PROFESSIONAL LEARNING COMMUNITY:

A CASE STUDY OF ONE MIDWESTERN SCHOOL

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by

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

dissertation entitled

PROFESSIONAL LEARNING COMMUNITITES:
A QUALITATIVE CASE STUDY OF ONE MIDDLE SCHOOL

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

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ABSTRACT

The concept of school faculty collaborating as a professional learning community has garnered widespread support and is the subject of much research and discussion. This qualitative case study was designed for the purpose of providing deeper insight into the establishment of professional learning communities from the perspective of a school which had been implementing PLCs for several years. One middle school was selected for this study based on its appearance as a highly functioning PLC.

Data collected included observations of small group collaborative work sessions as well as whole faculty staff development, individual interviews with the principal and select teachers, a focus group interview with department chairs, and document analysis of related artifacts. Several themes emerged from the data, specifically regarding the school as a PLC and factors that impacted the implementation process. Barrett Middle School does appear to be a highly functioning PLC, characterized by embedded teacher leadership and focused, comprehensive professional learning, and a culture based on collaboration and student success. Factors contributing to this include involvement from the district level, including ongoing support and training, as well as efficacious principal leadership and a climate which favored implementation.

Implications from this study include the value of embedded teacher leadership, as well as the need to support and develop the skills of principals involved in such efforts. In

addition, the value of district involvement should be given significant consideration.

Finally, schools like Barrett that seek to implement PLCs should consider the range and

scope of the guidance they utilize.

CHAPTER ONE

Introduction to the Study

Background

Changes to the educational landscape over the past several decades have

presented challenges for schools. In response to both societal changes and governmental

mandates, school improvement initiatives have focused attention on the education of all

children and the need to close the achievement gaps that persist among demographic and

socioeconomic groups (Jennings, 2006). In particular, the *No Child Left Behind* (NCLB)

legislation has changed the definition of a successful school. Gone are the days when

schools are judged by the average achievement of their overall population. Now, success

is measured by how many individuals or subgroups have met a certain benchmark. Even

schools that previously were perceived as successful are now being called to reexamine

the fundamental beliefs and structures under which they have operated.

Changes in both laws and society have resulted in increased attention to teacher

quality, as well as an increased focus on the alignment of curriculum and instruction, and

the implementation of instructional practices (Jennings, 2006). Marzano led a group of

researchers in conducting a meta-analysis of research on classroom instruction (Marzano,

Pickering, & Pollack, 2001). They concluded that individual teachers can have a

powerful effect on student achievement through instructional strategies, and even one

individual teacher can be a catalyst for the quality of instruction in the entire school

(Marzano et al., 2001).

While experts recognize the significance of quality instruction, they also

recognize traditional methods of professional development have had little impact with

regard to changing the instructional practices of individual teachers (Reeves, 2006; Sparks, 2005). Traditionally, professional development directed at improving instructional practices occurred in the form of workshops reserved for certain days of the year. Outsiders provided expert advice to teachers as passive recipients of information and effectiveness was generally determined by measures of participants' satisfaction with the training (Sparks & Hirsch, 1997). For many schools, structures such as these have been replaced. Now, planning for professional development begins with student outcomes and works backward to the "knowledge, skills, and attitudes required of educators" (Sparks & Hirsch, 1997, p. 41).

The standard for ideal staff development is now daily, job-embedded, and research based (National Staff Development Council, 2001). As Sparks (2005) has said "sustained, action oriented professional learning by all principals and teachers is essential in creating schools with quality teaching in every classroom" (p. xiv). Schools are challenged to develop comprehensive systems that are driven by student data, centered on appropriate instructional strategies, and grounded in an understanding of how adults learn. While this transition is slow, traditional methods of staff development are becoming less prominent as schools shift to site-based methods, such as school based coaches and leadership teams (Killion & Harrison, 2006; Sparks & Hirsch, 1997).

The concept of organizing schools as learning communities has been the subject of much research in recent years (e.g., Bryk & Schneider, 2003; Louis, Marks, & Kruse, 1996; Neumann & Wehlage, 1995; Scribner, Cockrell, Cockrell, & Valentine, 1999; Scribner, Hager, & Warne, 2002; Vescisco, Ross, & Adams, 2007). Policy makers and advocates have built upon this research to call for the use of learning communities in

schools (Fullan, 2001, 2002; Garmston & Wellman, 1999; Hord, 1994, 1997; Lambert, 1998, 2003, 2005; Schmoker, 2006). These advocates call for schools to be organized for adult as well as student learning in order to meet the needs of today's students. As Costa has said "if staff were not in a mentally stimulating environment, there is no reason we should believe they would create such an environment for their students" (as cited in Hord & Sommers, 2008, p. 30). In addition, there is growing acknowledgement that today's principal must be willing to learn along with everyone in the building, to be the lead learner, (DuFour, DuFour, Eaker, & Many, 2006; Fullan, 2006; Hord & Sommers, 2008; Reeves, 2006). The school leader, then, plays a significant role in staff development and is often responsible for its implementation.

The term professional learning communities, or PLCs, has become a catch phrase for this concept. Professional learning communities have been articulated and defined by a multitude of authors, each with significant variations, but also with many commonalities (DuFour, 2005; DuFour & Eaker, 1998; Eaker, DuFour, & DuFour, 2002; Fullan, 2006; Garmston & Wellman, 1999; Hord, 1994, 1997; Lambert, 1998, 2003, 2005; Louis, Marks & Kruse, 1996; Schmoker, 2006). In a call to action authored by Mike Schmoker (2004) and endorsed by 20 other recognized leaders in the field, he advocated for the PLC process as the most effective means to bring about school improvement. School leaders were encouraged to heed the research and establish continual learning groups focused on "explicit, common learning goals, [whose] collaboration pays off richly in the form of higher quality solutions to instructional problems, increased teacher confidence, and …remarkable gains in achievement" (Schmoker, 2004, p. 49).

In addition, the National Staff Development Council (2001) recognized the potential impact of professional learning communities when they developed ten standards for staff development and focused one standard wholly on professional learning communities. In encouraging the use of PLCs, the organization says: "The most powerful staff development experiences occur in ongoing teams that meet on a regular basis… for adult learning, joint lesson planning, and problem solving" (Learning Communities Standard, 2001, ¶ 1).

PLCs are built upon the concept of shared leadership (Garmston & Wellman, 1999; Hord, 1997) and leadership within a school that considers itself a PLC is a specific consideration for this study. Leaders have a significant impact on their school when they set direction, develop people within the organization and actively engage in redesigning the organization (Leithwood, Louis, Anderson, & Walstrom, 2004; Marzano, 2005). Specifically, the concepts of teacher leadership (Barth, 2001; Killion & Harrison, 2006) as well as the leadership capacity of the organization overall (Lambert, 1998; 2003; 2005) significantly influence the work of schools as learning organizations.

While many advocate for the PLC process (Hord & Sommers, 2008; Lezotte, 2005; Schmoker, 2006), it is widely acknowledged that to transform a school into a professional learning community is challenging. Currently there exists a significant gap between what we know about how schools can best be structured and how they actually are structured (Fullan, 2001; Schmoker, 2006), as it relates to PLCs.

Assuming that professional learning communities are a powerful way to influence student achievement and overall school success (NSDC, 2001), how do schools effectively implement professional learning communities? In order to develop greater

internal capacity, schools may seek assistance from outside specialists and other schools that have implemented the process. For example, the Statewide Professional Learning Communities Project is a structured 3year training process for building level leadership teams. As a part of a cohort group, each leadership team participates in ongoing training designed to facilitate their school's growth as a professional learning community. Training is designed from a *train the trainer* perspective and focuses on developing the leadership capacity of those team members to then work with teams of teachers in each of their buildings. My study will focus on one school that has participated in this particular training process and has been implementing professional learning communities for five years. By examining the work of this school, I hope to add to the body of work related to successful implementation of the PLC process. I hope this study will benefit schools undertaking such reforms through knowledge gained by examining another school that has already implemented the PLC process.

