1).

At times, teacher quality does not refer to attributes, but to behaviors. The behaviors were the primary focus of this study. Teachers of high quality are those



teachers who are willing to continuously learn and refine their skills and instructional methods (U.S. Department of Education, 1999). This statement defined the key behavior of quality teachers addressed in this research: the ability and the desire to grow professionally in a continuous effort to improve student achievement. It is this behavior that leads to the definition of teacher quality, as defined in the first paragraph.

How can school leaders ensure high quality teachers and provide training that will improve teacher quality? The focus of this study was to examine how the establishment of Professional Learning Communities affected teacher quality in two very different school settings.

### *Staff Development*

Unfortunately, there is no magic formula that can improve teacher quality. However, Reichardt (2001) listed four “areas of opportunity” to improve teacher quality; in-service professional development was one of those areas. Professional development, referred to as “staff development” for the remainder of this paper, was defined by the National Staff Development Council (2007) as “the continuing education of school employees” (p. 1). The importance of professional development was also realized by policymakers, as the No Child Left Behind Act provided a list of characteristics of high quality professional development that should be provided to teachers. In addition, the Educational Testing Service (2004) stated that “continuous professional development is critical to developing and maintaining high quality teachers” (p. 9).

High quality staff development is an important component in improving teaching and thus student achievement (Guskey & Sparks, 1996). The teaching practices presented in such events are the most immediate outcome of staff development, and these are “the primary factor influencing the relationship between staff development and improvements

in student learning” (Guskey & Sparks, p. 4).

Guskey and Sparks (1996) made reference to high quality staff development. However, not all staff development is of high quality. Despite the importance placed on professional development by many researchers, the research showed that money spent on professional development is often on topics that teachers neither want nor need (Finance, 2004). Professional development is generally considered to be formal education opportunities, such as workshops or courses (Corcoran, 1995; Huffman & Hipp, 2003; Lieberman, 1995). These workshops and courses are hit-and-run sessions that do not help teachers master a variety of instructional strategies that are needed today with the diverse student population (Darling-Hammond, 1997; Dunne & Honts, 1998; Johnson, 2006; Slick, 2002). Frequently, experts are brought in as presenters—making the teachers the passive recipients of the material (Lieberman).

The fact that most workshops are isolated opportunities, rather than provisions for sustained growth, goes against one of the provisions of the No Child Left Behind legislation. This legislation specifically stated that high quality professional development does not consist of “one day or short term workshops or conferences” (cited by Lauer & Dean, 2001, p. 20). Due to the lack of follow-up after these workshops and the lack of sustainability, teachers themselves feel the disjunct between the importance of professional development and what they actually receive (Corcoran, 1995). In a survey conducted by Public Agenda, half of the teachers polled said that the professional development they received made little difference to their practices and professional growth (Finance, 2004).

Research is beginning to show that these isolated efforts are, in fact, a “waste of time” (Corcoran, 1995, p. 3). The rationale behind this thought is that not only are staff

development offerings isolated in nature, but they are distant from the classroom itself. Timperley's (2006) research found that professional development programs need to be integrated into teachers' everyday working responsibilities rather than be isolated programs held off-site. Therefore, she recommended that the focus for professional development should shift from using these external and isolated courses and workshops towards developing strong Professional Learning Communities within schools, where professional learning is built into teachers' everyday working responsibilities (Timperley). Reichardt (2001) agreed with Timperley, saying that effective staff development needs to include an opportunity for teachers to discuss their practices and ways to improve (Timperley).

#### *A Professional Learning Community*

Research showed that student achievement is impacted by staff development opportunities (McRobbie, 2000; Mrozowski, 2002; TeachFirst, 2008). In order to substantially improve student achievement, staff development opportunities need to be provided in a supportive and collegial environment (Pfaff, 2000). One way to create such an environment is to implement a Professional Learning Community (Thompson, Gregg, & Niska, 2004; Timperley, 2006).

According to Slick (2002), "a learning community is a group of individuals who establish group goals and values for working and learning collaboratively" (p. 1). The Professional Learning Community helps to support teachers and administrators through its emphasis on collegiality and collaboration (Morrissey, 2000). In this collegial climate, teachers use data and information to positively affect professional learning, educational change, and school reform (Mason, 2003). Through this collaboration and collegiality, these student-centered, learning communities provide meaningful learning and support

for the individual (Slick, 2002).

This culture of collegiality and collaboration helps to build the “productive relations that are required to collaborate, partner, reflect, and also support teachers who work with students requiring the most assistance” (Annenberg, 2004, p. 1). This process of inquiry in such an environment “nurtures the growth and change necessary for improving the effectiveness of teachers” (Morrissey, 2000, p. 20).

The Professional Learning Community approach is logical because the sum of the parts, namely the individual contributions of each of the participants, is better able to respond to items that concern the organization as a whole, than the organization itself. This collective learning and inquiry consists of an ongoing dialogue and exchange of ideas that result in a stronger commitment by the staff (Berliner, 1997).

The focus is always on student results, but the establishment of a Professional Learning Community creates an emphasis on building the collective capacity of the group rather than the knowledge and skills of individuals (DuFour & Eaker, 1998). The process of building this collective capacity is, in essence, a method of providing effective staff development. In these groups, individual teachers have access to the ideas, materials, strategies, and talents of the entire team and, therefore, the collective capacity of the group increases.

### *Definition of Terms*

*The No Child Left Behind Act of 2001* (NCLB). The education policies made into law with the re-authorization of the Elementary and Secondary Education Act (ESEA) in January, 2002. States that do not comply with this legislation lose federal funding (Medford, 2007).

*Professional Learning Community* (PLC). “A place where people continually

expand their capacity to create the results they desire, and where people continually learn how to learn together” (Carver, 2005, p. 1). The PLC model actually provides the structure for continual school improvement through continual learning (Morrissey, 2000). Collaboration is the key piece, the cornerstone, of the PLC model (Thompson et al., 2004).

*Staff Development.* The continuing education of school employees (National Staff Development Council, 2007, p. 1).

*Teacher Quality.* The knowledge, skills, abilities, and dispositions of teachers that create meaningful learning activities for all, along with the indicated desire to continually learn and refine instructional skills and methods. It is the behaviors that are the primary focus of this study. Teachers of high quality are those teachers who are willing to continuously learn and refine their skills and instructional methods (U.S. Department of Education, 1999).

### *Statement of the Problem*

Schools struggle with supporting teachers in their efforts to become more effective in their jobs. While staff development is thought of as a way to improve teacher quality, research has shown that traditional models of staff development prove ineffective and isolated. For example, staff development is traditionally held in workshops away from campus, and teachers generally see these as a waste of time due to the isolation of the event, and the lack of follow-through (DuFour & Eaker, 1998; Thompson et al., 2004; U.S. Department of Education, 1999). Teachers have also stated that at these staff development opportunities there is no relevance between the material presented and what actually occurs in the classroom (EdSource, 2000; Johnson, 2006; U.S. Department of Education, 1999).

### *Purpose of the Study*

The purpose of this study was to describe the effect on teacher behaviors by the establishment of Professional Learning Communities in two different elementary schools. These two schools displayed varying needs, strengths, and histories, as described in the data below. School A was a suburban elementary school that had been open for 3 years, built in response to the high growth in the area. In contrast, School B served the community for over 50 years. Table 1 shows the student population changes in both schools.

Table 1

#### *Student Population of Schools*

School	2004-2005	2005-2006	2006-2007	2007-2008
School A	533	684	858	891
School B	711	729	762	776

The demographics of the two schools differed, as demonstrated in Tables 2 and 3. School A had a more diverse population with regards to ethnicity as compared to School B. The demographic percentages have remained stable at both schools over a 3-year period.

Table 2

*Ethnic Percentages at School A*

Ethnicity	2005-2006 N=684	2006-2007 N=858	2007-2008 N=891
Black	14.61	14.05	12.01
White	67.81	66.39	68.91
Hispanic	13.11	15.01	15.38
Other	4.47	4.56	13.70

Table 3

*Ethnic Percentages at School B*

Ethnicity	2005-2006 N=729	2006-2007 N=762	2007-2008 N=776
Black	3.9	2.85	2.96
White	89.37	89.64	88.02
Hispanic	6.19	6.22	7.22
Other	.54	1.30	1.80

Another indicator of the continuity of a school community is the teacher turnover rate. This, according to the North Carolina Report Card (n.d.), is the “percentage of teachers employed in a school last year who are no longer employed in the same school this year” and is represented in Table 4 and Table 5 (p. 1). Also included in this table is the school system’s average teacher turnover rate. The percentage of teacher turnover

was consistently higher in School A than in School B.

Table 4

*Teacher Turnover Rate (stated in percent) in School A*

<i>School</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>
	<i>N=36</i>	<i>N=45</i>	<i>N=56</i>
School A	N/A	31	13
System average	23	22	22

Table 5

*Teacher Turnover Rate (stated in percent) in School B*

<i>School</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>
	<i>N=44</i>	<i>N=45</i>	<i>N=48</i>
School B	12	16	9
System average	23	22	22

In the state of North Carolina, students in Grades 3-8 must complete annual ABCs End-of-Grade tests in reading and math. Table 6 shows the overall percentage of students who passed reading in each school over a 3-year period. Table 7 shows the overall percentage of students who passed math in each school over the same 3-year period.



Table 6

*Overall Student Performance (Percent Proficient) in Reading*

<i>School</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>
School A	88.1	89.7	85.1
School B	88.5	89.5	89.8

Table 7

*Overall Student Performance (Percent Proficient) in Math*

<i>School</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>
School A	92.9	72.6	78.4
School B	≥95	82.3	87.1

Leadership at both schools remained relatively stable. The principal at School A was the principal since the opening of the building in the fall of 2004. At School B, the principal was employed as the assistant principal in the fall of 2004 but was promoted to the position of principal during the 2005-2006 school year.

This study is of interest due to the leadership and the cultural differences between the two schools. School B was in existence for over 80 years and received various awards and recognitions, including the “Triple S” Safe School Award, “School of Distinction,” and “School of High Growth.” In addition, a large amount of community support was evident in the school’s primary fundraiser, which not only raised a substantial amount of money but utilized many volunteers from the community to make it succeed. In addition, School B had low teacher turnover and a consistent student population. School A was a new school in comparison, and did not establish a reputation through ABC designations

on a consistent basis. It experienced higher teacher turnover than School B, especially after the first year. School A's free and reduced lunch population was 34%, in contrast to School B's 18%.

The teacher turnover, the school histories, and the difference stated in the tables above, along with the difference in leadership experience of the principals, may have contributed to varying levels of PLC implementation. While both principals committed to implementing the PLC model, the researcher found out through use of the survey to what extent the model had actually been implemented. In addition, any differences in teacher attitude towards PLC implementation were noted.

#### *Brief Description of Procedures*

In the fall of 2008, two elementary schools in western North Carolina (one suburban, one rural) began their adoption of the Professional Learning Community model. The Professional Learning Community Assessment (PLCA) was administered at the beginning of the PLC implementation to create a picture of the current reality of the school, and to be used as a baseline. Group interviews were conducted by the researcher throughout the semester. These interviews took place at the beginning, midpoint, and end of the fall semester. In addition, principals were interviewed at the same times. Grade level minutes were also studied by the researcher to determine the content of the PLC group meetings. In addition to the hard data gathered, the interviews were recorded with the permission of the participants. All of the data were reviewed and then coded into emerging themes.

Permission was obtained by the superintendent of this district to conduct this study. In addition, the principals of the respective schools gave permission to have this study be conducted in their schools.

### *Research Questions*

The intended contribution of this study was to provide a dual case study that described what occurs with teacher behaviors when a PLC is established in two elementary schools. The research questions underlying and providing a research framework for the study were as follows:

1. How does establishing a PLC change teacher instructional behavior?
2. How does the implementation of a PLC encourage teacher professional growth?
3. How do grade level meetings affect the instructional behavior of classroom teachers?

### *Summary*

Teachers of high quality are those teachers who exhibit behaviors of continuous learning. Although staff development is viewed as a means to improve teacher quality, it is reported that the traditional means of staff development are thin and isolated, and have little impact on the professional growth of a teacher. The Professional Learning Community model is a means of providing staff development to teachers. This study demonstrates how the implementation of such a model in two North Carolina elementary schools affected the behaviors of teachers.

## Chapter 2: Literature Review

### *Overview*

This study was an effort to understand whether the implementation of a Professional Learning Community model would improve teacher quality as determined by teacher behaviors and teacher dispositions. The research proposed herein demonstrated the importance of teacher quality and how it can be improved. It also provided information about the possible changes in teacher behavior as a result of implementing a Professional Learning Community model.

### *The Importance of Teacher Quality and Behaviors*

If all students are to have a chance for success, then each student needs to have a teacher who can teach him/her, regardless of need, background, and diversity, to a high standard (Finance, 2004). The importance of teacher quality is a value held by many: researchers, policymakers, and even teachers agree that teacher quality is of vital importance in the academic growth of the student (Leigh & Mead, 2005). It is evident that parents even share this opinion as they often desire for their children to have a particular teacher they see as high quality (Haycock, 1998).

There is agreement in the research that teacher quality is the key to improving schools (Annenberg, 2004; Marzano, Pickering, & Pollock, 2001). The importance of teacher quality is emphasized in the research that stated no other intervention in the classroom can make the difference that such a teacher makes, so the quality of the teacher is the single most influential factor in student achievement (Goldhaber & Anthony, 2003; McRobbie, 2000; Rice, 2006). There have been a number of studies done to measure teacher quality against student achievement. One study concluded that having a highly effective teacher, versus one of just average quality, would result in a student having an

additional 2 months of academic achievement over an academic year (Teachers Matter, 2004). In Ohio, it was noted that teachers who rate the highest under the Cincinnati Public Schools' teacher evaluation system are also the teachers who show the greatest gains in student academic achievement (Mrozowski, 2002). In Texas, a value-added analysis showed that teacher quality was responsible for up to 18% of test score variance (Teachers Matter, 2004). Another Texas study found that the teacher's expertise accounted for up to 40% of the test score variance in math and reading between students (McRobbie, 2000). Another study found that teacher quality constitutes 40% of the variance with student achievement, more than any other factor (TeachFirst, 2008).

As stated in the research, the effects of teacher quality on student learning are large and measurable. At this critical time in school reform, School Administrators are faced with the dilemma of how to improve teacher quality, so that high student success can be ensured.

#### *How to Improve Teacher Quality*

The American Educational Research Association (2005) (AERA) stated that research on teacher learning and student achievement is divided into two waves of time. This first wave of teacher learning, beginning in the 1960's, focused on teaching skills, such as maintaining student attention, grouping students, management of class time, and other structural and organizational aspects of teaching. The second wave, starting in the 1990s, placed an emphasis on student potential and learning, and suggested that professional development can influence classroom practices significantly. Therefore, as a result, student achievement would improve (AERA).

#### *Effective Staff Development as a Method to Improve Teacher Quality—the Second Wave*

Even though this second wave suggested that professional development can

influence classroom practices, this in itself does not guarantee an increase in teacher quality. Darling-Hammond (1997) stated that it appears that there is no effective system in place to ensure teachers get these skills.

Traditionally, teachers think of staff development as workshops. This suggests that educators learn best when they leave their schools. This is because most traditional staff development is in small attempts, with a narrow vision. These traditional opportunities are thin in content, external of the classroom and isolated in nature. This hit-and-run method, with all presentation and no opportunity for follow-up, does not help teachers master a variety of strategies that are needed today with our diverse population (Darling-Hammond, 1997; Slick, 2001).

These attempts to provide staff development lack supportive cultures, continuity of thought, and collegiality (Morrissey, 2000). While teachers are afforded the opportunity as individuals to go to workshops away from the school campus, they do consider these workshops a waste of time, due to the isolating nature of the workshop, and because it is oftentimes the result of mandated change outside the teachers' interests. Teachers also question the value of such professional development experiences, saying there is no relevance between the material presented and the classroom (EdSource, 2000; Johnson, 2006; U.S. Department of Education, 1999).

