THE ROLE OF PROFESSIONAL LEARNING COMMUNITIES
IN CHANGING HIGH SCHOOL EDUCATOR BEHAVIORS
AND HIGH SCHOOL STUDENT OUTCOMES

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by
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The undersigned, appointed by the Dean of the Graduate School, have examined the dissertation entitled

THE ROLE OF PROFESSIONAL LEARNING COMMUNITIES
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Presented by Mary C. Magnusson

A candidate for the degree of Doctor of Education

And hereby certify that in their opinion it is worthy of acceptance

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ABSTRACT

The purpose of the study was to investigate the impact of professional learning communities (PLC's) on administrator and teacher behaviors and student outcomes in a high school setting. Three schools were randomly selected from the list of schools received from the nine Regional Professional Development Centers and are considered to be highly effective professional learning communities. All three schools were on the western side of the state as the one school that was on the east side of the state declined participation in the student interview portion of the research. At each of the three schools the researcher interviewed the principal and 2 focus groups, one of teachers and one of students 18 years of age or older. Data were collected using audio-recorded interviews, observations of PLC activities, and review of school documents and test data. Three themes emerged from the data: 1) "We are not alone," 2) "Learning with rigor," and 3) "Sense of Urgency." Implications of the study could serve to assist schools in the establishment of Professional Learning Communities for sustaining school improvement and impacting student outcomes.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Background

Significant progress has been made in the last 100 years for schools to open their doors to all regardless of race, gender, or socioeconomic standing (Berends, Bodilly, Nataraj, & Kirby, 2002). Concurrently, this has also been a time of unprecedented focus on accountability, school reform, and standards (DuFour & Eaker, 1998). Yet there continues to be a large disparity in the quality of educational experiences offered to high school age students, from state to state, district to district and school to school. While some high schools are trying to reinvent themselves to improve student learning, others are merely maintaining the status quo (Hord, 2004).

In 1983, the National Commission on Excellence published *A Nation at Risk*. This report was a catalyst for school reform in the United States (Hord, 2004). Many reform programs noted that they were designed to "improve student engagement and learning" (National Academy of Sciences, 2003, p. 187). Several of the high school reform programs that began over 20 years ago still exist and have had some impact on student achievement. Some reform programs increased state tested math reading scores, while some decreased the dropout rate and increased the graduation rate (National Academy of Sciences, 2003). Overall, these changes occurred through administrative leadership or teacher collaboration and sometimes were combined with professional development (Berends, Bodilly, Nataraj, & Kirby, 2002).

Since *A Nation at Risk* was, published high schools have faced growing pressures to meet standards that have been established to make schools accountable for preparing

students for the working world. Educational research by McLaughlin and Talbert (1993) supported professional learning communities as a way for teachers to collaborate and learn about teaching. Several other researchers (Brandt, 1995; Lee & Smith, 1996; Newman & Wehlage, 1995; Scribner & Reyes, 1999; and Hord, 2004) studied learning communities and found that student outcomes in schools were improving when they functioned as a learning community.

Senge (1994) published a book with Kleiner, Roberts, Ross, and Smith, entitled *The Fifth Discipline Fieldbook*. This book gave the strategies and tools necessary for building learning organizations based on the previous research of Senge. Included in these strategies and tools were building relationships, shared vision, collaboration, and team learning, which aligned with the tenets of professional learning communities (DuFour, 1998).

DuFour (1998) believed that "the most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as professional learning communities, known as PLC's" (p. xi). In fact, McLaughlin and Talbert (2006) coined the term teacher learning communities because "the ultimate payoff of teachers' learning opportunities depends upon teachers' opportunities and commitment to work together to improve instruction for the students in their school" (p. 3).

Those overwhelming accountability issues also made it imperative for high schools to identify and implement components of successful change. Thus, school leaders need to create a sense of urgency and show their stakeholders the importance of change

(Schmoker, 2006; Wagner & Kegan, 2006). As noted by Collins (2001, p. 65) educators must be willing to face the "brutal facts."

Bolman and Deal (1997) argued that the next step in the process is development of a vision which reflects what the school organization can become. Ultimately, developing and living the vision sets the stage for success with any change initiative (Kotter, 1996). However, a collaborative culture is often the missing link in unsuccessful change attempts (Kotter). Additionally, many researchers (Kotter; Wagner & Kegan, 2006) found that this collaborative culture should be cultivated by leaders who encourage risk taking, expand the leadership capacity of their organizations and recognize the importance of life-long learning. Other researchers (DuFour & Eaker, 1998; Joyce, 2004; Hord, 2004; McLaughlin & Talbert, 2006) believed that the development and implementation of professional learning communities (PLC) would address these challenges and other issues regarding successful change.

Successful organizations do not confine leadership to one individual (Conzemius & O'Neill, 2001; Fullan, 2005; Lambert, 1998; Lambert, 2003). Leadership extends to all stakeholders when principals leave behind their authoritarian view of leadership (Fullan; Lambert, 2006). When schools have strong leadership capacity; shared vision, collaboration, reflection, and collective responsibility for student achievement become apparent (Newman & Wehlage, 1995). With strong leadership, school personnel move away from autocratic administrators and begin developing leadership skills among all staff members (Lambert, 2003). Accordingly, when all staff members are willing to take responsibility for student learning, leadership capacity, coupled with the overriding characteristics of professional learning communities will be enhanced. Also, teacher's

ability to monitor student learning and make adjustments to instruction to meet the needs of the students will be improved (Buffum & Hinman, 2006; DuFour & Eaker, 1998; Schmoker, 2006).

A collaborative culture occurs when staff members are willing to take responsibility for student learning (Blankstein, 2004). When teachers work in teams to determine standards, develop common assessments, and make adjustments in their instruction based on the results of the common assessments a culture of collaboration exists (Blankstein; Schmoker, 2006). According to DuFour and Eaker (1998), "collaboration is the single most important factor for successful school improvement" (p. 117) and can make schools successful.

Professional development is necessary to guide the professional learning community process. Professional development is needed "so that participants gain the knowledge and skills to be able to 'do' the new work, to perform as a PLC" (Hord & Sommers, 2008, p. 22). Professional development is also considered a "strategy to improve instruction" and is intended to be "intensive and sustained" (McLaughlin & Talbert, 2001, p. 135). Overall, this type of professional development is continuous and focused on instructional and student learning with relevance to the teacher's school environment (McLaughlin & Talbert). Furthermore, it provides for teacher collaboration in and out of school. Collaboration and professional development allow teachers to influence how and what they learn (McLaughlin & Talbert, 2006).

Vail (2004) noted, however, that while reform has indeed focused on schools at the elementary level, at the high school level it has been considered less successful. Existing high school studies have revealed that high school dropout rates are increasing

(Noguera, 2002; Vail, 2004) and achievement gaps have increased among ethnic minority groups. While there have been studies on high school reform models over the years there is still a need to investigate the reform process of professional learning communities. There is a need to investigate the perceptions of the changes in behavior on the part of administrators and teachers to influence improvements in student outcomes at the high school level.

Conceptual Underpinnings of the Study

Four common themes were identified in the review of literature from various high school reform programs that had an impact on student outcomes. The four themes were leadership, professional development, collaboration, and small learning communities, also known as PLC's. Ultimately, the literature review revealed that PLC has incorporated all four themes, and required a change in behavior on the part of administrators and teachers to influence improvements in student outcomes.

Leadership

For years, people have made the assumption that leadership is vital to the success and effectiveness of any organization, including schools. Effective schools have effective principals as noted by many researchers (Marzano, Walters, & McNulty, 2005). Consequently, what is common to many leadership theories and theorists is that effective leaders involve others in decision making and focus on change (McLaughlin & Talbert, 2006). Inclusion in decision making for change includes collaboration, building relationships, studying teaching and learning, engaging people through development of a shared vision, disseminating responsibility for leadership, and building learning communities within the organization (Marzano, Walters, & McNulty).

Lambert (1998) suggested that when leadership is equated with one person, it becomes limiting. Leadership does not take advantage of participation by a community or society. "School leadership needs to be a broad concept that is separated from person, role, and a discrete set of individual behaviors. It needs to be embedded in the school community as a whole" (p. 5). This type of leadership emphasizes learning together and working collectively and collaboratively to build knowledge and meaning. Leadership promotes idea generation through conversation. Leadership encourages the creation of actions that come from new learning and then requires reflection of the work that came out of new understandings and shared beliefs (Lambert).

Professional Development

Pennell and Firestone (1998) found that teachers have become dissatisfied with professional development that is typically a one shot training or an expert telling teachers how to teach and then sending them back to their rooms. Teachers now prefer to network with other teachers. Pierce and Hunsaker (1996) also found professional development does not typically involve teachers in developing the focus. Teachers believed there is little or no support once they implement what was learned during their professional development. Pierce and Hunsaker argued, "Teachers are left out of the loop" (p. 101).

To get teachers into the loop, a common vision developed by administrators and teachers is necessary (Pierce & Hunsaker, 1996). "This vision should be one that the teachers and administrators have arrived at by agreement rather than one decreed from the top. Teachers are more committed to changes they have had a hand in designing" (p.102).

Current research (Correnti, 2008) also identified that professional development is the key to influencing teacher learning and teacher practice, especially if it is content specific. The research findings "suggest that the influence of professional development can be greatest when schools provide coherent, longitudinal programs of content specific professional development. Intense professional development is a predictor of teacher practice" (pp. 3, 5).

No Child Left Behind (NCLB) legislation has also affected professional development in that it requires "the use of research based strategies and professional development for teachers to make school improvements" (Griswold, 2005, p. 66). "Professional development is no longer just about the transmission of content knowledge and skills; effective professional development must result in changes in student outcomes" (Kratochwill, Volpiansky, Clements, & Ball, 2007, p. 619).

Effective professional development provides for teacher engagement, is participant-driven, collaborative, a result of examining student work, long-term, and connects with school-wide change (Darling-Hammond & McLaughlin, 1995). This type of professional development is a "departure from old norms and models of pre-service or in-service training. Professional development creates new images of what, when, and how teachers learn" (p. 597). Darling-Hammond and McLaughlin recommend that teacher reflection about their practice should be a requirement of professional development as it helps teachers create new knowledge about their content and student learners.

Collaboration

Collaboration is significant in the efforts to improve teaching, foster innovation, and create effective programs that will be sustained over time (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006; Brownell & Walther-Thomas, 2002). Instructional improvement is also supported when teachers engage in "conversations about how students learn content and what teachers can do to ensure all students learn" (Coburn & Russell, 2008, p. 1).

Collaboration in schools has been considered to be the most important feature of successful school improvement reforms and what must come first to improve the effectiveness of schools (Eastwood & Louis,1992; DuFour & Eaker, 1998). In agreement with these findings are Brownell, et al., (2006) who stated that "research findings combined with scholars' assertions about the importance of collaboration in changing teacher practice have led to its widespread acceptance as an essential component of any effort aimed at improving teaching" (p. 169). Collaboration has become part of the new culture in schools that are trying to eliminate the isolationism of teaching and cultivate more conversation with colleagues about teaching practice, assessment results, and student outcome goals (Leonard & Leonard, 1999).

Teachers want to collaborate with colleagues to demonstrate the connectedness of knowledge and to improve their professional practice (Pugach & Johnson, 2002; West, 1999). Consequently, collaboration can take place through a myriad of avenues such as networks, teaching portfolios, curriculum mapping, and teaming (Brownell, et al., 2006; DuFour & Eaker, 1998; Koppang, 2004; Pennell & Firestone, 1998; Xu, 2003). The composition of teams can be several people, as in grade level or departmental, or they can be just two people, such as a beginning teacher and mentor. As Wang, Odell, and

Schwille (2008) pointed out, "Their shared working arrangement (peer collaboration)

creates opportunities for them to learn from each other through mutual modeling,

observation, and reflections on each other's practice" (p. 138).

Small Learning Communities

Westheimer and Kahne (1993) identified that learning communities involve

interaction and consideration amongst teachers who share interests and responsibility for

common goals. The teachers pursue these goals together, building on the talents and

expertise of each other, while trying to reach consensus. Thus, their focus is on student

learning (Louis & Kruse, 1995).

Small learning communities create what is called "collective responsibility"

(Hord, 2004, p. 31). Collective responsibility means that the entire staff of a school take

responsibility for school improvement and all teachers encourage each other to "bring

and learn new skills and knowledge that will meet their students' needs and ensure

student success" (p.31).

Small learning communities also offer encouragement and support for teachers

(Ladson-Billings & Gomez, 2001). In their conversations and collaborations, teachers

hear about each other's struggles and the solutions to those struggles which can influence

teachers to think in new ways about helping students who have experienced failure in

school (Ladson-Billings & Gomez). To ensure student success a small learning

community must have a common mission, vision, and values; teacher collaboration; and

joint learning and inquiry (DuFour, Eaker, & DuFour, 2005; Hord, 2004; McLaughlin &

Talbert, 2001, 2006). These characteristics help provide a learning environment where

together, teachers are engaged in teaching, developing their practice, and sharing their collection of resources and history (McLaughlin & Talbert, 2001).

Teachers in small learning communities do not accept inaction; rather they turn collective ideas into actions (DuFour, Eaker, & DuFour, 2005). That is followed by the belief that actions must produce results and that the results are assessed to determine degree of improvement. Thus, teachers are encouraged and willing to experiment. They "develop, test and evaluate theories. They reflect on what happened and why, develop new theories, try new tests, evaluate the results, and so on" (DuFour & Eaker, 1998, p. 27-28).

According to Hord and Sommers (2008) the key to effective small learning communities is the principal who is "paramount to any endeavor to change pedagogical practice, adopt new curricula, reshape the school's culture and climate, or take on any other improvement targets" (p. 6). In small learning communities, the principal empowers all staff to be involved in decision making (DuFour & Eaker, 1998; Hord & Sommers).

Professional Learning Communities

When combining leadership, professional development, collaboration and small learning communities for school reform a new process is created known as professional learning communities (PLC's). This process has five components: shared beliefs; values and vision; shared and supportive leadership; collective learning; supportive conditions; and shared personal practice (Hord, 2004).

Effective professional learning communities require time for teachers to meet. "So that the entire staff shares a common vision, learns collectively, and collaborates in working toward that vision, the total school professional community meets regularly and

frequently to learn together" (Hord & Sommers, 2008, p. 17). This collective sharing has been shown to benefit both teachers and students. "Reports have been clear about the effects or results of school staffs working as PLC's. These benefits accrue to both staff and to students in various settings" (p. 18).

Within this investigation, it is important to examine PLC's at the high school level in seeking the impact of such a reform process on the perceptions of the changes in behavior on the part of administrators and teachers to influence improvements in student outcomes. Since, as Hord (2004) pointed out, reform is "a means for smoothing the road on this issue to focus participants on student benefits and the mission of the school, which should point uppermost to the well-being and successful learning of all students" (p. 24).

Statement of the Problem

With increased accountability pressures providing a collective focus for public school educators, examination of professional learning communities as a reform initiative that can improve student achievement at the high school level is necessary. The literature revealed that reforms to improve student achievement are abundantly available; however, such reforms initially have found more success at the elementary level. As Noguera (2002) noted, "At last, education reform seems to have brought about more than superficial changes, and several communities show signs of a genuine rise in student achievement at the elementary school level" (p. 60).

While reform has indeed found more success in schools at the elementary level, at the high school level it has been considered a failure by some researchers (Vail, 2004). Current studies have revealed that high school dropout rates are increasing and even more so for minority populations (Noguera, 2002). As Vail argued, the time is now for high

school reform needs to be pushed to the forefront. However, it is apparent that more research is necessary regarding the use of professional learning communities (PLC) at the high school level. Furthermore since PLC's are viewed by many as the most promising way to improve the quality of education of students (Blankstein, 2004; Buffum & Hinman, 2006; Schmoker, 2006), the focus of this investigation was to examine the change in behaviors of the administrators and teachers as they implemented the process of PLC and to further examine any student outcomes at the high school level.

Purpose of the Study

The Nation at Risk Report in 1983 and the passage of the *No Child Left Behind* Act of 2001, in 2002, have been identified as catalysts for school reform and have increased accountability for public school districts (Darling-Hammond, 2007; Hord, 2004; Meier, 2004; US Dept. of Education, 2001). Additionally, the development and implementation of Professional Learning Communities has been promoted by researchers (Blankstein, 2004; Buffum & Hinman, 2006a; Schmoker, 2006) to improve student outcomes and enhance teacher collaboration. Thus, the purpose of this study was to focus on the administrative and teacher changed behaviors that occurred in high schools successfully implementing PLC's as well as student outcomes.

The investigator of this study viewed professional learning communities through the use of focus groups, observations, and interviews in search of an understanding of the perceived effect of PLC's on administrative and teacher behavior and student outcomes at the high school level. This study will add to the body of knowledge concerning the effectiveness of professional learning communities and will assist future school district personnel examining high school models that will improve student outcomes.

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Research Questions

The purpose of the study was to investigate the impact of professional learning communities (PLC's) on administrator and teacher behaviors and student outcomes in a high school setting. The literature revealed that many researchers and authors (Blankstein, 2004; Buffum & Hinman, 2006a; Schmoker, 2006) acknowledged that schools must move away from the factory model of existence and move towards the collaboration model of a learning organization, also known as a professional learning community. This study examined the impact professional learning communities had on administrative and teacher behaviors and student outcomes. The research questions addressed in this study are as follows:

1. How has the principal behavior changed with the implementation of PLC's?

2. How has the teacher behavior changed with the implementation of PLC's?

3. What are the perceived outcomes of PLC's by administrators, teachers, and students?

4. What types of ownership do students take of their own learning since the implementation of PLC's?

5. What impact have PLC's had on student outcomes?

Limitations and Assumptions

The following are limitations identified for the study and should be considered throughout the remainder of the research:

1. The use of a multi-case study design is one limitation within this inquiry. Nonetheless, the researcher interviewed a wide range of stakeholders for the data collection to triangulate the data and enhance the reliability of the data.

2. The ability to generalize findings is limited because the study included only three school districts. However, Merriam (1998) wrote that qualitative research is not intended to generalize findings, but to interpret the events.

3. In a qualitative approach to methodology, validity is tied to the competence and integrity of the researcher (Patton, 1997). The overall credibility of the study may be affected by the trustworthiness of the researcher.

4. The study is limited within the framework of the questions asked of personnel in three school districts within one state.

5. The researcher assumed the participants were forthright in their responses and interpreted the interview questions as intended.

Design Controls

Data collection was done by one primary researcher. Therefore, this researcher was aware of the potential for researcher bias and subjectivity. Through the use of descriptive information from multiple sources (such as faculty focus groups, student focus groups, individual interviews with administrators), and observation of PLC, the researcher triangulated the data to establish internal validity and reliability (Merriam, 1998) thus minimizing researcher bias.

The goal of this research was to add to the existing body of knowledge regarding Professional Learning Communities and their influence on teaching behavior, administrator behavior, and student outcomes. In addition, detailed field notes, including reflections regarding personal subjectivity, served as a guard against personal bias. With one researcher exclusively doing the data gathering, consistency in data collection was established. Additionally, multiple forms of data collection were used and, when

possible, this researcher received feedback from the people interviewed using a process called "member checks" (Creswell, 1994, p. 158; Merriam, 1998, p. 204). This researcher assumed that the people interviewed answered questions honestly and with accuracy.

External validity or generalizability is the "extent to which the findings of one study can be applied to other situations" (Merriam, 1998, p. 207). In addressing the limitation of generalization within this inquiry, this researcher used the perceptions and words of the participants and a multi-site design in order to assist in determining how closely this situation matched other situations studied in order to promote transference (Merriam, 1998).

<div align="center">Definition of Key Terms</div>

For the purpose of this study, commonly used terms were defined as follows:

Accountability. Teachers being held responsible for student outcomes (McLaughlin & Talbert, 2006).

Collaboration. A process that is systematic and where teachers work together to examine and improve upon their classroom strategies (DuFour & Eaker, 1998).

Collective Responsibility. An entire staff, not just individual teachers, takes responsibility for all student learning (McLaughlin & Talbert, 2006).

Curriculum. Content students are supposed to know and be able to do each year in school (Schlecty, 2002).

High School. A building with grades 9-12 or grades 10-12.

Leadership. Collegially and collaboratively constructing meaning and knowledge and learning together that leads to a mutual purpose of schooling (Lambert, 1998).

Professional Development. A forum for teachers to gain knowledge and skill in their practice (Hord & Summers, 2008).

Professional Learning Communities. A structure for school improvement that builds staff capacity for learning and change. The entire school staff learns together and collaborates to work toward their vision (DuFour, Eaker, & DuFour, 2005).

Student Outcomes. The result of learning opportunities provided to students through assessment of data and adjustment of instructional practice that leads to increased rigor in coursework, academic gains, increased graduation rates, decreased dropout rates, and increased attendance rates (McLaughlin & Talbert, 2006).

Teacher Learning Communities. Professional learning communities of teachers, who reflect on their practice collaboratively, analyze data about student outcomes based on current practice, and make changes to their practice based on their data analysis (McLaughlin & Talbert, 2006).

Vision. A mental image of what an organization can be in the future, which instills a sense of direction to work toward that image (Hord, 2004; DuFour & Eaker, 1998).

Summary

Many researchers have described professional learning communities as the best strategy for sustained and substantive school improvement. With increased accountability, schools are challenged to improve test scores based on the guidelines of the *No Child Left Behind Act* of 2001(2002). PLC's clearly define what students need to know, provide assessments of student learning, and promote collaboration to determine the necessary adjustments to instruction with the intention that all students will be more successful in their learning. Several investigations on the outcomes and impact of PLCs

in individual schools have been conducted; however, not many have focused on the implementation of PLC's related to the behaviors of teachers and principals and their effect on student outcomes.