Statement of the Problem

Today's schools face increasing pressure to ensure all students meet certain levels of proficiency (Jennings, 2006). This shift to standards based education has led to fundamental changes in the way schools are evaluated and consequently, in the way they are structured (Marzano & Kendall, 1997). Because of NCLB, schools are focusing efforts on subgroups of their student populations who have traditionally struggled. Given the knowledge base surrounding the characteristics of effective schools (Lezotte, 2005) as well as current emphasis on the PLC process as an effective means of school improvement (NSDC, 2001; Schmoker, 2004), there is some agreement regarding how to redesign schools. As part of implementing PLCs, there is also the expectation that

leadership within the school will shift from formal positions of authority and become dispersed throughout the organization, increasing the overall leadership capacity of the school (Lambert, 2005).

Given this, there still exists a tremendous discrepancy between what is known about best practices and what is implemented in schools (DuFour, 2005; Eaker et al., 2002; Schmoker, 2006). Pfeffer and Sutton (2000) first coined the phrase, the "knowing-doing gap" (p. 4) to refer to the problem organizations face when they fail to change actions based on knowledge of what should be done. Additionally, several authors have contributed to the body of literature to assist schools in bringing these ideas regarding professional learning communities to action (DuFour, DuFour, Eaker, & Many, 2006; Cozemius & O'Neill, 2002; Hord & Sommers, 2008). Particularly for those implementing the PLC process, guidance from schools implementing this process can be helpful, yet the current PLC literature lacks empirical evidence about how PLCs are implemented and how the PLC experience influences leadership.

Purpose of the Study

The fundamental question addressed in this study is: given the challenges facing schools when implementing Professional Learning Communities, what can be learned from one school that has restructured and recultured itself in this manner over the last 5 years. The purpose of this qualitative case study is to add to the body of knowledge concerning the changes that take place in schools that implement PLCs, particularly regarding what factors might have influenced this development. One school that has been implementing PLCs for several years was selected for in depth study through individual and group interviews, observations, as well as document analysis. I will explore both the

overall efficacy of established PLCs, as well as possible changes in how leadership works within the organization. Findings from the study may be useful to those implementing PLCs in other settings.

<div align="center">*Research Questions*</div>

The research questions addressed in the study are:

1. What is the nature of this school as a PLC?

2. What factors influenced the development of this school as a PLC?

<div align="center">*Overview of the Literature*</div>

This study will focus on a PLC and what influence the implementation of a PLC has had on the school. As part of the framework guiding this study it is important to understand the PLC process, how it has evolved, and its importance in school improvement. Its early roots come from the effective schools research, which dates back over 40 years (Lezotte, 2005). This research was in response to an Equal Educational Opportunity study, also known as the *Coleman Report*, which essentially declared students' achievements are directly tied to family background, with school differences having a significantly small contribution to students' overall success (Coleman et al.., 1966). The report sparked a backlash from the educational research community. Following this, there was a greater focus on research which examined schools that were succeeding with minority and/or economically disadvantaged children (Lezotte, 2005).

Through many independent studies, schools that were effective with such student populations were identified and studied. From these studies seven correlates were eventually identified: "1). Instructional leadership; 2). Clear and focused mission; 3). Safe and orderly environment; 4). Climate of high expectations for success; 5). Frequent

monitoring of student progress; 6). Positive home-school relations; 7). Opportunity to learn and time on task" (Lezotte, 2005, p. 179). After identifying these correlates, researchers set out to describe how ineffective schools could become effective schools, focusing on changes in the behaviors of those who worked in schools through staff development, systemic changes in the organizations themselves, and characteristics associated with the change process.

I have organized literature relevant to this study into three groups. The first category includes investigational literature which examined professional learning communities or related topics, (e.g., Bryk & Schneider, 2003; Louis, Marks, & Kruse, 1996; Neumann & Wehlage, 1995; Scribner, Cockrell, Cockrell, & Valentine, 1999; Scribner, Hager & Warne, 2002; Vescisco et al., 2007) and is best described as research. The second category, advocacy, seeks both to substantiate and encourage the development of PLCs (Fullan, 2001, 2002; Garmston & Wellman, 1999; Hord, 1994, 1997; Lambert, 1998, 2003, 2005; Schmoker, 2006). Finally, a body of literature I refer to as interpretive is designed to make connections between research, policy and practice (e.g., Conzemius & O'Neill, 2003; DuFour, 2005; DuFour et al., 2006; Eaker et al., 2002; Hord, 1994, 1997; Lambert, 1998, 2003, 2005). When viewed collectively, this literature provides a comprehensive picture of a professional learning community, which contextualizes my case study examination of such an organization. For the purposes of my study, no one definition or framework is sufficient to inform the research questions. Instead, common characteristics from multiple authors are synthesized and examined for their relevance. In each of the following subsections, a defining characteristic of PLCs is described and these collectively form the conceptual framework for the study.

Learning Organization

In order for a school to be a PLC, it must be an organization that learns. Senge (1990) defines a learning organization as one whose members have the ability to learn and adapt continuously. In addition to being adaptive, organizations are generative, able to create new knowledge. Rather than becoming a reform initiative itself, a professional learning community becomes the supporting structure for schools to continuously transform themselves through their own internal capacity, or to become a learning organization. Leithwood and Louis (1998) suggest that:

> The task is not just to create a school organization capable of implementing the current set of reform initiatives . . . in the context of today's turbulent environments. Rather, the task is to design an organization capable of productively responding, not only to such current initiatives in today's environment, but to the number of initiatives, including new definitions of school effectiveness that inevitably will follow (p. 6).

Members of a PLC engage in systematic processes to promote continuous school improvement (DuFour et al., 1998) and these processes form the foundation for their work as a learning organization (Hord, 1994, 1997; Schmoker, 2006). A common practice in becoming a learning organization is to develop a fully articulated purpose, or mission, along with a vision of what the organization is to become that is shared by those in the organization (DuFour et al., 2006; Hord, 1997; Lezotte, 1991; Reeves, 2006). The shared values of the organization then become more important than individual goals and priorities (Hord, 1997). These collective commitments form the foundation for the school's work. (DuFour et al., 1998).

Continuous evaluation and reflection of practice are also part of a learning

organization (Argyris & Schon, 1996; Patton, 1997; Preskill & Torres, 1991). Learning

organizations are in continuous conversations surrounding shared knowledge and best

practices (DuFour, et al., 2005; Fullan, 2002; Garmston & Wellman, 1999; Hord &

Sommers, 2008). This ongoing circle of knowledge sharing enables the school to solve

specific problems distinctive to the school.

Knowledge of the change process and how individuals deal with change is

another critical piece of a learning organization. Fullan (2002) asserts that knowledge of

the change process is critical to successful leadership in today's educational

organizations. The organizational context in which change is implemented is also key to

sustaining reforms over time, with support from the district level having a significant

impact (Andrews & Lewis; 2002; Chrisman, 2005; Fullan, 2002; Giles & Hargreaves,

2006; Togneri & Anderson, 2003; Wood, 2007).

Culture of Collaboration

Collaborative work is at the heart of ongoing staff development in schools

organized as PLCs (DuFour et al., 1998, Hord, 1997); yet establishing collaboration as

part of the school's culture is more significant change. Several authors associated with

PLCs emphasize the importance of a strong culture centered on collaboration (DuFour et

al., 1998; Hord, 1997; Schmoker, 2005). In recognizing the significance of collaboration,

Louis et al.(1996) note "While individual professionalism is desirable, active work in a

professional group is also important to increasing teachers' sense of craft and their

overall commitment"   (p. 758).