Another reason why teachers see these workshops as a waste of time is the lack of follow-through and support (DuFour & Eaker, 1998; Thompson et al., 2004; U.S. Department of Education, 1999). This lack of follow-up prevents teachers from incorporating what was presented in the workshop, therefore also preventing a deep sense of understanding of the material and, thus, it has no impact on teacher quality (McRobbie, 2000). Researchers have argued that even when professional development is

successful at the individual level, its effects will not have long-term staying power if teachers are not supported in ways that promote the application of new knowledge in schools and classrooms and the sharing of knowledge between colleagues (Corcoran, 1995; Scribner, 1998).

However, despite the evidence that this collaboration is beneficial to students and teachers, teachers in many schools continue to work in isolation with minimal collaboration (DuFour & Eaker, 1998; Johnson, 2006). On campus, teachers work in their own isolated classroom, and without the support of their colleagues. They rarely have the opportunity to plan or collaborate with other teachers, to study good teaching, and even talk together about curriculum, instructional strategies, and student needs (Darling-Hammond, 1997). In today's schools, most teachers have only 3-5 hours a week to prepare lessons, and this is usually without the benefit of collaboration with peers (Darling-Hammond). With regards to professional development time, over half of our nation's teachers get a day's worth annually – a stark contrast to other nations, where teachers have 10 to 20 hours a week to work on professional development (McRobbie, 2000).

### *Professional Learning Communities*

Many schools are looking at a strategy—the implementation of a Professional Learning Community. This strategy is seen as a powerful staff development approach and as a systematic approach for improving schools and addressing student needs (Hord, 1997; Carver, 2005). The PLC model actually provides the structure for continual school improvement through continual learning (Morrissey, 2000).

Early research into this model, completed by Hord (1997), showed that attributes of Professional Learning Communities are supportive and shared leadership, collective

creativity, shared values and vision, supportive conditions, physical conditions, people capacities, and shared personal practice. Rebecca and Richard DuFour have written several books and many articles about Professional Learning Communities, and their list of characteristics were also prevalent in the research and often referred to. These characteristics of Professional Learning Communities are shared mission, vision, values, collective inquiry, collaborative teams, action orientation and experimentations, continuous improvement, and results orientation (DuFour & Eaker, 1998).

Rather than promoting individual and expert teachers working in isolation, the PLC model has a more collaborative approach where teachers discuss student achievement information, observe one another teaching, and modify their teaching methods in the light of achievement information (Timperley, 2006). This collaboration and reciprocity are the key pieces, the cornerstones, of the PLC model (Thompson et al., 2004).

The PLC concepts are supported by many education researchers, such as Roland Barth, Doug Reeves, Sharon Kruse, Karen Seashore Louis, Dennis Sparks, Thomas Sergiovanni, Linda Darling-Hammond, Richard Elmore, Richard Stiggins, Milbrey McLaughlin, Carl Glickman, Joan Little, Jonathan Saphier, Fred Newmann, Joan Talbert, Paul Byrk, Shirley Hord, Dylan Wiliam, Michael Fullan, Gary Wehlage, Mike Schmoker, Andy Hargreaves, Robert Marzano, and Phil Schlechy (DuFour, 2007). In addition, many education organizations endorse the PLC concepts. These include, but are not limited to, the National Center for Teaching and America's Future, the National Staff Development Council, the Center for Teaching Quality, and the National Education Association (DuFour, 2007).

It must be noted that while many effective schools incorporate Professional



Learning Community concepts into their institutional culture, those actions may not prove entirely successful over time. This model is a new way of working together collaboratively, to pool the resources and knowledge, and to ensure teacher growth. Failure to provide supportive conditions or any of the other vital parts to a PLC identified by Hord (1997) and DuFour (2007) will result in an incomplete model. DuFour (2007) stated, “you cannot find a study in which it says the way to improve a school is to have teachers work in isolation”.

#### *Shared Vision, Mission, and Values*

Hord (1997) and DuFour and Eaker (1998), pioneers in the research and the evolution of PLCs, shared the opinion that shared vision and values are a vital part of PLCs. The traditional PLC has a shared vision, mission, and values on improved practices and student outcomes (Annenberg, 2004). These shared vision, mission, and values are crucial parts of establishing a Professional Learning Community, as they create consensus on the need for the teachers to grow as learners and professionals (Berliner, 1997; Inpraxis, 2006).

Sharing a vision is not just agreeing with a good idea, it is a particular mental image of what is important to an individual and to an organization, and is the guiding force behind all decisions (Hord, 1997). This mental image creates a collective commitment in the organization, and becomes the integral driving force to the community as a whole (DuFour & Eaker, 1998). The vision gives direction to all of the people in the organization, and establishes goals for which the stakeholders must strive. DuFour and Eaker stated that the vision creates an agenda for action and serves as the guiding principle for the school. The vision also establishes the focus on student learning in DuFour’s model, as the mission statement is given meaning by addressing three

corollary questions: “What do we expect students to learn? How will we know what students have learned? How will we respond to students who aren’t learning?” (Eaker, DuFour, & DuFour, 2002). This idea comes from the business world, as it was stated in Kouzes and Posner’s (1995) text, *The Leadership Challenge*, in which they stated “a vision is an idea and unique image of the future...These visions give focus to the employees” (p. 95).

One of the steps in Team Learning Wheel of collective inquiry explained by Ross, et al. (1994) is entitled shared meaning. This refers to the collective vision and values of the group (DuFour & Eaker, 1998). Vision and values are of equal importance in the Professional Learning Community. Shared vision and values create norms of behavior that the staff shares towards the focus on student learning, and guide decisions about teaching and learning (Morrissey, 2000). Therefore, the vision and values are embedded in the day-to-day actions of the staff, as they set the parameters and guidelines for the decisions that are made daily (Kouzes & Posner, 1995). Louis, Kruse, and Marks (1996) stated that clearly shared values and norms, collectively reinforced, increase the likelihood of teacher success (cited in DuFour & Eaker).

These shared values make a significant difference in work attitudes and performance: they foster strong feelings of personal effectiveness, promote high levels of loyalty, promote strong norms about working hard, and foster teamwork (Kouzes & Posner, 1995). As a result, the system itself becomes more effective (Zmuda, Kuklis, & Kline, 2004).

In the education world, DuFour and Eaker (1998) contended that the vision and values collectively distinguish an adequate school from an outstanding school. He states “what separates a learning community from an ordinary school is its collective

commitment to guiding principles that articulate what the people believe...they are integral to a learning community” (DuFour & Eaker, 1998, p. 8). Other researchers take a more basic approach: Timperley (2006) stated that these shared norms and values are simply that all teachers share the belief that all students can learn.

### *Shared and Supportive Leadership*

As stated earlier, Hord (1997) considers Shared Leadership to be a component of a Professional Learning Community. Supportive and shared leadership allows for all to grow professionally: principals work with teachers as peers and colleagues, and treat them as such (Eaker et al., 2002; Hord).

No longer can leaders be thinking in a top-down model—they have to be seen as democratic, participatory leaders who lead by following, serving, and inviting others to share in the leadership. However, it is only with the support of the organization’s leaders that a school can move into a PLC model (SEDL, 1997). In a PLC, supportive leadership means that administrators, along with teachers, question, investigate, and seek solutions for school improvement. All staff members grow professionally, and administrators display a willingness to participate in collective dialogue, sharing and learning, without dominating the conversation (Morrissey, 2000). Teachers take on leadership roles in a PLC to move schools forward.

### *Supportive Conditions*

Although not recognized by DuFour and Eaker (1998) as one of the essential characteristics of a PLC, Hord (1997) stated that supportive conditions are necessary for the implementation of such a model. There are two components to supportive conditions. One component refers to the physical and tangible conditions that allow the staff to come together—the when, where, and how (Hord). Researchers show agreement of tangible

supportive conditions. Louis et al. (1996) said these are physical factors: time, size of the school, physical proximity of staff to one another, communication structures. This time for joint planning is another of the steps in the Team Learning Wheel defined by Ross, Smith, and Roberts (1994) (DuFour, 1998). Supportive conditions also refer to the intangibles: the human qualities and capacities of the people involved, as stated by Louis et al. (cited in Hord, 1997).

These supportive conditions are vital to allowing for the collaboration and collegiality of the team members, and fall under the responsibility of the school leader. They show a commitment on the part of the leader towards the implementation of a Professional Learning Community. Creating supportive conditions is a key to maintaining the growth and development of a community of professional learners (Huffman & Hipp, 2003; Morrissey, 2000). Supportive conditions also refers to the culture of a School And whether or not there is an atmosphere of trust, and a sense that all staff members are unified towards a common vision. In order to successfully have this reflection and action, it is necessary that teachers build a culture of respect and trust, and an increased commitment (Morrissey, 2000). Mutual respect and understanding between the team members are fundamental to success, along with having a shared vision and shared values. Trust is at the heart of fostering collaboration. In *The Leadership Challenge*, the authors stated that trust is the central issue in organizational effectiveness (Kouzes & Posner, 1995).

#### *Collective Learning and Application*

Schmoker (2004) stated that collaboration “is imperative as we can no longer ignore that teacher collaboration improves student performance” (Schmoker, p. 431). There is a wealth of research supporting the benefits of collaboration, which states that

teachers work more effectively when they are able to work collaboratively. The Professional Learning Community helps to support teachers and administrators through its emphasis on collegiality and collaboration (Morrissey, 2000). The members of the collaborative teams, which are a keystone of the PLC model, work together to achieve the common goals to support the common vision (Eaker et al., 2005). In this collaborative climate, teachers can use data and information to positively affect professional learning, educational change, and school reform (Mason, 2003). This culture of collegiality and collaboration helps to build the “productive relations that are required to collaborate, partner, reflect, and also supports teachers who work with students requiring the most assistance” (Annenberg, 2004, p. 1). This collaboration means that teachers observe and react to one another’s teaching, curriculum, and assessment practice, and engage in joint planning and curriculum development (Timperley, 2006). As a result, this collaboration helps and motivates the teacher to evaluate and reflect upon his or her own practices, and look for ways to improve instruction so that he or she can reach all children (DuFour, 2003). This constant evaluation, reflection, and looking for ways to meet instruction meets one of DuFour’s criteria for a PLC—continuous improvement.

In a PLC, everyone looks at all outcomes and asks themselves and their team members how to improve their practices so that student achievement will improve (Annenberg, 2004). The emphasis is on the School As a whole entity, not as a group of individual teachers. In such a community, the common good takes priority and the teachers work together in collaborative teams to achieve their collective purpose of learning for all (DuFour, 2004b; Hord, 1997). This process of inquiry “nurtures the growth and change necessary for improving the effectiveness of teachers” (Morrissey, 2000, p. 20).

Teams are a central component of the PLCs. It is during the team meetings that teachers ask crucial questions about learning, analyze student achievement, and create strategies for improving results (DuFour, 2004b). In this way, these teams are actually learning teams for the teachers themselves. Through these teams, teachers support each other as they improve their practices (Richardson, 2001). In addition, the teachers recognize the benefits of working collaboratively in teams: 63% of teachers in an NFIE survey see this collegial assistance as of vital importance throughout their careers (Renyi, 1996).

It is clear that having support systems in place for educators is a critical part of student success (Morrissey, 2000). In Kouzes and Posner's (1995) research, they studied 500 cases of achievement, and not one occurred without the active involvement and support of many. These teams, functioning as support systems, work together towards the ultimate goal of the vision. People in a Professional Learning Community continually seek new methods, they reflect on results, and they have a desire to grow and learn (DuFour & Eaker, 1998). In a PLC school, the teachers and administrators are actively involved in gathering information, making decisions, and implementing those decisions.

One reason that PLCs sometimes fail is the lack of agreement concerning the definition of collaboration. While the PLC model encourages collaboration in dealing with student performance, assessment, and teacher growth, there are schools that support lighter, less intense forms of collaboration. These can include simple congeniality, or having agreement on building operations and guidelines. This light collaboration does not encourage teachers to grow, and does not affect professional practice (DuFour, 2003).

#### *Shared Personal Practice and Collective Inquiry*

Although recognized as separate components of PLCs by DuFour and Eaker

(1998), Huffman and Hipp (2003) believed that there is “no line between shared personal practice and collective inquiry, and that the elements cannot be separated” (p. 24). Shared personal practice and collective inquiry are recognized as part of what happens in the collaboration, as the collaboration allows for the shared personal practice, collective inquiry, and action orientation: all components of what both Hord (1997) and DuFour and Eaker (1998) have recognized as an attribute of a PLC.

Reference has previously been made to the Team Learning Wheel established by Ross et al. (1994), with two of the steps being shared meaning and joint planning (DuFour & Eaker, 1998). The remaining two steps, public reflection and coordinated action, are an integral part of what happens in the small groups as part of the shared personal practice and collective inquiry.

This collective inquiry moves the teacher from the role of a teacher to that of also being a learner. The teacher is reflecting, pursuing, and experimenting – in essence, the teacher is working on learning to teach more effectively. This is significant, because it implies that “teacher development opportunities must become integral to the restructuring of schools” (Lieberman, 1995, p. 3.)

These collaborative teams allow for the opportunity for shared personal practice. The teachers trust one another, and are comfortable in sharing successes, ideas, and failures, all to help student achievement. This shared knowledge is critical, as when it is applied and reflected upon, the teachers get a “deeper level of understanding that enables them to adapt new practices to their own setting” (DuFour, 2004a, p. 3). A Professional Learning Community is peers helping peers. What are the teachers discussing to help each other? This could include “sharing information, seeking new knowledge, skills, and strategies....peer observations to offer skills, knowledge and encouragement, feedback to

improve instructional practices, sharing of instructional outcomes, coaching, and mentoring” (Huffman & Hipp, 2003, p. 20). In addition, they work together to solve problems and improve the learning opportunities for students. As a result, this collaborative process motivates the teachers to continually learn, grow, and improve (DuFour & Eaker, 1998; Stiggins, 1999). The focus is always on student results, but the establishment of a Professional Learning Community creates the emphasis on building the collective capacity of the group more than the knowledge and skills of individuals (DuFour, DuFour, Eaker, & Many, 2006; DuFour & Eaker; Stiggins, 1999).

#### *Staff Development in a Professional Learning Community Model*

Having the shared vision and values, important cornerstones of the PLC model, is an element to be considered when planning for successful staff development (Zmuda et al., 2004). Zmuda stated, “for staff development to be effective, it must be an integral part of a deliberately developed continuous improvement effort” (p. 5). High quality staff development is an important component towards improving teaching and thus student achievement (Guskey & Sparks, 1996). The teaching practices presented in such events are the most immediate outcome of staff development, and these are “the primary factor influencing the relationship between staff development and improvements in student learning” (Guskey & Sparks, p. 4). If these teaching practices boost student achievement, how can we ensure that teachers implement these practices, and even desire to?

Rather than having staff development presented in a string of isolated workshops, the staff development in a PLC model is a “collective study of the teaching and learning process” (DuFour & Eaker, 1998, p. 266). The emphasis shifts towards “building the capacity of collaborative teams of teachers to take responsibility for their own learning” (DuFour, 2007). This strategy is seen as a powerful staff development approach (Hord,



1997). This PLC model is supported by researchers for effective professional development (Annenberg, 2004). Research shows that when teachers are given a voice and the opportunity to engage in meaningful collaboration and professional dialogue rather than attending a fragmented event, a new energy and commitment is displayed by the teacher (Slick, 2002). DuFour (2000) stated that “the best staff development will represent a focused, results-oriented, and sustained effort to build the collective capacity of a faculty” (p. 3).