In Chapter Two, the review of literature focuses on the following: (a) review of school reform, (b) common themes from school reform, (c) leadership, (d) professional development, (e) collaboration, (f) small learning communities, and (g) Professional Learning Communities. An explanation of the research design and methodology is presented in Chapter Three. The presentation and analysis of data with discussion of findings and conclusions are discussed in Chapter Four, and in Chapter Five implications for practice and recommendations for future research will be described.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The *Nation at Risk* report, published in 1983 by the National Commission on Excellence, was a catalyst for school reform in the United States (Hord, 2004). In addition, political entities have pushed for school reform. Consequently, President George W. Bush stepped into the reform movement with proposed spending to help incoming high school students read and do math at grade level (Vail, 2004). Thus, in 2002, emerged the *No Child Left Behind Act of 2001* (NCLB). This act brought about the reauthorization of the Elementary and Secondary Education Act (ESEA) and, in combination with NCLB; Congress supported the overhauling of federal government efforts to support reform in elementary and secondary education (United States Dept. of Education, 2001).

However, some educators felt, even before the passage of NCLB, the support for reform had been lacking. "State education initiatives have generally been unaccompanied by adequate funding, causing school consolidation, higher taxes, and loss of local control" (Seal & Harmon, 1995, p. 119). In spite of the perceived lack of support by all, many reform efforts have still occurred over the last 20 years. This reform has mainly focused on elementary schools, and not as significantly on reforming high schools. As Noguera (2002) noted, "At last, education reform seems to have brought about more than superficial changes, and several communities show signs of a genuine rise in student achievement at the elementary school level" (p. 60).

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While reform has indeed focused on schools at the elementary level, at the high school level some researchers (Noguera, 2002; Vail, 2004) have considered it a disaster. In fact, "A third of American students drop out, half of Hispanic and African Americans drop out of high school which is a civic, social, and economic disaster" (Vail, 2004, p. 15). Current studies have revealed that high school dropout rates are increasing and even more so for minority populations. At the same time, graduation rates have decreased and achievement gaps have increased amongst ethnic groups (Noguera, 2002). "The resulting hue and cry, which has been gaining in intensity, has pushed high school reform to the forefront" (Vail, 2004, p. 15). This push to intensify the efforts of high school reform, "is crucial to the lives of our young people and future of public education and to our country" (p. 15).

While not as wide-spread as the elementary school reforms, the past reform effort at the secondary level began with an examination of comprehensive high schools in terms of their size, curriculum, program options, and ability to respond to student needs (Noguera, 2002; Schmoker, 2004; Vail, 2004). These "factory model" schools are currently being criticized for their lack of personalization, poor instructional quality, and their failure to meet many student needs (Darling-Hammond, Ancess, & Wichterle Ort, 2002; Noguera, 2002; Schmoker, 2004; Vail, 2004).

Conversely, in *Engaging High Schools: Fostering High School Students Motivation to Learn* (2003), the fellows in the National Academy of Sciences examined thirteen different school reform models and found that they have several common features such as "high standards for both academic learning and student conduct, personalization, meaningful and engaging pedagogy and curriculum, and professional

learning communities" (2003, p. 188). Berends, Bodilly, Nataraj and Kirby (2002) also reported that professional development, funding, and leadership were important to successful reform.

Thus initially in this literature review 13 high school reform programs were reviewed for common elements that were a factor in their success. The four common elements that were identified among these programs were leadership, professional development, collaboration, and small learning communities. Although the common elements did not all exist in all of the initial 13 high school reforms reviewed, as they were studied, it was discovered that all four elements did in fact exist in a reform effort referred to as professional learning communities (PLC). Thus, the purpose of this inquiry was to examine the use of professional learning communities in a high school setting to determine if that reform resulted in a change in administrative and teacher behaviors and ultimately student outcomes.

Initial Reform Programs

Of the 13 school reform programs developed after the 1983 *Nation at Risk* Report (National Commission on Excellence), Quint (2006) found three programs that showed success in improving student achievement. Each program had the key elements of students placed into small learning groups, a focus on academics, and a community component (p. 13). The first three programs investigated were *First Things First*, Talent Development, and *Career Academies*, followed by 10 other school reform programs summarized by the fellows of the National Academy of Sciences (2003). Those programs were *America's Choice, Atlas Communities, Coalition of Essential Schools, and Community for Learning, Co-Nect, Edison Schools,*

Expeditionary Learning/Outward Bound, High Schools That Work, Modern Red

School House, and *Paideia.*

First Things First

 First Things First was initially implemented in the Kansas City, Kansas School

District at all the elementary, middle, and high schools (Quint, 2006). Eventually this

program was implemented in several schools in numerous states. Investigation of this

program found that the components of small learning communities, instructional

improvement efforts, and the Family Advocate System led to increased attendance and

graduation rates, reduced dropout rates, and improved test results on state reading and

math tests (Quint).

Talent Development

    Having begun in Baltimore, Maryland, *Talent Development* was used in 83 schools

and 32 districts (Quint, 2006). As a program for whole school reform, its most effective

component was the focus on ninth grade students and teaming. Professional development

was also a part of this reform model (Quint). Quint noted that the program's success was

"substantial gains in attendance, academic course credits earned, and promotion rates

during student's first year of high school" (p. 17).

Career Academies

    The *Career Academies* program began about 35 years ago and is used in over 2,500

schools. Its key elements are "school within a school structure, a curriculum combining

academic and career courses, and partnerships with local employers" (Quint, 2006, p.

11). Research revealed that the program increased student participation in career

awareness and work related activities, increased student engagement in school, improved

attendance rates and credits earned toward graduation, but did not increase graduation rates or improve math and reading test scores (p. 15).

America's Choice

 America's Choice program began in 1989 and is being used in over 30 high schools. Its key components are an aligned system of standards, assessments, and curriculum with state standards, a strategy for identifying students who have fallen behind, and making the most efficient use of any resources available to increase student achievement (National Academy of Sciences, 2003). These components are accomplished through "strengthening instructional leadership, building professional learning communities, and engaging parents and community" (National Center on Education and the Economy, 2008, p.1) The research indicated that students in America's Choice schools stay in school, pass graduation tests, and have increased graduation rates. Also, statistically in math and reading students are scoring above the state average. In some cases when state test averages went down in the area of math, students in America's Choice schools have test scores whose averages have gone up.

Atlas Communities

 The *Atlas Communities* program (Atlas Learning Communities, n.d.) began in 1992 and is implemented in over 15 high schools. Its unique approach is a K-12 "pathway" that coordinates each student's educational program from the first day of kindergarten all the way through 12th grade graduation (National Academy of Sciences, 2003, pp. 205-206). Statistically students whose schools use the Atlas Communities program have shown math and writing gains. This reform model works with teachers, through professional development and collaboration, to examine student work, use data to identify student

learning needs, best practices in teaching, and to integrate instructional programs (Atlas Communities, 2008).

Coalition of Essential Schools

Coalition of Essential Schools (CES) program began in 1984 and is implemented in more than 400 high schools. Its key components are personalized learning, mastery of a few subjects and skills, graduation by exhibition, and creation of a nurturing community. Teachers become "critical friends" to one another during the change process (National Academy of Sciences, 2003). Schools that are Coalition Schools are showing increased attendance and graduation rates, increased numbers of students going to college, and a decrease in dropout rates. Academically students are improving standardized test scores (Coalition of Essential Schools, 2006).

Community for Learning

Community for Learning began in 1990 and was being implemented in six high schools before it ended in 2005. Founded on the premise of bringing communities and schools together, collaboration was one element of this program. The other key component was bringing about a community wide commitment to student learning through exposing students to many learning environments (libraries, museums, work places, higher education institutions, and homes). In addition, teachers worked in teams and collaborated to best meet the needs of their diverse students (National Academy of Sciences, 2003, p.206). On the *Community for Learning* website (2008), it is stated that "schools across the country that have used CFL have experienced reduced drop-out rates, raised achievement scores, and boosted morale" (www.temple.edu, 2008, p. 1).

Co-Nect

Co-Nect began in 1992 and it is unknown how many schools are engaged in the reform model. Its key components are integrating technology into instruction, designing lessons around interdisciplinary projects, and organizing schools into multi-grade clusters of students and teachers (National Academy of Sciences, 2003). Co-Nect schools have shown increases in student engagement and have seen improvement in student answers on open-ended type questions. Guiding the reform is project based learning and a critical friend's component tied to community service (Annenberg Media, 1998).

Edison Schools

Edison Schools formed in 1992 and actually began operating in 1995. This program is being implemented in about 10 high schools. Its key component is organizing a school into academies, houses, and teams. Teachers and students are given computers, the school day and school year are lengthened, students have the same teacher for 3 years, and instruction is aligned with assessments in a strong liberal arts curriculum. Schools contract with Edison and can terminate the contract at any time that student achievement results are not meeting the contracted terms (National Academy of Sciences, 2003, p. 207). In Edison schools students have made average five-year gains of 17.7 percentage points on criterion-referenced tests while students in these same schools gained on average 9.75 percentage points over a two year span" (Edison Learning, 2010, p. 1).

Expeditionary Learning/Outward Bound

Expeditionary Learning/Outward Bound began in 1992 and is used in over 30 high schools. The program is based on 10 design principles and its key components are small group learning (for administration, staff, and students), learning by doing, and developing character and a sense of community (National Academy of Sciences, 2003). The New

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American Schools website (2008) noted that there have been gains made in standardized test scores.

High Schools That Work

Formed in 1987 *High Schools That Work* (HSTW) is used in more than 1,200 high schools in 32 states. Its key components are the HSTW Assessment (given in math, reading, and science) and the HSTW student survey, combining college preparatory studies with vocational studies and student performance goals linked to the National Assessment of Educational Progress. The Southern Regional Education Board (2008) suggests that students who followed HSTW recommended academic curricula had considerably higher scores on math, science, and reading tests than those who did not. This is accomplished through relationship building between teachers and students, common planning time for teachers, focusing school administration on supporting what and how teachers teach, and teachers advising students and parents (Southern Regional Education Board, 2008).

Modern Red School House

Modern Red School House was developed in 1992 and is being used in over 15 high schools. Its main focus is to "take the rigorous curriculum, values, and democratic principle commonly associated with the 'little red school house' and combine them with the latest advancements in teaching and learning, supported by modern technology" (National Academy of Sciences, 2003, p. 209). The program is based on teacher teams, active participation by staff and students, curriculum aligned to state standards, and a staff created school vision facilitated by the administration. Modern Red School House provides a structure for implementing change and has helped math and reading scores

improve 15% to 20% in the schools that use it (New American Schools, 2008).

Paideia

Paideia was proposed in 1984 by Mortimer Adler and is used in 30 high schools in the United States and one high school in Sweden (Paideia, 2008). Its key components are three instructional approaches: didactic instruction, coaching, and small group seminars. In order for all three instructional approaches to be implemented, school wide restructuring needs to occur with support from administration. Socratic seminars may take up to two hours and coaching may require small groups for more one on one teacher assistance. The programs goals are based on "acquisition of knowledge, development of intellectual skills, and enlarged understanding of ideas and values" (National Academy of Sciences, 2003, p.210). Significant gains in state test results occurred within the first year of using the Paideia program and continued over time. In many schools students scored higher than the state average on their math, science, and language arts tests after using the program for several years. Students whose schools used the program tended to score 15 to 20 percentile points more on state tests than students whose schools did not use Paideia and achievement gaps were closed (Paideia, 2008).

In all 13 programs that were reviewed there were academic gains and in many models there were increased attendance rates, decreased dropout rates, and improved graduation rates. Not all of the programs, though, experienced all of the same gains. The four common threads that were found amongst the 13 reform programs included: supportive school leadership, professional development for staff and students, collaboration and small, professional learning communities.

Common Threads among the Reform Models

Leadership

According to Marzano, Waters, and McNulty (2005), the common thread of supportive leadership has been studied over an extensive period of time. Having an effective leader in place is critical for improving student performance (Education Alliance & National Association of Elementary School Principals, 2003; Fullan, 2002; Hallinger & Heck, 1999; Hargreaves & Fink, 2004; Harris, 2004; Institute for Educational Leadership, 2000; Mazzeo, 2003; Ousten, 1999; Waters, Marzano, & McNulty, 2003; Yukl, 2006).

Leonard and Leonard (1999) argued that "creating and maintaining such a culture of professional collaboration necessitates new understanding of appropriate school leadership" (p. 237). In many schools, principals are the leader. They help their schools adapt to a changing environment. Bass (2000) further noted:

> "Local line leaders in the organization and high level executives as
> well as internal networkers and community leaders are needed who
> can motivate and direct the organization and its members, to learn to
> adapt to the changes. The organization has to learn how to adapt to
> changes in the diversity of its workforce and customers as well as
> changing demands for social responsibility." (p. 18)

Leaders who understand and support effective school change utilize leadership practices that promote learning within the school organization (Lambert, 2005a; Hargreaves & Fink, 2003; Retallick & Fink, 2002; Sergiovanni, 2005; Weasmer & Woods, 1999: West, Ainscow & Stanford, 2005). Lambert (2003) further described leadership that promotes sustainable school change as keenly focused on creating

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conditions for learning, in that "leadership is the cumulative process of learning through which we achieve the purposes of the school" (p. 3).

Retallick and Fink (2002) supported this concept when concluding that "leading is defined as the framing of meaning and the mobilization of support for a meaningful course of action" (p. 92). Sergiovanni (2005) buttressed this concept by stating that "leadership inevitably involves change, and change inevitably involves learning" (p. 122). Specific to schools, this type of educational leader understands that "reforms need to be pursued under conditions which maximize intensive teacher learning, involving external ideas as well as internal ideas" (Fullan, 2003, p. 7). Effective leaders know that teachers are the key to any successful reform effort and can be a great source of ideas. "Schools are effective because of their teachers, not in spite of them. Even the most well-conceived improvement programs fall flat if teachers lack the skills to implement them" (DuFour & Eaker, 1998, p. 206)

Leading in a culture of change involves activity that results in direct impact and interaction with others participating in the change while attending to the creation of and sustaining of a culture of renewal (Fullan, 2003; Retallick & Fink, 2002). Sergiovanni (2005) described such leaders as having the ability to know and focus on what was critical and who "cared deeply about their work, learn from their successes and failures, take calculated risks, and are trustworthy people" (p. 112). This kind of leader advances reciprocal learning that enables others to contribute to the construction and negotiation of meaning, maximizing the potential of the organization, and leading to a shared purpose or vision (Harris & Lambert, 2003; Lambert, 1998; Mid-continent Research for Education & Learning, 2000). DuFour and Eaker (1998) added that "principals of professional

learning communities lead through shared vision and values rather than through rules and procedures" (p. 184).

Sergiovanni (2005) stipulated that such leaders craft conditions for change by emphasizing capacity building. Marzano, Waters, and McNulty (2005), when analyzing the factors that supported successful change or led to failed change, found that "the leadership supporting an innovation must be consistent with the order of magnitude of change represented by that innovation" (p. 66). Consequently, it is essential for change leaders to understand the change process and the nature of change (Fullan, 2002).

The challenge for educators and leaders involved in change is developing an understanding that the route to change is not the same for all organizations and, while most school organizations are fundamentally similar, there are "distinctly different change processes" (Mid-continent Research for Education and Learning, 2001, p. 3) Guskey (2000) noted that "the most worthwhile changes in education require time for adoption, adjustment, and refinement" (p. 9). He explained that change begins with small, incremental steps and "the greatest success is consistently found when the change requires noticeable, sustained effort, but is not so massive that typical users must adopt coping strategies that seriously distort the change" (p. 37). DuFour and Eaker (1998) believed that the principal's best strategy for change is professional learning communities because "the most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as professional learning communities" (p. xi).

To complicate grasping the nature of change, Fullan (2005) maintained that "significant change involves a certain amount of ambiguity, ambivalence, and uncertainty

for the individual about the meaning of change" (p. 3). Fullan also advised leaders to not assume that the version or image they carry of the change is the change that should be or will be implemented. Change has meaning for those involved in the process and that meaning is different for each person (Hargreaves, 2004).

School leaders successfully engaged in change establish necessary systems to support the change process, including creating a collective meaning of change (Retallick & Fink, 2002). The leader seeks to pursue and achieve changes that are supported by the school staff while developing these appropriate strategies for implementing change in a learning organization. DuFour and Eaker (1998) believed that such support by the school staff meant involving the staff in the decision-making process of the school which empowered teachers into action.

In contrast, West, Ainscow, and Stanford (2005) found that for the school leaders in school settings faced with challenging circumstances when initiating reform, "it was knowing how to start that mattered" (p. 90) and that the start of the change process is a time when schools "need to rediscover the sense of purpose"(p. 78). For those implementing change, Fullan (2003) suggested that "a good starting point is to develop a more relaxed attitude toward uncertainty: to not have expectations of the system that it is incapable of meeting, and then work on those more subtle, more powerful change forces that can bring greater results over time" (p. 25).

For school leaders to know when, how, and where to start change efforts, Beach (2006) recommended working with others in the organization to assess the internal and external environments as a means of specifying the needed changes. Doing the

assessment also means examining where the organization is compared to where the organization wants to be (Beach, 2006).

Retallick and Fink (2002) encapsulated the change process and at the same time acknowledged the complexity of change when explaining that leaders needed to find strategies for school staff to "develop the capacity for dealing with change by looking at school issues through multiple conceptual lenses" (p. 93). Understanding the change process is fundamental to successful change, but it is a challenging quest for those leading, initiating, and managing change. Therefore, to organize, motivate, lead change, and help their schools adapt to the demand for real academic results for students, effective educational leaders must draw from a variety of leadership theories and utilize elements from each theory to most appropriately bring about the necessary change (Waters & Grubb, 2004).

Transactional Leadership. Effective leaders are part manager and part motivator. The manager is also described as transactional. Transactional leaders are active or passive or use a system of rewards for accomplishments (Kouzes & Posner, 1995). If leaders are "active management by exception," they look for mistakes, monitor behavior, and enforce rules to avoid mistakes. These leaders tend to make people feel that they should not take risks or show any initiative. If leaders are "passive management by exception," they set standards but tend to wait for problems to occur and then use punishments to respond to the unacceptable actions (Yukl, 2002, p. 254). If leaders are "constructive transactional" they set goals and clearly indentify desired outcomes and use rewards when the goals and outcomes are reached (Kouzes & Posner, 1995;

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Marzano, et al., 2005, p. 14; Yukl, 2002, p. 254). Such leaders are "trading one

thing for another" (Marzano, et al., 2005, p. 14)

Transformational Leadership. The effective leader is described as

transformational and "more focused on change" (Marzano, et al., 2005, p. 14).

Transformational leaders "closely resemble leaders who are inspiring others to

excel, giving individual consideration to others, and stimulating people to think in

new ways" (Kouzes & Posner, 1995, p. 321). Yukl (2002) stated that people who

work for transformational leaders feel trust, admiration, loyalty, and respect for

the leader. Also, people will accomplish more than they thought they would

because of the motivation they feel from the transformational leader (Kouzes &

Posner, 1995).

Ethical Leadership. As change takes place within an organization, "effective

leaders engage members and other stakeholders in a dialogue to determine what type of

changes are necessary and morally right for the organization" (Yukl, 2006, p. 407).

Stakeholders are helped by leaders to acknowledge problems that are causing changes

and to help facilitate problem-solving. By providing relevant information and

encouraging critical evaluation of the information leaders, they assist stakeholders in

finding solutions that are suitable and valuable for everyone involved.

A leader who is focused on moral and ethical behavior will seek to serve the

people of the organization and the organization itself, putting their personal needs aside.

Furman (2003) defined such moral purpose as

> Social responsibility to others and the environment. School leaders with
>
> moral purpose seek to make a difference in the lives of students. They act

with the intention of making a positive difference in their own schools as

well as improving the environment in other district schools. (p. 17)

On a daily basis leaders employ ethical and moral leadership in everything

they do. All decisions are made with serving the needs of others as the goal.

Leaders focus on doing the right thing for the group, whether that is students,

parents, staff, community, or a combination of these (Kouzes & Posner, 1995).

Following through on commitments and doing the right things for the right

reasons assist leaders in developing credibility. "Leadership is a reciprocal

process between those who aspire to lead and those who choose to follow.

Strategies, tactics, skills, and practices are empty without an understanding of the

fundamental human aspirations that connect leaders and constituents" (Kouzes &

Posner, 2002, p. 23).

Servant Leadership. Ethical and moral behavior is the premise of servant

leadership (Greenleaf, 2002; Kouzes & Posner, 2002; Yukl, 2006). Through empowering

and nurturing their staff and encouraging them to become a part of the problem-solving

process a servant leader works toward making sure the high-priority needs of others are

met. Thus, the servant leader works toward what is moral and right.

With the central theme in educational leadership shifting toward leadership with

moral purpose, leaders are focused on doing something that really matters to the children,

all children, regardless of background and previous opportunities (Davis, 2003: Furman,

2003). Therefore, the essence of leadership is service (Davis, 2003). "Leaders are most

effective when they are reminded frequently of the purpose and the people the institution

serves" (p. 14).