As part of successful collaborative efforts, knowledge of team characteristics and development informs the work of professional learning communities. Hackman (2002) asserts "effective work teams operate in ways that build shared commitment, collective skills, and task-appropriate coordination strategies" (p. 28). PLCs apply knowledge of effective teamwork to their collaborative processes. In addition, trust has also been identified as a foundational element in successful teams and organizations (Bryk & Schneider, 2003; Fleming & Thompson, 2004; Lencioni, 2002). Research related to the development of trust in organizations indicates trust is instrumental in developing organizational conditions which are necessary for improvements, serves as a moral compass for the organization (Bryk & Schneider, 2003), and enables groups to deal openly with conflict (Lencioni, 2002).

Results Orientation

A distinguishing element of a professional learning community is a consistent focus on student learning rather than teaching (DuFour, 2005, Eaker et al., 2002; Garmston & Wellman, 1999, Louis et al., 1996). Collaborative groups of professionals measure student achievement through varied means and use such data to guide their work. Marzano et al. (2001) asserts that a guaranteed and viable curriculum is fundamental to school success, and one task PLCs undertake is developing a shared understanding of what is most important for students to know and do (DuFour et al., 2005). Faculties also develop assessments for common use surrounding this curriculum, and spend extensive time examining the resulting student data (Eaker et al., 2002). Groups collaboratively develop measureable goals for student progress and utilize shared best practices to achieve those goals.

Shared Leadership

The quest to define and describe leadership has taken many different forms in modern research literature and has produced a broad theoretical base with which to understand the many dimensions of leadership (Kezar, Carducci, & Contresras-McGavin, 2006; Leithwood, Jantzi, & Steinbach, 2000; Yukl, 2002). Traditional perspectives of leadership have often focused attention on leadership from the top, assuming that power and authority equates to leadership (Yukl, 2002). More recently, leadership has come to be conceptualized in more democratic forms, with a greater focus on the context and process within which leadership occur. This shift in how leadership has been conceptualized is linked, according to some, to the practice of leadership; and as leadership is viewed differently it is also practiced differently (Kezar et al., 2006). This shift in leadership perspectives is foundational to the theory and practice of PLCs. As a framework for viewing leadership within a school, distributed leadership characteristics are evident in the work of professional learning communities. Distributed, or participative, leadership centers on the leadership embedded throughout the school, regardless of formal position (Ogawa & Bossert, 1995). It emphasizes the role of the leader in developing the decision making processes of the group and empowering the group (Yukl, 2002).

Leadership in a PLC is viewed from the perspective that everyone in the organization is a leader and leadership takes on a new meaning (Barth, 2001; Hord, 1997; 2004). Given the complexities of today's educational world, it simply is not possible for a single, traditional leader to possess all the skills necessary to enable an organization to be successful (Neuman & Simmons, 2000). Those in formal leadership roles share authority

and responsibility with others in the organization enabling "real improvements to take root and survive" (Neuman & Simmons, 2000, p. 10) and allow for an increase in students' opportunities to succeed.

Those in formal leadership are now charged with facilitating the growth and development of others and of the organization's vision (Hord, 1997, 2004; Senge, 1990). It is the formal leader's responsibility to facilitate the establishment of effective policies, procedures, and learning processes for the organization, not to impose these upon the organization. This leader must be able to nurture the development of the community and recognize when others, including teachers, are ready for greater leadership responsibility (Hord, 2004). Teachers lead in both formal and informal ways. This gradual cultural shift occurs when everyone in the organization envisions themselves as both a leader, whether formally or informally, and a learner (Lambert, 2002; Reeves, 2005, Senge, 1990).

Study Design

This qualitative case study focused on one school in a midwestern state that has implemented the professional learning community process for 5 years. This school was selected from among those schools that have participated in the Statewide Professional Learning Communities Project. Both individual and focus group interviews were conducted with selected teachers and the principal. Individual teachers were selected based on their willingness to participate and included a broad cross section of participants. In addition, a separate focus group interview was conducted with teacher leaders who serve as department chairs. Responses to questions were analyzed for emerging patterns in the data. Further data was collected through document analysis of

artifacts such as meeting minutes, goals, action plans, and other collaborative work products.

Limitations and Assumptions

This study assumes a school that has participated in a 3 year training process has a high level of commitment to the PLC process and high efficacy regarding implementation. Focusing on one school allowed for an in depth analysis. Because only one school was studied, it may be difficult to generalize these results to other schools; however, aspects of the findings may be transferable to other settings.

Definitions

Collaboration. The process in which a group engages wherein members become interdependent, share and create knowledge, and produce work they would not be able to independently (Bruffee, 1999).

Distributed leadership. The belief leadership may be present in all parts of the organizations, not simply those traditional positions of authority (Ogawa & Bossert, 1995). Also, from this perspective, and the formal leadership role is to develop the decision making processes of the group (Yukl, 2002).

Learning organizations. "Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (Senge, 1990, p. 3).

Leadership capacity. "Broad-based, skillful participation in the work of leadership" (Lambert, 2003, p. 4). Broad-based means the involvement of a significant portion of

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organization members; skillful refers to those in the organization having the relational knowledge to work with each other effectively.

Statewide PLC Project. An initiative funded through the Statewide Department of Elementary and Secondary Education, as well as through fees charged to schools that participate in the Project. Specialists provide training and ongoing systemic support to participating schools over an initial 3 year period, and may provide support as needed in following years.

Professional learning communities. For the purposes of this study, PLCs have the following characteristics: they are learning organizations, have a culture of collaboration, focus on results, and share leadership throughout the school.

Student achievement or student learning. For the purposes of this study, student learning is measured by standardized achievement tests.

Teacher leadership. Teacher leadership is defined as formal or informal participation in leading the school by teachers, through participation in teacher leadership roles, as well as simply input and participation in activities to guide the work of the school.

Train-the-trainer. Train-the-trainer refers to a professional development structure in which a small group of teachers represent the whole faculty and attend trainings, with the goal of disseminating information and skills to the whole faculty. Statewide PLC Project training is presented in this manner.

Summary

In this chapter I have presented introductory information about a qualitative case study that explored the professional learning community process as it is implemented in one school that was part of the Statewide Professional Learning Communities Project. I

described background information, conceptual underpinnings, specific information related to the study methodology, and relevant definitions. In Chapter 2, the related literature will be explored, to be followed by an explanation of the methodology in Chapter 3. Chapter 4 will present the results of the study, organized around themes which emerged from the data, and chapter 5 will include a discussion of the findings and conclusions. It is my hope that this study will add to the body of knowledge related to the PLC process, and school improvement, and assist those utilizing this framework to better organize schools to enhance student success.

CHAPTER TWO

Review of Related Literature

Literature relevant to this study can be categorized into three groups. First, there

exists a significant body of scholarly research that has investigated the work of learning

communities (e.g., Bryk & Schneider, 2003; Louis, Marks, & Kruse, 1996; Neumann &

Wehlage, 1995; Scribner et al. 1999; Scribner et al. 2002; Vescisco et al., 2007). This

research provides insight into both the potential benefits and drawbacks to schools. For

the purposes of this study, this group of literature will be referred to as research.

Based upon this and other research, educational theorists and policy makers alike

have called for schools to reorganize and reculture themselves into learning communities

(Fullan, 2001, 2002; Garmston & Wellman, 1999; Hord, 1994, 1997; Lambert, 1998,

2003, 2005; Schmoker, 2006). This second body of literature, referred to as advocacy,

seeks both to substantiate and encourage the development of schools as professional

learning communities. As part of this effort, the characteristics of professional

development have shifted toward daily, job embedded, collaborative learning (NSDC,

2001). Schools are challenged to develop comprehensive systems that are driven by

student data, centered on appropriate instructional strategies, and grounded in an

understanding of how adults learn. While this transition is slow, traditional methods of

staff development are becoming less prominent as schools shift to site-based methods,

such as school based coaches and leadership teams (Killion & Harrison, 2006; Sparks &

Hirsch, 1997).