Therefore, the best professional development does not occur in the isolated workshop, but in the workplace itself, because teachers work together to address the issues and challenges relevant to them (DuFour, Eaker, & DuFour, 2005). It is only with the support and positive interaction with colleagues that teachers gain new insights and understandings about their practices (Morrissey, 2000). Hughes (2006) showed that this support and interaction is important, because this professional collaboration gives teachers a greater capacity to improve student learning. In addition, many researchers have concluded that teachers see themselves as continual learners, and that much of this learning comes from interaction with their peers in professional discussion (EdSource, 2000). DuFour and Eaker (1998) supported this conclusion by saying that the importance of collaborative teams cannot be overstated and exaggerated, and that effective staff development is a collective study rather than a series of presentations.

The National Commission on Teaching and America’s Future stated “professional development can be embedded in teachers’ daily work through joint planning study groups, peer coaching, and research” (Darling-Hammond, 1997, p. 4). In addition, one of the principles of high quality professional development, as identified in the Goals 2000 (2001) legislation, stated that professional development “promotes continuous inquiry

and improvement embedded in the daily life of schools” (p. 2). This belief is echoed in Timperley’s (2006) research, as she said that “effective professional development—professional development that improves student achievement—takes place within a strong Professional Learning Community” (p. 9). This concept of professional development embedded in the daily work of teachers is also recommended as a workplace condition to strive for (Johnson, 2006).

Many schools approach professional development by encouraging staff members to earn degrees or attend a potpourri of workshops, but the flaw is that individual learning does not ensure that the organization as a whole will learn, or that it will help the organization achieve its vision (DuFour & Eaker, 1998). The PLC model addresses the sustained effort because in the PLC model, staff development is thought of as being in the workplace, and is a regular, if not daily experience (DuFour & Eaker). In essence, it can be considered job-embedded. The educators in a School are responsible for their ongoing professional development (Morrissey, 2000). The process of staff development provides the coaching critical to mastery of new skills, results in reflection and dialogue, sustained over a considerable amount of time, and is evaluated at different levels (DuFour & Eaker). This job-embedded method of staff development is the optimum professional development situation, because the teachers work together to address the issues and challenges that are relevant to their situations (DuFour et al., 2005). This is also an optimum situation because of the long-lasting effects it provides, rather than the short-term effects of traditional staff development (Lewis et al., 1999).

This model also optimizes the time spent on professional development, as teachers have the opportunity to learn, implement, and reflect upon new ideas together on a continual basis, with follow-up, and not in an external setting. (Louis & Marks, 1996;

Oakley, 2000). It is a time to share strategies, success stories, and difficulties (Stiggins, 1999). The small, supportive groups found in the Professional Learning Communities reduces the sense of isolation so prevalent among schoolteachers and gives individual teachers an opportunity to call on team members for assistance (DuFour & Eaker, 1998). In America, educators struggle with moving away from the tradition of isolated staff development towards the collaborative model. In Asia and Europe teachers are often provided with more opportunities for job-embedded forms of staff development than their American counterparts (Slick, 2002). Some reformers have even suggested that at least 20% of teachers' work time should be given to professional study and collaborative work (Slick). A 1998 survey, conducted by the National Center for Education Statistics, supported that peer collaboration is an integral part of teacher learning. It also revealed that this increased collaborative time was associated with improvements in teaching because 52% of the teachers who participated stated that it was the participation in this collaborative model that improved their teaching (Lewis et al., 1999). In addition, 63% strongly agreed that the ideas shared during this time were helpful in their teaching (Lewis et al., 1999). Therefore, the new model for staff development should be a collaborative, learning-centered model (Inpraxis, 2006).

#### *How a Professional Learning Community Affects Teacher Quality*

The importance of staff development in improving and maintaining teacher quality is recognized by the Goals 2000 (2001) legislation. In this document, principles of high quality staff development are listed. Two of these principles are that the staff development “promotes continuous inquiry and improvement embedded in the daily life of schools” and “focuses on individual, collegial, and organizational improvement” (Goals 2000, p. 2).

The implementation of a PLC model has many benefits for the staff members, which include a “reduction in isolation of teachers, increased commitment, shared responsibility, powerful learning, higher and higher morale” (Hord, 1997, p. 33). PLCs work because they “produce teachers who constantly improve teaching and learning throughout the school” and also encourage a shared set of beliefs and a focus on academics (Saphier, King, & D’Auria, 2006). This collaboration is a powerful form of professional learning because when teachers work together to evaluate each other’s work, accept feedback, evaluate student work, and plan, they are engaged in highly effective professional development (Huffman & Hipp, 2003; McTighe & Emberger, 2006; Renyi, 1996; Zmuda et al., 2004). In 2003, Marilyn Holham stated, “who knows more about lessons than teachers? They are the experts. Having an opportunity for them to give each other feedback is the highest form of professional development” (Holland, 2006, p. 1). The implementation of a learning community leads to increased confidence, higher quality solutions, and the ability to support each other’s strengths and accommodate weaknesses (Inpraxis, 2006; Schmoker, 2004). This learning community also enables the teachers to see each other as valuable learning resources, and they will learn from each other and capitalize on each other’s strengths and weaknesses (Richardson, 2001).

Establishing a learning community offers a means to help teachers remain happy with their chosen career paths. Sharing their insights and goals with a broader public enables participants to grow professionally through collaboration (Slick, 2002). It is also noted that many teachers and administrators find the opportunity to meet, discuss, and reflect with colleagues, a welcome change from the traditional types of staff development (Annenberg, 2004).

This dialogue between the teachers becomes an integral part of school change

(DuFour & Eaker, 1998). This is because if teachers need to be reflective on their teaching and learning, they need to understand what they are already doing, and have opportunities to share and dialogue with their peers (Oakley, 2000). As Newmann (1999) stated, “change in education comes about only when teachers are helped to change themselves” (as cited by Huffman & Hipp, 2003, p. 4). Teachers are helped to change themselves when given a framework, such as the collaboration in a Professional Learning Community, to succeed. The sharing of insights and goals with others enables teachers to grow professionally through collaboration (Slick, 2002).

Teachers also report the benefits they have received from participating in a learning community framework. One example is a 1998 survey completed by the U.S. Department of Education, which was the Teacher Survey on Professional Development and Training. One result of this survey was that teachers stated that the collaboration was important for their ongoing learning, and believed that the increased collaboration time resulted in a significant increase and improvement in their teaching (U.S. Department of Education, 1999).

After a 2-year implementation period of the PLC model in Wisconsin, more than half of the teachers involved said that they felt they each had gained “an authentic voice, and felt more confident in their abilities, along with being certain of their rights to speak with colleagues” (Slick, 2002, p. 3). Slick went on to say that through the experience of working in a Professional Learning Community, the teachers gained energy, and became more enthusiastic about teaching (Slick). Hence, a cycle begins: a teacher with a greater sense of enthusiasm will have a strong return on the staff development activity, meaning that there is a bigger chance that some of the new ideas presented and discussed will be implemented in the classroom (Pfaff, 2000).

Teachers learn together, apply what is learned, reflect on the process, and discuss the results. This creates a continuous circle of learning. Adults also learn most effectively when they share the lessons they have learned (Ingvarson, Meiers, & Beavis, 2005; Stiggins, 1999). Lezotte (2005), a leader in the Effective Schools Movement, offered a list of six beliefs. One of these beliefs was that “the capacity to improve a School Already resides in a school” (Lezotte, p. 187). Translated, this means that teachers can improve, and the best way is to give them a chance to learn from each other. In a study completed by Ingvarson et al., the researchers concluded that there was a strong positive correlation between a Professional Learning Community and the reported positive impact on teacher knowledge and practice.

Other researchers have supported that the process of teacher learning is best supported in these collaborative groups. The learning, reflecting, and the experimentation of new ideas improve teacher quality because they allow the teacher to refine their skills and strengthen their confidence and performance (Darling-Hammond & Baratz-Snowden, 2007; U.S. Department of Education, 1999).

### *Summary*

There is agreement in the research that teacher quality is the key to improving schools (Annenberg, 2004). Although we know that the knowledge and skills the teacher brings to a classroom are vital to student success, it appears that we have no ongoing system in place to ensure teachers get, refine, and share these skills other than professional development. Too often, professional development is presented in isolation, in the form of workshops and courses, and it maintains a distance from the classroom.

The PLC model goes against tradition, having collaboration and reciprocity as the key component of staff development. In this setting, teachers can learn best from other

teachers as they form learning teams for the teachers themselves. In a PLC model, staff development is a daily experience in the workplace.

## Chapter 3: Methodology

### *Introduction*

According to Creswell (2003), a case study is one in which “the researcher explores in depth a program, event, an activity, a process, or one or more individuals. The case is bounded by time and activity” (p. 15). For this study, the case study design explored the two elementary schools as they moved into the PLC model. This study was conducted through detailed, in-depth data collection with multiple sources of information including principal interviews, survey, group interviews of teachers, and a review of grade level minutes.

The approach that was used for coding the qualitative data provided by the interviews and grade level minutes is Renata Tesch’s interpretational analysis. This was defined as the process of examining the data collected closely to find themes and patterns that can be used to describe the phenomena (in this case, the effects of implementing the PLC) being studied (Gall et.al., 2003). The intended contribution of this study was to determine how the implementation of a PLC affected teacher instructional behaviors. This chapter describes the methodology used to acquire and analyze the data to determine any differences in teacher instructional behaviors following the implementation of the Professional Learning Communities (PLC) model.

### *Research Questions*

The research questions underlying and providing a research framework for the study are as follows:

1. How does establishing a PLC change teacher instructional behavior?
2. How does the implementation of a PLC encourage teacher professional growth?



3. How do grade level meetings affect the instructional behavior of classroom teachers?

### *Participants*

The participants in this study included all full-time certified classroom teachers at two North Carolina elementary schools. These schools were located in the central region of the state. These teachers were assigned regular, full day classrooms. The participants in this study were employed at their respective schools for at least the 2007-2008 and 2008-2009 school years.

Additional demographic, performance, and other relevant data published in the North Carolina School Report Card for each school were included in this study. Other data, such as student demographic data, were provided from the SIMS office in each school. This was done in an effort to show differences between the two schools, along with providing a picture of the school's culture and current reality. This study is of interest due to the leadership and the cultural differences between the two schools. School B was in existence for over 80 years and received various awards and recognitions, including the "Triple S" Safe School Award, "School of Distinction," and "School of High Growth." In addition, a large amount of community support was evident in the school's primary fundraiser, which not only raised a substantial amount of money but utilized many volunteers from the community to make it succeed. In addition, School B had low teacher turnover and a consistent student population. School A was a new school in comparison, and had not established a reputation through ABC designations on a consistent basis. It experienced higher teacher turnover than School B, especially after the first year. School A's free and reduced lunch population was 34%, in contrast to School B's 18%.

The teacher turnover, the school histories, and the difference stated in the tables above, along with the difference in leadership experience of the principals, may have contributed to varying levels of PLC implementation. While both principals committed to implementing the PLC model, the researcher found out through use of the survey to what extent the model was actually implemented. In addition, any differences in teacher attitude and behaviors towards PLC implementation were noted.

### *Overview of Instruments*

This study design allowed the researcher to assess growth in teacher quality using several instruments. The Professional Learning Community Assessment (PLCA) was given to the teachers at the beginning of the study to measure the depth of implementation of the PLC model (see Appendix A). In addition, group interviews were conducted by the researcher. These interviews took place with three grade levels from each School. At the beginning, middle, and end of the semester using the researcher's interview protocol (see Appendix B). Interviews with the principals took place at those same times using the principal's interview protocol (see Appendix C).

Grade level minutes from the three teams selected to participate in the study were reviewed by the researcher. These were analyzed to identify common themes of what was occurring in these grade level meetings following the implementation of a PLC model.

In addition, a checklist form (Appendix D) was completed by the researcher at each site at the time of the first principal interview to collect information on the setting of each school, the appearance, the atmosphere, along with the researcher's impression of the schools. This checklist was used by Faris (1999) for the purpose of creating an image of the school's reality.

### *Principal Interviews*

Gay, Mills, and Airasian (2006) stated a number of advantages with the interview study. These advantages included the flexibility, the ability to gain information that may not be gathered by a survey, and the ability to ask probing, follow-up questions (Gay et al.). Another advantage, noted by Creswell (2003) was that participants can provide historical information (p. 187). Therefore, this method was chosen by the researcher to gain information from the school principals on the implementation of PLCs in their schools, along with the changes they perceived, if any, in their buildings as a result of the implementation.

The researcher created a structured interview protocol (Appendix C) to be repeated for the three interviews for each principal. These questions were designed to encourage discussion and allow for the respondents to be reflective about the process.

The responses made were recorded with a recording device (with permission of the principal and the participants), but were also recorded manually by the researcher. These data were then analyzed, and each comment was coded. By doing this, common themes naturally appeared. This coding and natural appearance of themes is a data analysis activity used frequently by qualitative researchers (Gay et al., 2006).

### *Group Interviews*

Qualitative researchers are “finding that the interactions among the participants stimulate them to state feelings, perceptions, and beliefs that they would not express if interviewed individually” (Gall et al., 2003, p. 238). With focus groups, the researcher can observe the interaction within the group, and it is this interaction that can provide a rich amount of data on behaviors and attitudes towards PLCs. These data would not be available in individual methods of research, such as an individual interview or survey.

For this study, three grade levels from each school participated in these focus groups. These three grade levels were chosen randomly, by flipping a coin to choose one grade level of each pairing: kindergarten and first, second and third, fourth and fifth. In this way, the researcher ensured that a range of grade levels were represented. These grade levels met as individual grade levels during their planning time three times during the semester (beginning, middle, end). The researcher established the focus group protocol (Appendix B) and the same protocol was used each time. The size of the groups varied according to the number of teachers assigned to that particular grade level at that site.

The responses made were recorded with a recording device (with permission of the principal and the other interview participants), and were also recorded manually by the researcher. These data were then analyzed, and each comment was coded in accordance with the steps in Tesch's (1990) interpretational analysis. By doing this, common themes naturally appeared.

### *Survey*

The PLCA (Professional Learning Community Assessment) was given to teachers at the beginning of the 2008 fall semester (see Appendix A). This survey addressed the five dimensions of a PLC. The reliability of this survey was tested using Cronbach's Coefficient Alpha. The span over the five coefficients was .83 to .93, giving it a high level of internal consistency. This survey was given via the Zarca online system. Respondents were asked to answer items 1-37 by selecting the response that best described their perceptions of their school. Responses were ranked as follows:

SA= Strongly Agree (4)

A= Agree (3)

D= Disagree (2)

SD=Strongly Disagree (1)

By administering this survey, the researcher gained baseline data explaining to what extent the five dimensions of the PLC are already present in the schools. The five dimensions (shared and supportive leadership, shared values and mission, collective learning and application, shared personal practice, and supportive conditions) were each a part of the survey itself. It also enabled the researcher to establish data based on the perceptions of the teachers regarding the function of the organization.

#### *Grade Level Minutes*

Minutes of the various grade level meetings were also studied by the researcher. These minutes provided documentation and reflected what was being discussed and decided upon at these meetings. The format used for these grade level minutes was established by the principal at each of these schools, as providing a set template would limit the amount of information given in the minutes.

#### *Triangulation of the Data*

The data from the grade level meetings, the group interviews, and the principal interviews were used to validate the results of the survey. Each of the research questions stated above can be answered by the triangulation of all of the data collected.

Qualitative data analysis consisted of starting with a large amount of data, then breaking it down into smaller units. From there, the researcher reorganized the data into themes (Gay et al., 2006). The researcher used Creswell's (2003) recommended six generic steps for organizing the data. These steps were preparing and organizing the data, reading through the data, beginning detailed analysis with a coding process (for this the researcher will use Tesch's (1990) process described below), using that process to

generate categories and themes, advancing how these themes will be represented in the analysis, and making an interpretation of the data (Creswell). This final step (the interpretation of the data) was the final outcome of the research and provides a learning point for the reader.