Instructional Leadership. An instructional leader can be defined as a principal who "understands the instructional programs that the district has adopted well enough to actively guide teachers. He or she must be able to judge the quality of teaching in order to select and maintain a good teaching staff" (Fink & Resnick, 2001, p. 600). Instructional leaders need to have enough knowledge of content to help evaluate the teaching behaviors observed. They must then use instructional research when making recommendations to determine what should be done to help each teacher grow and improve. Instructional leaders must learn to develop small learning communities within schools to cultivate and strengthen the skills and knowledge of those within to improve students' learning and achievement (DuFour, 2002; Elmore, 2002; Fink & Resnick, 2001; Lambert, 2002). Fullan (2002) described instructional leadership as only a part of what is needed to meet today's accountability standards by stating the following:

> Characterizing instructional leadership as the principal's central role has been a valuable first step in increasing student learning, but it does not go far enough. . . . [We] need leaders who can create a fundamental transformation in the learning cultures of schools and of the teaching profession itself. The role of the principal as instructional leader is too narrow a concept to carry the weight of the kinds of reforms that will create the schools that we need for the future. (p. 17)

Principals cannot be effective by working alone. Therefore, principals need to guide teachers and other members of the school community to develop their own leadership capacity (Lambert, 2002; Leithwood, Jantzi, & Steinbach, 2000; National Association of Elementary School Principals, 2001; Waters & Grubb, 2004).

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Participative and Distributive Leadership. Participative leadership is "concerned with power-sharing and empowerment of followers" (Yukl, 2002, p. 13) and is defined as a style that assumes that "the decision-making processes of the group ought to be the central focus for leaders" (Leithwood et al., 2000, p. 12). Shared decision-making is connected with healthy, effective organizations (Furman, 2003; Leithwood et al., 2000; Schlechty, 2000).

Empowerment within the organization leads to improved organizational effectiveness (Hackman & Johnson, 2000; Hallinger & Heck, 1999; Katzenbach & Smith, 2003; Kouzes & Posner, 2002; Schlechty, 2000; Yukl, 2006). Benefits of participative leadership include "higher decision quality, higher decision acceptance by participants, more satisfaction with the decision process, and more development of decision-making skills" (Yukl, 2002, p. 83). When people have influence in decision-making they tend to identify with the decision, thus creating a sense of ownership and an increased motivation to put the decision into action.

The leader's responsibility in empowerment is to analyze each situation in order to establish when to encourage participation, when to delegate, and how to facilitate the conditions for empowerment. Leaders should not assume that everything will go their way, but instead be willing to give up control and listen to all opinions. Disagreement early on generates new ways of thinking resulting in more productive actions towards positive change (Fullan, 1996).

Creating high-performing teams is another way of empowering participants in the organizational change process. A team is a small number of people with corresponding skills who are devoted to a common purpose, performance goals, and approach for which

they hold themselves mutually accountable (Katzenbach & Smith, 2003). Since all stakeholders have a part in establishing goals and strategies, a common commitment and trust in the team to perform develops.

Through the development of a common purpose and goals, strategies are developed for various members of the team to carry out. As a result of mutual accountability, everyone is held responsible for the overall performance of the individuals and the team as a whole (Bolman & Deal, 1997; Katzenbach & Smith, 2003).

According to Schlechty (2000), "participatory leadership will be the mode of operation in healthy school districts committed to student success" (p. 198). Results-oriented, shared decision-making, when encouraged throughout the organization, develop a nourishing organization that is capable of growing and changing. A culture of belonging, responsibility, and commitment develops in a culture where everyone works together and all are important to the functioning of the organization (Rafaeli & Worline, 2000; Schein, 2000; Schlechty, 2000).

Distributed and participative leadership (Schlechty, 2000; Spillane, 2005) share many common characteristics. In the most effective schools, change occurs because everyone in the educational community takes the responsibility and authority to have a leadership role. The matching of expertise to need establishes greater commitment to mutual goals (Neuman & Simmons, 2000). The emphasis in distributive leadership is on the exchanges between people and situations. Distributive leadership develops interdependency as various leaders work in a coordinated manner, at times overlapping each other's work (Spillane, 2005), while concurrently developing leadership capacity in various members of the school community (Lambert, 2002; Spillane, 2005; Waters &

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Grubb, 2004). "The concept of shared leadership strengthens collective accountability for it envisions that all members of the school community can become leaders in achieving the desired results. Thus, leadership becomes a distributed property" (Zmuda, Kuklis, & Kline, 2004, p. 169).

In summary effective educational leaders must draw from a variety of leadership theories and utilize elements from each theory to most appropriately bring about necessary change (Waters & Grubb, 2004). Each of the above mentioned theories has the elements that can be used by principals, depending on the context of the situation, to bring about change within their existing organization. Consequently, effective leaders need a repertoire of skills, the ability to study conditions and situations through multiple frames, and the knowledge to choose the approach best fitting to the needs of people within the organization (Bolman & Deal, 1997; Seashore-Louis, Toole, & Hargreaves, 1999).

Strong leadership is not enough, however, to effectively lead an organization. Equally important, the principal must have the knowledge to be able to determine which leadership responsibilities need to be emphasized throughout the change processes constantly occurring in education (Waters & Grubb, 2004). Strong leadership also focuses on results. Effective leaders "work with their staffs to articulate clear and measurable goals, to identify indicators that offer evidence of progress, and to develop systems for monitoring those indicators on a continuous basis" (DuFour & Eaker, 1998, p. 194).

The principal needs to share responsibility, give up control, listen to new

ideas, and actively participate in team-driven, shared decision making. In order for teachers and community members to develop leadership skills and for principals to build leadership capacity for school improvement to occur they need research based professional development. Griswold (2005) further stated that "NCLB requires the use of research-based strategies and professional development for teachers to make school improvements" (p. 66).

Professional Development

Until about 10 years ago, according to Pierce and Hunsaker (1996) teacher professional development was primarily piece meal and a one shot dose of teacher in-service where teachers traveled to various locations. The in-service consisted of teachers listening to experts where "experts tell teachers how to teach and then leave them to fend for themselves" (Pennell & Firestone, 1998, p. 354). Kohler, McCullough, Crilley, and Shearer (1997) proposed that "The enhancement of teacher's professional development has become a predominant area for educational reform over the last 10 years and educators are noting that school's must be organized to promote teacher's continual learning and expertise" (p. 240).

Teachers should be active participants in professional development instead of passive recipients of information about change. Pierce and Hunsaker (1996) added that "The literature advocates that teachers be heavily involved in their own professional development and the change be accomplished on a school by school basis" (p. 103). DuFour and Eaker (1998) agreed that teachers should be active participants and "must function as staff developers who focus on creating a school culture that enables educators to grow and learn as integral parts of their standard routines" (p. 187).

It is the principal's job to provide teachers with the necessary information to make the informed decisions that create such a school culture. "Principals of professional learning communities provide staff with the information, training, and parameters they need to make good decisions" (DuFour & Eaker, 1998, p. 186).

Darling-Hammond and McLaughlin (1995) labeled this school-centered professional development. Fullan and Stiegebauer (1991) noted, "Change is needed because many teachers are frustrated, bored, and burnt out. Good change processes that foster sustained professional development over one's career and lead to student benefits may be one of the few sources of revitalization and satisfaction left for teachers" (p. 131). In agreement are Sparks and Hirsch (1997) who wrote:

> In a logical progression, results-driven education for students requires results-driven staff development for educators. . . .Staff development's success will be judged not by how many teachers and administrators participate in staff development programs or how they perceived its value, but by whether it alters instructional behavior in a way that benefits students (p. 5).

Moreover, real change requires a "transformation of subjective realities" (Fullan & Stiegebauer, 1991, p. 36). "Significant educational change consists of changes in beliefs, teaching style, and materials, which can come about only through a process of personal development in a social context" (p.132). According to the *National Foundation for the Improvement of Education* (1996) modern teaching and learning can no longer be packaged but instead require highly developed approaches to teacher development. NCLB is the most recent reason for requiring highly developed approaches to teacher

development. NCLB brought the focus of professional development to the relationship between teacher skill and student outcome with its requirement for schools to employ highly qualified teachers. "Professional development is no longer just about the transmission of content knowledge and skills; effective professional development must result in changes in student outcomes" (Kratochwill, Volpiansky, Clements, & Ball, 2007, p. 618-619).

Corenti (2008) added that "a current focus of research has examined teachers' professional development because this is the most direct avenue for influencing teacher learning and, therefore, teacher practice" (p. 1). Corenti also mentioned that content specific professional development has the most influence on teachers and their instruction. In agreement, Kratochwill et al. (2007) found that when professional development is core-area or content focused, it is more effective, and active learning in professional development leads to greater change in practice. In a professional learning community school, the focus of professional development is research-based content (DuFour & Eaker, 1998).

Schwartz and Alberts (1998) postulated that improvements in teachers' classrooms happen only if the teachers are involved in the process. Since teachers are the key to school reform, enriched and expanded professional development experiences need to be offered to teachers.

Today's teachers have new roles, just as administrators do. Teachers must now be able to teach and reach students from very diverse backgrounds. Teachers have to identify and attend to individual students' learning and developmental needs, which includes cognitive, emotional, social, and physical needs (Schwartz, et al., 1994)

Additionally, teachers have to learn about and use technology and decide how much of the overwhelming amount of new material being created in their content area to teach (Schwartz, et al., 1994).

Teachers must also find more effective ways to communicate and work with parents and community (Schwartz, et al., 1994). These new roles "demand ongoing, authentic, and person-oriented professional development. We believe that teachers will only be free to become positive change agents when they can choose education that helps them build on what they already know and allows them to make meaning of their own professional lives in a community of educators" (National Foundation for the Improvement of Education, 1996, p. 16). Teachers involved in professional learning communities make group learning a priority, and they work at building the collective capacity of the group to solve the problems that help all students learn (DuFour & Eaker, 1998).

Also in agreement are Darling-Hammond and McLaughlin (1995), Pierce and Hunsaker (1996), and Xu (2003) who argued that teachers must be ready agents of change who are willing to rethink their classroom practice, build new roles and expectations for student outcomes, and teach in ways they did not learn about in their teacher education classes. Teachers need to be given time to reflect on their daily lessons and to build those lessons around research-based content, pedagogy, and student learning. "Effective professional development involves teachers both as learners and as teachers and allows them to struggle with the uncertainties that accompany each role" (Darling-Hammond & McLaughlin, 1995, p. 1). For teachers to be learners and teachers Darling-Hammond and McLaughlin argued that the professional development:

Must engage teachers in concrete tasks of teaching, assessment, observation,

and reflection to illuminate the processes of learning and development. It

must be sustained, ongoing, intensive, and supported by modeling, coaching

and the collective solving of specific problems of practice; and it must be

connected to the other aspects of school change. (p. 597)

When professional development departs from the old style of in-service training or

pre-service training Darling-Hammond and McLaughlin (1995) suggested that how,

when, and what teachers learn shifts from policies that control or direct what teachers do

to strategies designed to develop teachers' and their schools' capacity to take

responsibility for student learning. Capacity building policies promote teachers

constructing their own knowledge and using that knowledge in their own content area as

opposed to policy makers using top down implementation for teacher's acquisition of and

use of knowledge. This concept of capacity building is also reflected in the writings of

Levin (2001) and Huffman, Thomas, and Lawrence (2003) who discussed that teachers

craft their own distinctive understandings of the teaching and learning process based on

what they already know and believe coupled with their ideas and experiences from the

real world. "Teachers learn by doing, reading, and reflecting (just as students do); by

collaborating with other teachers; by looking closely at students and their work; and by

sharing what they see" (Darling-Hammond & McLaughlin, 1995, p. 598).

Rallis, Tedder, Lachman, and Elmore (2006), Sparks and Hirsch (1997), and

Pennell and Firestone (1998) advocated that teachers learn most through an assortment of

opportunities to examine relevant problems with colleagues, not through workshops, and

through opportunities to share experiences of classroom practice (Sparks & Hirsch,1997).

Teachers need to work together to make sense of and understand the teaching and learning process within their own school environment (Pennell & Firestone, 1998). The examination of relevant problems with colleagues forms the basis of "a community of practice—a professional group engaged in the sustained pursuit of a shared enterprise for the purpose of learning and building community" (Rallis et al. 2006, p. 537).

The change in teacher professional development is also occurring because of the changing roles of principals (National Association of Elementary School Principals, 2001). The roles of principals and other educational leaders have expanded to include more emphasis on teaching and learning, data-driven decision making, accountability, and professional development (Institute of Educational Learning, 2000; National Association of Elementary School Principals, 2001).

Principals must be learners themselves and work with teachers to provide professional learning experiences focused on improvement of student learning, development of leadership capacity in various personnel within the school, and learning to use data from a variety of sources to guide decisions (King, 2002; Sweeney, 2003). Sweeney added that "effective professional development creates a learning environment in which teachers continue to improve their practice to better meet the needs of their students" (p. 10).

Blandford (2000) believed that principals must assist in staff development by providing, promoting, encouraging, and arranging for professional development opportunities, training, reflection, and models of good practice. "An effective manager will aim to improve the qualities of existing staff in order to achieve school targets" as "ultimately, the time committed to the professional development of teachers will be

reflected in pupil learning outcomes" (p. 13).

The roles of school administrators have expanded to include a more active role in teaching, learning, and professional development. "Administrators help provide teachers with direction for their actions and need to ensure that development strategies help manage teachers' intentions" (Diaz-Maggioli, 2004, pp. 152-153). Effective administrators will also facilitate, organize, and evaluate professional development while helping teachers network with colleagues in their own and other schools (2004).

Sweeny (2003) further argued that to improve the qualities of existing staff is to "help teachers define effective instruction and how it looks in the classroom" (p. 6). This help comes from classroom observations, lesson demonstrations, and use of research to help teachers create their own vision for instruction. Pennell and Firestone (1998) agreed through their promotion of state supported teacher networks where experienced and expert teachers facilitate and lead professional development. "The teachers we talked to confirmed that they found network programs more enjoyable and more pertinent to the classroom than most previous professional development opportunities. Many spoke of experiencing a sense of professional renewal" (p. 355).

At the school level, it is the principal's responsibility to manage professional development so that teacher's work can be accomplished successfully and efficiently. The principal should be the catalyst of teacher growth and development ensuring that there is an environment for teacher learning to flourish (Diaz-Maggioli, 2004).

Thus, professional development can no longer be a one-shot dose of teacher in-service because today's' teaching and learning can no longer be packaged as it requires more highly developed approaches to teacher development (Schwarz &

Alberts, 1998, p. 154). NCLB requires administrators to hire highly qualified teachers so professional development has become focused on the relationship between teacher skill and student outcome. Kratochwill et al. (2007) declared

> "The direct link made between high-quality professional development and student achievement found in NCLB requirements clearly highlights a significant shift in thinking. Professional development is no longer just about the transmission of content knowledge and skills; effective professional development must result in changes in student outcomes" (p. 619).

To accommodate changes in the classroom professional development must change and allow for more teacher input and interaction. "Professional development should embrace a range of opportunities that allow teachers to share what they know and what they want to learn and to connect their learning to the contexts of their teaching" (Darling-Hammond & McLaughlin, 1995, p. 598). Additionally, "professional development activities must allow teachers to engage actively in cooperative experiences that are sustained over time and to reflect on the process as well as on the content of what they are learning" (Darling-Hammond & McLaughlin, 1995, p. 598).

Darling-Hammond and McLaughlin (1995) noted that "new approaches to the professional education of teacher are needed, and they require new structures and supports" (p. 598). Teachers learn, as students do, through hands-on activities, researching, and reflecting. Teachers learn through collaboration, analyzing student work, and by sharing with colleagues. Such learning allows teachers to put theory into skilled practice. "In addition to a powerful base of theoretical knowledge, such

learning requires settings that support teacher inquiry and collaboration and strategies grounded in teachers' questions and concerns" (p. 598). School administrators can provide for this collaborative environment using various collaboration methods. "School principals must be advocates of collaboration and make it a priority by providing time for teachers to engage in collaborative activities" (Paulsen, 2008, p. 313).

Collaboration

With the shift to more accountability in schools and the passage of NCLB there has been a push to restructure education and "reculture schools in terms of teacher professionalism and collaboration" (Leonard & Leonard, 1999, p. 237). Part of that restructuring has involved teachers learning and working together. Brownell, Adams, Sindelar, Waldron, and Vanhover (2006) found that "teachers learning and working together to achieve common goals is considered by many scholars to be a central element of major school reform efforts" (p. 169). Brownell and Walther-Thomas (2002) and Brownell et al. (2006) further suggested that collaboration is important in the efforts to improve teaching, foster innovation, and create effective programs that will be sustained over time. Eastwood and Louis (1992) and DuFour and Eaker (1998) deem collaboration in schools as the most important feature of successful school improvement reforms and what must come first for anyone trying to improve the effectiveness of their school.

West (1999) noted that an increasing number of teachers want to collaborate with colleagues to show the connectedness of knowledge. Pugach and Johnson (2002) added that "in collaborative working environments, teachers have the potential to create the collective capacity for initiating and sustaining ongoing improvement in their

professional practice so each student they serve can receive the highest quality of education possible" (p. 6). Kezar (2006) also agreed that collaboration improves student learning.

School administrators currently are asked to use shared decision making to promote increased collegial interaction through professional growth initiatives (Darling-Hammond & McLaughlin, 1995; Hord & Sommers, 2008). Brownell and Walther-Thomas (2002) noted that principals and teachers first need to tackle pragmatic barriers for collaboration to work. Doing so means principals have to provide time for teachers to learn how to collaborate and continue providing time for collaboration to occur (Darling-Hammond & McLaughlin, 1995; Hord, 1997).

Studies have found that mentor/beginning teacher collaboration impact the teaching practice of first year teachers. "Beginning teachers in a collaborative school environment reported that their mentors made greater impacts on their professional development, which were further sustained by the collaborative culture" (Wang, Odell, & Schwille, 2008, p.136).

Wang et al. (2008) noted that first year teachers who collaborated with each other learned from each other through observation, modeling, reflection, and support of each other's teaching. The collaboration also led to seeing things from a different perspective (Wang, et al., 2008; O'Shea, Williams, & Shattler, 1999). Even if the students were not in the same schools, if they had been collaborating in coursework, they continued to collaborate with each other across districts. Grant and Gillette (2006) added that "collaboration can also build commitment and understanding across lines of ethnicity, gender, ability, socioeconomic status, language, and sexual orientation" (p. 295).

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One method of collaboration is collaborative inquiry (Knight, Wiseman, & Cooner, 2000), also called teacher research or collaborative research. The purpose of collaborative teacher research is to connect research with practice to shape teacher thinking, instructional behavior, and student outcomes while also affecting school systems and their culture. This type of collaboration addresses "the impact of innovations in conjunction with teachers throughout the research process, including problem identification, data collection, analysis, and dissemination of results" (p. 26).

Teaching portfolios is another method of collaboration that can be implemented. In a study by Xu (2003), using teaching portfolios for professional development led to teacher collaboration. The study sought to "better understand how one school used the teaching portfolios as a primary mechanism supported by a set of conditions to promote professional learning and collaboration among teachers at different developmental stages" (p. 349). Xu further found that collaboration was affected in three ways by the teaching portfolios. One, the portfolios were a means for teachers to learn with and from one another. The portfolio brought out a common language that connected teachers and gave them a means to share teaching styles and ideas with each another. Two, the portfolios bettered the relationship between teachers and administrators and brought about administrator/teacher collaboration. The portfolio gave administrators insight into what was going on in the teacher's mind and allowed administrators to work more constructively with teachers. In addition, the teachers began to see themselves as change agents. The teachers wanted to network with other local districts and districts in other states to collaborate on portfolio use and what was working in their classrooms (p. 350)

Koppang (2004) suggested using curriculum mapping as another method of

collaboration. Curriculum mapping consists of collecting data about what is really taught in a school. "Curriculum maps can provide information about content and skills used for instruction, as well as the length of time devoted to various aspects of the curriculum" (p. 154). If assessment methods are included on the curriculum map, then some links can be made as to how students will be expected to show their understanding of the subject matter.

Curriculum mapping is most effective when done with an entire staff but can be started within a grade level or subject area. Although individual teachers do the mapping, collaboration takes place when the maps are shared. "Sharing maps allows teachers to gain information and identify repetitions, gaps, and potential areas for integration. Teachers then come together in mixed groups to discuss the maps and compare their findings" (Koppang, 2004, p. 154). Once teachers discuss and compare findings they decide where adjustments need to be made in the alignment of curriculum. In the words of Hayes Jacobs (2004), "curriculum mapping . . . has provided the tools to build a cohesive learning community with teachers as the chief architects and builders" (p. 23).

Teacher learning cohorts are also a method of collaboration. The purpose of the cohorts is to aid teachers in improving their instruction through the implementation of new strategies. Exploring problems and learning how to implement new strategies was discussed in the cohort meetings (Brownwell et al. 2006). The cohorts are designed to "to be a professional development process driven by collaborative problem-solving, focusing on what teachers felt they needed to change in their teaching practice" (p.169).

The passage of NCLB led to restructuring in schools that provided time for teachers to work together and collaborate. Even in pre-service education, collaboration

was introduced and fostered. Mentors, first year teachers, regular, and special education teachers collaborated. Teachers had traditionally been very isolated from one another and collaboration changed this. Teachers working together fostered innovation, improved their teaching, and created more effective and sustainable programs. Teaching portfolios, curriculum mapping, teacher learning cohorts, and collaborative inquiry were some ways that teachers collaborated.