Finally, a body of literature designed to make connections between research,

policy and practice has emerged. Within this context is a group of advocates for

professional learning communities who were often once practitioners (Cozemius & O'Neill, 2003; DuFour, 2005; DuFour et al., 2006, Eaker et al., 2002) and also practitioners who have conducted research related to these practices (Hord, 1994, 1997; Lambert, 1998, 2003, 2005). Literature produced by this group, referred to as interpretive, is often designed to explicitly guide practitioners in the work of changing schools to become professional learning communities. While the work of researchers and advocates is intended for practitioners, it may often go unnoticed by educators. By design, interpretive literature seeks to bridge the gaps between research, advocacy, and practitioners, though it can be argued that its purposes are also self-serving. Though generally grounded in research, interpretive literature is widely commercially marketed, and so must be viewed through a different lens. Its significance comes through its direct influence on educational practice. Educators in today's schools are often guided most directly by this body of work, making it relevant to inform this study.

The lines between these three groups are often blurred. Researchers may become advocates, advocates may conduct research, theorists and policy makers at times advocate for the work of themselves and others, and each may seek to interpret research and policy to direct and guide practitioners. In each case, school improvement for the good of students is the general motivation, but factors such as profit, power, and prestige may also play a role. In examining research, advocacy literature, and interpretive literature directed toward practitioners, there exist both variations and commonalities. In reviewing literature to inform the research questions at hand, I consolidated and synthesized the literature into four broad characteristics of professional learning communities: learning organization, culture of collaboration, results orientation, and

culture based on shared leadership. In each of the following subsections, a broad characteristic of PLCs is defined and described, followed by related research, advocacy and interpretive literature. When viewed collectively, this literature provides a comprehensive picture of a professional learning community, which contextualizes my case study examination of such an organization.

Learning Organization

The quest to articulate what a learning organization is and how to develop one has been the focus of much attention. According to Senge (1990), a learning organization is one that develops the ability for each of its members to learn and adapt continuously. Not only are organizations increasingly adaptive in nature, with the capability to respond as needed, they are generative, with the ability to create new knowledge. An organization that engages in generative learning is one that "creates information and knowledge, not merely processes them efficiently… organizational members must not be passive, but must rather be active agents of innovation" (Nonaka & Takeuchi, 1995, p. 12). This ability to adapt and create knowledge, both on an individual and organizational level, is a necessary asset that is necessary criteria for a learning organization.

In articulating his case for developing learning organizations, Senge (1990) has this to say: "Unfortunately, the primary institutions of our society are oriented predominantly toward controlling rather than learning, rewarding individuals for performing for others rather than for cultivating their natural curiosity and impulse to learn" (p. 7). This tendency to devalue individual contributions and strengths, as well as collective ingenuity, characterizes traditional organizations and will significantly inhibit their development in the not so distant future. While organizations of the past may have

thrived when the leader was the primary agent of creativity and problem solving, organizations of the present and future are not sustainable when they are run in this fashion (Senge, 1990).

Rather than becoming a reform initiative itself, a professional learning community becomes the supporting structure for schools to continuously transform themselves through their own internal capacity, or to become a learning organization. Leithwood and Louis (1998) suggest:

> The task is not just to create a school organization capable of implementing the current set of reform initiatives . . . in the context of today's turbulent environments. Rather, the task is to design an organization capable of productively responding, not only to such current initiatives in today's environment, but to the countless number of initiatives, including new definitions of school effectiveness, that inevitably will follow (p. 6).

Indeed, organizations that learn are committed to continuous evaluation and examination of practices (Argyris & Schon, 1997; Patton, 1997; Preskill & Torres, 1991). Specifically, Argyris and Schon propose the following assumptions for improving the interpersonal dynamics of the group: "1. Emphasize common goals and mutual influence. …2. Communicate openly and publicly test assumptions and beliefs… 3. Combine advocacy with inquiry" (pp. 165-166).

Case study research on schools organized as learning communities indicates development of problem solving or knowledge creating skills can occur although evidence of this was only found in one of the three schools studied by Scribner et al. (1999). In addition, in a review of 11 research studies related to PLCs, Vescio et al.

(2007) found work in PLCs was associated with reflective practices, both at an individual and organizational level, suggesting there is some evidence that PLCs exhibit aspects of learning organizations.

As part of the knowledge creation process, advocates encourage PLC members to engage in continual conversations surrounding shared knowledge (DuFour et al. 2005; Fullan, 2002; Garmston & Wellman, 1999; Hord & Sommers, 2008). This "reflective dialogue" (Garmston & Wellman, p. 19) becomes a catalyst for later shared work. Through shared inquiry, faculties develop the knowledge and skills to solve problems collectively (Hord & Sommers, 2008) as well as share knowledge of best practices (DuFour et al., 1998, 2005). When the process of sharing knowledge becomes part of the group norms, continued growth for all is possible (Fullan, 2002). In addition, interpretive literature points to the correlation between clarity of purpose and school effectiveness and indicates that schools benefit from articulating shared values and beliefs (DuFour et al., 2006; Hord, 1997; Lezotte, 2005; Reeves, 2006).

As a foundation, schools that are PLCs focus on developing and living a shared mission. When a clear purpose has been established, a vision of what the school might become is a logical next step. Both Hord (1997) and DuFour and Eaker (1998) recognize the benefits of a collective vision that staff place above their own personal ambitions, a specific "mental image" that guides daily work (Hord, p. 19). Shared values (Garmston & Wellman, 1999) contribute to the actions faculty members take to achieve goals (DuFour & Eaker, 1998) set forth by the group. However, collective actions of the organization speak louder than words. "No school has ever improved simply because the staff wrote a mission statement" (DuFour et al., 2006, p. 19) yet these collaboratively agreed upon

commitments can contribute to the efficacy of the school as a learning organization when they are fully embraced by the school community.

Members of a PLC are encouraged to engage in systematic processes to promote continuous school improvement (DuFour et al., 1998) and these processes form the foundation for their work as learning organizations (Hord, 1994, 1997, 2008; Schmoker, 2006). Embedded in these systematic, collaborative processes is a continuous focus on current data. Collaborative school teams should continually examine and utilize data to set specific goals and then work to achieve these goals through established processes (DuFour et al., 1998). This focus on using current data, combined with attention to purpose, can foster the development of a learning organization.

As a learning organization is by definition ever changing and adapting, theorists advocate for extensive knowledge of the change process and how to build an organization supportive of such change (Elmore, 2002; Fullan, 2001; Huffman & Hipp, 2003; Snow-Gerono, 2005; Wood, 2007). Research by both Wood and Hord (cited in Huffman, 2003) points directly to the need for those in leadership positions to understand the change process. Also, Fullan considers an understanding of the change process to be a cornerstone of his conceptual model of leadership, noting both top-down and bottom-up leadership is essential in developing a culture that supports change. Both Elmore and Snow-Gerono point to the need to adapt to ever changing circumstances or a culture of "uncertainty" (Snow-Gerono, 2005, p. 241). Finally, Morrissey and Cowan (2004) noted the advantages of leaders' acknowledging change is hard and encouraging faculty to give voice to that sentiment.

When developing knowledge of change implementation, much can be gained by focusing on research related to sustaining change over time. In examining the research related to sustainability, two specific conclusions emerge. First, when teachers are heavily vested in the leadership of the initiative it is more likely to be sustained (Chrisman & Supovitz, 2005; Fullan, 2002; Glickman, 2002; Wood, 2007). Fullan refers to this as "leadership at many levels" (p. 18), noting that when a strong infrastructure of teacher leaders develops, the school adapts more easily to transitions in formal leadership, and also has a base from which to draw a new formal leader. Relatedly, Wood noted the importance of investing "greater autonomy and authority in participants" (p. 737). Studies by Chrisman and Supovitz and Glickman both value action research as a process for continuous school improvement that empowered teachers.