The researcher used Renata Tesch's (1990) process for coding the data. This process consisted of eight steps to analyze the data. The eight steps are to read over the transcriptions to get an overall picture, read over several documents and write thoughts about the underlying meaning in the margins, make a list of all topics and cluster them, abbreviate the topics as codes and put the codes next to the data, find the most descriptive wording for the topics and turn them into categories, alphabetize the final category abbreviations, assemble the data material for each category, and recode the existing data if necessary (Creswell, 2003). The researcher used this process for the grade level minutes, the group interviews, and the principal interviews.

#### *Assumptions of the Study*

The following assumptions were considered in the study:

1. All teachers and principals were honest in their feedback.
2. Grade level minutes reflected the true contents of the meetings.

#### *Limitations of the Study*

This study took into account teachers' perceptions of their individual professional development and quality. Another limitation to this study is that it assumed that teachers would accurately report their perceptions of planning and professional development, and the effectiveness of such.

One significant disadvantage, as stated by Gall et al. (2003) is that these results may not be generalized to other situations. While limited generalization can take place,

the results presented in this paper are individual to these schools.

### *Delimitations of the Study*

Time was a delimitation as the researcher controlled the length of the study. In addition, teachers gained a year's experience along with all of the learning opportunities that took place within that time. Another delimitation was that only two schools were used for the study.

### *Summary*

The research showed that teacher quality is believed to be the most critical factor in student achievement. By having teachers work together collegially and collaboratively in a PLC model, the teachers have the opportunity to learn from each other and, thus, have the opportunity to improve their quality of teaching. The purpose of this study was to determine if the implementation of a Professional Learning Community model in two North Carolina elementary schools would impact teacher instructional behaviors and, thus, impact one aspect of teacher quality.

## Chapter 4: Results

The purpose of this study was to describe the effect on teacher behaviors by the establishment of Professional Learning Communities in two different elementary schools. The participants in the study included full-time certified classroom teachers in two North Carolina elementary schools. Table 8 shows the number of teachers who participated at each of the school sites. These schools were located in the central region of the state. These teachers were assigned regular, full day classrooms.

Table 8

### *Number of Participants in the Study*

<i>Data source</i>	<i>School A</i>	<i>School B</i>
pre survey	23	25
post survey	21	19
interview 1	25	21
interview 2	25	21
interview 3	25	21

The models utilized to process the data were Creswell's (2003) six generic steps for organizing the data, along with Tesch's (1990) eight step process for coding the data. Data were collected through both qualitative and quantitative means. Qualitative data were collected through group interviews of grade levels, principal interviews, and grade level minutes. In addition, pre and post surveys were administered to the staff of each school.

The research questions underlying and providing a research framework for the study were as follows:



1. How does establishing a PLC change teacher instructional behavior?
2. How does the implementation of a PLC encourage teacher professional growth?
3. How do grade level meetings affect the instructional behavior of classroom teachers?

### *Impressions of School A*

A checklist form (Appendix D) was completed by the researcher at each site at the time of the first interviews to collect information on the setting of each school, the appearance, the atmosphere, along with the researcher's impression of the schools. This checklist was used by Faris (1999) for the same purpose.

The researcher arrived at School A for the first round of interviews and found the lobby to be clean. Clear signage was available directing visitors to the office. The researcher was not greeted, but instead signed in and asked the receptionist where to set up. The receptionist then contacted the assistant principal, who directed the researcher to set up in the curriculum room. The curriculum room was a large planning room in which the grade levels met with the curriculum coordinator and others to plan. The table was large enough for all participants to sit around comfortably, and the room was located at the end of a hallway, which provided privacy and minimal disruption. The principal introduced the researcher at the beginning of each of the first round of interviews. After each of these introductions, the researcher asked the principal to leave the room. At that point, the researcher explained the process to the participants. She also distributed initial permission forms to each of the participants and told the teachers that what was shared in the interviews would remain confidential.

Anecdotal notes were taken throughout the interview process. These notes

documented the interaction of the participants. At School A, the grade levels were noticeably hesitant to contribute to the conversation during the first interview for each grade level. At the time of the second interview, the researcher again assured the confidentiality of the participants, in hopes that there would be more participation. During the third interview, the researcher had to state this again in one of the grade levels in the middle of the interview due to the hesitation in participation. In all three grade levels, one person dominated the conversation, while others indicated agreement or remained silent. The grade level participants at this School Also veered from discussing the question until redirecting themselves, or by having the researcher state the next question during a pause in the conversation.

#### *Data Analysis of Grade Level Interviews in School A*

In order to understand the depth of PLC implementation at both of these schools, the researcher coded the qualitative data into themes, and matched the themes with the five dimensions of the PLC. The focus group interviews were audio taped and transcribed by a secretary. The researcher read the script several times and color-coded the manuscripts for themes. The transcripts were not returned to the participants for verification.

#### *Dimension One in School A: Shared Vision, Mission, and Values*

Hord (1997) and DuFour and Eaker (1998) shared the opinion that shared vision and values are vital parts of PLCs. The vision gives direction to all of the people in the organization, and establishes goals for which the stakeholders must strive. DuFour and Eaker stated that the vision creates an agenda for action and serves as the guiding principle for the school. Table 9 shows the results of the PLCA survey given to the teachers at School A with regards to shared vision, mission, and values.

Table 9

*Results of Survey Questions Aligned with Dimension One in School A; Results Indicated in Frequency*

Themes	Pre Survey N=23					Post Survey N= 21				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Accessibility to information	0	2	14	7	0	0	3	16	1	1
Collaboration in developing shared values	0	3	17	3	0	0	1	17	3	0
Shared values guide decisions	0	3	17	3	0	0	1	19	1	0
Shared focus on student learning	0	1	17	5	0	0	2	15	4	0
Decisions aligned with the school's values and vision	0	1	17	5	0	0	1	15	5	0
Collaboration in developing shared vision	0	2	17	4	0	0	2	17	2	0
School goals focus on student learning	0	1	15	7	0	0	4	11	6	0
Policies aligned to vision	0	0	16	7	0	0	0	17	4	0

The responses to the majority of the questions remained the same, with respect to overall agreement. The data show that on the pre survey 171 of 184 (93.0%) total responses were in agreement and 153 of 167 (91.6%) total responses were in agreement on the post survey. The tendencies in this dimension of the survey were decreases in the percentages of participants in the pre survey answering strongly agree from 22.3% to 15.5% in the post survey and for the percentages of participants who disagreed to have very little change. When asked about the school focusing on student learning 4 of 21

(19.1%) disagreed with the statement on the post survey while 1 of 23 (4.3%) disagreed on the pre survey.

The principal was inconsistent in describing her vision throughout the three interviews. At the beginning of the year, the principal at School A stated that the vision of her school was to be a community, and that failure was not an option. By the time of the second interview, the principal changed to say that her vision was to develop the “Professional Learning Community way of thinking” so that all children would be looked at as individuals (Anonymous, personal communication, October 14, 2008). The principal stated this again at the time of the third interview, although she did state that her primary focus was to ensure that everyone was focused and working together. She stated that her “school was splitting up” due to discussion about a new school opening up and other external issues, but that she wanted to keep the importance on learning, and to keep everyone focused (Anonymous, personal communication, January 7, 2009).

Teacher interview data inconsistently supported the survey data regarding the school goals. The teacher interviews supported the data in the survey in that teachers believed that the goal or vision of school was the implementation of the curriculum, and this was never mentioned by the principal. However, the decline in the survey item about “school goals” was not supported because at the end of the study, there was strong belief in that “ensuring the success of each child” was the vision of the school. Table 10 shows the frequency of themes regarding the vision of the school in the teacher interviews.

Table 10

*Frequency of Themes for Questions Aligned with Dimension One in School A*

Themes	Interview		
	<u>1<sup>st</sup></u> N=25	<u>2<sup>nd</sup></u> N=25	<u>3<sup>rd</sup></u> N=25
Improving student achievement in two subgroups	2	2	1
Vision is implementation of curriculum	3	1	7
Student environment (promoting health, providing a caring environment)	0	4	0
Improving communication among all stakeholders	1	4	3
To ensure the success of each child	2	0	10
Lifelong learners	2	1	0
Unknown	1	3	2

Although the survey results indicated that the teachers had an understanding of the school vision and goals, the interview results suggested otherwise. Grade level teachers had difficulty answering these questions, resulting in uncomfortable laughter or silence in most of the grade level interviews. In the fourth grade, one of the teachers recited the school system vision and no other input was given during the second and third interviews. In Table 10, “unknown” refers to those occasions in which teachers, when asked what the vision of the school was, would say they did not know.

The decline in frequency of “agree” with “school goals” was also not supported by the grade level minutes. These show (see Table 19) an increase in the time student needs were discussed in grade level meetings. At the time of the pre survey, discussion of

student needs made up 3.6% of the total meeting time, and this rose to 9% by the latter half of the study.

*Dimension Two in School A: Shared and Supportive Leadership*

In a PLC, supportive leadership means that administrators, along with teachers, question, investigate, and seek solutions for school improvement. All staff members grow professionally, and administrators display a willingness to participate in collective dialogue, sharing and learning, without dominating the conversation (Morrissey, 2000). Teachers, with the support of the School Administrators, take on leadership roles in a PLC to move schools forward. Table 11 shows the results of the PLCA survey given to the teachers at School A with regards to shared and supportive leadership.

Table 11

*Results of Survey Questions Aligned with Dimension Two in School A; results indicated in frequency*

Themes	Pre Survey N=23					Post Survey N= 21				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Opportunities for staff to observe peers	0	1	18	4	0	1	1	18	1	0
Leadership is promoted among staff	0	3	16	4	0	0	1	16	4	0
Staff is involved in making decisions	0	3	12	7	1	0	1	16	4	0
Principal uses staff input to make decisions	0	4	15	4	0	0	1	14	6	0
Staff has access to information.	0	2	13	8	0	0	2	17	1	1
Principal is proactive	0	1	16	6	0	0	2	16	3	0
Staff is enabled to initiate change	0	3	18	2	0	0	2	16	3	0
Principal shares responsibility	0	1	16	5	1	0	1	16	4	0
Principal shares authority	0	5	13	4	1	0	3	14	4	0
Decision making takes place throughout school	0	3	12	8	0	0	2	17	2	0

Responses on the shared and supportive leadership dimension from a global view indicated that the vast majority of the respondents on both the pre survey and post survey were in agreement with the 10 statements. The data showed that on the pre survey 201 of 227 responses (88.5%) were in agreement. On the post survey, the percentage increased slightly based on 192 of 209 positive responses (91.9%). Two statements that related to the sharing of authority by the principal and using input from the staff to make decisions accounted for over half the reduction of negative responses.

The principal interviews supported these trends. When asked about how the talents of teams and individuals were developed in her school, the principal at School A said that individuals “have a way of rising” to leadership positions (Anonymous, personal communication, October 14, 2008). She added “I think those teachers that want to lead will, and there are those that just kind of stay in their classroom” (Anonymous, personal communication, October 14, 2008). At the time of the last interview, the principal took a more assertive role to developing leadership and stated “I observe who is taking responsible roles and I feed that – I took a team to a PLC workshop, and I had them teach teachers” (Anonymous, personal communication, January 7, 2009). She also stated that she had gotten feedback from teachers who said they felt more empowered and responsible. The principal said that she had strong people doing great work, and that she was “building leaders – empowering others to be leaders” (Anonymous, personal communication, January 7, 2009). She also made reference at the time of the third interview to having teachers provide staff development at the school level. As the principal moved toward a more empowering and shared leadership model throughout the semester, the teachers reflected that new understanding with the PLCA survey. No mention was made by the principal of teachers observing each other.

Teacher interviews also supported the decrease in the frequency of negative responses. There was mention of increased communication between teachers and administration by the time of the third interview. Growth in the area of administration being “approachable and helpful” was also noted. The teacher interviews also supported the increase in negative responses in the statement concerning peer observations, as the frequency dropped from a 4 at the time of the first interview to a 0 at the time of the second and third interviews. Table 12 shows the frequency of themes regarding shared and supportive leadership in the teacher interviews.

Table 12

*Frequency of Themes for Questions Aligned with Dimension Two in School A*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=25</u>	<u>2<sup>nd</sup></u> <u>N=25</u>	<u>3<sup>rd</sup></u> <u>N=25</u>
Leadership opportunities available to staff	3	3	2
Good communication	4	4	6
Visible	4	4	0
Allowed to do peer observations	4	0	0
Approachable/helpful	4	10	7

However, there was not a strong theme developed regarding staff leadership. Some said teachers had to be chosen by administration to be leaders, others said teachers had to volunteer to become leaders. With regards to leadership opportunities, the teachers only mentioned those who were already in positions of leadership, such as the assistant principal and the literacy facilitator. There was some mention of teachers going to PLC workshops to present to the staff, but there was no other mention of teachers taking on



leadership responsibilities.

Grade level minutes did not support the growth reflected in the three statements of dimension two of the PLCA survey that showed a decrease in the negative frequency stated above. Grade level minutes reflected a minimum of shared leadership opportunities amongst the grade level. The shared leadership was demonstrated in grade level minutes with examples, such as a teacher offering to take responsibility for an activity, planning a field trip, or to gather and disseminate information to the other members in the grade level. This shared leadership was reflected 13% of the time in the grade level minutes for the first half of the study, and went down to 3% for the second half (see Table 19).

Although not evident in the overall survey themes, the researcher noted that at the time of the first interview, two of the grade levels asked for clarification when asked to describe the relationship between teachers and administration. One asked if the researcher was asking what the ideal situation would be; the other asked for clarification regarding which administrator. It must be noted that the characteristics teachers gave (communication, visible, approachable) were all given in conjunction with the term “assistant principals,” “assistant principal,” or the specific name of an assistant principal throughout the three interviews. One grade level shared mixed feelings about the administration as a whole, saying the support “depended on the administrator” and while there was “an effort to increase communication,” there was a definite “lack of follow-through” (Anonymous, personal communication, October 14, 2008). As the semester progressed, all grade levels consistently emphasized the approachability of one of the assistant principals, along with her quick response and positive feedback.

#### *Dimension Three in School A: Supportive Conditions*

Supportive conditions, such as the physical factors and the “intangibles” stated in

Chapter 2, are vital to allowing for the collaboration and collegiality of the team members, and fall under the responsibility of the school leader. By providing these conditions, the leader demonstrates commitment to implement a PLC. Creating supportive conditions is a key to maintaining the growth and development of a community of professional learners (Huffman & Hipp, 2003; Morrissey, 2000). Table 13 shows the results of the PLCA survey given to the teachers at School A with regards to shared and supportive leadership.

Table 13

*Results of Survey Questions Aligned with Dimension Three in School A; Results Indicated in Frequency*

Themes	Pre Survey N=23					Post Survey N= 21				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Staff have opportunity to apply learning and share	0	1	16	6	0	0	1	18	2	0
Caring relationships exist	0	1	15	7	0	0	0	14	6	1
A culture of trust exists for taking risks	0	0	18	4	1	0	3	13	4	1
Achievement is recognized regularly	0	3	14	6	0	0	4	12	5	0
Staff and stakeholders are unified to embed change	0	2	16	4	1	0	3	15	3	0
Time is provided for collaboration	0	6	14	3	0	1	1	15	4	0
Schedule promotes collective learning and sharing	0	5	15	2	1	1	1	15	4	0
Money is available for professional development	0	2	15	6	0	0	2	16	3	0
Technology/instructional materials are available	1	1	15	6	0	0	1	17	3	0
Resource people provide support	0	0	15	8	0	2	0	14	5	0
School is clean and inviting	0	2	12	9	0	0	2	14	5	0
Proximity of personnel allows for ease in collaboration	1	2	17	3	0	0	2	15	4	0
Communication system is in place in school	0	5	17	1	0	1	3	14	3	0
Communication system is in place across entire school community	0	4	17	2	0	2	2	15	1	1

The supportive conditions dimension had the second highest negative response percentage of all of the dimensions. The data showed that for the negative indicators, 32 of 291 responses (11.0%) were either disagree or strongly disagree for the posttest. These results are similar to the pre survey data which was 36 of 319 responses representing 11.3%. The agreement on the two surveys was static at ~89%. Examining the statements related to the Supportive Conditions Dimension the data indicated that two statements

produced more than half the increase in the percentage of strongly disagree. These increased levels of disagreement are related to support provided by the resource people and a school-wide communication system. It was also noted that the number of strongly agree responses decreased from 67 of 319 responses (21.0%) on the pre survey to 52 of 291 responses (17.9%) on the post survey. The items on the survey that decreased three or more responses include staff members have an opportunity to apply learning and share, money is available for professional development, technology and instructional materials are available, resource people provide support, and the school is clean and inviting. Disagreement dropped considerably for statements related to time provided for collaboration and the schedule promoting collective learning and sharing. The data showed -5 and -4, respectively, for the two statements. The drop in number of negative responses from the pre survey to the post survey for these two questions showed improvement with respect to agreement with the statements.