Small Learning Communities

According to Darling-Hammond, Ancess, and Wichterle Ort (2002), learning communities can also benefit students. "A number of studies have found that, all else equal, schools have higher levels of achievement when they create smaller, more personalized units in which teachers work together and students see smaller numbers of teachers over a given period of time" (p. 641). Fullan (1998) believed that school reform has for too long been about changing the structure of schools organizationally rather than culturally. Implementing new structures for teaching and learning will not positively affect student learning. Arbogast (2004) argued that "A learning community incorporated a strong emphasis on the professionalization of teacher's work through increasing teacher knowledge" (p. 36). Thus building a more collaborative and collegial atmosphere will positively affect student learning. Wald and Castleberry (2000) concurred that "rather than having new structures drive the change process, a change in culture toward a more collaborative, community-minded way of being together will dictate the necessary organizational changes in schools" (p. 13).

According to Westheimer and Kahne (1993), a learning community is interaction and consideration among teachers who share interests and responsibility for common

goals. The teachers pursue these goals together, building on the talents and expertise of each other while trying to reach consensus. "Meaningful interactions among members lead to a sense of shared responsibility for both the process and its outcomes. Reflection is encouraged, and dissent is honored" (p. 395). Tomlinson, Callahan, Tomchin, Eiss, Imbeau, and Landrum (1997) suggested that small learning communities are "communities of learning in which a variety of learners engage in a broad mix of educational experiences designed to maximize the contribution of each learner to self and to the whole" (p. 269).

According to Hord (2004) a small learning community "provides a structure for schools to continuously improve by building staff capacity for learning and change" (p. 14), and "the entire staff shares a common vision, learns collectively, and collaborates in working toward that vision" (Hord & Sommers, 2008, p. 17). McLaughlin and Talbert (2001) postulated that in small learning communities "teachers are mutually engaged in teaching; they jointly develop their practice; and they share a repertoire of resources and history" (p. 41).

Ladson-Billings and Gomez (2001) further noted that small learning communities offer a means of support and encouragement for teachers because "listening to one another's struggles and solutions can serve as a catalyst for changing ways of thinking about students who have experienced school failure" (p. 675). DuFour and Eaker (1998) argued that there are three things that constitute a small learning community. One is being professional, being an expert in a certain area, and using the current research in that area of expertise to collaborate with others to achieve goals of improvement. Second is being an ongoing learner who continually practices what is being studied and learned to

make continuous improvement. Third is being part of a community, a group that shares common goals and interests, and works toward those goals and interests to accomplish what they could not do on their own. In a small learning community "educators create an environment that fosters mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone" (p. xii).

Hord (2004), McLaughlin and Talbert (2001, 2006), and DuFour, Eaker, and DuFour (2005) identified three characteristics that any learning community must possess. First is to have a common mission, vision, and values; second is to have teacher collaboration; and third is to have joint learning and inquiry. These three characteristics help provide a learning environment that is "fueled by rich, diverse and accessible sources of information" (Wald & Castleberry, 2000, p.12).

Wheatley (1992) added "For a system to remain alive information must be continually generated. The fuel of life is new information. If there is nothing new or if the information that exists merely confirms what is, the result will be death" (pp. 104-105). A common mission, vision and values, collaboration, and collective inquiry stimulate the system of professional learning communities.

A common mission, vision, and values gives school staff their focus for improving student learning and is frequently referenced in school initiatives (DuFour & Eaker, 1998). Teacher collaboration means teachers working together in teams or as a whole staff toward a common goal established by each team or the school (Hord, 2004). Joint learning and inquiry refers to teachers looking for new answers to the old questions about helping students learn. There is constant questioning, testing of new ideas, reflection of the results of the testing, and more questioning. The status quo is no longer acceptable

(DuFour & Eaker, 1998; Hord, 2004; McLaughlin & Talbert, 2006).

Leadership has also become an important part of successful small learning communities, shared leadership in particular (Hord, 2004). "Administrators, along with teachers, must be learners: questioning, investigating, and seeking solutions for school improvement and increased student achievement" (Hord, 2004, p. 8).

In summary small learning communities are formed to allow for teacher collaboration as a means of increasing teacher knowledge, therefore, improving student learning. Fullan (1998) and Wald and Castleberry (2000) felt that nurturing a collaborative and collegial culture would benefit student learning more than using structural change to improve student learning. Collaboration, joint learning and inquiry, and a common mission, vision, and values are the three main characteristics of small learning communities (Fullan, 1998). Teachers working together also create an encouraging and supportive environment where colleagues listen to one another. The listening process serves as a catalyst for teachers to change the way they think about students who have not experienced success in school (Ladson-Billings & Gomez, 2001).

Other characteristics that are important to the success of small learning communities are leadership, action, and results (Hord, 2004; McLaughlin & Talbert, 2006). Administrators need to become learners with their staff and share leadership. Teachers who collaborate and inquire turn their ideas into actions and then the results of those actions are assessed as to how they affected student learning (DuFour & Eaker, 1998; DuFour, Eaker, & DuFour, 2005; Hord, 2004; McLaughlin & Talbert, 2001, 2006).

Professional Learning Communities

Professional learning communities combine leadership, professional

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development, collaboration, and small learning communities into a school reform initiative that moves away from the factory model schools of the nineteenth century to the learning organizations of the twentieth century. A professional learning community school focuses on results instead of rules or procedures, focuses on learning instead of teaching students what they should know, embraces collaboration instead of isolation, and empowers teachers to research best practices for classroom use (DuFour & Eaker, 1998). Teachers in a professional learning community focus on three questions to guide all that is done. Those questions are "What are students expected to know?"; "How will we know when students have learned it?"; and "What will we do when students do not learn it?" The four building blocks of professional learning communities are mission/purpose, vision, values, and goals. The building block of mission/purpose answers the question "Why do we exist" (DuFour & Eaker, 1998, p. 58)? It also answers the question "Where are we right now?"

A school wanting change figures out why it is doing what it is doing and accepts responsibility for the results. DuFour and Eaker (1998) suggested that a professional learning community school will have a mission and purpose that answers these two questions "what is it we expect our students to learn, and how will we fulfill our collective responsibility to ensure that this learning takes place for all of our students?" (p. 62).

The building block of vision answers the questions "Where do we want to go from here?" or "What do we hope to become?" (DuFour & Eaker, 1998, p. 62). The vision gives direction to the mission, motivates teachers to act, and can be viewed like a picture in one's mind. An effective vision statement could be "based on relevant

background information and research; be desirable, feasible, and credible; be focused on clarifying direction and priorities; be easy to communicate; and be developed through a collective process that promotes widespread ownership" (p. 86).

The third building block of values answers the question, "How do we make our vision work?" "The values question represents the essential ABC's of school improvement because it challenges the people within that organization to identify specific attitudes, behaviors, and commitments they must demonstrate in order to advance toward their vision (DuFour & Eaker, 1998, p. 88). Values statements guide school staff to reach their vision. All values statements are tied to the vision; they are concise; focus on what staff will do, not what they believe; and focus on what self will do to reach the vision, not what others can do. For example, teachers will focus on what teachers can do to reach the vision, not what administrators can do to reach the vision.

The fourth building block of goals answers the question "Which steps will we take first and when?" (DuFour & Eaker, 1998, p. 100). Each step taken will guide the actions taken by the staff to reach their goals. Priorities, responsibilities, and time lines will be established. Goals are measureable so progress can be monitored and celebrated. Goals are also the building blocks that help schools reach their vision.

The four building blocks help get PLC's started as a school reform. To sustain this effort takes "communication, collaboration, and culture" (DuFour & Eaker, 1998, p. 106). Communication comes with the constant reminder of what the building blocks established. Administrators and teachers regularly ask questions that reference what is being done, that it is connected to the achievement of the vision. Communication occurs with the sharing of results as progress is monitored.

Over time, some other characteristics of professional learning communities have arisen. DuFour and Eaker (1998) identified that "professional learning communities are action oriented and results oriented" (p. 27, 29). Teachers in professional learning communities do not accept inaction; they turn ideas into actions, which is followed by the belief that actions must produce results and that the results are assessed to determine degree of improvement. Actions are also a means of communication. Administrators and teachers model for their students what is expected. If administrators talk about the importance of collaboration, they make sure collaboration is a part of the teaching day. If teachers want students to be life-long learners, they demonstrate life-long learning to their students (DuFour & Eaker, 1998).

Time allocation, celebration, and confronting the tough issues are also means of communicating commitment to reaching the school's vision (DuFour & Eaker, 1998). If something is important then time is provided for discussion and action. Each time goals are reached, they should be celebrated to communicate their importance and keep the focus on the vision. When people do not do their part in focusing on the vision, they are confronted on a behavior level, not a personal one by their principal. The administrator reminds teachers that they made a commitment to a vision and that their behavior needs to show that commitment.

Although collaboration is just one of the important components of PLC's, it is the piece that is most critical to sustaining school improvement. DuFour and Eaker (1998) stated,

"It is clear that the effort to transform a school into a professional learning community is more likely to be sustained when teachers participate in

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reflective dialogue; observe and react to one another's teaching; jointly

develop curriculum and assessment practices; work together to implement

new programs and strategies; share lesson plans and materials; and

collectively engage in problem solving, action research, and continuous

improvement practices" (pp. 117-118).

The best structure of collaboration is the team. Teams of teachers can be arranged

by grade level, by content area or by students whom they share. Collaboration can also

exist around professional development (DuFour & Eaker, 1998). For example if a group

of teachers are all interested in using the same strategy or strategies, they can collaborate

after they have participated in professional development and plan for use and follow up

of the strategy or strategies. Lambert (1998) called this a type of shared leadership. "To

be 'leadership,' these processes must enable participants to learn themselves toward a

shared sense of purpose-a purpose made real by the collaboration of committed adults"

(p. 8).

Effective collaboration also has to be specific. The collaboration team needs to be

clear about what it is trying to achieve. The goals that the school has set to achieve its

vision are some of the specifics. Other specifics are designed by the teams themselves as

they pursue the goals (DuFour & Eaker, 1998). Another reason for specific collaboration

is that "collaboration is not a natural act in the traditional culture of American education

in which teachers work in isolation" (p. 125). Teacher teams need specific questions and

tasks to give the team a sense of direction and confidence.

The culture of school change and any professional learning community school is

fashioned by its values. Values drive behavior and attitudes about change. The best

"strategy for influencing and changing an organization's culture is simply to identify, articulate, model, promote, and protect shared values" (DuFour & Eaker, 1998, p. 134). Articulating, modeling, and protecting values occur through collaborative dialogue, reflection, and celebration. Professional learning community schools design their mission and purpose, vision, values, and goals around curriculum and instruction, the areas that impact school improvement the most. As Dufour and Eaker noted:

> A professional learning community strives to provide its students with a curriculum that has been developed by the faculty through a collaborative process and enables the school to foster a results orientation in its most critical area—student learning. (p. 152)

Teams rather than individuals make collectively better decisions. "The members of a learning community give up a measure of individual autonomy in exchange for significantly enhanced collective empowerment" (DuFour & Eaker, 1998, p. 154). The curriculum decisions that are made involve both what should be taught and what should not be taught. Ultimately, DuFour and Eaker suggested that the guiding factor in these decisions was focusing "on significant learner outcomes" (p. 163).

Summary

Initially in this literature review, 13 school reform efforts were examined. Three programs showed success in improving student achievement and each program had the key elements of students placed into small learning groups, a focus on academics, and a community component. The other 10 programs had at least one of the key elements previously listed and showed success in the areas of decreased dropout rates, increased

graduation rates, math and writing gains, increased attendance rates, improved morale, increased number of students going to college, improved achievement rates, increased student engagement, improved responses on open-ended test questions, and improved achievement scores in the areas of science and reading.

Examined next were the common threads of the reform programs. The common threads were leadership, professional development, collaboration, and professional learning communities. In the area of leadership, theories and components of effective leadership were described for a variety of school settings. Leaders determine which theories are effective based on the situations they encounter in their daily routine.

Subsequently identified were professional development and an argument made that it must accommodate the changing classroom and must allow for teachers to engage and interact with one another to share, learn from one another, and connect their learning to their teaching. Recognized was collaboration as the ingredient that gives teachers time to talk with one another. Moreover, that collaboration can happen between two or more people and occurs through curriculum mapping, teaching portfolios, and collaborative inquiry.

Finally, the literature reviewed pointed out that professional learning communities (PLC) combined leadership, professional development, and collaboration to convey to administrators and teachers that by collaborating they can have a positive effect on student learning outcomes. Teachers by engaging with one another, come to possess a sense of shared responsibility for student learning, and they accomplish together what none of them could accomplish alone. This literature review examined if the use of professional learning communities resulted in a change in high school administrative and

high school teacher behaviors and ultimately high school student outcomes.

Discussed in Chapter Three is a description of the research design and methodology. This discussion includes research questions, population, and sample, methods of data collection, and data analysis. Presentation of the data findings and analysis of these findings are presented in Chapter Four. Findings, conclusions, implications for practice, and recommendations for future research are described in Chapter Five.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

School reform models and school improvement initiatives inundated the

educational community with the publishing of the 1983 *Nation at Risk* report (Hord,

2004). At first, the initiatives were simply more of what already existed and were dictated

by the federal government. The reforms did not focus on teaching or instruction and

many schools were not successful in their attempts to help all students learn (DuFour &

Eaker, 1998; Hord, 2004; Neuman & Simmons, 2000; Vail, 2004).

The focus of the initiatives tended to be on total school redesign that included

shared decision making, site based management, teams, and teachers sharing

responsibility for classroom instruction (DuFour & Eaker, 1998; Vail, 2004). While the

federal government gave states, more control these initiatives were not successful and

never seemed to include the heart of where education happens, the classroom (DuFour &

Eaker). Fullan (2002) argued further that school reform efforts should focus on what is

needed to improve student learning, explanations about why changes are being made, and

how best to implement the needed changes. Lasting change can happen when these

efforts are focused within a collective group of teachers, and not on any one individual

(Fullan; Ousten, 1999).

In 2002, the *No Child Left Behind Act* of 2001 brought the school reform focus

closer to the classroom with its requirement of accountability of what was being taught in

the classroom through high stakes testing (Vail, 2004). Fullan (2004) posited "there are

simple, proven, affordable structures that exist right now and could have a dramatic,

widespread impact on schools and achievement" (p. 424). He noted that the tool that encompasses the structures is professional learning communities. DuFour and Eaker (1998) agreed, making note that "The most promising strategy for sustained, substantive school improvement is building the capacity of school personnel to function as a professional learning community" (p. xi).

DuFour and Eaker (1998) further identified that professional learning communities incorporate leadership, professional development, and collaboration to bring about change in instruction that will positively impact student learning. While there have been inquiries regarding PLC's at the elementary level (DuFour & Eaker, 1998; McLaughlin & Talbert, 2006), the use of PLC's at the high school level has not been prevalent (Vail, 2004). Increased dropout rates (Noguera, 2002; Vail, 2004) and growing diversity issues have generated an urgent need to investigate the impact of professional learning communities on the perceptions of the changes in behavior on the part of administrators and teachers to influence improvements in student outcomes at the high school level.

In this chapter, the rationale for the design and methodology of this study are described. The population and sampling for the study depicted and a description of the instrumentation used, along with data collection methods and data analysis is explained. Completing the information presented in the chapter is a discussion of the researcher's biases and assumptions impacting the study.

Problem and Purpose Overview

The *Nation at Risk* report published in 1983 and the *No Child Left Behind* Act of 2002 flooded the educational scene with school reform programs and increased

accountability requirements for public schools (Darling-Hammond, 2007; Hord, 2004; Meier, 2004; United States Department of Education, 2001). Educators were held accountable for what students learned and accountability increased. Most recently, and after many years of failed reforms, professional learning communities (PLC's) have been promoted by researchers in education to improve student achievement and address the issue of accountability (Blankstein, 2004; Buffum & Hinman, 2006; Schmoker, 2006).

PLC's promote leadership, professional development, and collaboration where the entire staff takes responsibility for student learning. Therefore, the purpose of this study is to focus on the perceived administrative and teacher changed behaviors that occurred in high schools successfully implementing PLC's and how these behaviors affected student outcomes.

Research Questions

The purpose of the study was to investigate the impact of professional learning communities on administrator and teacher behaviors and student outcomes in a high school setting. The literature reviewed (Blankstein, 2004; Buffum & Hinman, 2006; DuFour & Eaker, 1998; Schmoker, 2006) revealed that many researchers acknowledged that schools must move away from the factory model of existence and move towards the collaboration model of a learning organization, also known as a professional learning community. The focus of this inquiry was to examine the perceived impact PLC's had on administrative and teacher behaviors and student outcomes in a high school setting.

The research questions addressed in this study are as follows:

1. How has the principal behavior changed with the implementation of PLC's?

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2. How has the teacher behavior changed with the implementation of PLC's?

3. What are the perceived outcomes of PLC's by administrators, teachers, and students?

4. What types of ownership do students take of their own learning since the implementation of PLC's?

5. What impact have PLC's had on student outcomes?

Rationale for Using Qualitative Research

Merriam (1998) argued, "Qualitative research is an umbrella concept covering several forms of inquiry that helps us to understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible" (p. 3). For the purpose of this study, qualitative research was chosen. Unlike quantitative methodology, the qualitative approach, through interviews and observations, attempts to describe what a program experience means to participants (Patton, 1997), referred to as "holistic description" (Wallen & Fraenkel, 2001, p. 432).

Although there are a variety of qualitative methodologies, some general characteristics are found in qualitative research studies. The characteristics of qualitative research studies are (a) people are the main focus of the research and data analysis is based on their words and actions; (b) the research design emerges over time and the focus of the study becomes broader or narrower after the study begins, not before it starts; (c) sampling for the study is not random but purposefully chosen; (d) collection of data and data analysis are primarily done by the researcher; (e) the research, called fieldwork, is done where the people are who are being studied; (f) the research builds on hypotheses

or theories not on questioning existing theory; and (g) the results of the study are written in a narrative format with rich detail (Merriam, 1998; Wallen & Fraenkel, 2001).

As there are numerous characteristics of qualitative research, there are also several types of qualitative research. Five major types of qualitative research are (1) generic or basic qualitative study, where the researcher is simply trying to understand something; (2) ethnographic study, where society and culture are observed and commonalities are identified; (3) phenomenology, where the essence of a phenomenon is depicted; (4) grounded theory, where as the researcher collects and analyzes data and a theory emerges from within that data; and (5) case study, where one individual or program or entity is examined in detail within a limited time frame (Merriam, 1998; Thomas & Brubaker, 2000; Wallen & Fraenkel 2001). This researcher chose a case study approach to study the perceived effect of professional learning communities on principal and teacher behaviors and student outcomes in a high school setting.

There are two categories and several types of case studies (Merriam, 1998). The case study approach used in this study is termed overall intent. The types of case studies done for overall intent are (a) descriptive, a detailed account of a phenomenon being studied; (b) interpretive, attempting to "develop conceptual categories or to illustrate, support, or challenge theoretical assumptions held prior to data gathering" (p. 38); and (c) evaluative, explaining, judging, or describing what is being studied (pp. 38-39). This researcher will conduct an interpretive case study to support that PLC's affect principal and student behavior and student outcomes in a positive way.

Qualitative Inquiry Limitations

Every study has its limitations and case studies are no exception (Wallen & Fraenkel, 2001). Observer effect is a limitation because participants being observed may act differently than normal while the observer is present as participant curiosity takes over. In addition, the behavior of the observed participants may be influenced by the intent of the researcher.

Observer bias can be another limitation if researchers have their own opinions and prejudices which could color what they see. This can work in two ways. One is where past experiences bias what is observed. The second is where the observer, knowing certain characteristics about who is being observed, expects a certain behavior that may not actually occur (Wallen & Fraenkel, 2001).

Multiple observers and conclusions can also be considered a limitation if after reading reports from several observers on the same topic, there was not one "real truth" but instead diverse conclusions (Thomas & Brubaker, 2000, p. 109). Other limitations include time and money to devote to the study; the study may be too long or too detailed to be useful; the report of the topic being studied may be oversimplified or exaggerated which could lead to invalid conclusions from anyone reading the study. Additionally, with the researcher being the primary instrument for collection of data and its analysis, the sensitivity and integrity of the researcher could be questioned; ethics questions could arise as the researcher could choose whatever data he or she wanted to get the result he or she hoped for; and the reliability, validity, generalizability can be questioned (Merriam, 1998).

In this study the primary task of the researcher was to seek the insights and perceptions of participants about how professional learning communities affected

principals and teacher's behaviors and student outcomes. To address the limitations

referred to above, the researcher used multiple methods of data collection such as teacher

focus groups, interviews of administrators, and interviews of students, and then data were

triangulated in order to assure validity and reliability (Creswell, 2003). Limitations were

also addressed using member-checking to review data and information provided by the

participants to assure validity of the qualitative findings (Merriam, 1998). Consequently,

this qualitative case study remained sufficiently open and flexible to permit the study of

PLC's data emergence for further research (Patton, 1997).

Population and Sample

In a qualitative case study, the most appropriate sample to choose is one that is

purposeful. "Purposeful sampling is based on the assumption that the investigator wants

to discover, understand, and gain insight and therefore must select a sample from which

the most can be learned" (Merriam, 1998, p. 61).

In this study, the researcher contacted the professional learning community trainer

at the nine Missouri Regional Professional Development Centers (RPDC's) and asked for

one high school in each of the nine regions considered a highly effective professional

learning community school. The areas that each RPDC represented were a geographical

cross section of all schools in the state.