Second, the context in which the change is implemented is critical to its sustainability:

> Those factors that present barriers to change, if unrecognized, will thwart the efforts of the leaders of school improvement. By encouraging the development of those factors that facilitate change or nurturing them if they already exist, leaders increase the opportunity for change to become a permanent part of the school environment (Boyd, 1992, ¶5).

Specifically, support to the school from the district level is critical to school reculturing themselves as learning communities (Andrews & Lewis; 2002; Chrisman, 2005; Fullan, 2002; Giles & Hargreaves, 2006; Togneri & Anderson, 2003; Wood, 2007). Fullan noted the importance of principals being able to learn from other principals, particularly those within their district, as a key factor in their ability to impact the school. In particular, the

commitment of the district to give the change several years to show results is invaluable (Chrisman, 2005; Togneri & Anderson, 2003). However, even though reformed districts functioning as PLCs may be more sustainable than those reformed through more typical reforms, they may revert to previous habits when faced with standardized reform and extreme pressure from sanctions (Andrews & Lewis, 2002; Giles & Hargreaves, 2006). This can be overcome if the initial reforms become ingrained in the district's culture (Wood, 2007). Also critical to the sustainability of PLCs within a school is the need to customize a plan for a school (Phillips, 2003). The leaders and teacher leaders at the middle school studied by Phillips were deliberately conscious of the context in which they operated and designed school improvement efforts specific to their situation. A true learning community then must be a learning organization, capable of responding to changes, generating new knowledge, implementing changes, and sustaining these changes.

For practitioners seeking interpretations of the change process, two conceptualizations articulated by Fullan (2002) and Marzano et al.. (2005) are particularly useful. In his work, Fullan identifies three stages in the change process, beginning with initiation. This stage is characterized by the connection of an initiative to student needs. This is followed by the implementation phase, in which power is shared among the group, but which often includes a temporary dip in progress. Schools that survive this dip may progress to the institutionalization phase, in which the initiative becomes a lasting part of the school. Furthermore, Marzano et al. categorizes change as either first or second-order. First-order change occurs when change is accepted into the existing belief structure. Second-order change occurs when the current framework of

beliefs changes as a result of the change initiative. The shift to collaboration and the resulting changes in the organization are certainly second order changes and are important to the PLC process.

Culture of Collaboration

The study of organizational culture, while still ambiguous, has gained significance relative to its overall effect on leadership. Tierney (1988) refers to culture as "what is done, how it is done, and who is involved in doing it. It concerns decisions, actions, and communication both on an instrumental level and a symbolic level" (p. 3). Research has supported the idea that a strong, viable culture that supports organizational structures is more effective than a weaker disconnected culture (Martin, 2002). The culture of a professional learning community centers on collaboration among members.

Collaboration in its truest form is much more than a group of people working together. When members of a group learn collaboratively, they become interdependent, learning to rely on the group and giving power and authority both to others in the group and the group as a whole (Bruffee, 1999). Knowledge becomes "a social construct, a consensus among the members of a community of knowledgeable peers" (Bruffee, 1999, p. xiv). Through collaboration, schools have the power not just to share knowledge, but create new knowledge and greatly increase the ability of the school to respond to changing needs and problems. It is this interdependence, this willingness to rely on each other, that forms the foundation of a professional learning community.

In order to develop a comprehensive understanding of a culture of collaboration, it is useful to explore research about the concept of teams, as well as research on the importance of dealing with conflict constructively and trust between group members. In

addition, the significance of allocating time to work together and developing collaborative skills among group members is relevant.

As part of collaborative efforts, it is useful to distinguish between a group of people and a team. People often use the word team to identify the group because it has positive connotations (Katzenbach & Smith, 1993). In some cases, what is referred to as a team is better described as a coacting group, a group that "performs the same type of work, but … do not depend on each other and need little coordination" (Yukl, 2002, p. 306). A team can be distinguished from a coacting group because of its interdependence and common purpose.

Theorists have investigated the elements of interactions among group members and attempted to define what constitutes a team (Hackman, 2002; Katzenbach & Smith, 1993; Lencioni, 2002; Yukl, 2002). Defining elements include a common purpose or direction for the group's work (Hackman, 2002; Katzenbach & Smith, 1993; Yukl, 2002), a willingness among the group to hold each other accountable (Katzenbach & Smith, 1993; Lencioni, 2002), a high value placed on complementary skills and diversity (Hackman, 2002; Katzenbach & Smith, 1993; Yukl, 2002), shared leadership (Hackman, 2002; Katzenbach & Smith, 1993), and a willingness to engage in constructive conflict (Lencioni, 2002; Katzenbach & Smith, 1993). In differentiating teams from working groups, Katzenbach and Smith say a team has:

> Shared leadership roles, individual and mutual accountability, specific team
> purpose that the team itself delivers, collective work-products, encourages open-
> ended discussion and active problem-solving meetings, measures performance

directly by assessing collective work-products and discusses, decides, and does

real work together (p. 113).

These distinctions between true teams and working groups are important to those implementing PLCs; establishing teams are critical so collaborative processes may become fully embedded in the school's culture.

The need to understand how to address constructive conflict is a particularly challenging aspect of collaboration. In examining two case studies of urban middle schools that enacted collaborative reforms, Achinstein (2002) pointed to the relevance of conflict among groups. She asserts while our focus is often on achieving consensus in groups, how groups deal with conflict is critical to their success, in particular "how the communities navigated their differences resulted in contrasting potentials for organizational learning and change" (Achinstein, 2002, p. 450). This ability to understand the tensions inherent in collaboration is identified by Snow-Gerono (2004) as a necessary factor for teacher inquiry to thrive. As an example, Haycock (2002) points to specific research on the impact of PLCs staff's perceptions of school librarians. After working in collaborative PLC groups, librarians felt others' perceptions of their role were significantly altered and enhanced. Both principals and other teachers developed a deeper understanding of librarians' role as instructors rather than simply resources for students to utilize, and so a potential source of conflict was addressed.

Examination of research related to collaboration reveals trust among group members plays a critical role in establishing a culture of collaboration (Bryk & Schneider, 2003; Fleming & Thompson, 2004; Lencioni, 2002) As an element of school culture, trust is an essential component that is often overlooked, partly because it is so

difficult to measure. In attempting to quantify trust and its significance to schools, Bryk and Schneider examined data from 400 Chicago elementary schools over a 10 year period. Their findings indicate trust "fosters a set of organizational conditions, some structural and others social-psychological that make it more conducive for individuals to initiate and sustain the kinds of activities necessary to affect productivity improvements" (Bryk & Schneider, 2003, p. 116). Trust is related to a decreased sense of vulnerability and facilitates group problem solving, or collective inquiry in organizations (Bryk & Schneider, 2003; Fleming & Thompson, 2004). Furthermore, trust contributes to individuals' understanding of their roles in the school system, serves as a moral and ethical resource for schools (Bryk & Schneider, 2003), and trust provides the foundation for groups to deal openly with conflict and to better utilize collective time allocated to school improvement (Lencioni, 2002).

In an examination of the practices of five principals and their behaviors related to developing trust between themselves and faculties, Fleming and Thompson (2004) attribute the practice of collective problem solving and inquiry among teachers as integral to the development of trust. Likewise, Lencioni (2001) argues that formulative activities for groups that encourage members to know and value one another promote the development of trust between group members. Though these works do not apply only to professional learning communities, the relationship between trust and effective collaboration established through this literature suggests those involved in the PLC process should give attention to developing and maintaining trust in their organizations.