Evidence to support the decline in “a culture of trust” was minimal. Neither the principal nor the teachers mentioned “taking risks.” The grade level minutes (see Table 18) indicated a decrease in the leadership among teachers, which could be interpreted as supporting the decrease.

The principal interviews supported the increase in “time is provided for collaboration” and “schedule promotes collective learning and sharing.” In creating supportive conditions for the implementation of a PLC, the principal at School A reported that each grade level had two planning times per week, along with a half day of planning one time each semester. At the time of the second interview, the principal stated that she was also having groups of teachers attend various staff development opportunities off campus. At the third interview, the principal shared she was going to provide vertical

cross-grade level planning after school, and that she was going to have a book study about PLCs for those who were interested.

The teacher interviews did not support the increase of percentage agreement in the two statements referenced above (see table 14). As a whole, teachers did not make reference to the planning time provided nor the external staff development opportunities provided by the principal when asked questions about the supportive conditions available for implementation of a PLC. They did express the importance of having resource teachers come to their planning and that collaboration was encouraged by the administration. One teacher stated that while she felt the teachers “were encouraged to attend meetings and workshops, and share,” there was no time provided to do such (Anonymous, personal communication, October 14, 2008). The teacher’s comment led to an extensive discussion on the lack of time provided, and how much they “had to cram in a short amount of time” (Anonymous, personal communication, October 14, 2008). Throughout the grade level interviews, others mentioned the lack of time and how there was not enough time to take care of the “administrative items” that was required, much less planning. However, it was noted by the researcher that the fourth grade cut two of their meetings short in order to complete their personal Individual Growth Plans and to hold parent conferences. Questions 1, 8, and 9 of the group interview protocol were directly aligned with the dimension of “supportive conditions.” Table 14 shows the frequency of themes regarding supportive conditions in the teacher interviews.

Table 14

*Frequency of Themes for Questions Aligned with Dimension Three in School A*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=25</u>	<u>2<sup>nd</sup></u> <u>N=25</u>	<u>3<sup>rd</sup></u> <u>N=25</u>
Personnel resources available to come to planning	3	4	2
Sharing and collaboration encouraged	5	9	4
Not enough time is provided	3	6	10
All staff members are treated professionally	2	2	0

Grade level minutes supported the increase in percentage of agreement in both “Time is provided for collaboration” and “Schedule promotes collective learning and sharing.” The grade level minutes reflected a decrease in the percentage of time spent on procedural and administrative items, but an increase in instructional planning, discussion of student needs, and staff development (see Table 19).

This dimension of the PLCA survey also showed areas with no change but a high percentage of disagreement. These areas fall into two categories: celebration and communication. The survey reported an increase in disagreement for regular recognition of achievement from 13% to 19%. In addition, the survey indicated that approximately 20% of the staff, at the times of both the pre and post surveys, did not see a communication system within the school, or in place across the entire school community.

*Dimension Four in School A: Collective Learning and Application*

Collective learning is evident in how teachers work together, along with the resulting changes in instructional behavior teachers see among others in the staff.

Teachers ask crucial questions about learning, and support each other as they improve their individual and collective classroom instruction. People in a Professional Learning Community continually seek new methods, they reflect on results, and they have a desire to grow and learn (DuFour & Eaker, 1998). Table 15 shows the results of the PLCA survey given to the teachers at School A with regards to collective learning and application.

Table 15

*Results of Survey Questions Aligned with Dimension Four in School A; Results Indicated in Frequency*

Themes	Pre Survey N=23					Post Survey N= 21				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Stakeholders are involved in creating high expectations	0	2	17	3	1	0	3	16	2	0
Staff works together	0	1	12	10	0	1	1	13	6	0
Collegial relationships exists, commitment to school improvement	0	1	11	10	1	1	2	14	4	0
Staff plans together to address student needs	0	1	9	13	0	1	3	11	6	0
Opportunities exist for collective learning	0	1	12	10	0	0	3	15	3	0
Staff engages in dialogue that reflects respect	0	3	9	9	2	0	4	13	4	0
Professional development focuses on teaching and learning	0	0	10	13	0	0	0	14	7	0
Staff learns together and applies new knowledge	0	1	15	6	1	0	3	16	2	0

The collective learning and application dimension had the greatest rate of

negative responses of all the dimensions. The number of negative responses more than doubled from 10 of 179 (5.6%) on the pre survey to 22 of 168 responses (13.1%) on the post survey. It is also noted that the strongly agree responses on the post survey (32 of 168) were less than half of the strongly agree responses on the pre survey (74 of 179). Several of the statements notably have a shift toward negativity either by increasing the number of disagreement responses or a reduction in the number of strongly agree responses. These statements include collegial relationships exist among staff that reflect commitment to school improvement efforts, staff plans together to address student needs, opportunities exist for collective learning, and staff learns together and applies new knowledge.

All of the trends reflected in these statements are supported in the principal interviews in that no mention of collective learning was offered by the principal other than having a group of teachers go to a PLC workshop together, along with providing one session of staff development at the school level. The only example provided of a “collegial relationship” was when a new third grade teacher was hired several months into the year, and the principal said she was impressed by how those teachers worked together to make that transition smooth for the new staff member.

This decline was also supported in the teacher interviews. The importance of staff development was addressed by the teachers in their first two interviews. The staff development they referred to was that of in-house training provided by their curriculum coordinator, along with training provided by the county. However, by the end of the semester, there was no mention of staff development, other than one teacher saying that they had less professional development than years prior. In addition, “sharing of ideas” demonstrated a decline, showing that the teachers believed that less learning and sharing



was occurring. Table 16 shows the frequency of themes regarding collective learning and application in the teacher interviews.

Table 16

*Frequency of Themes for Questions Aligned with Dimension Four in School A*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=25</u>	<u>2<sup>nd</sup></u> <u>N=25</u>	<u>3<sup>rd</sup></u> <u>N=25</u>
Sharing ideas	9	13	4
Planning together	1	4	2
Utilizing common assessments to discuss student achievement	3	8	9
Staff Development provided during grade level meeting beneficial	8	12	0

However, grade level minutes reflected an increase in staff development, thereby not supporting the decrease noted in the survey (see Table 18). During the first half of the semester, 8% of the planning time was used for staff development. This increased to 18% by the end of the semester. Grade level minutes reflected an increase in the discussion of individual student instructional needs. At the beginning of the semester, only 3% of the grade level planning time was used to do so, but this increased to 9% by the end of the semester. One grade level did not have any discussion of individual student needs reflected in their minutes.

Although not reflected in the survey, the researcher noted the inconsistency in teacher response when asked about the experience of being in a PLC. When asked if this experience was beneficial to their individual practice, responses changed as the semester

progressed. At the beginning of the semester, all three grade levels spoke positively about how being in a PLC affected their instruction, with answers ranging from “yes, it makes a difference” to providing more specific examples about the professional development given during planning, and the time given to “bounce ideas off of each other to help students” (Anonymous, personal communication, October 14, 2008). As the semester progressed, the teachers had more difficulty answering this question. At the time of the third interview, teachers were mixed in their positive and negative responses, and demonstrated confusion about the timeline and implementation, saying they believed that the full implementation of the PLC model would not occur until the following year. Fourth grade talked at length about the extra work that implementing a PLC required – until a staff member spoke up and stated that at that point, the grade level did not have an understanding of what a PLC was, and did not have a picture in mind of what it should look like.

#### *Dimension Five in School A: Shared Personal Practice*

Shared personal practice is the collaborative process that motivates the teachers to continually learn, grow, and improve (DuFour & Eaker, 1998; Stiggins, 1999). The focus is always on student results, but the establishment of a Professional Learning Community creates the emphasis on building the collective capacity of the group more than the knowledge and skills of individuals (DuFour et al., 2006; DuFour & Eaker; Stiggins). This shared knowledge is critical, as when it is applied and reflected upon, the teachers get a “deeper level of understanding that enables them to adapt new practices to their own setting” (DuFour, 2004a, p. 3). The teachers work together to solve problems and improve the learning opportunities for students. As a result, this collaborative process motivates the teachers to continually learn, grow, and improve (DuFour & Eaker;

Stiggins). Table 17 shows the results of the PLCA survey given to the teachers at School A with regards to Shared Personal Practice.

Table 17

*Results of Survey Questions Aligned with Dimension Five in School A; Results Indicated in Frequency*

Themes	Pre Survey N=23					Post Survey N= 21				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
School staff is committed to improving learning	0	1	10	12	0	0	0	17	4	0
Opportunities exist for staff to observe each other	0	3	14	6	0	0	2	15	4	0
Staff provides feedback to peers	0	3	16	4	0	0	4	15	1	1
Staff informally shares ideas for improving student learning	0	0	11	12	0	0	0	14	7	0
Staff reviews student work to improve instructional practice	0	1	13	9	0	0	1	14	4	2
Opportunities exist for coaching and mentoring	0	1	13	9	0	0	1	15	5	0

The shared personal practices dimension did not increase in number of responses that were in disagreement with the statements but did exhibit a shift more to the center on the strongly agree to agree responses between the pre survey and post survey results. The data show that 9 of 138 negative responses (6.5%) on the pre survey went to 8 of 123 negative responses on the post survey. The data also show that the strongly agree responses fell from 52 of 138 (37.7%) to only 25 of 123 (20.3%) on the post survey. This tendency was consistent for all of the statements made in the shared personal practice dimension.

This decline was also supported by the teacher interviews. At the time of the

second interview the teachers reported that they did not know if teacher performance was being affected, as they did not have the opportunity to observe each other. However, some teachers did report an increase in reviewing individual student work and giving each other feedback on assisting that child. First grade spoke about the new emphasis on discussing individual students. One of the teachers said “We talk about the strategies that may help a child – and that child may not even be in my class – where before, we didn’t have to do that” (Anonymous, personal communication, October 14, 2008). Fourth grade did not move that far into discussing how to help a child. This was evidenced because when asked about how they worked together on assessing and analyzing student work, the teachers would report on sharing the assessment data, but not talk about using the assessment to plan for instruction. Therefore, the teacher interviews showed inconsistent support of the decline in “staff provides feedback to peers.” Table 18 shows the frequency of themes regarding shared personal practice in the teacher interviews.

Table 18

*Frequency of Themes for Questions Aligned with Dimension Five in School A*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=25</u>	<u>2<sup>nd</sup></u> <u>N=25</u>	<u>3<sup>rd</sup></u> <u>N=25</u>
Don’t know if collaboration has impact on teacher performance	3	2	0
Reviewing individual student work	6	5	10
Sharing and learning from one another	7	6	7
Having resource support	1	5	2

Grade level minutes did not support the decline in “staff provides feedback to peers.” The minutes, due to increase in discussion of student needs from 3.6% to 9%, showed more collaboration and sharing of feedback to each other (see Table 19).

#### *Breakdown of Grade Level Minutes in School A*

The researcher had difficulty in obtaining all grade level minutes from School A, only receiving 23 sets of minutes out of approximately 50 meetings that were held. Therefore, these data could be interpreted as fully reflective of the school, but only as one small indicator. These minutes were split into two groups. Group one was made up of August and September, and group two was made up of October-December. Each comment in the grade level minutes was coded. “Procedural items” referred to activities such as establishing deadline dates for paperwork, working on a field trip request, revising lunch schedules, or revisiting other school procedures. “Instructional planning” referred to teachers talking about and creating lesson plans for instruction. “Leadership among teachers” was evident when teachers took responsibilities for representing the grade level or taking on duties. “Principal administrative items,” to use a term coined by educators, referred to the extra expectations, paperwork, and duties not related to classroom instruction that were given to teachers. These included, but were not limited to, PTO events, evening curriculum nights, and turning in paperwork. “Discussion of student needs” referred to the specific act of talking about an individual student, or group of students, based on performance and sharing ideas on how to meet their needs. “Staff development” was present in grade levels when the literacy facilitator presented literacy strategies, or when other information for professional growth was shared. Table 19 indicates the percentage of the full account of grade level minutes each activity was referred to, not the percentage of time spent on those activities, as those times are not

specified in the minutes. These percentages were rounded off to the nearest tenth.

Table 19

*Breakdown of Grade Level Content at School A, in Percentages*

Activity	Group 1	Group 2
Procedural items	32.6	27
Instructional planning	21.4	25.8
Leadership among teachers	12.9	3.7
Principal “administrative items”	21.4	16.9
Discussion of student needs	3.6	9
Staff development	8.5	18

*Impressions of School B*

A checklist form (Appendix A) was completed by the researcher at each site at the time of the first interviews to collect information on the setting of each school, the appearance, the atmosphere, along with the researcher’s impression of the schools. This checklist was used by Faris (1999) for the same purpose.

The researcher arrived at School B for the first round of interviews and entered the building via a clean, bright, and colorful hallway with shiny floors. Clear signage was available directing visitors to the office. The researcher was greeted by name and directed to the conference room. The conference room provided a history of the school through its displays of achievements, commendations, awards, and photographs.

As the first and second grade teams at School B entered for their interviews, the researcher noted that the participants came together and were engaged in lively, personal conversation. The interviews were of the same relaxed, easygoing nature of conversation.

This was in contrast to fifth grade, whose team members entered sporadically and did not engage in personal conversation as they entered. The principal was present to introduce the researcher at each of the grade levels for the first round of interviews, and then left prior to the start of the interviews. The only deviation from this procedure was with fifth grade, when the literacy facilitator entered the conference room prior to the start of the interview. Upon introducing her, the principal asked if the researcher needed her in the interview. The researcher replied that if this person functioned more as a teacher than an administrator, she could participate. At that time, the principal responded “No, she’s just one of them,” gesturing to the other teachers (Anonymous, personal communication, September 2, 2008). The researcher asked the participants if they were in agreement, and each of the teachers nodded her head. However, the researcher did note that throughout the interviews in fifth grade, the teachers were hesitant to answer questions, and frequently the literacy facilitator answered questions to start conversation.

At the beginning of the first interview, the researcher explained the process. She also had the participants initial permission forms, and told the teachers that what was shared would remain confidential. The researcher did not need to revisit the issue of confidentiality with the grade levels at School B as they were all participating.

#### *Data Analysis of Grade Level Interviews in School B*

In order to understand the depth of PLC implementation at both of these schools, the researcher coded the data into themes, and matched the themes with the five dimensions of the PLC. The focus group interviews were audio taped and transcribed by a secretary. The researcher read the script several times and color coded the manuscripts for themes. The transcripts were not returned to the participants for verification.

*Dimension One in School B: Shared Vision, Mission, and Values*

Hord (1997) and DuFour and Eaker (1998) shared the opinion that shared vision and values are a vital part of PLCs. The vision gives direction to all of the people in the organization, and establishes goals for which the stakeholders must strive. DuFour and Eaker (1998) stated that the vision creates an agenda for action and serves as the guiding principle for the school. Table 20 shows the results of the PLCA survey given to the teachers at School B with regards to shared vision, mission, and values.