The criteria given to the representative at the Regional Professional Development

Centers for choosing the high schools was that they had been professional learning

community schools for 3 to 5 years, had documentation to show that there would be a

continued commitment to sustaining PLC's, and that on-going professional development

would be centered around PLC work. An additional criterion was that the principal of the

professional learning community high school had been leading the school for at least 2 years.

Not all RPDC's responded. Of those that did, six high schools were identified, and the superintendents of the school districts were sent letters of interest. From the four responses received, three high schools were randomly chosen as a typical sample. A typical sample was chosen as it "reflected the average person, situation, or instance of the phenomenon of interest" (Merriam, 1998, p. 62).

Once the three schools were identified, the superintendent in each of the districts was sent a gatekeeper's letter seeking authorization for school participation (see Appendix A) requesting permission for the administrator, five teachers, and five students of the school to take part in the study. After the superintendent gave informed consent for the school to participate, a letter of participation (see Appendix A) was sent to the principal in the building for permission for the five teachers and five students (who were 18 years of age) to participate.

In the letter, the principal was asked to select five teachers, some of whom had been with the school prior to the start of PLC, to participate in a focus group at the school setting. Next, the principal and teachers were also asked to identify students who were 18 years of age to be part of a focus group. Once the teachers and students were identified, a letter of consent for the teachers and for those students who were 18 years of age was also sent to the principal who distributed, collected, and mailed them back to the researcher. All those who agreed to participate were asked to sign and return their informed consent letter.

Data Collection

There were three ethical guidelines followed to protect the human subjects involved in this study. The three guidelines addressed were protection of participants from harm, assurance of the confidentiality and security of research data, and avoidance of deceiving subjects involved in the research (Creswell, 2003; Fraenkel & Wallen, 2003). Superintendents in the districts of the three participating schools received and signed gatekeeper consent forms, granting permission for the school's participation in the study.

The following elements of the consent form were included: the right to participate voluntarily, the purpose of the study, the procedures of the study, and the right to ask questions, obtain the results of the study, and have their privacy respected. Also included were the benefits of the study for the individual and the signatures of the participants and the researcher (Creswell, 2003).

These consent forms met with the approval of the Institutional Review Board of the University of Missouri, Columbia (see Appendix A). Signed letters of informed consent accompanied any research conducted. All responses were coded to make certain that the confidentiality of the subjects was protected.

Principals and focus group members were contacted to set up times and places for interviews. A letter of confirmation was sent, via e-mail, to each participant (Appendix A). In addition, the interview questions and focus group questions were e-mailed so that the participants had an opportunity to review the questions and contemplate their responses. Principals were also contacted to set times for the researcher to observe PLC activities. Again, a letter of confirmation and a letter of informed consent were e-mailed (Appendix A).

Interview Protocols

        The most common way, and sometimes the only way, to gather data in a qualitative study is through interviews. While some interviews are face to face or one on one, others are done in groups. The purpose of interviewing is to get information that cannot be observed such as feelings, perceptions, interpretations, or past events and to give "voice" to the respondent (Merriam, 1998). Thus, semi-structured interviews were conducted to triangulate the data gathered from focus groups, observations, and document analysis. Two face-to-face audio-recorded interviews with the Principal were conducted. The first interview protocol was developed in regard to professional learning community facets (see Appendix B). The second interview protocol was developed from the results of analyzing the teacher and student focus group interviews (see Appendix B). These semi-structured interviews were conducted consisting of open-ended experience and opinion questions (Fraenkel & Wallen, 2003) relating to PLC as an effective reform model for high school settings.

        Each interview was audio-recorded and later transcribed by the researcher. Member checking was conducted to verify the accuracy of the transcripts and confirm for each participant that their stories were portrayed as intended (Fraenkel & Wallen, 2003). The researcher took Field notes during the interview process to record information not reflected on the audio-tapes. Triangulation of the data occurred through the use of rich, thick descriptions provided from the interviews, field notes, document analysis, and observations (Creswell, 2003; Fraenkel & Wallen; Merriam, 1998).

        During the interview process, the researcher must be careful not to be overly structured in the interview process to prevent respondents from reacting to what they

think the researcher already believes. Also, respondents may talk more freely when interview questions are more open ended and non-specific (Merriam, 1998; Cohen, Manion, & Morrison, 2002).

Focus Group Protocol

The researcher also facilitated two focus group meetings to gather data from the teachers and students. The focus group protocol (see Appendix B) was selected because, as noted by Krueger and Casey (2000), "a range of ideas or feelings that people have" (p. 24) was necessary.

One focus group consisted of five principal-selected teachers involved in the PLC program being studied. Another focus group consisted of five students selected by teachers and principals who had been students at the high school during the implementation of PLC. These participants were selected based on being determined as information-rich participants (Krueger & Casey, 2000).

The conversations of the focus groups were audio-recorded and transcribed at a later date. The focus group lasting less than one hour took place at the various high school settings. The researcher used slightly modified questions based on the same focus of questions as used in the interview protocol for principals.

Observations and Document Review

To compliment interviews in a qualitative study, observations and document analysis was done. Observations represented firsthand accounts of what was being studied; unlike interviews which are second-hand accounts. In actuality, observations and interviews tend to go hand in hand, as during observations some conversations and informal interviews occur (Merriam, 1998).

Some concerns in the area of observation are the uncertainty of participant observation with regard to being at the right place at the right time, talking to the appropriate people, and doing the proper thing at the correct time. There is also worry about how to organize all the observed data, over identifying with the participants of the study, and speculating how much the observer is affecting what is being observed. The researcher's job is to identify the effects of being an observer and account for them when interpreting the data (Creswell, 2003; Fraenkel & Wallen, 2003; Merriam, 1998).

In order to minimize the effect of interview and observation limitations, the researcher reviewed the transcripts, observation logs, field notes, documents, and artifacts, to find patterns that emerged in order to triangulate the data (Fowler, 2004). For the sake of accuracy, the researcher also provided the participants with the transcriptions for their review.

Data Analysis

Qualitative research is not linear or step by step process; therefore, data collection and analysis are simultaneous during the case study. The interaction of data collection and analysis aid the researcher in producing findings that are honorable and credible (Merriam, 1998). Therefore, used in this study was the constant comparative method of data analysis. With this method the researcher, literally, compares units of data during the study (Merriam, 1998). To further explain the constant comparative method, Boeije (2002) noted,

The researcher decides what data will be gathered next and where to find them [the data] on the basis of provisionary theoretical ideas. In this way it is possible to answer questions that have arisen from the analysis of and reflection on

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previous data. Such questions concern interpretations of phenomena as well as boundaries of categories assigning segments or finding relations between categories. The data in hand are then analyzed again and compared with the new data. (p. 393)

Organizing and managing data were accomplished through a coding system which led to the surfacing of recurring patterns. The patterns then made evident the emergence of categories or themes creating a framework for data analysis. The researcher ended the data collection process when duplication and repetition of data occurred (Merriam, 1998).

In a qualitative study, the process is "guided by detailed procedures (for example selection of participants, identifying categories) and conceptual relationship among categories…. [which] were formulated and tested by reexamining each interview through a comparative method to test the relationships" (Merriam, 2002, p. 150). This study represented insights and perceptions of principals, teachers, and students from three professional learning community schools. These findings may inspire further investigation by other researchers.

In order to establish trustworthiness and consistency in a qualitative case study Yin (2003) postulated that there must be validity and reliability components:

1. Construct validity: establishing correct operational measures for the concepts being studied.
2. Internal validity: establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships.

3. External validity: establishing the domain to which a study's findings can be generalized.

4. Reliability: demonstrating that the operations of a study – such as the data collection procedures – can be repeated, with the same results. (p. 34)

The researcher established trustworthiness and consistency through record keeping, coding, and data collection. Maintained was a personal log and it noted the dates of all phone contacts, letters mailed, e-mails sent, scheduled interviews, and scheduled observations.

The researcher followed a specified and formal procedure for selecting the participants, data collection, and data analysis. Field notes, transcriptions, and additional documents were locked up and under the direct supervision of the researcher. Even though all interviews were completed by the researcher, the data collected was reviewed by an educational researcher to further confirm credibility.

Document Analysis

The analysis of school documents was based on the themes developed from the coding of the interview transcripts. The documents that were included in the analysis involved the CSIP (Comprehensive School Improvement Plan, which focuses on student achievement and graduation) of the school, the MSIP (Missouri School Improvement Plan, which focuses on student achievement, attendance, and graduation) of the district, and any related documents describing the PLC program and processes, including agendas and team group meetings. Examined, were the vision and mission statements of each district, to determine alignment with the goals of the PLC program, in addition to the themes developed through interview coding.

Observation Analysis

Observation (see Appendix I) was also used in order to develop thick, rich descriptions of the phenomenon of using the tenets of PLC as professional development. Observation was utilized to obtain detailed evidence as to how participants' behaviors in PLC team meetings aligned to participants' reflections in the focus group and what meanings various factors have for participants.

Observation was also employed during individual interviews of the principal. The observation categories included setting, interactions, activities, language, nonverbal communication, what was not happening, and the researcher's own feelings. The observations were then analyzed in conjunction with the themes developed from the coding of the transcripts of the interviews and focus groups.

Researcher's Biases and Assumptions

The researcher in qualitative inquiry is considered the primary instrument for data collection and analysis and therefore, "must be aware of any personal biases and how they may influence the investigation" (Merriam, 1998, p. 21). Therefore, this researcher realized the potential for bias in this study of the impact that Professional Learning Communities might have on principal and teacher behavior and student outcomes.

Additionally, the researcher is passionate about PLC's and believes that PLC's are beneficial to staff and students. In order to control for personal biases in the study and foster validity, safeguards were provided by triangulation of data and data management procedures. The researcher also provided the participants with the transcriptions for their review (member checking) and the data collected were reviewed by an educational researcher to further confirm credibility.

Summary

The rationale for the design and methodology of the study was presented in Chapter Three. An overview of the problem and purpose regarding this qualitative case study was provided. Furthermore, the research questions were established and the population and sample were identified. Additionally, the rationale for the chosen study design and a description of procedures for data analysis were explained. Safeguards were put in place to ensure credibility and consistency. Recognition of the biases and assumptions of the researcher were also discussed. Contained in Chapter Four is a description and analysis of the data. A summary of the findings, conclusions, the implications of the study, and the need for future research are included in Chapter five.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of the study was to investigate the impact of professional learning communities (PLC's) on administrator and teacher behaviors and student outcomes in a high school setting. The literature reviewed (Blankstein, 2004; Buffum & Hinman, 2006a; Schmoker, 2006; DuFour & Eaker, 1998) revealed that many researchers acknowledged that schools must move toward the collaboration model of a learning organization, also known as a professional learning community. Thus, the focus of this inquiry was to examine the perceived impact PLC has had on administrative and teacher behaviors and student outcomes in a high school setting.

In this study, the researcher contacted the professional learning community trainer at the nine Regional Professional Development Centers (RPDC's) and asked for one high school in each of the nine regions that was considered a highly effective professional learning community school. The criteria given to the representative at the Regional Professional Development Centers for choosing the high schools was that they had been professional learning community schools for 3-5 years, had documentation to show that there would be a continued commitment to sustaining PLC's, and that on-going professional development would be centered around PLC work. Additional criteria given were that the principal of the professional learning community high school had been leading the school for at least 2 years.

Once high schools were identified, gatekeeper letters were obtained, from the district superintendents, by the researcher. Next the high school principals, their teachers,

and students 18 years of age and older were contacted and informed letters of consent were obtained. These consent forms met with the approval of the Institutional Review Board of the University of Missouri, Columbia (see Appendix A). Then interviews were arranged with principals and focus groups of teachers and students. All interviews and focus groups were audio-recorded. The researcher also observed PLC activities and analyzed MSIP, CSIP, and PLC paperwork for data collection.

Organization of Data Analysis

Part I: Demographic Data

Schools

Three schools were randomly selected from the list of schools received from nine Regional Professional Development Centers and were considered to be highly effective professional learning communities. All three schools were on the western side of the state as the one school that was on the east side of the state declined participation in the student interview portion of the research.

School A has 840 students, grades 9-12, which is a decline over the last five years. The ethnicity of the student population is 93.5% White, 2.9%, Hispanic, 2.1% Black, .8% Indian, and .7% Asian. The graduation rate in 2009 was 80.4%. There are 57 teachers whose average years of experience are 13.8. Sixty-five percent of the teaching staff has a Master's Degree or above. The average teacher salary is $44,782 and the average administrator salary is $84,904. This suburban district had a population of 17,004 in the 2000 census. The average family income was $50,451and the average home value was $95,919.

School B has 890 students, grades 9-12, which represents an increase over the last

five years. The ethnicity of the student population is 95.4% White, 2.7% Hispanic, 1.7% Black, .7% Asian, and .1% Indian. The graduation rate for 2009 was 93.6%. There are 57 teachers whose average years of experience are 9.8 and 58% of the staff has a Masters Degree or higher. The average teacher salary is $44,382 and the average administrator salary is $81,349. This suburban district had a population of 9,000 in the 2000 census. The average family income was $58,893 and the average home value was $125,926.

School C has 345 students, grades 7-12. The ethnicity of the student population is 96.5% White, 2.0% Black, .6% Hispanic, .6% Asian, and .3% Indian. The graduation rate in 2009 was 100%. There are 24 teachers whose average years of experience are 15.4 and 26.3% have a Masters Degree or higher. The average teacher salary is $37, 313 and the average administrator salary is $69,520. This rural district had a population of 4,046 in the 2000 census. The average family income was $57,297 and the average home value was $126,887.

Part II: Compendium of Findings

Research Questions

The following research questions were answered through collection and analyzing of the data:

1. How has the principal behavior changed with the implementation of PLC's?

2. How has the teacher behavior changed with the implementation of PLC's?

3. What are the perceived outcomes of PLC's by administrators, teachers, and students?

4. What types of ownership do students take of their own learning since the implementation of PLC's?

5. What impact have PLC's had on student outcomes?

Principals, teachers, and students were interviewed, and the researcher observed PLC activities at each of the respective schools. Documents (district school improvement plan, comprehensive school improvement plan, PLC data, and assessment data) were collected and field notes were taken to provide additional information about the school environment. Interview and focus group transcripts were coded to examine and compare the data to determine the interconnectedness between and among the participants' responses, thus identifying categories and themes. Focus group discussions, interviews, observed PLC activities, field notes, and documentation were considered to triangulate the data.

Protocol

Before visiting the three schools chosen for this project, the researcher contacted the superintendents from each district to explain the study regarding professional learning communities at the high school, to ask permission to include the high school personnel and selected students for the study, and to ask permission to contact the principal of the high school. The superintendent who gave approval signed the informed consent form. The researcher then corresponded with the principal in each high school who facilitated the selection of the focus groups for the project. During the visit to conduct interviews, the researcher spent time with the principal and teachers to discuss and obtain supporting data for the project.

The researcher followed two ethical guidelines to protect the subjects. Prior to the day of the interviews and focus groups: each subject received an informed consent form describing the study, the use of findings, and ramifications for the participant, as well as a

list of the questions. Subjects signed the informed consent forms noting their understanding. The form indicated their participation was voluntary, and they could choose to withdraw at any time. Following the sessions, interviewees received an e-mail containing a transcription of their interview for verification that it accurately recorded their responses and intent. This process of "member checking" is essential for obtaining authentic dialog from participants (Merriam, 1998).

Focus Groups

Two focus groups from each high school responded to questions, which they had received prior to the interview. One focus group in each high school consisted of five teachers selected by the principal. The second focus group consisted of five students, 18 years of age, selected by the principal or teachers. Each participant received a copy of the questions prior to the focus group interviews. The last question the researcher always asked was for participants to add any information which they felt had not previously been covered. In Tables 1 through 3, which follow, is information related to the participants in the teacher and student focus groups.

Table 1 *Participants from High School A*

	Type of Interview	Participant	High School Position
1	Individual	AP1	Principal
2	Focus Group	AT1	Teacher
3	Focus Group	AT2	Teacher
4	Focus Group	AT3	Teacher
5	Focus Group	AT4	Teacher
6	Focus Group	AT5	Teacher
7	Focus Group	AS1	Student
8	Focus Group	AS2	Student
9	Focus Group	AS3	Student
10	Focus Group	AS4	Student
11	Focus Group	AS5	Student

Note: n= 11 participants

Table 2 *Participants from High School B*

	Type of Interview	Participant	High School Position
1	Individual	BP1	Principal
2	Focus Group	BT1	Teacher
3	Focus Group	BT2	Teacher
4	Focus Group	BT3	Teacher
5	Focus Group	BT4	Teacher
6	Focus Group	BT5	Teacher
7	Focus Group	BS1	Student
8	Focus Group	BS2	Student
9	Focus Group	BS3	Student
10	Focus Group	BS4	Student
11	Focus Group	BS5	Student

Note: n= 11 participants

Table 3 *Participants from High School C*

	Type of Interview	Participant	High School Position
1	Individual	CP1	Principal
2	Focus Group	CT1	Teacher
3	Focus Group	CT2	Teacher
4	Focus Group	CT3	Teacher
5	Focus Group	CT4	Teacher
6	Focus Group	CT5	Teacher
7	Focus Group	CS1	Student
8	Focus Group	CS2	Student
9	Focus Group	CS3	Student
10	Focus Group	CS4	Student
11	Focus Group	CS5	Student

Note: n= 11 participants

Documents

Along with field observations, interviews, observed PLC activities, and focus groups, official school documents were used to assist in developing a background for this study and for allowing triangulation of the data. These analyzed documents included PLC team notes, comprehensive school improvement plan, district school improvement plan, Missouri assessment program results, and PLC agenda and minutes. These documents were analyzed by the researcher and coded according to the categories established by the interviews and focus group data sets. This enhanced the triangulation of the data.

Research Questions: Analysis of Data

Research Question 1

How has the principal behavior changed with the implementation of PLC's?

Principal behavior changed in three ways according to those interviewed. The principals felt less alone as a leader, teachers and students believed principals became more team oriented, and principals focused on student learning and goals.

No Longer Alone

One principal said "You don't have to be the one that makes all the decisions. You know, the weight of that is not on just your shoulders when you have groups. We have a new group this year, actually, called Teachers at the Forefront which is kind of like my Principal Advisory Committee" (BP1). A second principal also believed two heads are better than one. "If I'm the only one that's leading the building, leading a group, we're not going to get near as far as if everyone is taking a leadership role. Everyone has to take a shared ownership, a shared leadership of addressing needs and challenges that come up" (AP1).

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The third principal interviewed supported the same belief saying:

I don't feel like I have to do it all. Just like I mentioned earlier when my leadership Team came here last spring and said, "You know what? We need to change the way we're doing homework and after school study hall because you're doing all the work." It is easier to just go to teachers now and ask them, "Well what do you think about this? What do you think about this? How should we do this?" They think, and they come back with ideas. I can delegate instead of just letting it all fall on my shoulders. (CP1)

Team Leadership Focus

Team leadership increased teacher input. Teachers appreciated that their principals included them more in decision making instead of making decisions themselves. As one teacher noted:

I think the difference that we've seen is the role of a leader has now turned into more of a team situation. Where before we had PLC's, [CP1] and our former principal before that tended to just make whatever decisions they needed to do. And now, if we have changes or things we want to do, we tend to run those through the PLC Leadership Team members. (CT1)

Different committees were established to help in the decision making process, which also increased teacher input as another teacher revealed:

I think one of the ways is that he asks for more input from teachers before making a decision. It's not top driven anymore. There are a lot of committees, a lot of get together to make decisions instead of just the principal. (AT4)

The teachers also noted that their principals became more team oriented. One teacher stated:

Yeah, it's more of the team effort. We all work together. We did not really have a teacher centered to where now we actually sit down and we help make decisions. For example, when we look at course requirements for the next year for per department, we actually look at that before it goes any higher. (AT2)

Focused on Student Learning and Goals

Being focused was also brought up as a change in principal leadership. Teachers noticed that their principals were more goal oriented and organized with the focus being

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on student learning. One teacher said, "It allows [BP1] to focus on our goals as a building, building relationships between administrator and teacher, and to encourage cross-curricular and professional development opportunities for us" (BT5). Another teacher spoke of organization and said, "I think things are a little bit more organized now and has goals" (CT3). A third teacher talked about student learning as the focus in saying, "You can definitely see that a focus has been on the kids and their student learning in the last three-four years since we've started this" (BT3).

Students also shared that they believed the principal had more direction and focus. One student shared that the principal was more aware of what she was observing due to some common teaching strategies in all classrooms. A student said, "I think when she comes and sits in on classes she kind of has more of an idea of what's going on when she knows what everybody is doing in the classroom" (BS3). In one school the principal has met with the students on several occasions to share goals and encourage the students to set their own goals. This student stated:

> We've had how many meetings with [AP1] from this year - two or three already. He's been very open with the student body. He's told us exactly what his goals are, and he invites us to explore our own goals. Being a professional learning community he believes is the first step to everybody achieving those goals. (AS2)

A third student shared that the principal helped enforce a new policy regarding homework and that the policy started after the school became a professional learning community. "We have the Zero Policy Act. You can't get a zero on anything. You have to either do it or you have an academic study hall" (CS5).

Research Question 2

How has the teacher behavior changed with the implementation of PLC's?

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Teacher behavior changed in how teachers presented information, focused on curriculum and worked with their lesson planning. Teachers used grade level or course level expectations (GLE's and CLE's) for bell work, they took into account the different ways that students learned, and they gave students choices in assignments. Teachers also learned that they could no longer do units just for fun; they had to streamline their curriculum after deciding what the students really needed to know. The teachers collaborated on curriculum issues which enhanced lesson preparation.