Echoing the findings of researchers, advocates advising practitioners emphasize the importance of a strong culture centered on collaboration (DuFour et al., 1998; Hord,

1997; Schmoker, 2005). Faculties are expected to study and learn from each other and operate from the premise that "collaboration by invitation will not work…collaboration is embedded into every aspect of the school culture" (Eaker, 2002, p. 11). Each faculty member in a school is a member of one or more collaborative teams. The teams may be organized by grade level, subject area, cultural subject area, or a cross section of participants organized around a specific problem (DuFour et al., 1998). This ongoing collaborative process is structured and cyclical in nature, going beyond congeniality to get at the heart of practices that increase student learning (Lezotte, 2005).

In addition to trust, theorists agree that a culture of collaboration will not be established unless structured time is set aside to work together (DuFour et al., 1998; Garmston & Wellman, 1999; Hord, 1997) Without the opportunity to converse and collaborate with each other, an organization is nothing more than individuals working in the same place. Indeed, the relationship between conversation and thought is foundational, "we think because we can talk with one another" (Bruffee, 1999, p. 134). In order to facilitate the sharing of such knowledge, time to collaborate among participants is critical, and it is particularly effective when it happens within the workday (DuFour et al., 1998; Hord, 1997) and on a weekly basis (DuFour et al., 2006).

While there is a great deal of focus on structured time to collaborate, teachers in one research study related to leadership and collaboration noted the informal times available to them to collaborate were more valuable than the formal times (Leonard & Leonard, 1999). In their findings, these researchers cautioned leaders to be wary of accountability structures that might actually constrain collective creativity, or promote competition between groups.

Even when given time and opportunity, adults will not automatically collaborate; this is a skill that must be developed. Theorists and policy makers point to the importance of developing skills related to effectively collaborating with each other (Bruffee, 1999; Hackman, 2002; Hord, 2004; Lambert, 2002; Joyce, Mueller, Hrycauk, & Hrycauk, 2005; NSDC, 2001). Lambert refers to this as "skillful participation" (p. 37), emphasizing that groups benefit knowledge about collaborative skills such as developing consensus and insuring participation of all. When initially grouped for a project, members are likely to compete with each other and some individuals will likely dominate the work unless those facilitating the work strive for true collaboration and consensus. It is best for groups to learn to work together first through nonthreatening activities that are comparably of less importance before they are asked to collaborate on projects that will have a significant impact on their work (Bruffee, 1999; Hackman, 2002). Leaders may also specifically model and provide practice for groups in these skills (Hord, 2004). In some cases, instructional coaches can serve as a catalyst among groups of teachers, increasing their willingness to compare and discuss instructional practices (Joyce et al., 2005).

Results Orientation

A focus on results is defined by effects on students, as opposed to changes in teacher perception and skills. Professional learning communities focus efforts on student learning outcomes (DuFour, 2005, DuFour et al., 2006, Eaker, 2002; Garmston & Wellman, 1999; Louis et al., 1996). Rather than collaboration centered on "swapping activities and exchanging materials" (Garmston & Wellman, 1999, p. 17), collaboration focuses on accomplishments for students. It is this emphasis on student learning, rather than teaching, which represents a significant change in thinking for many educators.

Two research studies specifically pointed to the effectiveness of PLCs when the school focuses on an instructional initiative in their collaborative efforts (Chrisman, 2005; Fisher & Frey, 2007). Fisher and Frey noted that PLCs implemented surrounding a specific instructional initiative showed greater gains than less focused PLC implementation. Studies also indicated increases in achievement at the high school level when individual student achievement is targeted with specific intervention programs and restructuring of grading processes and scheduling (Bruffum & Hinman, 2006; White & McIntosh, 2006).

Further examination of research related to student achievement has relevance for this study. Neumann and Wehlage (1995) synthesized the results from more than 1,500 schools that had undergone restructuring. Their results indicate schools that demonstrated increased student achievement were characterized by reforms that increased organizational capacity. Schools "with strong professional communities were better able to offer authentic pedagogy and are more effective in promoting student achievement" (Neumann & Wehlage, 1995, ¶5). As part of the development of professional communities, shared governance by teachers and interdependent work structures had significance, as did external support from district and community sources.

In addition, Vescico (2008) noted the relationship between PLCs and student achievement. In particular, schools that engaged in collaborative efforts "highly focused around student learning" (Vescico, 2008, p. 87) demonstrated gains, whereas those with collaborative efforts not focused on student achievement did not. Vescico also pointed to the relationship between the strength of the PLC implementation and student

achievement. The more staff were involved in professional learning endeavors the more evidence of increased student achievement was found.

As a starting point in collaborative work, interpretive authors encourage schools to begin by addressing fundamental questions of what students should know and be able to do (DuFour et al., 1998; Eaker et al., 2002; Garmston & Wellman, 1999). These collaborative efforts often begin with a critical examination of curriculum, but then shift to examination of student work. Teachers are encouraged to develop common assessments and reach agreement on standards for student performance, then set collective, specific, measurable goals related to student performance (DuFour et al., 1998; Eaker et al., 2002; Cozemious & O'Neill, 2002).

Shared Leadership

In examining the changes in leadership studies that have taken place over the past 20 years, Kezar et al. (2006) points to the shift from hierarchical models of leadership to increasingly democratic forms, and the reciprocal relationship between leadership theory and practice. This shift from "static, highly structured, and value-neutral leadership frameworks" to "dynamic, globalized, and process-oriented perspectives of leadership that emphasize crosscultural understandings, collaboration, and social responsibility for others" (Kezar, 2006, p. 2) has particular relevance for leadership within professional learning communities. Given the PLC focus on shared leadership, distributed leadership has significance for the work of PLCs and will be explored below. In addition, I will explore relevant applications of this theory.

As a framework for viewing leadership within a school, distributed leadership characteristics are evident in the work of professional learning communities. Distributed,

or participative, leadership centers on the concept that leadership "flows through the networks of roles that comprise organizations" (Ogawa & Bossert, 1995, p. 225). It emphasizes the role of the leader in developing the decision making processes of the group and empowering the group (Yukl, 2002). Leadership is not the sole property of the formal leader or leaders, but is present in all aspects of the organization. Those who are in official leadership capacities, then, do not take ownership of decisions, but instead give that authority, whenever possible, to the group (Leithwood et al. 2000). When viewed in this manner, leadership is a systemic characteristic of an organization (Ogawa & Bossert, 1995).

A greater distribution of leadership throughout the organization can lead to increased motivation, better decision making, greater job satisfaction (Yukl, 2002), and increased overall effectiveness (Leithwood & Duke, 1999). Distributed leadership is empowering to members of the organization, and with this comes a greater sense of self-worth, and also a greater flexibility and willingness to change. In advocating greater involvement of participants, Fullan (2002) argues against top down decision making and calls for leaders to develop a personal moral purpose for teachers that they might view themselves as having the ability to change the organization, very similar to the tenets of shared leadership discussed previously.

Leaders who seek the participation of others then strive to develop the skills that enable the teams and groups they assist to work effectively and make decisions that truly reflect the consensus of the group. "Principals, or other school leaders for that matter, do not singlehandedly lead organizations to greatness; leadership involves an array of individuals with various tools and structures" (Spillane, 2005, p. 143). The leader's role

then, is not to make decisions, but to enable others to made decisions. Recognizing the significance of the development of teams and the need for organizations to develop teams, distributed leadership focuses on the importance of networks and relationships within the organization.

Reasearch specifically points to ways teachers can be involved in many different aspects of the organization (Barth, 2001; Chrisman, 2005; Hord, 2004; Lambert, 2002;). Teacher input regarding professional development is particularly advantageous (Chrisman, 2005; Hord, 2004), as they are most closely tuned into the needs of the school. This professional development can often take the form of study groups, action research teams, and both vertical and grade level teams (Barth, 2001; Lambert, 2002). It is more common for teachers to be involved in setting standards for behavior and curriculum, but teachers may also be involved in budgetary decisions, setting school policy and hiring key personnel (Barth, 2001; Lambert, 2002; Hord, 2004). Barth advises that transitioning to this new role for teachers may be challenging. He suggests teachers who are successful find goals they are passionate about, persist when obstacles emerge, and are able to view even small changes optimistically, all aspects of leadership within PLCs.