Table 20

*Results of Survey Questions Aligned with Dimension One in School B; Results Indicated in Frequency*

Themes	Pre Survey N=25					Post Survey N= 19				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Accessibility to information	0	1	22	2	0	0	1	15	3	0
Collaboration in developing shared values	0	2	20	3	0	0	1	15	3	0
Shared values guide decisions	0	0	23	2	0	0	0	15	4	0
Shared focus on student learning	0	1	19	5	0	0	1	12	6	0
Decisions aligned with the school's values and vision	0	0	18	7	0	0	0	12	7	0
Collaboration in developing shared vision	0	0	23	2	0	0	1	14	4	0
School goals focus on student learning	0	3	17	5	0	0	3	14	2	0
Policies aligned to vision	0	0	18	7	0	0	1	14	3	1



The responses to the majority of the questions remained the same, with respect to overall agreement. The data show that on the pre survey 193 of 200 (96.5%) total responses were in agreement and 143 of 151 (94.7%) total responses were in agreement on the post survey. The tendencies in this dimension of the survey were increases in the percentages of participants answering strongly agree on the pre survey from 16.5% to 21.2% on the post survey and for the percentages of participants who disagreed to have a minimal increase from 3.5% on the pre survey to 5.3% on the post survey.

Although the results of the surveys are consistent throughout the pre and post surveys, the researcher noted that the highest amount of disagreement was with the statement “school goals focus on student learning.” In both the pre and post surveys, this statement had the highest frequency of disagreement (3 in each survey). However, this disagreement, or lack of focus on student learning, is not supported with the principal interviews. When asked about the vision of the school, the principal at School B was consistent with her answers throughout the interviews. Although she did not offer a concrete and verbatim vision statement, she emphasized the use of best practices, and collaboratively problem solving to help the struggling students succeed in school. In addition, the principal at School B supported her vision by saying that the goal was to “target the kids who need the extra support” and to place emphasis on learning (Anonymous, personal communication, October 16, 2008). She stated that this was a “big shift” in the thinking of the teachers (Anonymous, personal communication, October 16, 2008).

The decrease in agreement on “school goals focus on student learning” was not supported by teacher interviews. When first asked about the goals of the school, teachers responded with programs, such as PBIS, or the implementation of instructional programs.

By the time of the second interview, the emphasis on such programs had disappeared in favor of working together as a team, and the focus on learning. By the time of the third interview, more staff development about PLC had taken place, and the principal had shared her expectations regarding the implementation of PLC. The themes of “children are the central focus” and “whatever it takes” had a high frequency of responses.

However, there were varied responses among the grade levels when asked about vision and goals at the time of the third interview. First grade teachers said that there was more accountability with student performance. Second grade teachers agreed with this but shared their sense of panic, “feeling the weight of the goals” but not “knowing what direction to go.” When asked about the vision and goals, fifth grade teachers did not respond, with only one teacher saying what her individual personal goal was. Table 21 shows the frequency of themes regarding shared vision, mission, and values in the teacher interviews.

Table 21

*Frequency of Themes for Questions Aligned with Dimension One in School B*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=21</u>	<u>2<sup>nd</sup></u> <u>N=21</u>	<u>3<sup>rd</sup></u> <u>N=21</u>
Children are the central focus	9	13	12
Vision is implementation of curriculum	11	2	0
Vision is implementation of technology	4	2	2
Staff development is provided	5	0	0
To create a PLC	2	0	8
Whatever it takes/not learning is not an option	1	0	12
Collaboration/sharing talents	0	13	3

The percentage of grade level meeting time that was spent in instructional planning rose from 10.5% to 12.5%. The time spent on the discussion of student needs also rose from 5.3% to 8.3%. However, the amount of “administrative items” covered in the meetings rose from 19.3% to 30.6% of the time (see Table 29).

*Dimension Two in School B: Shared and Supportive Leadership*

In a PLC, supportive leadership means that administrators, along with teachers, question, investigate, and seek solutions for school improvement. All staff members grow professionally, and administrators display a willingness to participate in collective dialogue, sharing and learning, without dominating the conversation (Morrissey, 2000). Teachers, with the support of the School Administrators, take on leadership roles in a PLC to move schools forward. Table 22 shows the results of the PLCA survey given to the teachers at School B with regards to shared and supportive leadership.

Table 22

*Results of Survey Questions Aligned with Dimension Two in School B; Results Indicated in Frequency*

Themes	Pre Survey					Post Survey				
	N=25					N= 19				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Opportunities for staff to observe peers	0	4	18	3	0	0	2	10	7	0
Leadership is promoted among staff	0	1	22	2	0	0	0	15	4	0
Staff is involved in making decisions	0	0	20	5	0	0	4	10	5	0
Principal uses staff input to make decisions	0	2	14	8	1	0	2	12	4	1
Staff has access to information	0	1	20	4	0	0	0	17	2	0
Principal is proactive	0	0	18	7	0	0	0	15	4	0
Staff is enabled to initiate change	0	1	21	3	0	0	4	12	3	0
Principal shares responsibility	0	1	21	3	0	0	1	14	4	0
Principal shares authority	0	2	20	3	0	0	5	11	3	0
Decision making takes place throughout school	0	1	21	3	0	0	1	14	4	0

Responses on the shared and supportive leadership dimension from a global view indicated that the vast majority of the respondents on both the pre survey and post survey were in agreement with the 10 statements. The data showed that on the pre survey 236 of 249 responses (94.8%) were in agreement. On the post survey the percentage decreased slightly based on 170 of 189 positive responses (90%). The statements “staff is involved in making decisions,” “staff is enabled to initiate change,” and “principal shares authority” showed an increase in disagreement that accounted for the entire increase in negative responses between the pre survey and post survey, with all other areas remaining the same or showing a decrease in negative responses.

The statement “staff is involved in making decisions” went from zero negative responses to four negative responses at the time of the post survey. “Staff is enabled to initiate change” had the same trend, with a negative response of one at the pre survey which increased to four at the time of the post survey. “Principal shares authority” had an increase in negative response from two at the pre survey to five at the post survey.

The principal interviews offer inconsistent support for the declines in these three statements. The principal at School B made no mention of opportunities for shared leadership via committees, teacher input, and shared decision making. Rather, she discussed capitalizing on the talents of teachers. In her first two interviews, she stressed the importance of finding teachers who do things really well, and allowing teachers to observe them or having those teachers present at faculty meetings. She also emphasized looking for the best in each person so that each individual could share his or her talents.

In the interviews, the teachers also discussed how their talents were utilized. First grade teachers said that they used their talents when differentiating instruction, because they planned it so that the teacher who was most skilled in teaching a strategy would help the students who most needed instruction in that strategy. Second grade teachers shared their excitement about using their data in the future to decide what their strengths were so that they could share those strengths to help improve instruction and student achievement across the grade level. In fifth grade, none of the teachers responded until the literacy facilitator said that the teachers shared their expertise in general. In response to this, one teacher stated “I know this is a talented team, but it is not obvious to me what each teacher enjoys – it’s not being put out there, and I would love to know who I could go to” (Anonymous, personal communication, January 13, 2009).

Although there was discussion of talent, the teacher interviews supported the

decline in percentage agreement of the three survey items stated above. Data in Table 23 showed no growth in teacher empowerment, and the administration being open to ideas and suggestions declined to zero at the time of the second interview. Table 23 shows the frequency of themes regarding shared and supportive leadership in the teacher interviews.

Table 23

*Frequency of Themes for Questions Aligned with Dimension Two in School B*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=21</u>	<u>2<sup>nd</sup></u> <u>N=21</u>	<u>3<sup>rd</sup></u> <u>N=21</u>
Draws on strengths/talents	6	6	2
Open to ideas/suggestions	3	0	0
“Open door” policy	4	2	0
Sets expectations	2	4	7
Empowering	2	3	2
Supportive/positive	4	3	7

This decline was also supported in the grade level minutes (see table 30).

Evidence of leadership among teachers went from 3.5% to 1%, yet the principal “administrative items” showed an increase from 19.3% to 30.6%.

In addition to the survey, the researcher noted that the different grade levels had varying opinions of the relationship between teachers and administration as the year progressed. First grade teachers consistently praised their principal for being open. Second grade teachers moved from a sense of expectation that everyone must carry her own weight towards seeing their principal as having clear expectations. Fifth grade teachers were hesitant to answer the question at the first interview, letting one person

answer the questions in detail while others repeated what she said. By the time of the second interview, fifth grade was again hesitant to answer and then spoke negatively. The researcher noted that the literacy facilitator was in the interview, and as teachers shared their concerns, the facilitator took on the role of defending the principal by saying “thinking about relationships – I just feel this is a huge school, and sometimes it’s hard to have that communication. I know administration is busy, but I think sometimes people feel that their issues aren’t given attention” (Anonymous, personal communication, October 14, 2008). When she said that, the other teachers agreed.

### *Dimension Three in School B: Supportive Conditions*

Supportive conditions, such as the physical factors and the “intangibles” stated in Chapter 2, are vital to allowing for the collaboration and collegiality of the team members, and fall under the responsibility of the school leader. By providing these conditions, the leader demonstrates commitment to implement a PLC. Creating supportive conditions is a key to maintaining the growth and development of a community of professional learners (Huffman & Hipp, 2003; Morrissey, 2000). Table 24 shows the results of the PLCA survey given to the teachers at School B with regards to supportive conditions.

Table 24

*Results of Survey Questions Aligned with Dimension Three in School B; Results Indicated in Frequency*

Themes	Pre Survey N=25					Post Survey N= 19				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Staff have opportunity to apply learning and share	0	1	18	6	0	0	2	13	4	0
Caring relationships exist	0	0	15	10	0	0	0	14	5	0
A culture of trust exists for taking risks	0	0	19	6	0	0	0	15	4	0
Achievement is recognized regularly	0	0	17	8	0	0	1	13	5	0
Staff and stakeholders are unified to embed change	0	0	21	4	0	0	0	14	5	0
Time is provided for collaboration	1	1	20	3	0	0	6	9	4	0
Schedule promotes collective learning and sharing	0	2	19	4	0	0	6	8	5	0
Money is available for professional development	0	0	17	8	0	0	1	13	5	0
Technology/Instructional materials are available	1	0	15	9	0	0	1	12	6	0
Resource people provide support	0	0	16	9	0	0	1	13	5	0
School is clean and inviting	0	1	10	14	0	0	0	8	10	1
Proximity of personnel allows for ease in collaboration	0	0	20	5	0	0	3	9	7	0
Communication system is in place in school	0	1	19	5	0	0	0	15	4	0
Communication system is in place across entire school community	0	1	18	6	0	0	1	14	4	0

The supportive conditions dimension, which had the highest positive response at the time of the pre survey for School B of all of the dimensions, showed a decrease in positive responses at the time of the post survey to where it was ranked as third. In this



dimension, the positive responses decreased by 5.6% yet the negative responses increased by 6.6%. The data showed that for the negative indicators 9 of 350 responses (1.7%) are either disagree or strongly disagree for the pre survey, but this increased to 22 of 265 (8.3%) at the time of the post survey. Examining the statements related to the supportive conditions dimension, the data indicated that three statements produced nearly all of the increase in the percentage of negative responses. These statements were “time is provided for collaboration,” “schedule promotes collective learning and sharing,” and “proximity of personnel allows for ease in collaboration.” It was also noted that the number of strongly agree responses remained nearly stagnant, with a 27.7% response rate at the time of the pre survey and a 27.5% at the time of the post survey.

The principal interviews do not support nor contradict these declines, as the principal made no mention of time, other than saying during the first interview that she was giving each grade level two planning times per week. The organizational structure was that one time was for planning, and one time was for PLC. No mention was made during any of the three interviews concerning proximity of personnel.

Grade level interview data did not support the survey results. There was an increase noted in “time allowed for collaboration” and “staff development is available.” No mention was made of the proximity of personnel. In addition, the interviews reflected a change in focus on the interviews. In the first interview, second grade said specifically that grade level meetings had no impact on their professional growth. There was conversation about the “administrative items” covered. One teacher stated

There is not enough time. By the time you drop off your class, get to your grade level meeting, go to the bathroom, take care of the business, there isn't much time to talk. Anything curriculum wise, that's after school. (Anonymous, personal

communication, September 2, 2008).

By the time of the second interview, one second grade teacher reported that

I feel like it is changing. Before our grade level meetings were informative...here's a list we have to do...it was information, it was business.

Now I feel like we have more time to take about kids and do planning, which is really what we should be doing at grade level instead of talking business.

(Anonymous, personal communication, October 14, 2008)

Table 25 shows the frequency of themes regarding supportive conditions in the teacher interviews.

Table 25

*Frequency of Themes Aligned with Dimension Three in School B*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=21</u>	<u>2<sup>nd</sup></u> <u>N=21</u>	<u>3<sup>rd</sup></u> <u>N=21</u>
Caring relationships	9	9	5
New ideas encouraged	3	1	0
Time allowed for collaboration	2	0	5
PLC providing a “common language”	0	0	8
Technology/Instructional materials are available	8	0	1
Staff Development is available	3	3	5
Expectations clearly communicated	5	8	7

Grade level minutes supported the data from the survey. These minutes (see Table

30) showed an increase in time spent on procedures and administrative items, up from 63% of the time to 70%. Even though the minutes indicated a small increase in the amount of time spent on instructional planning (10.5% to 12%) and in the discussion of student needs (5.3% to 8.3%), the bulk of the grade level meeting time was spent on administrative and procedural items rather than on items related directly to instruction. In addition, staff development dropped from 17.5% to 8.3%. Again, no mention was made of proximity to personnel.

*Dimension Four in School B: Collective Learning and Application*

Collective learning is evident in how teachers work together, along with the resulting changes in instructional behavior teachers see among others in the staff. Teachers ask crucial questions about learning, and support each other as they improve their individual and collective classroom instruction. People in a Professional Learning Community continually seek new methods, reflect on results, and have a desire to grow and learn (DuFour & Eaker, 1998). Table 26 shows the results of the PLCA survey given to the teachers at School B with regards to collective learning and application.

Table 26

*Results of Survey Questions Aligned with Dimension Four in School B; Results Indicated in Frequency*

Themes	Pre Survey N=25					Post Survey N= 19				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
Stakeholders are involved in creating high expectations	0	2	21	2	0	0	0	14	5	0
Staff works together	0	1	20	4	0	0	0	15	4	0
Collegial relationships exists, commitment to school improvement	0	0	23	2	0	0	0	14	5	0
Staff plans together to address student needs	0	1	18	6	0	0	0	14	5	0
Opportunities exist for collective learning	0	1	20	4	0	0	0	16	3	0
Staff engages in dialogue that reflects respect	0	2	20	3	0	0	0	15	4	0
Professional development focuses on teaching and learning	0	0	17	8	0	0	0	10	9	0
Staff learns together and applies new knowledge	0	1	20	4	0	0	1	13	5	0

The collective learning and application dimension had the greatest rate of positive responses at the time of the post survey. At the time of the pre survey, 192 out of the 200 responses (94%) were “agree” or “strongly agree,” and this increased to 151 out of 152 responses (99.3%) at the time of the post survey. The overall trend in this dimension was one of improvement, with all responses changing to positive at the time of the post survey with the exception of one in the statement “staff learns together and applies new

knowledge.” In addition, the percentage of “strongly agree” increased from 16.5% (33 responses) to 26.3% (40 responses).

The increase noted in “staff learns together and applies new knowledge” was supported in the principal interviews. The principal noted that there was a visible shift in thinking as evidenced in that the teachers were discussing students and also questioning each other. The principal also reported a more positive and uplifting School Atmosphere.

The increase in overall positive response in this dimension was supported by the teacher interviews. Three of the themes presented in the interviews showed a net increase by the time of the third interview. The only decrease was in “discussing student achievement,” but this was minimal as the frequency of this theme changed from 6 to 7 to 5. Table 27 shows the frequency of themes regarding collective learning and application in the teacher interviews.