Presentation of Information

Principals agreed that teachers stepped up their presentation of information with more focus on the curriculum. As one principal noted:

> We were always big on all of our staff having a bell work type problem for when the kids come in so they could take care of housekeeping chores as far as attendance and things like that. But what it did was the bell work that we were doing instead of just some little ticky tacky thing to keep them busy, we focused on … mak[ing] sure that that bell work is aligning with our curriculum. We're now focused on GLE's, our CLE's. (CP1)

A second principal mentioned, "I think there's no more pet projects, for one. Teachers teach to the curriculum. There's no longer the curriculum on the shelf versus the taught curriculum" (BP1).

During observations and walkthroughs, principals actually saw the changes in how teachers worked with their students. Principals observed changes from rookie teachers to veteran teacher. As pointed out by one principal:

> I heard one teacher say okay we're going to do this. Let's check our math and what we did yesterday. They'll check it. They'll turn it in. Put your number right or wrong on top of the paper. They'll collect it, and she took a red pencil and she circled what they had written down as far as they had missed. At the end of the hour … in the blocks, you give it back to them and say okay. Now, you've got 15 minutes. You go back on that work that you did yesterday, and you fix all your problems. Everything you change I'll go over it. Everything you change I'm

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going to give you one point for every two that you get correct. We've dropped that tag, "I'm the teacher. I'm teaching. If you want to get it, here it is. Tomorrow I'm going to move on. (CP1)

The same principal observed a veteran teacher making changes and stated:

Seeing her transform, even the way she ran her class the last couple of years. She got right on board because she was going to have a lot "F's". She got right on board. Seeing how she changed the structure of her class to begin to give kids time in class to do work, not take all that time to lecture and just lecture. I see her changing her instructional strategies throughout the block, doing different things instead of just, "Here's an overhead. Take notes now." I would see things turn that thing off a little bit. She'd say, "Okay, let's … any questions about that real quick?" I'd see her go to the chalkboard and then she would do a few things. And then, she'd go back to it, or okay, this comment right here. Let's pair up real quick for a couple of minutes. I want to see you talk with somebody about it and explain to your partner what I'm trying to say here. If they don't understand, help them out or vice versa. I'm going to ask you guys as a group what did you guys think about that? What do you think about? I've seen her doing stuff like that instead of just pure just lecture. (CP1)

Principals also noticed that teachers not only collaborated during common plan or professional development but also between classes. One principal stated:

I think it has shifted our focus from being, you know, "I'm Joe Teacher and I go in my room and I close my door and I do my job," to generating a lot more professional conversation, a lot more professional growth without a, you know, an outside speaker or workshop. It has helped us focus on what we want to do better. With Professional Learning Communities, we've incorporated peer observations and just talking to each other and evaluating each other's lessons. What worked for you, what didn't work for you? So, I think it's expanded the number of teaching strategies used across the board. (BP1)

Another principal noted, "I think PLC's have allowed many teachers the freedom that they've wanted to try some new things, to try some different things" (AP1).

Focus on Curriculum

Overall, teachers noted that what has changed is a more concentrated focus on curriculum and instruction. Teachers have become more focused on common curriculum in courses with several sections taught by different teachers and consistency from class to class with an awareness of the responsibility to do so. As one teacher noted:

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There is more focus and it's more consistent through our classrooms. If we, as a department or a building, come up with a process for writing a thesis statement, the students get the same process over and over. The consistency helps prevent confusion and also helps the students learn and maintain the concepts. There is focus on the objectives since we develop the assessments in Common Course Teams prior to the lessons, and focus those assessments on standards alone. (BT5)

Some teachers have seen their colleagues share and use each other's ideas. As one teacher said:

I noticed . . . differentiated instruction. A lot of the teachers are using that, and when we collaborate, we talk about that. When we collaborate we … or when we have in-services, the teachers are the instructors on in-services which is much better than bringing someone from the outside. I think that's a positive change. (AT4)

Other teachers mentioned that they are being monitored more by principals and that the principals understand what is happening in their rooms due to the focus on GLE's and CLE's. As one teacher noted:

I feel like it brings an awareness to the classroom, not only awareness but a level of responsibility to the teacher's themselves that wasn't here before. It feels like, at least in my classroom, I'm aware that people are watching, and they understand what learning is happening in our rooms. (BT3)

Teachers also mentioned that they collaborate more with each other about curriculum. One teacher said:

We collaborate now on a regular basis, so we are basically teaching things a lot in the same way. I mean we have our own individual personalities in the classroom, but we are doing a lot of the same activities and things. (BT4)

Another teacher agreed by stating:

We're little bit more organized with our students. I'm more in line I think with the goals of the state and our teaching goals for our building. We're getting pretty well aligned from sixth grade to seventh to eighth, on up through the high school. So that's what's helped the most, I think, is that now, we're finally getting together. (CT3)

Collaboration also breaks the isolation barrier as this teacher pointed out:

I think the collaboration. Realizing that you're not doing this by yourself that there are other people that are struggling in the same areas that you are or maybe

they're doing better than you are. You can kind of learn from what they've experienced with certain situations and kids. (AT2)

This teacher shared the sentiment of her colleague in regard to feeling

less isolated:

The best thing for me as being a new teacher, I feel like I have backup. I have people that I need if I ever need – I'm never, I don't feel like I'm lost. That's a nice way to put it. I don't feel like – I feel like I always have somebody I can go to, and if there is a problem, then I can always talk about it at a team meeting when we have our team meetings and stuff. (CT2)

A students' point of view also surfaced from teachers as they noted that students

were beginning to see that learning was the focus. As one teacher pointed out:

I think the students also are starting to recognize that it's about student learning. It's not really a … it's not like we embody that, and it's only that direction. We've put them in charge of their learning in a lot ways, and not only are we collecting data but a lot of teachers now have students collecting their own data so they can see I'm doing well in this, but I'm struggling with this. So, it's helping them maybe focus a little bit more on what they need to study. (AT5)

A colleague added that through the focus on curriculum, students were more

aware of the objectives they were learning and stated, "The students are aware of the

objectives they are expected to meet and have the responsibility of self-assessment to

meet them" (AT1).

The student perspective was dissimilar as some students stated that not much had

changed, yet others declared that changes were noticeable. One student said that teachers

were teaching the same as they always had but noted that, "Teachers are a little bit

stricter about getting homework in" (CS3). Another student agreed and said, "Stuff really

hasn't changed. It's just more you have to do it" (CS2).

The students that noticed differences in teacher instruction said that teachers were

more organized, they let the students know more in advance what material would be

taught, and they were moving at a faster pace. One student offered this information:

It helps to like have them tell you what you're going to be doing throughout the year. Like, you have a plan of we're going to be talking about this century, then this century, and this, and then this person and this person. You know, like, where you're going to be at throughout the year so you can kind of plan on studying and how much you need to study and stuff like that. (BS1)

Another student spoke to the teachers doing a better job of keeping focused on the topic:

It's definitely helped keep people on track. There are some teachers in the district who, you know, before this year have had problems sticking to a specific topic, you know, taking more focus into extracurricular at times. A lot more progress has been made through curriculum in all fields. (AS2)

A fellow student also mentioned that objectives helped the student stay more focused, "All the classes have stated objectives as to what students will be able to do. It's like their objective for the day and everything what classes are supposed to have so you know what you're supposed to be learning and stuff" (AS5).

Another student pointed out that the pace of teaching had changed. The faster pace worked for many students but could be a struggle for others. The student went on to say:

This might kind of be a negative, but like you said, we are going so fast that it's almost like maybe some kids - so maybe some kids are being left behind because we do learn so fast. I mean I've noticed that, but my ability to learn may be different than somebody else's. But, I can keep up with that kind of. You know like, it's okay for me, but like the speed of it may be hard for other people. (AS3)

Students and Lesson Planning

Students also noticed that teachers were more aware of what each other was doing and their lesson planning involved more thought about how students learn. One student liked that teachers from different disciplines were working together:

For me the most, I guess, obvious one is … I don't know if it relates, but teachers from, like, different studies let's say, language arts and a history teacher - it makes it a lot easier for them to get together because, for example, for reading something in language arts, it usually has something to do with the time period

that we're studying in history because those teachers have already gotten together previously and figured out what they were going to do. So, it makes it to where you have your lesson plan in history, and you learn your history stuff and then you go to a different classroom in a different subject. But, that stuff is still being, you know, displayed to you. It makes it to where it's a lot easier to learn it if you're learning it in more than one place. (BS2)

Another student noted that teachers were trying to accommodate different student learning styles and stated:

We get the opportunities to learn in the way we learn, and they notice that. Like, they tend to like help us. So, it's more about us and the classrooms. It's more like one on one. They try to give it - well like - not one on one, but they try and make sure that everyone is happy in the classrooms and suitable with like their way of learning. So, it's not just like you've got to be strict with … we're all reading from taking notes say. Instead, like they give us options with like auditory lecture and stuff like that, so you get to hear a variety of different things. (AS4)

Some students also mentioned that teachers experienced some peer pressure. One student stated:

As one tenured teacher, if they weren't going to be as active with the class, if the other teachers in that department are, you know, making plans for certain things, then it kind of pushes them towards being active with their class. (BS2)

Another student noted that teachers who have colleagues to work with have an advantage over those who do not. The student said, "The people that have a group that they can like meet with, they usually do better than just, like, elective classes" (BS5).

Research Question 3

What are the perceived outcomes of PLC's by administrators, teachers, and students? Learning, rigor, relationships, and changing attitudes about school were four outcomes that administrators, teachers, and students perceived were a result of PLC's.

Learning

Helping students learn was what principals and teachers were striving for in their changed behavior. That meant changing how teachers teach. It also meant that teachers needed to decide just what students should learn. One principal said:

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Changes in learning – well the biggest thing we were trying to do, I think, was change the way that we were teaching kids to learn. Trying to teach towards those multiple senses as far as how everyone learns. Change those instructional strategies and styles. Giving them the opportunity to come back and talk with you and visit with you. We knew that if we could teach them they could learn it. We could move on and maybe even get farther than what we have in the past. Our outcome was still there. (CP1)

Another principal put it this way:

Once you decide on what the essential learnings of a department, for example, of a social studies department [are] going to be. Those essential learnings drive everything else. We can get the kids to have a deeper understanding of what those essential learnings are." I think that's what PLC actually translates into, into the classroom, there has been, and I am expecting, deeper learning to go on. That goes hand in hand with the type, and that is a more focused type of learning. (AP1)

Teachers began expecting more of their students, which in turn led to students

being more attentive and excited about their learning. Teachers were measuring

knowledge, not points. As one teacher noted:

I think they're more aware of what we want them to learn. Like when we put our objectives on the board, this is exactly over the next day or few days what we're going to be covering. It gives them an idea of what's important and what they need to put their emphasis on as far as what they retain. (AT1)

Another teacher said:

I would say the kids are more eager to learn and they're more attentive. I would just say they already know the expectation when they come into the classroom; we're going to hit the ground running. And they're more attentive. I don't have to spend near as much time on classroom discipline because they already know the expectation. (CT4)

A third teacher said:

I believe that the impact with student learning is they know that we are expecting to do better, to actually learn something, and like (AT5) said, it's not actually for a grade at the first. But, you know, there's steps that you have to go through. I think that they're starting to realize it. That is important to them and what they do in the future. (AT3)

Another teacher also mentioned:

Kids are more [cognizant] of their learning abilities. They know what type of learner they are, or what they need to be, or what they need to learn effectively. I feel like in the past we, for lack of a better term, spoon fed them information. This is what you need to learn. This is the way we're going to do it. Now, I feel like it can be a challenge at times, but we're giving them ownership in their learning. They're telling us what they need. We're measuring knowledge more than we are points. (BT3)

The students liked that administrators and teachers were learning with students and agreed that this made learning more exciting. Also, because teachers were letting student's know what was going to be learned, students believed they had control over their learning. About everyone learning together, one student said:

When we were first introduced to the name Professional Learning Community, the Professional really stuck out to me. I'm thinking … my first thought was all right. This means that putting differences aside, putting points of view aside, putting maturity aside, the students and teachers and administration are going to meet or attempt to meet on the same plane and just learn. (AS2)

A fellow peer talked about the excitement of learning:

I think it makes, you know, just crave knowledge like basically … it makes me like I crave like that "A" on that test like seeing the results I think has impacted me the most just like the outcome of, you know, that's going to be. The fact I like … I don't know. I think everything all together just made me excited to learn. I don't know it's just I'm excited. (AS4)

Another student said she learned better when she knew in advance what was going to be taught:

 I like knowing what we're going to be doing. Like I said before, like, knowing that we're going to be talking about a certain subject at a certain time, and like knowing like the end of the next week what we're going to be learning about. I like kind of having that control, like, not control, but knowing what I'm going to be doing. (BS1)

Rigor

For principals rigor had to do with results, standardized curriculum,

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communication of expectations and a focus on achievement. One principal summarized it this way:

 The focus is on results and achievement. And so we're always looking for continuous improvement. Good enough never is. We're always looking for ways to improve. It's much clearer for students what the expectations are and the environment as far as the culture of the building is focused on achievement. "It's harder for kids to fail than it is for them to be successful. And I think that's all a result of Professional Learning Communities. (BP1)

Teachers saw rigor as having material that is more challenging in their instruction, as well as in the curriculum. Teachers were now questioning whether or not their classrooms were really productive and also questioning students more to see if material had been mastered. Teachers also used backward design when planning lessons and assessments to make sure that what was tested matched what was taught.

As the following two teachers noted, "I think they're trying more challenging things" (BT2). Well most definitely. Well, our curriculum is … It is more strenuous. The rigor in our building is 10 times what it was six years ago" (BT3).

Another teacher reflected on rigor in all classrooms:

 I think currently right now we're trying to develop more rigor in each classroom because some of the classes are very easy and there's not a lot of challenge for the students. And so right now we're working on incorporating rigor in every classroom, whether it's PE or Math and we're constantly trying to question the students and really see if they are mastering the learning objective for the day. (CT4)

One building is doing a book study on rigor so teachers are looking at their classrooms differently:

 We are actually looking in our actual classrooms on are we being good to our students? You know, how is the rigor affecting us in our classroom? Are we taking and using it, are we taking and maybe overburdening our kids with work that maybe is not really being productive? So how productive [are] our classrooms and how can we change it to make it more productive, more interesting for our kids, more where the kids want to challenge themselves and get

to that higher learning rather than just stay at the level that they are. (CT2)

Another school used backward design to address rigor and a teacher said:

Backward design is one thing that really has popped up through PLC's and looking at the big ideas. To pull those and really think backwards in what's the big ideas that they need to get has caused a restructuring I guess I would say, but definitely an objective driven way of presenting material to students, and they have the goal and vision versus the teacher being the one that knows where they're going. (AT4)

Students referred to rigor by discussing the pace of curriculum and homework.

The pace of the homework had two impacts. One student viewed the impact as:

I expected it to go pretty quick and for it to be more strict learning environment. That made sense to me, but I didn't expect to often be teaching myself. That's kind of how I feel sometimes, not just in that class that I mentioned before, but in other classes. I'm going okay well, if I'm not getting this I'm just going to have to catch up on my own. (AS3)

Another student stated the impact in this way:

I've definitely seen an increase in the speed of the curriculum, as we talked before, and to me personally, that posed a greater challenge. It gave me something more to work for rather than okay, we're going to slow down and let the kids in the back row catch up to us for a couple days, and then we'll keep moving on. (AS2)

Other students referred to rigor in regard to homework. One student summarized

homework: "I have to take time out of my day, usually more than when I, you

know, didn't work as hard on my homework or whatever, to actually do it so I don't have

to redo it" (CS2).

Relationships

Everyone benefitted by new and or enhanced relationships because of PLC's. One

principal said, "It's easier to just go to teachers now and ask them, "Well what do you

think about this? What do you think about this? How should we do this?" They think,

and they come back with ideas" (CP1).

Teachers mentioned that students noticed teachers working more together and teachers were sharing more with each other. Teachers also got to know students better. One teacher talked about students noticing teachers working together more:

> I think students also see that you have teachers who are banding together. I mean I think a lot of times students sometimes see the teachers as just a teacher. They don't them see them all the time as a professional, as somebody who is, you know, somebody knowledgeable in their field. So when they see with the PLC the teachers getting together and that it's going to cross the board, it's not just with one class, one teacher, then they kind of have a different outlook of what's going on with the class. (BT2)

> Another teacher talked about sharing ideas:

> We have started sharing a lot of ideas that we have found successful in our classrooms. From the last in-service that we had, I mean I picked up a lot [of] great ideas that I was able to use in my classroom. So, just that sharing among ourselves I think has been something that's helped me. (AT2)

> A third teacher talked about getting to know the kids better:

> You didn't really know about the kids, about their situation, and now we all do the formatives whether they're informal, or formal, or whatever. If like somebody doesn't do well, you assess why, and you talk [to] them. They can take it again. It doesn't have to be graded. Not everything has to be for a grade. So, I mean that's one of the biggest changes from 20 years ago that I see in the PLC's. (AT4)

Students saw positive relationships growing between teachers and between students. As one student observed:

> I think it develops relationships like the teachers, the relationships among them, if they're improved, would definitely improve the learning environment. And then with things being the same and organized, everything's on the same level as far as what they're presenting us. It allows us to build relationships as well with each other because we're not isolated to one room that knows the one condition of that one room if the conditions are the same for every room, then we have the same relationship with them as we would with someone in our own class. It lets us expand out. With them all running almost the same curriculum, I feel like I have more classmates to work with. (BS3)

> A fellow student added:

I think that it's only helped us as students. It's really helped the teachers a lot. You can see the improvement in like the way that teachers teach. It's not bettering only us which we've all made that very clear it's bettering us, but it's bettering the teachers and staff, [and] the administrators. (AS3)

Changing Attitudes about School

Attitudes about school were observed to be more positive and students were more

observed to be more responsible. One teacher's perspective was as follows:

That's another part about the Professional Learning Communities is we instituted a positive discipline program which directly isn't associated with learning, but indirectly we're rewarding those students who perform well in the classroom. I think that has benefited us wholeheartedly because as part of that we've made attendance attached to those particular discipline levels, not that we're being harsh on those individuals who don't show up to school but rewarding those kids who do show up to school and do perform. (BT3)

This teacher added, "I think our school culture has improved tremendously. Kids

are coming to school. They're overall in a better mood" (BT3).

Another teacher felt a homework policy made students more responsible:

We changed our extended learning policy. We are continually reworking that and reworking that because kids just aren't going to turn in late work, and then you always have the habitual offenders that never want to do it whether you threaten them with their life or whatever. So we've turned that around this year and I can see that that's already helped. Because on weeknights when we have study hall, two or three kids are staying versus 12 from last year. (CT4)

Students seemed to enjoy school more because the pacing has increased. They

are more focused, and classes are better organized. As one student noted regarding the

pace:

Yeah, it makes it, you know, like fast paced. It goes by quicker, and it seems like everything is just like more like upbeat almost. You get excited to come to school. I found new enjoyment into coming to school after it happened because I can learn better this way. (AS4)

Another student mentioned the focus, "I think it helps everybody to stay focused.

It keeps them in school and engaged, either good students or troubled students" (AS1). A

third student mentioned organization, "For me, it makes it nicer just because I like things to be organized, but then again, not everybody is like that" (BS3).

Research Question 4

What types of ownership do students take of their own learning since the implementation of PLC's?

In talking to principals, teachers, and students, taking ownership for learning has different meanings for each group.

Principals

Principals were not sure that students have taken ownership for their learning due to PLC's, but they feel that programs and policies have been put into place to give students more opportunities to do better on their school work. In turn, this may cause students to do a better job of getting work done. One principal said:

> I don't know if I can answer that yes or no if they take more ownership in their learning. I think that the kids know that we're more on top of it to make sure that they get done what we ask them to do. With that being said, then it might motivate them to go ahead and get things taken care of so they know how to deal with the other things that we have in place if they don't get it done. (CP1)

Another principal agreed and said:

> Through Professional Learning Communities, I think because everything is more focused, because the objectives and the learning goals and the outcomes are there, it has [helped students take ownership of their learning] and our staff's philosophy of not allowing kids to fail. You cannot choose to fail in our school. And so we've put in pyramid interventions where kids have time if they need extra help. If they don't need extra help, they're just not doing it, we have situations where we call it the "Power of I" but it's after school study sessions, both 30 minutes before and after, and then we have three times a week where we have the two hour evening or Saturday morning school where kids can come in. So I think it's harder for kids to fail than it is for them to be successful. And I think that's all a result of Professional Learning Communities, but we've also put in some of those structures and interventions within that pyramid that help us as well. (BP1)

Teachers

Teachers saw students become more self-directed. Teachers began having

students track their grades and this led students to consider more advanced classes in the

areas they saw they were doing well. In addition, teachers saw students become more

accepting of not everything being graded. One teacher pointed out:

>They're so self-directed. I mean, you know, it's really them just figuring out what
>they need and going with it. I guess the point I was making is you're seeing the
>responsibility and the ownership being taken in their learning and how they
>approach the classroom overall. I still think we're just struggling to catch
>everyone as we will, but from time to time you see glimpses in those students that
>you don't think you're going to catch. It is encouraging. (BT2)

>This same teacher adds:

> Even students that will be in regular ed. classes, as far as their learning and how
>it's impacting them, they're seeing that, "Well I'm doing really well in this class.
>Maybe at semester I should try a pre-AP class. What do you think about that?"
>"Well, I think according to what you've seen and what I've seen, yeah, you need
>to move into something that's a little bit more rigorous." I mean I think it really
>does just hit on the point that they actually are more engaged with what's going
>on with their education which is what it should be anyway. (BT2)

>Another teacher said that students are beginning to see it is not all about the final

grade:

>The summative assessment is for the grade, but they're able to see am I going to be
>prepared for that each step of the way? The focus, I feel, is more on learning than
>on the end goal of the grade. (AT5)

> A colleague agreed and emphasized:

>With the formative assessments and not giving a grade and so they're looking to
>see if they did master that objective, a lot of the teachers have taken that a step
>further and said did you master it or did you not master it? Why didn't you and
>what can you do to master this? And so, we're making them think, I guess, outside
>the box or at a higher level of what can you do? And so, they have to have actually
>write or tell you this is what I need to do to be able to master this objective. (AT4)

> Two teachers also added that learning became more important to students. One

teacher stated, "They use their study halls religiously because they want the time that

they have in school to have all the help that they can have and I just think that the PLC has encouraged that, the different learning environment" (CT4). The second teacher added, "They became more responsible learners with our after school study programs and those types of things" (CT1).