Several researchers found noticeable shifts in leadership within schools (Bolam, McMahon, Stoll, Thomas, & Wallace, 2004; Chrisman & Supovitz, 2002; Farrell, 2007; Leonard & Leonard, 1999; Phillips, 2003). PLCs were specifically linked with increased teacher status (Farrell, 2007) and innovative use of resources (Bolam et al., 2004). Chrisman and Supovitz concluded teachers working in teams felt more involved in school-related decisions and this empowerment was key to improved student learning.

Leonard and Leonard documented that nearly half of teachers in their study viewed teams of teachers and administrators as influential sources of leadership.

Researchers have documented the power of leaders to impact teachers' work and engagement in PLCs (Leonard & Leonard, 1999; Printy, 2008; Scribner et al., 2002). When asked to identify leadership sources as impetus for change, teachers in one study still listed the principal as most important in motivating change (Leonard & Leonard, 1999). Conversely, these same teachers viewed principals as less significant in innovating practices. Printy asserted leaders influence the work of teacher groups through formal structures, such as ensuring teachers work together productively through guided meetings, as well as informal expectations of teacher inquiry and action research that leaders communicate to teachers. This leadership may come from principals or department chairs, but leaders are most effective when they scaffold teachers' knowledge development and serve as facilitators between groups, supporting the establishment of shared leadership that includes teachers in a PLC. Finally, in an examination of two schools, the impact of two different principals was contrasted (Scribner et al., 2002). This case study explored the need for principals to focus not only on a school's collective identity, but to nurture teachers' individual professional identities in order to strengthen individual commitment to students' learning.

Englert and Tarrant (1995) documented the importance of teacher authority with regard to instructional innovations and curricular decisions in PLCs. In this study, teachers were at first reluctant to take responsibility for curriculum development, but then acknowledged the power to shape policy and practice influenced their ownership of the curriculum. In another study, teachers engaged in the action research process as part of

their PLC realized an increase in self-efficacy, "including greater collegiality, an increased sense of empowerment, and improved self-esteem" (Farrell, 2007, p. 37). These examples from research support the effectiveness of shared leadership as a part of a professional learning community.

Advocates for professional learning communities often point to a shared model of leadership, recognizing that teachers in the organization are leaders (Barth, 2001; Hord, 1997; 2004). Shared leadership as a concept is sometimes ambiguous (Hord, 1997). However, Lambert's (2002) articulation of fundamental leadership principles is helpful:

> Everyone has the right, responsibility and ability to be a leader. How we define leadership influences how people will participate. Educators yearn to be more fully who they are-purposeful, professional human beings. Leadership is an essential aspect of an educator's professional life (p. 37).

From this perspective, those in formal leadership positions have a different role than they may have in the past. Facilitating the growth and development of others, and of the organization's vision, becomes their primary focus (Hord, 1997, 2004; Senge, 1990). Senge encourages leaders to attend to the creative tension between the vision of what the organization might become and a picture of its current reality. It is the formal leader's responsibility to facilitate the establishment of effective policies, procedures, and learning processes for the organization, not to impose these upon the organization. The formal leader must be able to nurture the development of the community and recognize when others are ready for greater leadership responsibility (Hord, 1997).

A gradual cultural shift occurs when everyone in the organization envisions themselves as leaders and learners (Lambert, 2002; Reeves, 2005, Senge, 1990).

Principals need to see themselves as facilitators, not decision makers (Senge, 1990), and nurture a culture of teachers who lead by learning (Joyce et al., 2005). Leaders must craft roles for themselves as designers, developing values, policies and effective learning processes; teachers, guiding and empowering more accurate views of reality; and stewards, both of "the people they lead and …the larger purpose or mission that underlies the enterprise" (Senge, 1990, p. 11).

In terms of the principal's role in that shift, he or she has the potential to be both facilitator and barrier (Barth, 2001). Principals may be reluctant to turn decisions over to staff when they ultimately will be held accountable for them. Or in other cases, they simply do not invest the time necessary for developing leadership in others. The principal's chief role of culture builder is challenging but necessary (Barth, 2001; Hord, 2004; Lambert, 2005). Specifically, principals are advised to develop relationships with teachers, fostering trust and empowerment, and support teachers as they take risks (Barth, 2001; Hord, 2004). Principals often assume the role of questioner, refining discussions and probing for specificity (Barth, 2001; Lambert; 2005).

The process of developing shared leadership does not happen quickly (Lambert, 2005; Williams, 2007). Over time, a value driven culture of interdependency, self-accountability, and shared authority and responsibility can emerge (Lambert, 2005). In some cases, evidence of this occurs when a school is able to do without the principal, at least on a part time basis (Lambert, 2005; Williams, 2007). For example, in a study of 15 schools, two that had been restructured to include shared leadership had evolved to the point where they only needed a part time principal (Lambert, 2005). Williams examined schools that were run by leadership committees, which had no principal, and noted the

low turnover and positive instructional climate, despite the increased workload for teachers. These studies point to the positive influences shared leadership can have on an organization.

The benefits of this challenging shift to shared leadership are both obvious and subtle (Barth, 2001; Chrisman, 2005. In a study comparing schools that sustained reforms and those that did not, Chrisman noted all of the successful schools had cultures centered around shared leadership. Teachers were actively involved in learning together and involved in substantive decisions regarding their schools. Barth noted more personal benefits to shared leadership, including greater personal and professional satisfaction, self-efficacy, and a reduction in teacher isolationism. While difficult to measure, the impact of shared leadership is a critical piece of a professional learning community.

Conclusion

This review has presented a comprehensive description of professional learning communities gleaned from the work of many researchers, advocates and interpretivists in this field. It has also examined leadership theories and frameworks that inform the professional learning community process. A school must be a learning organization, and have a culture of collaboration, a results orientation, and shared leadership to be a comprehensive PLC. These characteristics of a professional learning community are part of a comprehensive whole. This schoolwide approach to job embedded, collaborative staff development can provide the foundation for school improvement efforts that will positively influence both school culture and student achievement. It is aligned with current views on professional development that call for schools to organize themselves into goal driven learning communities (NSDC, 2001). This knowledge is critical in order

to analyze whether PLCs can move beyond concept to practice, which is central to my

study. Chapter three will focus on methods for this study. I will describe the qualitative

methods selected for this study, the selection process, the study design process, as well as

the process for data collection and analysis

CHAPTER THREE

Methods

There is growing support for the use of the professional learning communities

process (NSDC, 2001; Schmoker, 2004). My study will provide further insight into the

development of PLCs in one school that has restructured and recultured itself in this

manner over the last five years. In this chapter, I first explain the methodology for this

case study. Next, I explain preparation for the study, including formulation of the

research questions, participant selection and development of interview questions. I then

explain the data collection and analysis processes, as well as the ethical principles

guiding the study.

Methodology

The purpose of this qualitative case study is to add to the body of knowledge

concerning the development of PLCs in schools, particularly regarding what factors

might have influenced this development. In considering whether qualitative or

quantitative methods would best be utilized to answer the research question, it is helpful

to consider both the fundamental distinctions between the two methodologies, as well as

the specific research questions at hand.

Qualitative research is by nature descriptive and interpretive, seeking to describe

the reality created by people, how the whole works as a unit, what meanings people have

constructed (Merriam, 1998). Knowledge is seen as emerging from participants'

understandings and the researcher is an integral and active part of the process, charged

with becoming part of the situation (Hathaway, 1995), and such knowledge is "laced with

personal biases and values" (Creswell, 1998, p. 19). While critics of qualitative research

challenge its lack of objectivity, arguing that its findings are not generalizeable to other situations, the depth and breadth of information obtained in a qualitative study provides a distinct picture of the subject being studied, along with analysis that digs for deeper meanings.