Table 27

*Frequency of Themes for Questions Aligned with Dimension Four in School B*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=21</u>	<u>2<sup>nd</sup></u> <u>N=21</u>	<u>3<sup>rd</sup></u> <u>N=21</u>
Utilizing other’s talents	5	3	7
Planning together	7	12	11
Discussing student achievement	6	7	5
Staff Development/learning together	1	7	3

Grade level minutes also supported this positive shift shown in the survey, as demonstrated by the increase of time spent in discussing student needs. An increase was

also evident in the percentage of time spent in instructional planning (see Table 30).

*Dimension Five in School B: Shared Personal Practice*

Shared personal practice is the collaborative process that motivates the teachers to continually learn, grow, and improve (DuFour & Eaker, 1998; Stiggins, 1999). The focus is always on student results, but the establishment of a Professional Learning Community creates the emphasis on building the collective capacity of the group more than the knowledge and skills of individuals (DuFour et al., 2006; DuFour & Eaker; Stiggins). This shared knowledge is critical, as when it is applied and reflected upon, the teachers get a “deeper level of understanding that enables them to adapt new practices to their own setting” (DuFour, 2004a, p. 3). The teachers work together to solve problems and improve the learning opportunities for students. As a result, this collaborative process motivates the teachers to continually learn, grow, and improve (DuFour & Eaker; Stiggins). Table 28 shows the results of the PLCA survey given to the teachers at School A with regards to shared personal practice.

Table 28

*Results of Survey Questions Aligned with Dimension Five in School B; Results Indicated in Frequency*

Themes	Pre Survey N=25					Post Survey N= 19				
	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>	<u>SD</u>	<u>D</u>	<u>A</u>	<u>SA</u>	<u>NR</u>
School staff is committed to improving learning	0	0	18	7	0	0	0	12	7	0
Opportunities exist for staff to observe each other	0	2	22	1	0	0	3	12	4	0
Staff provides feedback to peers	0	1	24	0	0	0	2	14	3	0
Staff informally shares ideas for improving student learning	0	0	20	5	0	0	1	11	7	0
Staff reviews student work to improve instructional practice	0	3	18	4	0	0	3	13	3	0
Opportunities exist for coaching and mentoring	0	1	20	4	0	0	1	14	4	0

The shared personal practices dimension had only a slight increase in number of responses that were in disagreement with the statements. The data showed that 7 of 150 negative responses (4.7%) on the pre survey went to 10 of 119 negative responses (8.8%) on the post survey. The data also showed that the participant strongly agree responses rose from 21 of 150 (14%) to 28 of 119 (24.6%) on the post survey. The two statements “opportunities exist for staff to observe each other” and “staff provides feedback to peers” accounted for nearly all of the percentage increase in “strongly agree” between the two surveys. However, these two statements also showed an increase in the percentage of disagreement (8% to 15.8%, and 4% to 10.5%, respectively).

In her interviews, the principal made no mention of staff members observing each other. There was also no mention of peer observations specifically in the teacher interviews. Table 29 shows the frequency of themes regarding collective learning and application in the teacher interviews. It is important to note that although the teachers did not report observing each other, the “sharing and learning from one another” was noted through all three interviews as being of importance.

Table 29

*Frequency of Themes for Questions Aligned with Dimension Five in School B*

Themes	Interview		
	<u>1<sup>st</sup></u> <u>N=21</u>	<u>2<sup>nd</sup></u> <u>N=21</u>	<u>3<sup>rd</sup></u> <u>N=21</u>
Collaboration has no impact on teacher performance	4	0	1
Staff development is shared	3	0	2
Discussing student work	5	8	4
Sharing and learning from one another	9	11	11
Support	0	2	0
Not enough time is given to plan and collaborate	0	0	9
Commitment	1	4	0

Grade level minutes also supported the survey data, as there was no mention of peer observation. The grade level minutes did support the sharing and learning reported in the teacher interviews with a slight increase in the areas of instructional planning and discussion of student needs (see table 30).

*Breakdown of Grade Level Minutes in School B*

The researcher had difficulty in obtaining all grade level minutes from School B,



only receiving minutes from 27 meetings out of approximately 50. One grade level only submitted 2 weeks worth of minutes but did send the researcher all of the emails that were sent between teachers for the purpose of planning. Therefore, these data cannot be interpreted as fully reflective of the school, but only as one small indicator.

These minutes were split into two groups. Group one was made up of August and September, and group two was made up of October-December. Each comment in the grade level minutes was coded with themes nearly identical to those of School A.

“Procedural items” referred to activities not directly related to classroom instruction, such working on a field trip request, revising lunch schedules, or revisiting other school procedures. “Instructional planning” referred to teachers talking about and creating lesson plans for instruction. “Leadership among teachers” was evident when teachers took responsibilities for representing the grade level or taking on duties. “Principal administrative items,” referred to the extra expectations, paperwork, and duties not related to classroom instruction that were given to teachers. In School B, this specifically included large school-wide events such as Grandparents’ Day, and fundraiser information. “Discussion of student needs” referred to the specific act of talking about an individual student, or group of students, based on performance and sharing ideas on how to meet their needs. “Staff development” was present in grade levels when the literacy facilitator presented literacy strategies, or when other information for professional growth was shared. Table 30 indicates the percentage of the full account of grade level minutes each activity was referred to, not the percentage of time spent on those activities, as those times are not specified in the minutes. These percentages are rounded off to the nearest tenth.

Table 30

*Breakdown of Grade Level Content at School B, in Percentages*

Activity	Group 1	Group 2
Procedural items	43.9	38.9
Instructional planning	10.5	12.5
Leadership among teachers	3.5	1
Principal “administrative items”	19.3	30.6
Discussion of student needs	5.3	8.3
Staff development	17.5	8.3

## Chapter 5: Conclusions, Discussion, and Recommendations

### *Introduction of the Dissertation*

The purpose of this study was to describe the effect on teacher behaviors by the establishment of Professional Learning Communities in two different elementary schools. The intended contribution of this study was to provide a dual case study that describes what occurs with teacher behaviors when a PLC is established in two elementary schools. The research questions underlying and providing a research framework for the study are as follows:

1. How does establishing a PLC change teacher instructional behavior?
2. How does the implementation of a PLC encourage teacher professional growth?
3. How do grade level meetings affect the instructional behavior of classroom teachers?

Data collected in this study were acquired from a variety of sources including principal interviews three times during the semester, group interviews three times during the semester, PLCA survey data from the beginning and end of the semester, and grade level minutes.

### *Implications of the Findings*

According to group interviews, teachers in both schools did not fully grasp the concept of the PLC model. Even though both principals stated in the summer of 2008 that they were going to implement the PLC model in their schools, the January group interviews showed that the model had not been fully implemented in both schools and demonstrated that there were barriers to program implementation that affected the study.

*Implications of the Findings in School A*

In the five dimensions of the PLCA, School A declined in percentage agreement in “shared vision, mission, and values,” “collective learning and application,” and “shared personal practice.” The declines in percentage agreement noted in these portions of the PLCA were supported by principal interviews, teacher interviews, and grade level minutes. School A showed growth in the dimensions of “shared and supportive leadership” and “supportive conditions,” although a decline was noted in the latter with “a culture of trust exists for taking risks” declining in percentage agreement from 94% to 82%.

The first research question was “how does establishing a PLC change teacher behavior?” Dimension one, “shared vision, mission and values” demonstrated the lack of understanding and implementation of the PLC model. The principal’s vision throughout the three interviews changed from “having no child to fail and becoming a Professional Learning Community” (Anonymous, personal communication, September 4, 2008) to “making sure we look at children as individuals” (Anonymous, personal communication, October 14, 2008) to “trying to keep the staff focused and working together” (Anonymous, personal communication, January 7, 2009). This lack of communicated vision also created anxiety in the staff regarding a PLC, because in interviews, the teachers shared that being in a PLC was an expectation, but that they didn’t know what it was. The fourth grade teachers, representing the highest grade level interviewed, said that the PLC model gave them too much to do, then later admitted that they did not understand what the model was. Teachers also expressed difficulty in stating the vision of the school, as noted in Table 2. This lack of a unified vision among the staff was evidenced by the fact that what the teachers said in their interviews did not correlate with

what the principal said the vision of the school was at the time of each interview.

Because of the lack of staff development about PLC, the staff did not have an understanding of the model. According to the principal, the staff development provided was to have a few teachers who attended various PLC conferences and workshops. Participants in these workshops included the administration and a group of teachers. No mention was made of sharing the PLC knowledge gained in these workshops with the remainder of the staff. This was supported in teacher interviews. Teachers stated that they were encouraged to attend workshops, but did not have a chance to share what was learned in those workshops. The only mention of PLC training for the whole school was when one teacher presented “Total Quality Education” to the staff. In her interview, the principal said she had this done so teachers could see how “Total Quality Education” (an initiative of the school district) was integrated with PLC. However, the principal said she was planning a book study, for those who wanted to participate, on PLC for the following year. In School A, there was no evidence that a global change took place with teacher behaviors and the data showed that the PLC understanding was weak, thereby leading to minimal implementation of the PLC model.

However, it is interesting to note some changed behavior, although the data did not show if these changes were with the principal or the teachers. Dimension two (shared and supportive leadership) showed the greatest improvement between the pre survey and the post survey. At the time of the pre survey, it had the highest percentage of negative responses among the five dimensions. It improved to having the second highest percentage of positive responses at the time of the post survey. The positive movement with the dimension itself went from an 88.6% positive response at the time of the pre survey to 91.8 at the time of the post survey. Within this dimension, specific areas that

improved were “principal shares authority” and “decision making takes place throughout the school.” The data did not show if this improvement was due to the principal making more opportunities available, if teachers were taking more advantage of the already present opportunities, or other issues.

The second research question was “how does the implementation of a PLC encourage teacher professional growth?” Part of encouraging professional growth is providing the structure to allow it to occur, as demonstrated in the PLCA surveys. In the dimension “supportive conditions,” the data showed that the principal provided supportive conditions by providing time for collaboration (74% agreement to 90% agreement), and that the schedule at School A supported collective learning and sharing (77% agreement to 90% agreement). However, while the principal provided the time for the collective learning sharing, dimension four showed a decline in the statement “opportunities exist for collective learning.” The percentage agreement on this statement declined from 96% agreement to 85% agreement. In dimension four, the statement “staff learns together and applies new knowledge” went from 95% agreement to 86% agreement.

This was supported by teachers who said there was less sharing of ideas occurring, and that the principal made minimal mention of opportunities for teachers to grow collectively. Teacher interviews also demonstrated a decline in “staff development provided during grade level meeting beneficial.” This was evidenced by a frequency of eight at the time of the first interview to a frequency of zero at the time of the last interview. The data did not indicate whether that was because of a lack of staff development, a lack of leadership from the literacy facilitator, the lack of expectations on the part of the administration, or that the staff development provided was not seen as

worthwhile. In addition, even though grade level minutes showed a decrease in the amount of administrative items and procedural items being covered in grade level meetings, the areas that would include professional growth (discussion of student needs, and staff development) accounted for only 27% of the time spent in grade level meetings. Therefore, even though the time was provided, there were no data that showed that this increase in time was to provide, encourage, and expect staff development and collective learning. The evidence, showing the lack of collaboration and staff development, along with the lack of PLC implementation stated above in the first question, showed that no major change took place within School A with regards to teacher professional growth.

The third research question was “How do grade level meetings affect the instructional behavior of classroom teachers?” In order to study how the instructional behavior is affected, it is necessary to study the grade level minutes and see what can be transferred to classroom practice. At the beginning of the year, non-instructional items (principal “administrative items,” procedural items) took up 54% of the grade level meeting time, then dropped to 43.9% of the grade level meeting time, freeing more time for staff development and instructional planning. The amount of staff development provided increased from 8.5% of the grade level time to 18%. Despite the increase of time spent in staff development, there was a decline in how teachers saw it as beneficial. Teacher interviews demonstrated a decline in “staff development provided during grade level meeting beneficial” (a frequency of eight at the time of the first interview to a frequency of zero at the time of the last interview).

In addition, even though grade level minutes showed a decrease in the amount of administrative items and procedural items being covered in grade level meetings, the areas that would include professional growth (discussion of student needs, and staff

development) only accounted for 27% of the time spent in grade level meetings. While teachers did say that they were utilizing common assessments to discuss student achievement, no mention was made of using those results to plan for instruction.

Dimension five (shared personal practice), is the process that motivates the teachers to continually learn, grow, and improve (DuFour & Eaker, 1998; Stiggins, 1999). This dimension had the second highest positive response percentage at the time of the pre survey, but this changed to the highest positive response percentage at the time of the post survey. In the PLCA survey, the statement “staff provides feedback to peers” showed a increase in negative responses between the two surveys, moving from 13% negative responses to 20% negative responses. However, the teacher interviews showed inconsistent support of the decline.

Because of the lack of meaningful staff development provided during grade level meetings, not using assessments to plan for instruction, and having inconsistency in how staff provides feedback to others, there was no evidence to support that any change in teacher instructional behavior had taken place that could be detected by the data sources.

#### *Implications of the Findings in School B*

In the five dimensions of the PLCA, School B showed a decline in percentage of agreement on “shared vision, mission and values,” “shared and supportive leadership” and “supportive conditions.” In addition, “shared personal practice” remained constant in the results except for “opportunities exist for teachers to observe each other” which dropped from 92% agreement to 83% agreement. However, School B showed growth in dimension four “collective learning and Application” in that all responses were positive at the post survey and supported by interviews and grade level minutes.

The first research question was “how does establishing a PLC change teacher



behavior?” In order to answer this question, it had to be established that a PLC was, in fact, established at School B. In her interviews, the principal shared that she attended several PLC workshops with her literacy facilitator, and that she had a team of teachers attending PLC training workshops offered by the county throughout that year and the spring prior. These teachers shared various activities with the remaining staff at staff meetings. One activity that was mentioned often in grade level interviews was a “color activity” that took place prior to the second interview. In this activity, the teachers discovered their own talents and the talents of others. It was not until the third interview that teachers demonstrated an understanding of PLC. In this interview, grade levels said that the implementation of PLC gave them a common language, and that the principal’s expectations were clear about the implementation of a PLC.

Hord (1997) and DuFour and Eaker (1998) shared the opinion that the shared vision and values are a vital part of PLCs. DuFour and Eaker (1998) stated that the vision creates the plan for action, and serves to guide the school. Therefore, having a shared vision is a necessary component of PLCs. The principal was consistent in addressing her vision throughout the interviews, as she emphasized collaborative problem solving to help struggling students and to be sure that all students would succeed. However, the teachers did see this same consistency. At the time of the first interview, the strongest theme present was “vision is the implementation of curriculum.” This changed to “collaboration” and “children are the central focus” at the time of the second interview. Alignment with the principal’s vision was present at the time of the third interview as the strongest themes were “children are the central focus” and “whatever it takes/not learning is not an option.” However, while this was evident in the teacher interviews, the PLCA survey moved from 12% disagreement in the statement “school goals focus on student

learning” to 16% at the time of the post survey.

The teachers as a whole did not understand that the implementation of a PLC was an expectation until the third interview, and also were not given training as a whole on what a PLC was until between the second and third interview. In addition, the teachers did not know what the shared vision was, a key part of a PLC. Because of the lack of data showing that a PLC was implemented, there was no evidence to show that teacher behavior at School B occurred as a result of PLC implementation.

The second research question was “how does the implementation of a PLC encourage teacher professional growth?” In the dimension of “collective learning,” all pre survey responses that were negative changed to positive at the time of the post survey. Teachers referred to using other’s talents to help them, as provided by the “color” training. One teacher in a grade level spoke of a desire to have the other teachers in her grade level help her with her students. The two other grade levels interviewed talked about the benefits of planning and learning together. One of the grade levels shared their excitement about using their data to decide what their instructional strengths were so that they could capitalize on those instructionally. One grade level mentioned the higher accountability for the teachers and stressed the importance of working together to help the students. It was evident to the researcher that two of the three grade levels interviewed placed a high priority on working together and learning from each other, as they talked about the importance of doing this but expressed frustration over the lack of time.