Student Perspective

The student's perspective on taking ownership of their learning revolved around grades, time to get extra help on work, knowing ahead of time what is expected and being prepared, paying more attention in class, and making choices. One student felt this way about taking ownership:

> It helped me take ownership because I see the improvements in my grades. I see it in my GPA. I see that, I've always done good in school, but I've never done like this good like so far. To me, I'm proud. I'll go tell everybody that you know what? I'm doing great in school you know. I'm very proud to be a PLC. (AS3)

> Another student said "I make sure that I have time to get my homework done. I

mean I go out with people, but I just make sure I have my homework done first so that my grades will stay up because of the fast pace in the classrooms (AS1). Another way that students took ownership for their learning was by, "Paying more attention in class" (CS2). Students also take advantage of programs for extra help. As one student pointed out:

> We have the availability of the extended learning time. That does allow the kids, you know, that … I mean also it's not exactly looked at as a punishment, but like you know, you're rewarded if you are here every day; if you're caught up in your classes and stuff like that. But, it's like it gives us that little bit of extra time to kind of get that one on one attention if you are falling behind. (AS4)

> Knowing what to do ahead of time helps the students as well, as one student

pointed out:

> Like I keep saying this, but if you know that you're going to be studying about a certain thing and you really like that subject, then you're going to be like excited

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to learn about it. You're going to take ownership that way. You're going to want to do it. Even if you don't like it, you're still going to know what it's about. So, if you get the assignment like a week in advance, you can kind of study up on it and take ownership in that way. (BS1)

One student gave an example of the way he takes ownership for his learning in

math class:

For a more specific example because I can't really think of any more general statements we haven't already talked about. In my calculus class, we don't have a lesson and then you do a few problems. The next day you come back in and you hand that lesson back in. We do chapters four lessons at a time, and we're assigned those 25 questions from each lesson. So, you have a 100 math problems due basically every two weeks. Then, we take a test. Now, I can either choose to do only the review questions that I will need for the test and turn those in, or I can choose to do all hundred questions and get a couple bonus points for the test to help myself out because then I'm getting more practice. I'm getting those extra points to even help me out if I make a mistake, but it does take a little bit more of my time. Even so in either case, I can decide on my own when do I feel like I'm going to have time to do this lesson. (AS2)

Research Question 5

What impact have PLC's had on student outcomes?

According to principals, teachers, and students, there has largely been a positive

impact on student outcomes due to PLC. All three groups' statements focused on test

scores and grades.

Principals

Principals focused their answers on state assessment results. One principal said,

"Our achievement has steadily risen, at least in the five years I've been here. As end of

course scores go, we're third year perfect on the APR, Distinction in Performance"

(BP1). The second principal said:

The biggest thing that we attacked and has changed the routine was our "F's". We've really focused on how many students we had that have an "F". We've seen "F's" go from over 100 students with an "F" six years ago to at the end of this

first quarter, I had 31 students who had "F" We wanted to raise grades. We figured if we could raise the grades, make students accountable for homework, we were going to obviously increase grades and increase scores. Kids know that you're serious about things. If I don't do my homework, I'm going to get … I'm going to be stuck in Study Hall. If you're increasing learning, they're getting things better. You're moving along quicker. Our EOC's were really well last year. We went wow. This is working. Well, our com arts scores came up too, even in junior high. Our junior high students started doing better in writing. We've seen that kind of stuff. (CP1)

The third principal also mentioned data collection as a means of impacting student

outcomes:

There has been, I want to say, both less and more focus on standardized tests, the MAP tests which have morphed into the end of course exams. I think the main effect the PLC's have had on learning is the focus on data and what data are we collecting, why are we collecting that data, and then what impact does that data have. (AP1)

Teachers

Teachers also mentioned test scores but added that new programs and SMART

(Specific, Measurable, Attainable, Realistic, and Timely) goals have had an impact on

student outcomes. One teacher stated, "I think test scores have come up. Since we've

been more concentrated and focused on their learning, overall grades have come up.

Another teacher added, "We're measuring knowledge more than we are points. I know

that our average ACT scores have come up over the last four years above state level I

think this year, which I'm pretty proud of. (BT3)

A colleague added:

I would say overall as a whole, part of the Professional Learning Communities too, we do the Power of I part of faculty coming together to make sure students are responsible and they do their work or things like that. So, that has impacted student grades and has helped the failure rate overall. We've seen it on the ACT. We've seen it on the end of course, MAP end of course at the high school. We've also seen it in other ways as far as when kids go for scholarships because we seem to be … I mean a lot of kids get scholarships. (BT1)

Another teacher said:

I have seen kids at the beginning of the year that got F's on World History tests that are now achieving A's and B's on this just because I've worked with them and we've worked on what tools can we use to help you, you know, study better. (CT2)

A colleague added:

I think the thing that I've seen is our test scores have been improved. When I look at our scores and what's happened to us and ACTs, even those types of things, we look at implementation from four years ago to today, we've seen a major improvement and it's an emphasis every year on improving with SMART goals and improving different things each year. And the kids have seen that and I think they've shown improvement every year because of it. (CT1)

Students

Besides grades and test scores students agreed that homework levels, extra help, and more efficient classrooms impacted student outcomes. One student stated:

My grades have gone up, but I don't know if it's related to the change in how things are being presented to me. But I mean, I wouldn't rule it out as being a possible reason. I know it kind of ties back to what you want to do with your academics. (BS2)

Another student said:

People are improving, it seems like. But like our MAP and everything is improving and as we go on, we get better at what we're doing. It seems like that's changing a lot. My grades used to not be very good, but now they're a lot better. Study more and just paying attention in class. (CS4)

A third student said:

The classrooms work more efficiently to where students that can fall behind sometimes can get one on one time with the teacher so that everybody is on the same level of expectation of what we have to do in class. (AS1)

In agreement was another peer who said, "With me, I worked harder, and my grades went up because of the faster moving pace. It just helped me a lot" (AS1).

A fellow student said:

The homework levels have gone up. Normally, like I remember and this could have just been from being a freshman or a sophomore, but I didn't have a lot of

homework, and then junior and senior year when we started this, homework levels went up. But, I am not against homework by any means because I think it helps you like stay focused. It makes you want to like work harder at everything not just like school, too. (AS4)

One student did feel her grades went down with the implementation of PLC's. She stated that "My grades, for one, have been down since this. Make us take notes on it, and so they can just sit there and click the thing. We take notes" (BS4).

Summary

Presented in Chapter Four were the demographic data for the three districts included in the study. A description of the protocol used in the study, including the methods of data collection and the process of analysis followed. The interviews and focus groups were recorded and transcribed, then used to provide information to address each of the five research questions. In Chapter Five, an overview of the design and procedures employed for the study are described. A discussion of the findings of the study with limitations and design control are included. In addition, conclusions, implications for practice, and recommendations for further research are presented.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, AND IMPLICATIONS

Introduction

The purpose of this study was to focus on the administrative and teacher changed

behaviors in three high schools that were successfully implementing PLC's. The study

also focused on student outcomes resulting from the implementation of PLC's in the

same three high schools. In this chapter are shared the overview of the purpose of the

study and the design and procedures used during the inquiry. Discussed are the findings

and conclusions drawn from the data, along with implications for practice and

recommendations for future research.

Purpose of the Study

The purpose of the study was to investigate the perception of how the

implementation of professional learning communities in a high school setting changed

behaviors of administrators and teachers and affected student outcomes. The literature

revealed that many researchers (Blankstein, 2004; Buffum & Hinman, 2006a; Schmoker,

2006) acknowledged that schools must move away from the traditional model in

existence and move towards the collaboration model of a learning organization, also

known as a professional learning community. The intent of this study was to examine the

impact professional learning communities had on administrative and teacher behaviors

and student outcomes.

The following research questions guided this study:

1. How has the principal behavior changed with the implementation of PLC's?

2. How has the teacher behavior changed with the implementation of PLC's?

3. What are the perceived outcomes of PLC's by administrators, teachers, and students?

4. What types of ownership do students take of their own learning since the implementation of PLC's?

5. What impact have PLC's had on student outcomes?

Design and Procedures

Chosen for the design of the study was qualitative research. Unlike quantitative methodology, the qualitative approach, through interviews, focus groups, and observations, attempts to describe what a program experience means to participants (Patton, 1997) and is referred to as "holistic description" (Wallen & Fraenkel, 2001, p. 432).

In this study, the researcher contacted the professional learning community trainer at the nine Regional Professional Development Centers (RPDC's) and asked for one high school in each of the nine regions considered a highly effective professional learning community school. The criteria given to the representative at the Regional Professional Development Centers for choosing the high schools was that they had been professional learning community schools for 3-5 years, had documentation to show that there was a continued commitment to sustaining PLC's, and that on-going professional development would be centered around PLC work. An additional criterion given was that the principal of the professional learning community high school had been leading the school for at least 2 years.
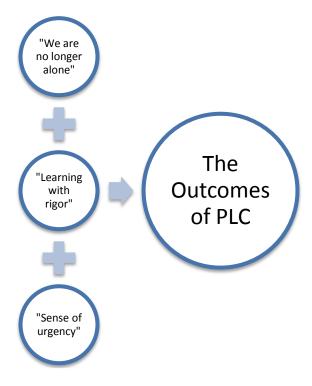
Once high schools were identified, the researcher obtained the gatekeeper informed consent letter. Next the high school principals, their teachers, and students 18

years of age and older were contacted and informed letters of consent were obtained. These consent forms met with the approval of the Institutional Review Board of the University of Missouri, Columbia (see Appendix A). Then arranged were interviews with principals and focus groups of teachers and students. All interviews and focused groups were audio-recorded. The researcher also observed PLC activities and analyzed MSIP, CSIP, and PLC paperwork for data collection.

Findings

The researcher used the qualitative inquiry process in providing a framework for the answer to how the implementation of professional learning communities in a high school setting changed behaviors of administrators and teachers and affected student outcomes. Through interviews, observations, field notes, and school data three themes emerged. The first theme fits the cliché "we are no longer alone." The second theme delves into "learning with rigor." The third theme focuses on a "sense of urgency." Depicted in Figure 1 are the three themes that emerged from this data set.

Figure 1 *Outcomes of Professional Learning Communities*

We Are No Longer Alone

According to DuFour and Eaker (1998), principals involved in professional learning communities empower faculty and staff to be a part of the school's decision making process. "Principals of professional learning communities make conscious efforts to promote widespread participation in the decision making processes of their schools. They understand that they cannot do it alone" (p. 185). All three principals interviewed shared that they no longer felt alone and they did not have to do it all (AP1, BP1, CP1). As one principal noted it was now easier to go to the teachers and ask for input or ask how something should be accomplished and his teachers would reflect and get back to him with feedback (CP1). And as another principal noted, more would get done if people had a shared ownership and shared leadership in addressing the needs of their school

(AP1). All of the principals observed that teachers felt more ownership and empowerment from their principals as they described a team-driven and teacher-centered approach to leadership. Principals began to ask for more teacher input and they [teachers] felt as if they were part of a team with the principal (AT1, AT2, CT1). Students even noticed that their principals were visiting classrooms more (AS3, BS3, BS5, CP1) and working closely with the teachers.

Collaboration time for teachers also became a focus at each school. Collaboration is the key ingredient to any successful school reform, according to Eastwood and Louis (1992). In one school teachers worked in common course teams. These teachers planned units and lessons together and made common assessments. They also did peer observations and then reflected on what worked and why or what did not work and why (BT5, BP1). During in-services, instead of hiring outside consultants, teachers themselves became the presenters. As noted by one teacher, there was sharing of ideas between peers (AT4). Teachers also felt less alone because they believed they had someone to share struggles with and learn from within the school. If they were a new teacher, they perceived that they had someone to go to whom they regularly collaborate with (AT2, CT2). The students benefited from the collaboration when teachers of different departments collaborated on a unit of study (BS2).

A secondary result of collaboration was the building of relationships between principals, teachers, and students. Principals found it easier to approach teachers for input (CP1), while teachers got to know more about colleagues they were teamed with for collaboration. Teachers also found professional discourse increasing as they talked more on a daily basis because of collaboration (BT4). In addition, teachers also found

themselves getting why the student had not mastered an objective. This enhanced relationship with students helped the teacher to understand how to remediate the issue (BT4). Students noticed teachers getting along better which resulted in what students called an "improved learning environment" (BS3). Students also found consistencies with instructional strategies amongst teachers and classrooms, due to the collaboration, allowed them to feel as if they had more classmates to learn from in team work (BS4).

Learning with Rigor

One focus of professional learning communities is student learning (DuFour & Eaker, 1992; Hord, 2004; McLaughlin & Talbert, 2001; McLaughlin & Talbert, 2006) through teacher learning. Professional learning communities, according to DuFour and Eaker (1998), should regularly ask themselves two questions, "What is it we expect all students to learn?" and "How will we respond when they do not learn?" (p. 85). Principals in this inquiry saw learning as a focus on curriculum supplemented by new teaching strategies, collaboration, and establishment of essential learnings (AP1, BP1, and CP1). They viewed rigor as focusing on assessment results and student learning, based on data-driven decision making. (AP1, BP1). As one principal emphasized, "Good enough never is. We're always looking for ways to improve" (BP1).

The data also revealed that teachers, through collaboration, have determined specific learning objectives for students and have made a conscientious effort to make students aware of what those are. The learning objectives are posted for students to let them know what will be studied at any given time. Students are also more aware of the teacher expectations (AT1, CT4). There has also been a shift from grading just for points to focusing on student knowledge, and students are being asked to track their own progress (AT5, BT3).

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Also suggested by the data set is that teachers are wanting to challenge students more, so they are asking themselves if their classrooms are productive, interesting, and challenging. Answering these questions added rigor to the curriculum (BT3, CT2, CT4). As one teacher noted, "The rigor in our building is 10 times what it was six years ago" (BT2). As a result of this added rigor one school has added Advanced Placement classes and students are asking teachers if they should enroll in those higher level classes (BT2) in response to these higher expectations.

As noted by the students, rigor is in the pace of the work, a stricter learning environment, and increased homework levels. The curriculum was just not being covered but taught, resulting in a faster pace and less busy work. To keep up, some students said they had to refocus and they did their homework to keep up with the speed of the class. They knew if they did not do their homework, they would get behind (AS3, BS2). With less busy work and less catch up work days, homework became more important (CS2, CS5). As emphasized by one student, "We're definitely moving at a quicker pace. It keeps me focused" (AS2). The students also felt that the faster pace and the increase in homework was challenging and kept them more focused. This resulted in the days passing faster and learning was perceived as more fun and relevant (AS4, BS2).

Sense of Urgency

As DuFour and Eaker (1998) said, "The appropriate analogy for curriculum development is focus, focus, focus" (p. 162). This focus ultimately expands to results and student achievement. That is where the sense of urgency emerges. This sense of urgency is about an impatience that drove schools to get results. Just as successful leadership is based on results, successful professional learning communities are based on results,

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specifically student achievement (DuFour & Eaker, 1998).

A variety of results have been seen by principals, teachers, and students in the three schools used in this research. State mandated test scores have improved, classroom grades have improved, ACT scores have improved, more students are applying for and getting scholarships, and students are taking some ownership for their learning (AP1, BP1, BT2, BT3, CT1).

Students have become more self-directed and are making more of an effort on homework because the pace of the material presented has increased (BT2, AS1, AS3, BS2). Student grades went up as the number of F's went down (CP1). Also, students said they were paying more attention in class due to the faster pace and the challenges of the lessons taught (CS2, CS4).

Each of the three schools also put interventions into place to accommodate the sense of urgency to see results. One school had extended learning time built into the end of the school day so students could work on assignments and get help from peers or teachers if need be. For students doing well, they earned the right to leave and go home at that time (AP1, AS4). The second school offered the "Power of I" instruction for 30 minutes before and after school, after school tutoring for 2 hours, three nights a week, and tutoring on Saturday mornings (BP1, BT1). The third school started an after school study hall for students who did not turn in homework. It began one night a week, with the principal supervising and then evolved into three nights a week, with teachers supervising. In addition, this same school created a 25-minute study hall within their existing schedule when students could work on assignments and get help from peers or teachers (CP1, CP5).

Conclusions

Several conclusions can be drawn from this data set that include change behaviors for all the professional learning communities stakeholders examined in this inquiry. Data revealed that both teachers and principals changed their behaviors based on the knowledge and skills gleaned from the PLC processes. These changed instructional, curricular, and assessment behaviors resulted in several positive outcomes for students.

Changes in Behavior

When implementing PLC's principals changed their behavior from a top down approach to a team-driven approach and they were relieved not to have all the weight of decision making on their shoulders. Principals became more comfortable going to teachers for input and even formed building leadership teams to help with building wide decision making about the changes that needed to take place in the school environment.

Teachers also changed their behaviors in the classroom and throughout the school environment due to the processes and experiences with PLC's. They went from working in isolation to being more collaborative. Teachers worked together on curriculum, assessments, lesson planning, and instruction. The professional learning processes allowed the teachers to build relationships with each other that increased the trust level resulting in a sharing of teaching ideas, observing each other, and designing interdisciplinary lessons. Teachers also found that they were increasing rigor in their classroom expectations because of the collaboration.

Due to the professional learning communities processes the principals and teachers began to look at what and how students were learning in order to guide instruction. Moreover, professional efficacy was enhanced by the acceptance of

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responsibility by the teachers if the students were not successful. This resulted in further instructional conversation and collaboration about what to do when students did not learn. Collaboratively the principals and the teachers created plans and programs to help students who did not learn and to reward students who did learn.

Student Ownership of Learning

As a result of professional learning communities being implemented in their school, students took ownership of their learning by working harder on assignments, doing their homework, and accepting the challenge of higher expectations. The faster pace excited some students and made school more interesting. In most cases, students found their grades went up. However, one caveat emerged when one student felt her grades went down because there was more note taking, yet she felt challenged. Students also noted that some teachers gave choices on assignments which took into account the different learning styles or ability levels of students.

Student Outcomes

Also due to professional learning communities teachers noticed that since they were putting more responsibility on the students to take an active interest in what they were learning, students realized the focus was now on learning and not just grades. This re-focusing resulted in the principals, students, and teachers all perceiving that student achievement would improve. In actuality the students' grades did improve, ACT test scores improved, and even attendance rates improved after the implantation of PLC's.

Implications for Practice

Schools going through the process of being PLC's are "successfully redesigning themselves to become organizations that continually learn and invent new ways to increase the effectiveness of their work, and focus on improving student learning"

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(Hord, 2004, p. 5). This process involves principals, teachers, and students and ultimately the bottom line is doing what is best for students. Thus, noted from this inquiry are several implications for practice for universities and school districts.

First, principals involved with PLC's need to understand that to be successful they must move from an autocratic type leadership model to the PLC instructional participatory leadership model. Thus, leadership preparatory programs need to assure that their programs incorporate tenets of participatory leadership models, such as distributive and transformative models, that emphasize leadership capacity throughout the organization. Specifically, the curriculum for leaders should focus on how to enhance the principal's ability to guide teachers to collaboratively analyze data, instruction, teaching strategies, and common assessments, to name a few. Since the process of PLC's forces principals to lead from a collaborative approach they require "less command and control, more learning and leading, less dictating and more orchestrating" (DuFour & Eaker, 1998, p. 184). A sharing of leadership means involving faculty and staff in school decision making, as well as empowering teachers to act on their ideas. Principals do this through leadership teams, department chairpersons, teaching teams, and committees. The goal is to get as many faculty to be a part of the decision-making processes so that they feel ownership in the decisions that drive what they do.

Consequently, teacher preparation programs need to address the issue of teacher leadership development within their curriculum as a means to help teachers achieve the collaborative nature needed for PLC's to flourish. As the principal orchestrates the necessary structures for collaboration, teachers need to fulfill their responsibility to learn together, build collegial relationships, and encourage each other to be risk takers. This

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requires a new set of collaborative skills to draw from to make the collaboration successful.

As the preparatory programs for principals and teachers are changing, the professional development focus of schools must change as well to meeting these new expectations. The focus of all professional development must be on how students learn and how educators can make all students successful. During professional development, teachers work collaboratively to analyze data, design common assessments, determine pacing guides for courses, develop scoring guides, and determine formal/informal assessments. The professional development therefore is authentic to the needs of that particular school. The old adage, "one size fits all" does not hold true for school personnel who are vested in professional learning community processes.