This lack of time was reflected in dimension three (“supportive conditions”) of the PLCA. The statements “schedule promotes collective learning and sharing” and “time is provided for collaboration” both showed a change between the two surveys from 92%

agreement to 68% agreement. In this same dimension, 100% of the responses were positive in both surveys for the statement “a culture of trust exists for taking risks.” However, it can be stated that the staff at School B understood the importance of professional growth and needed the time to do so. With the evident culture of trust in the school, along with the desire for professional growth exhibited in two of the three grade levels interviewed, it is this researcher’s opinion that once the full implementation of the PLC is in place at School B, professional growth will be a priority. However, at this point in time, there is not sufficient evidence to show the implementation of a PLC at School B, and there is no evidence to show a change in teacher professional growth at School B.

The third research question was “how do grade level meetings affect the instructional behavior of classroom teachers?” In dimension five (“shared personal practice”), the researcher noted some decline in agreement in the PLCA survey with the statement “staff reviews student work to improve instructional practice” (88% agreement to 84% agreement). There was also an overall decline in the frequency of the theme “discussing student work” in the teacher interviews. A decline was also noted in the statement “staff provides feedback to peers” (96% agreement to 89% agreement).

The breakdown of grade level minutes showed the content of the meetings. At the beginning of the year, non-instructional items (principal “administrative items,” procedural items) took up 63.2% of the grade level meeting time, then rose to 69.5% of the grade level meeting time, taking more time away from staff development and instructional planning. Staff development dropped from 17.5% of the time to 8.3%, and the other areas that would directly impact instruction (instructional planning and discussion of student needs) rose two and three percentage points to 12.5% and 8.3%, respectively. Therefore, due to the having nearly 70% of the grade level meeting time

spent with administrative items and procedural items, along with the teachers stating there was not enough time to get things done, the data showed that the grade level meetings did not affect the instructional behavior of classroom teachers in School B.

### *Limitations*

A primary limitation to the study was that the study took place in two locations, over a brief period of time. Therefore, the generalizability of the study was limited. This study was of interest due to the leadership and the cultural differences between the two schools. School B was in existence for over 80 years and has received various awards and recognitions, including the “Triple S” Safe School Award, “School of Distinction,” and “School of High Growth.” School A was a new school in comparison, and did not establish a reputation through ABC designations on a consistent basis. It experienced higher teacher turnover than School B, especially after the first year. School A’s free and reduced lunch population was 34%, in contrast to School B’s 18%.

Care had to be taken by the researcher to protect the identities of the individual participants during focus group interviews. The researcher did have to reassure participants that confidentiality would be maintained.

Since the researcher was a professional acquaintance to the principal of both schools, there was a threat to the internal validity of the study. Teachers may have not been completely candid during the focus group interview for fear of their concerns being shared with their principals. Confidentiality was protected by having the participants sign the permission forms only with initials so that the researcher would not know their names. In addition, the researcher assured all participants that confidentiality would be maintained.

In School A, lack of administrative follow-through was a limitation. There were

several occasions in which grade levels were told at the last minute the researcher was coming to do interviews, or not told at all. This may have contributed to teacher silence at the interviews, as the interviews had not been placed in the meeting agendas.

In School B, the presence of the literacy facilitator in the fifth grade interview was a limitation. The principal had her participate in these interviews, saying “she’s one of the teachers.” However, the principal brought the literacy facilitator with her to various PLC workshops. In addition, the researcher noted that the teachers in that grade level were hesitant to answer questions, and often the literacy facilitator would answer for them.

In both schools, the use of grade level minutes was a limitation for several reasons. Not all grade level minutes were turned in, and responsibility was placed on the recorder to document the conversation and actions of the grade level accurately.

#### *Conclusions and Recommendations for School A*

Because of the inconsistent implementation of the PLC model in both schools, it was difficult to formulate answers to the research questions. Even though both schools agreed to implement this during the first semester, the data showed that not only the two schools themselves, but that grade levels within those schools demonstrated a wide range of variance in understanding and implementing the PLC model.

In School A, the school principal must address the vision of the school (shared vision and values). Without the vision, the school staff cannot identify what the collective goal is, and as a result, feel they are working individually, or trying to hit an unknown target. In the interviews, the teachers guessed at the school vision, stated the school system vision, or stated what they perceived as goals for the school. The principal’s vision also changed throughout the interviews. This lack of communicated vision also created anxiety in the staff regarding a PLC. This anxiety was evidenced in interviews, as

the teachers shared that implementing a PLC was an expectation, but that they did not know what a PLC was.

In addition to providing a consistent vision, the principal at School A must provide training on PLC for her entire staff. At the time of the third interview, all grade levels expressed confusion about this model and said they didn't know what it was. However, because it had been mentioned, it created anxiety with the teachers and also a feeling of "something else added to the plate."

In School A, the principal must also work towards creating a culture of trust. This lack of trust was noted in several ways by the researcher. In the PLCA survey, "a culture of trust exists for taking risks" declined from 100% agreement to 85%. In addition, two of the grade levels had to be reassured by the researcher that their comments would remain confidential, and it was only after that reassurance that teachers would participate. Thirdly, when asked about the relationship between teachers and administration, the grade levels asked for clarity either regarding which administrator, or what the ideal was. All grade levels spoke of individual administrators when answering this question, consistently speaking highly of one of the assistant principals but saying little about the principal. This trust can be addressed by working on areas noted as weaknesses in the PLCA in dimension three. In this dimension, "achievement is recognized regularly" declined from 87% agreement to 81% agreement, and "communication system is in place in the school" remained in both surveys as having 20% disagreement. This lack of celebration along with a lack of communication can make teachers feel as if they aren't important, or are not trusted.

The communication between the various levels of the school needs to be addressed. Not only did the PLCA show the 20% disagreement on the communication

system, but the researcher noted this lack of communication when the grade levels were not informed of the interviews in a timely manner. The principal will need to review the communication system within the School and improve upon it.

The principal recognized the need for sufficient time in grade level planning. At the time of the third interview, she had moved the grade level chair meetings from Wednesday afternoons to Tuesday mornings, thus providing additional planning time on Wednesday afternoons for grade levels. In addition, there was a decline in administrative and procedural items taking place during grade level planning, providing more time for instructional planning, staff development, and discussion of student needs. Even though the principal is making adjustments to provide this time to the grade levels, she may need to review the expectations for the grade level planning, as grade level minutes for one grade level showed that they cut their meeting short at least two times to take care of items of a personal nature.

The data showed that growth was made in dimension two, specifically in the survey areas of “principal shares authority” and “decision making takes place throughout the school.” While this dimension was the weakest of the five at the time of the pre survey, it showed the greatest gains so that at the time of the post survey, this dimension had the second highest percentage of positive responses. The principal should continue promoting this shared leadership and allow teachers to observe each other and have ownership in decisions.

### *Conclusions and Recommendations for School B*

In School B, the group interviews indicated that from the beginning of the study, there was a consistent focus on the children and planning together. By the end of the study, there was also strong evidence that PLC was providing a “common language” and

that the expectations given by the administration regarding PLC practices were clear. The vision of the school was understood by all staff, as were the expectations.

The principal at School B should review the data under dimension two, “shared and supportive leadership.” Statements in this dimension showed a strong decline in the areas of “staff is involved in making decisions,” “staff is involved in initiating change,” and “the principal shares authority.” All three of these statements showed more than a 20% decline in agreement between the PLCA pre and post surveys. Teacher interviews supported this as there was a decline in “the principal is open to new ideas.” It is also evident in grade level minutes as the amount of procedural and administrative items covered in meetings rose throughout the semester. The structures that promote shared leadership are in place, but the principal needs to utilize her grade level chairs and her site-based team to encourage this shared leadership and ownership of the school.

In addition to shared leadership, the principal at School B needs to utilize the leadership structures in place to improve communication of non-instructional items. While the teachers were provided the time of two grade level meetings a week, the teachers showed in the PLCA survey that this was not enough, dropping from 92% agreement to 68% agreement. The amount of time may not be the issue due to the content of the grade level meetings. In these meetings, the non-instructional topics (procedural items and administrative items) rose from 63.2% of the grade level meeting time at the beginning of the year to 69.5% of the time at the end of the semester. The principal can study this and make plans to have these non-instructional items communicated in some other manner rather than during grade level planning. The principal and teachers at School B made reference to their grade level planning times as “grade level” and “PLC meeting.” This made the teachers look at PLC as something external, rather than a way of



doing things. Should the principal want these meetings to each have a different focus, the second meeting needs to be renamed so that the teachers do not see PLC as an “extra thing.”

The principal at School B had a staff that values collective learning, as exhibited by the 100% of positive responses in the post survey. Because of this, the principal can capitalize on these common values by providing them more opportunities to grow professionally, giving them the time to share, protecting their grade level time from non-instructional items, and celebrating the growth and risks the teachers make.

#### *Recommendations for Future Study*

Because of the inconsistent implementation of the PLC model in both schools, it is difficult to formulate answers to the research questions. Even though both schools agreed to implement the PLC model during the first semester, the data showed that not only the two schools themselves, but grade levels within those schools demonstrated a wide range of variance in understanding and implementing the PLC model. A recommendation for future study would be to go back to these schools after a full year of PLC implementation to study the changes in teacher behaviors.

Another recommendation for future study would be to specifically study the upper grade levels in these elementary schools after a full year of PLC then answer the above-stated research questions. The researcher noted that in both schools, the highest grade level interviewed exhibited the most resistance or difficulty in adopting the PLC model. In School B, the grade level said they had too much to do. It was in this group that one teacher said she wanted to know the talents of the teachers in the grade level so that she could learn from them, and this plea was met with silence from the other teachers. This grade level could not state any benefit to their teaching as a result of the implementation

of the PLC model as they “had too much to do.” This was also the grade level that the principal referred to as being the hardest to move forward, and being set in their ways. In School A, the oldest grade level said that the PLC model gave them too much to do, then the teachers admitted that they did not understand what the model was.

At both of these elementary schools, it was evident that the younger the grade level, the easier it was for them to implement the PLC model. These teachers were more willing to pursue the implementation of the model. The younger grades at both schools exhibited a higher understanding than the upper grades. This may be due to the nature of differentiated instruction in the younger grades, departmentalizing in the older grades, or the issue of state accountability and testing in the higher grades that results in giving the higher grade level teachers a higher sense of stress, individual accountability, and a feeling of overload.

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## Appendix A

### Professional Learning Community Assessment Questionnaire

### Professional Learning Community Assessment Questionnaire

This questionnaire assesses your perceptions about your staff based on several of the dimensions of a Professional Learning Community (PLC) and related attribute. There are no right or wrong responses. This questionnaire contains a number of statements about practices that occur in some schools. Read each statement and then use the scale below to select the scale below that best reflects your personal degree of agreement with the statement. Put in an “x” in the appropriate box provided to the right of each statement. Be certain to select only one response for each statement.

Scale: 1= Strongly Disagree (SD)

2= Disagree (D)

3= Agree (A)

4 = Strongly Agree (SA)

	Shared and Supportive Leadership	SD	D	A	SA
1.	The staff are consistently involved in discussing and making decisions about most school issues.				
2.	The principal incorporates advice from staff to make decisions.				
3.	The staff have accessibility to key information.				
4.	The principal is proactive and addresses areas where support is needed.				
5.	Opportunities are provided for staff to initiate change.				
6.	The principal shares responsibility and rewards for innovative actions.				
7.	The principal participates democratically with staff sharing power and authority.				
8.	Leadership is promoted and nurtured among staff.				
9.	Decision making takes place through committees and communication across grade and subject areas.				
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.				
	Shared Values and Vision				
11.	A collaborative process exists for developing a shared sense of values among staff				
12.	Shared values support norms of behavior that guide decisions about teaching and learning.				
13.	The staff share visions for school improvement that have an undeviating focus on student learning.				
14.	Decisions are made in alignment with the school's values and vision.				
15.	A collaborative process exists for developing a shared vision among staff.				

16.	School goals focus on student learning beyond test scores and grades.				
17.	Policies and programs are aligned to the school's vision.				
18.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.				
	Collective Learning and Application				
19.	The staff work together to seek knowledge, skills, and strategies and apply this new learning to their work.				
20.	Collegial relationships exist among staff that reflect commitment to school improvement efforts.				
21.	The staff plan and work together to search for solutions to address diverse student needs.				
22.	A variety of opportunities and structures exist for collective learning through open dialogue.				
23.	The staff engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.				
24.	Professional Development focuses on teaching and learning.				
25.	School staff and stakeholders learn together and apply new knowledge to solve their problems.				
26.	School staff is committed to programs that enhance learning.				
	Shared Personal Practice				
27.	Opportunities exist for staff to observe peers and offer encouragement.				
28.	The staff provides feedback to peers related to instructional practices.				
29.	The staff informally share ideas and suggestions for improving student learning.				
30.	The staff collaboratively review student work to share and improve instructional practices.				
31.	Opportunities exist for coaching and mentoring.				
32.	Individuals and teams have the opportunity to apply learning and share the results of their practices.				
	Supportive Conditions- Relationships				
33.	Caring relationships exist among staff and students that are built on trust and respect.				
34.	A culture of trust and respect exists for taking risks.				
35.	Outstanding achievement is recognized and celebrated regularly in our school.				
36.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.				
	Supportive Conditions – Structures				
37.	Time is provided to facilitate collaborative work.				
38.	The school schedule promotes collective learning and shared practice.				

39.	Fiscal resources are available for professional development.				
40.	Appropriate technology and instructional materials are available to staff.				
41.	Resource people provide expertise and support for continuous learning.				
42.	The school facility is clean, attractive, and inviting.				
43.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.				
44.	Communication systems promote a flow of information among staff.				
45.	Communication systems promote a flow of information across the entire school community including central office personnel, parents, and community members.				

## Appendix B

### Group Interview Protocol

### Group Interview Protocol

1. Describe the relationship between teachers and administration. (Shared and Supportive Leadership, Supportive Conditions)
2. How are the talents of teams and individuals developed in your school? (Shared and Supportive Leadership, Collective Learning and Application, Shared Personal Practice and Collective Inquiry).
3. What are your main goals this year, and what are the strategies used to accomplish these goals? (Shared Values and Vision).
4. Do you feel your skills as a teacher are being improved upon by the experience of being in a PLC? How? (Collective Learning and Application)
5. Elaborate on how teachers routinely work together in planning, assessing, and analyzing student learning. (Shared and Supportive Leadership, Collective Learning and Application, Shared Personal Practice and Collective Inquiry)
6. What role do grade level meetings have in impacting your professional growth?
7. What is the vision for the school? (Shared Values and Vision)
8. What changes have been made to make you believe you are in a PLC? (Supportive Conditions)
9. What visible changes in instructional behavior are you seeing in members of the faculty? (Shared and Supportive Leadership, Collective Learning and Application, Supportive Conditions)

## Appendix C

### Principal Interview Protocol

### Principal Interview Protocol

1. What is your vision for the school? (Shared Values and Vision)
2. How have you implemented changes in order to create a PLC? (Supportive Conditions)
3. How do you develop the talents of teams and individuals in your school? (Shared and Supportive Leadership, Collective Learning and Application, Shared Personal Practice and Collective Inquiry)
4. Do you feel your skills as a leader are being improved upon by this experience? How? (Shared and Supportive Leadership)
5. What visible changes in behavior are you seeing with your staff? (Shared and Supportive Leadership, Collective Learning and Application, Supportive Conditions)



## Appendix D

### Observation Data Form

## Observation Data Form

Name of School	General Impression of School Building and Grounds	Reception of Visitors on Campus	Reception of Teacher to Researcher	Principal Interviews	Overall "Feel of the School"	Other comments
School #1						
School #2						