Probably the most significant implication derived from this inquiry is the need to include high school students in the process of PLC's. While none of these students were explicitly told that something was happening in their school, it was obvious to the students that different expectations were placed on principals, teachers and themselves as a result of the change agent, PLC's. By engaging the students from the offset, they will have a better understanding of what is happening in their schools and why it is happening. Educators might indeed learn from what students have to say about the happenings in their school and the ethos that is created by the implementation of a reform model such as PLC's.

Recommendations for Future Research

The most glaring issue for further research, based on the data, was the disconnect between what the teachers said was changing in the classroom and what the students said

was changing in the classroom. The actual versus the perceived changes in teacher practice needs to be studied as PLC's focused on student learning is essential.

Another issue that surfaced was that students are not familiar with PLC's processes. They see that teachers are working together more, they see some common lessons happening in many classrooms, and they are aware of interventions that are established. However, they do not have an understanding of why this is happening. Thus a study that examines students in collaboration with teachers to improve student achievement needs to be conducted.

Another investigation could focus upon parental knowledge of PLC's. According to one principal the parent's lack of knowledge about PLC's and their purpose sometimes made it difficult to show support for what the school was trying to do. It could be beneficial for a school to find out what parents know about PLC's and from the data make a plan to inform parents about the purpose of PLC's and how to support the school's efforts through PLC's.

Summary

The purpose of the study was to investigate the impact of professional learning communities (PLC's) on administrator and teacher behaviors and student outcomes in a high school setting. Overall, the three stakeholders investigated in this inquiry identified several behaviors that had changed as a result of the implementation of PLC's. Principals, teachers, and students agreed that teachers were collaborating more, relationships improved between teachers and students, interventions were created for students not learning, and several student outcomes were noted. Discussed were several implications for practice, along with additional recommendations for further inquiries.

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Appendix A

Letters

1. Superintendent Permission for School District Participation Letter

2. Superintendent Permission for School District Participation Form

3. Letter of Informed Consent – Focus Group

4. Informed Consent Form – Principal

5. Informed Consent Form – Teacher Focus Group

6. Informed Consent Form – Student Focus Group

7. Thank You Letter

Superintendent Permission for School Participation Letter

Dear Superintendent,

I am conducting a research study titled, *The Role of Professional Learning Communities In Changing High School Educators Behaviors and High School Student Outcomes.* This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into school reform for school improvement. The findings could serve to assist schools in the establishment of Professional Learning Communities for sustaining school improvement and impacting student outcomes.

For the study, school districts who had successfully implemented Professional Learning Communities were selected from Missouri. I am seeking your permission as the superintendent of the *<Name Here>* School District to contact *<name of principal>* and five randomly selected teachers for the purpose of inviting the teaching staff to participate in this study. I would also ask the principal and teachers chosen to contact students who are 18 years of age to invite them to participate in the study.

The principal will be invited to participate in a one-on-one interview comprised of ten open-ended questions. In addition, a randomly selected group of five teachers will be invited to participate in a focus group interview session comprised of ten open-ended questions. Also, a randomly selected group of students (18 years of age) will be invited to participate in a focus group interview session comprised of ten open-ended questions. A copy of the questions, interview protocol, focus group protocol, and informed consent letters are attached for your review. All interviews will be audio-taped.

Participation in the study is completely voluntary. The participants may withdraw from participation at any time they wish without penalty, including in the middle of or after completion of the focus group and/or individual interview. Participants' answers and the building's identity will remain confidential, anonymous, and separate from any identifying information. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation either by phone at (816) 256-7236, or by fax at (816) 268-7345, or by email at mmagnus385@aol.com. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at (660) 543-8823 or by email at bmartin@ucmo.edu.

If you choose to allow me to contact a principal, the school district staff, and students 18 years of age regarding participation in this study, please complete the attached permission form. A copy of this letter and your written consent should be retained by you for future reference.

Thank you for your time and consideration.

Mary Magnusson
Doctoral Candidate

Superintendent Permission for School District Participation Form

I, _____grant permission for a principal, district staff, and district students 18 years of age in the *<Name Here>* School District to be contacted regarding participation in the study of *The Role of Professional Learning Communities In Changing High School Educator Behaviors and High School Student Outcomes* being conducted by Mary Magnusson.

By signing this permission form, I understand that the following safeguards are in place to protect teaching staff choosing to participate:

1. All confidential responses will be used for dissertation research and potential future publications.
2. All participation is voluntary, and may be withdrawn at any point in the study prior to submission of the survey.
3. All identities will be protected in all reports of the research.
4. Any consent or refusal to participate in this study will not affect the employment of participants in any way.

Please keep the letter and a copy of the signed permission form for your records. If you choose to grant permission for a principal, district staff, and district students 18 years of age in the *<Name Here>* School District to participate in this study, please complete the *Superintendent Permission for School Participation Form*; seal it in the enclosed envelope and return to Mary Magnusson as soon as possible.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I grant permission for a principal, district staff, and students of 18 years of age in the *<Name Here>* School District to be contacted and invited to participate in this study.

_____ _____
Superintendent's Signature   Date

Letter of Informed Consent Form

Administrator Interview

Dear Participant:

Thank you for considering participation in a research study titled, *The Role of Professional Learning Communities In Changing High School Educator Behaviors and High School Student Outcomes*. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into school reform for school improvement. Your participation has been approved by your Superintendent.

Researcher: Mary Magnusson, University of Missouri-Columbia Doctoral Candidate, mmagnus385@aol.com, (816) 256-7236.

Advisor: Dr. Barbara Martin, 4105 Lovinger Hall, University of Central Missouri, (660) 543-8823, bmartin@ucmo.edu

Procedures: For the study, school districts who have successfully implemented Professional Learning Communities from Missouri have been selected. From the selected schools, principals are invited to participate in a one hour face to face individual interview comprised of 10 open-ended questions. The individual interview will be informal and you are free to answer the questions you choose, and pass on those that you do not wish to answer. The individual interview will be audio-recorded and then transcribed verbatim for use by the researcher. Principals in this study must currently be employed at the school building and be 18 years of age to participate.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of the focus group interview or after it is completed. Your consent to participate or refusal to participate will not affect your employment in any way. You may also decline to answer any questions that you feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 816-256-7236. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

Confidentiality: Tapes and transcripts will remain confidential, anonymous, and separate from any identifying information. A pseudonym will be assigned to responses for use by the researcher. You will have the opportunity to verify the transcribed interview for accuracy of what was stated and what you intended. Edits, deletions, and clarifications will be made immediately to the transcript to comply with your right to voluntarily release data. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after

completion of this study. Your identity and your building's identity will be confidential and remain anonymous in the reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants' rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/ 45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Mary Magnusson by phone at (816) 256-7236, or by fax at (816) 268-7345, or by email at mmagnus385@aol.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

Injuries: The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations "45 CFR 46" will be upheld. This statement is not to be construed as an admission of liability.

Risks and Benefits: The risk of your participation in the study is minimal. The research gathered should be helpful in providing insight into school reform for school improvement. The findings could serve to assist schools in the establishment of Professional Learning Communities for sustaining school improvement and impacting student outcomes.

If you have questions regarding your teachers' rights as a participant in research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

.
If you choose to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. Thank you for your time and consideration.

Sincerely,

Mary Magnusson
Doctoral Candidate

Letter of Informed Consent Form

Teacher Interview

Dear Participant:

Thank you for considering participation in a research study titled, *The Role of Professional Learning Communities In Changing High School Educator Behaviors and High School Student Outcomes*. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into school reform for school improvement. Your participation has been approved by your Superintendent and Principal.

Researcher: Mary Magnusson, University of Missouri-Columbia Doctoral Candidate, mmagnus385@aol.com, (816) 256-7236.

Advisor: Dr. Barbara Martin, 4105 Lovinger Hall, University of Central Missouri, (660) 543-8823, bmartin@ucmo.edu

Procedures: For the study, school districts who have successfully implemented Professional Learning Communities from Missouri have been selected. From the selected schools, teachers are invited to participate in a one hour focus group interview comprised of 10 open-ended questions. The focus group interview will be informal and you are free to answer the questions you choose, and pass on those that you do not wish to answer. The focus group interview will be audio-recorded and then transcribed verbatim for use by the researcher. Teachers in this study must currently be employed at the school building and be 18 years of age to participate.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of the focus group interview or after it is completed. Your consent to participate or refusal to participate will not affect your employment in any way. You may also decline to answer any questions that you feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 816-256-7236. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

Confidentiality: Tapes and transcripts will remain confidential, anonymous, and separate from any identifying information. A pseudonym will be assigned to responses for use by the researcher. You will have the opportunity to verify the transcribed interview for accuracy of what was stated and what you intended. Edits, deletions, and clarifications will be made immediately to the transcript to comply with your right to voluntarily release data. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after

completion of this study. Your identity and your building's identity will be confidential and remain anonymous in the reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants' rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit
http://www.research.missouri.edu/cirb/index.htm or
http://ohrp.osophs.dhhs.gov/humansubjects/guidance/ 45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Mary Magnusson by phone at (816) 256-7236, or by fax at (816) 268-7345, or by email at mmagnus385@aol.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

Injuries: The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations "45 CFR 46" will be upheld. This statement is not to be construed as an admission of liability.

Risks and Benefits: The risk of your participation in the study is minimal. The research gathered should be helpful in providing insight into school reform for school improvement. The findings could serve to assist schools in the establishment of Professional Learning Communities for sustaining school improvement and impacting student outcomes.

If you have questions regarding your teachers' rights as a participant in research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

.
If you choose to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. Thank you for your time and consideration.

Sincerely,

Mary Magnusson
Doctoral Candidate

Letter of Informed Consent Form

Student Interview

Dear Participant:

Thank you for considering participation in a research study titled, *The Role of Professional Learning Communities In Changing High School Educator Behaviors and High School Student Outcomes*. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into school reform for school improvement. Your participation has been approved by your Superintendent and Principal.

Researcher: Mary Magnusson, University of Missouri-Columbia Doctoral Candidate, mmagnus385@aol.com, (816) 256-7236.

Advisor: Dr. Barbara Martin, 4105 Lovinger Hall, University of Central Missouri, (660) 543-8823, bmartin@ucmo.edu

Procedures: For the study, school districts who have successfully implemented Professional Learning Communities from Missouri have been selected. From the selected schools, students are invited to participate in a one hour focus group interview comprised of 10 open-ended questions. The focus group interview will be informal and you are free to answer the questions you choose, and pass on those that you do not wish to answer. The focus group interview will be audio-recorded and then transcribed verbatim for use by the researcher. Students in this study must currently attend the school building and be 18 years of age to participate.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of the focus group interview or after it is completed. Your consent to participate or refusal to participate will not affect your schooling in any way. You may also decline to answer any questions that you feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 816-256-7236. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

Confidentiality: Tapes and transcripts will remain confidential, anonymous, and separate from any identifying information. A pseudonym will be assigned to responses for use by the researcher. You will have the opportunity to verify the transcribed interview for accuracy of what was stated and what you intended. Edits, deletions, and clarifications will be made immediately to the transcript to comply with your right to voluntarily release data. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after

completion of this study. Your identity and your building's identity will be confidential and remain anonymous in the reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants' rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/ 45cfr46.htm For inquiries about the survey or your participation, please contact the researcher Mary Magnusson by phone at (816) 256-7236, or by fax at (816) 268-7345, or by email at mmagnus385@aol.com. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

Injuries: The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations "45 CFR 46" will be upheld. This statement is not to be construed as an admission of liability.

Risks and Benefits: The risk of your participation in the study is minimal. The research gathered should be helpful in providing insight into school reform for school improvement. The findings could serve to assist schools in the establishment of Professional Learning Communities for sustaining school improvement and impacting student outcomes.

If you have questions regarding your students' rights as a participant in research, please feel free to contact the University of Missouri-Columbia campus Institutional Review Board at 573-882-9585.

.
If you choose to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. Thank you for your time and consideration.

Sincerely,

Mary Magnusson
Doctoral Candidate

Informed Consent Form – Principal

I, _____agree to participate in the study of the role of professional learning communities in changing high school educator behavior and high school student outcomes being conducted by Mary Magnusson.

By signing this consent form and participating in a one-on-one interview, I understand that the following safeguards are in place to protect me:

1. My responses will be used for dissertation research and potential future publications.
2. My participation is voluntary, and may be withdrawn at any point in the study prior to submission of the survey.
3. My identity will be protected in all reports and publications of the research.
4. My consent or refusal to participate in this study will not affect my employment in any way.

Please keep the consent letter and a copy of the signed consent form for your records.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

_____ _____
Participant's Signature   Date

You will be contacted to set up a date, location, and time for your interview via e-mail.

Informed Consent Form – Teachers

I, _____agree to participate in the study of the role of professional learning communities in changing high school educator behavior and high school student outcomes being conducted by Mary Magnusson.

By signing this consent form and participating in the focus group interview, I understand that the following safeguards are in place to protect me:

1. My responses will be used for dissertation research and potential future publications.
2. My participation is voluntary, and may be withdrawn at any point in the study prior to submission of the survey.
3. My identity will be protected in all reports and publications of the research.
4. My consent or refusal to participate in this study will not affect my employment in any way.

Please keep the consent letter and a copy of the signed consent form for your records.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

_____ _____
Participant's Signature   Date

The date, location, and time for the focus group interview at your school will be arranged and notification will be e-mailed to you.

Informed Consent Form – Students

I, _____agree to participate in the study of the role of professional learning communities in changing high school educator behavior and high school student outcomes being conducted by Mary Magnusson.

By signing this consent form and participating in the focus group interview, I understand that the following safeguards are in place to protect me:

1. My responses will be used for dissertation research and potential future publications.
2. My participation is voluntary, and may be withdrawn at any point in the study prior to submission of the survey.
3. My identity will be protected in all reports and publications of the research.

Please keep the consent letter and a copy of the signed consent form for your records.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

_____ _____
Participant's Signature   Date

The date, location, and time for the focus group interview at your school will be arranged and notification will be e-mailed to you.

Thank You Letter

Date

\<Title>\<First Name>\<Last Name>
\<Position>
\<School District>
\<Address>

Dear \<Title>\<Last Name>,

I would most sincerely like to thank you for taking valuable time from your busy schedule to help me with my research study. The information from your interview will be very helpful in providing insight into school reform for school improvement. The findings could serve to assist high schools in the establishment of professional learning communities in a high school setting for sustaining school improvement and impacting student outcomes.

Please be assured that I will maintain the confidentiality and anonymity of your participation and responses, both in my dissertation project and in all future published research on this topic.

I welcome you to call should you wish to provide me with any additional insight or documentation that you believe would further enrich my study.

Sincerely,

Mary Magnusson
Doctoral Candidate
University of Missouri-Columbia
(816) 256-7236
mmagnus385@aol.com

Appendix B

Instruments

1. Interview Protocol – Principal

2. Interview Protocol – Focus Groups

3. Observation Protocol

Interview Questions for Principal

Date: _____   Start Time: _____

Questions	Information
1. Tell me your name, title and involvement with Professional Learning Communities. Probe-how long	Learn about participant and PLC

2. How have Professional Learning Communities affected the way you lead your building? Probe-change in focus, change in routines,	Q1

3. How have Professional Learning Communities affected what happens in the classroom?	Q2

4. How have Professional Learning Communities affected teaching styles?	Q2

5. What changes in learning did and do you expect because of Professional Learning Communities?	Q3

6. In what ways have Professional Learning Communities affected students?	Q4

7. Do students take more ownership of their learning since the implementation of Professional Learning Communities? In what ways? Is that a change since the implementation of PLC's?	Q4

8. How have Professional Learning Communities impacted student learning?	Q4

9. What are the benefits of Professional Learning Communities in regard to your leadership style? Why	Q1

10. What are the negatives to Professional Learning Communities in regard to your leadership style? Why	Q1

11. What did I not ask you about your experience with Professional Learning Communities that you would like me to know in regard to how your leadership changed with staff and students?	Q1 Q2 Q4

Appendix

<u>Focus Group: PLC Team Members</u>

Date: _____   Start Time: _____

<u>Introduction:</u>

   Good afternoon and welcome. Thank you for taking the time to join our discussion about Professional Learning Communities. My name is Mary Magnusson, and I will serve as the moderator for today's focus group. In order to ensure accuracy I will be audio-taping the discussion. The purpose of today's discussion is to get information from you about Professional Learning Communities including the role of the principal. You were invited because you are or have been involved in the Professional Learning Communities in some role and have some insight as to how that has affected your school.

   Please remember, there are no right or wrong answers but rather differing points of view. Feel free to share your point of view even if it differs from what others have said. If you want to follow-up on something that someone has said, you want to agree, disagree or give an example, feel free to do that. I want this to be more of a conversation among yourselves, so don't feel like you have to respond to me all of the time. I am here to ask questions, listen and make sure everyone has a chance to share. I am interested in hearing from each of you. Please speak up and remember only one person should talk at a time.

   Our session will last about an hour and we will not be taking a formal break. Feel free to leave the table for any reason if you need to. I have placed name cards in front of you to help me facilitate the discussion, but no names will be included in any reports. Let's begin by going around the room and finding out more about each other.

 Date: _____   Start Time: _____

Questions	Information
1. Tell me your name, teaching area and involvement with Professional Learning Communities.	Learn about participant and PLC
2. How have Professional Learning Communities affected the way the principal leads the building?	Q1
3. How have Professional Learning Communities affected what happens in the classroom?	Q2

4. How have Professional Learning Communities affected the way you teach?	Q2

5. What changes in learning did and do you expect because of Professional Learning Communities?	Q3

6. In what ways have Professional Learning Communities affected students?	Q4

7. Do students take more ownership of their learning since the implementation of Professional Learning Communities? In what ways? Is that a change since the implementation of PLC's?	Q4

8. How have Professional Learning Communities impacted student learning?	Q5

9. What are the benefits of Professional Learning Communities in regard to your teaching? Why	Q2

10. What are the negatives to Professional Learning Communities in regard to your teaching? Why	Q2

11. What did I not ask you about your experience with Professional Learning Communities that you would like me to know in regard to how teaching changed for you?	Q1 Q2

Date: _____   Start Time: _____

<u>Introduction:</u>

        Good afternoon and welcome. Thank you for taking the time to join our discussion about Professional Learning Communities. My name is Mary Magnusson, and I will serve as the moderator for today's focus group. In order to ensure accuracy I will be audio-taping the discussion. The purpose of today's discussion is to get information from you about Professional Learning Communities including the roles of the principal and teachers. You were invited because you are or have been involved in the Professional Learning Communities process and have some insight as to how that has affected your learning in school.

        Please remember, there are no right or wrong answers but rather differing points of view. Feel free to share your point of view even if it differs from what others have said. If you want to follow-up on something that someone has said, you want to agree, disagree or give an example, feel free to do that. I want this to be more of a conversation among yourselves, so don't feel like you have to respond to me all of the time. I am here to ask questions, listen and make sure everyone has a chance to share. I am interested in hearing from each of you. Please speak up and remember only one person should talk at a time.

        Our session will last about an hour and we will not be taking a formal break. Feel free to leave the table for any reason if you need to. I have placed name cards in front of you to help me facilitate the discussion, but no names will be included in any reports. Let's begin by going around the room and finding out more about each other.

Date: _____   Start Time: _____

Questions	Information
1. Tell me your name and what Professional Learning Communities mean to you.	Learn about participant and PLC

Questions	Information
2. How have Professional Learning Communities affected the way the principal leads the building?	Q1

Questions	Information
3. How have Professional Learning Communities affected what happens in the classroom?	Q2

4. How have Professional Learning Communities affected how your teachers teach?	Q2

5. What changes in learning did and do you expect because of Professional Learning Communities?	Q3

6. In what ways have Professional Learning Communities affected you as students?	Q4

7. Do you feel that Professional Learning Community work has helped you take more ownership of your own learning? In what ways or why not?	Q5

8. How have Professional Learning Communities impacted your learning?	Q5

9. What are the benefits of Professional Learning Communities in regard to your learning? Why?	Q2 Q4

10. 10. What are the negatives to Professional Learning Communities? Why	Q2 Q4

11. What did I not ask you about your experience with Professional Learning Communities that you would like me to know in regard to how school changed for you?	Q1 Q2

On-Site Observation Form

Date _____

Beginning Time _____ Ending Time _____

Setting _____

Participant _____

Observations:

VITA

Mary Carolyn (Mary) Magnusson was born July 5, 1957 in Detroit, Michigan to Clifford and Josephine (Was) Magnusson. She is the oldest of three girls. Her sisters are Shirley and Judy Magnusson. Mary attended Adams Elementary and Riley Junior High in Livonia, MI. In 1970 her family moved to Columbia where her father took a position at the University of Missouri. Mary then attended West Junior High and David H. Hickman High School in Columbia. After her 1975 graduation from Hickman High School, Mary accepted a swimming scholarship and attended the University of Missouri-Columbia (UMC). She completed her Bachelor of Arts Degree as a teacher in the areas of Physical Education and Biological Sciences. She completed her Masters in Athletic Administration from UMC in 1982 and her Educational Specialist in Secondary Education in 1994 from the University of Missouri-Kansas City. Mary taught and coached for 10 years in Sedalia and the Kansas City area. Mary has been an assistant principal at John Evans Middle School in Potosi, MO and Belton High School in Belton, MO; a principal at Odessa Middle School in Odessa, MO; and is currently an assistant principal at Raytown South High School in Raytown, MO. She earned her EdD in Educational Leadership and Policy Analysis from UMC in 2010. Mary is divorced with no children but does enjoy her goddaughter, Rachel, who lives in Coeur d' Alene, Idaho and her 16 year old cat, Brisbane.