Quantitative research generally begins with a hypothesis and seeks a cause and effect relationship. Empirical data are collected and analyzed; variables are identified and controlled, all in an effort to find what information might be generalized to other situations. The researcher is seen as separate and objective; knowledge is viewed as distinct and separate from perceptions (Hathaway, 1995; Merriam, 1998). A drawback to quantitative research may be its limited ability to see beneath the surface. Because it only describes what can be quantified, there may be many factors that are unaccounted and uninvestigated.

Given the distinctions between the two methodologies, qualitative research, which derives meaning from context and from those being studied (Creswell, 1998; Merriam, 1998), was chosen as the most appropriate tool to discern what has taken place while this school has implemented the PLC process. By utilizing qualitative research methods I was better able to build a "complex, holistic picture" (Cresswell, p. 15) of a PLC and the school in which it exists, attempting to add insight for those who are engaged in this process.

The study design is best described as an interpretive or analytic case study (Merriam, 1998) of the PLC process. Creswell (1998) describes a case study as "an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in

context" (p. 61). In this case the bounded system is the selected school, with specific attention to PLC process as it has been implemented. Data included individual and focus group interviews, observations, and document analysis. These data enabled me to develop a thorough description of this school as a PLC, and also describe factors that influenced its development. The data are firmly grounded in the context of the implementation, which included the school itself, as well as the district and the external resources utilized by the school. including training and collaborative networks. Since the goal of the research project is to examine the PLC process as it has occurred within this school, it would not be desirable for me to become completely immersed in the group as a participant. Instead, my role is that of participant as observer (Emerson, Fretz, & Shaw, 1995), as described below with respect to my professional background.

Methods of Preparation

Formulating the Question and Topic

In qualitative research, the researcher is an instrument of data collection and is responsive to the context of the environment (Merriam, 1998). For the first 15 years of my career as an elementary educator, I had the opportunity to work closely with others in trusting, open, collaborative relationships, but I was not part of a school that implemented the PLC process. Next I began work with an instructional initiative that included time for teachers to collaborate, to set goals related to student achievement, and the use of best practices in instruction. I assisted school leaders and teachers through training and consultation, but there was not a high degree of explicit focus on developing the requisite collaborative skills. I observed that schools that experienced positive changes in student achievement and/or school culture were those that most resembled professional learning

communities as I understood them. These observations provided the impetus for a move to work as a specialist with the statewide Professional Learning Communities Project. My previous experiences, as well as my desire to improve the level of support I provide to schools, gives me a particular interest in and a foundation for my study of PLCs through a qualitative case study framework.

When I began to examine and study the process of PLCs in schools, it became clear that schools that made the most progress in this reform initiative underwent many changes, including a greater focus on collaboration, a greater use of multiple forms of data, and an increased level of staff commitment and teacher leadership. I was curious as to how these changes occurred, particularly with respect to shared or distributed leadership within the organization. By deeply exploring this process in one school, a comprehensive picture of what has taken place might assist other schools implementing PLCs, which I believe can be a powerful organizational process with respect to school improvement.

During the process of examining related literature and considering my interest in one school's experience developing as a professional learning community, I developed the following research questions:

1. What is the nature of this school as a PLC?

2. What factors influenced the development of this school as a PLC?

Participant Selection Background

One school was selected for this study based on implementation of the PLC process and participation in the Statewide PLC Project. The Statewide PLC Project is a structured process of support and training for schools that choose to participate.

Participating schools select a leadership team that includes the principal and representative teachers who serve collaboratively to guide the process, as well as individually as facilitator coaches on faculty teams throughout the school. Schools participate in training and consultation with regional PLC specialists based in professional development centers in the state, and together form a supportive network with other schools involved in the Project.

Since the Project began 6 years ago, specialists have been based in five of the nine professional development centers throughout the state. During the 2007-2008 school year, funding for the program was increased and specialists now serve all nine regions. Throughout the original five regions of the state, there are currently 98 schools that have been in the Project for at least 3 years, the first criteria for participation in the study.

The selection process for this study was purposeful (Creswell, 1998; Merriam, 1998). One school was selected after discussions with PLC specialists from the Statewide PLC Project (see Appendix A). The school selected for the study is best described as *unique* (Merriam, 1998), in that the school appears to exhibit the characteristics of a PLC as outlined in chapter two of this study. Specialists were asked to refer potential schools demonstrating these characteristics, drawing upon knowledge of the leadership team, past experiences with the school, and information gained from an onsite evaluation. Each school participates in an evaluation during their third year of project participation. The evaluation is conducted by PLC specialists and methods include document collection, as well as individual and focus group interviews and analyses. Specialists present findings from the evaluation to the leadership team for the purpose of continued school improvement.

Based upon the initial pool of schools developed by specialists, three schools were considered for selection. Final selection of the school was based on discussions with the principal and other faculty members and the willingness of faculty to participate. I sought and received permission for the school to participate in the study from district leadership (see Appendix B).

In addition to the principal, 25 teachers participated in the study, through individual or focus group interviews, or small group observations (5 teachers participated in a focus group interview, 5 teachers participated in individual interviews, and fifteen teachers participated in 4 small group observations, with some overlap in observation and interview participants). I also conducted two observations of the faculty as a whole at staff development sessions. This school was unknown to me prior to the study. Participants from the school were contacted by phone, email, and/or in writing regarding the nature and purpose of the study. For those participants interested, I explained the time commitment necessary, my procedures for maintaining confidentiality, and their right to withdraw from the study at any time. I obtained written consent forms (Creswell, 1998) prior to any interviews being conducted (see Appendix C). Teachers who were interviewed individually volunteered and were interviewed during their lunch periods. In the case of the focus group interview, the principal gave up the weekly meeting time she has with department chairs, and arranged for these teachers' participation.

Participant Information

For those study participants who were interviewed, a brief demographic description is provided. All participants were Caucasian females:

Principal: Sandy has been the principal at Barrett Middle School for 8 years. Her career in education spans 32 years, beginning as middle school Spanish teacher. She has been an administrator at the middle school level for the past 12 years, all in the district that includes Barrett.

Teachers individually interviewed include:

Mary, a sixth grade math teacher with 12 years of teaching experience, 11 at Barrett. She was part of the leadership team who guided initial PLC implementation.

Susan, a German teacher who works half time at Barrett and half time at one a high school in the district. This is her fifth year of teaching, all in this building.

Michelle, a sixth grade math teacher with 7 years teaching experience, all at Barrett. She is a member of the Quality Instructional Leaders team (described later in this chapter) and previously worked as a secretary for Sandy at another middle school.

Joan, a special education teacher with 19 years experience, 7 at Barrett. She also participated in a collaborative group observation.

Holly, a home economics teacher with 15 years experience, 10 at Barrett. She was part of the leadership team who guided initial PLC implementation.

Teachers (department chairs) interviewed in a focus group

Amy, a science teacher with 14 years experience, 11 at Barrett.

Selena, a special education teacher with 20 years experience, 11 at Barrett.

Cathy, a communication arts teacher with 13 years experience, 6 at Barrett.

Barb, a social studies teacher with 16 years experience, 7 at Barrett.

Carol, a math teacher with 13 years experience, 11 at Barrett.

Data Collection

Interview Questions

I developed questions for both individual and focus group interviews based upon the related literature and the research questions developed for the study. Questions were developed following a semi-structured interview protocol (Merriam, 1998). This flexible format allowed for variation in wording and order of questions. This method was best suited for this study given its explorative and interpretive nature. In designing questions that were clear, open-ended, and contained familiar language (Krueger & Casey, 2000), the interviews were structured to yield information directly relevant to the research questions.

Throughout the interviews, questions were used to probe for additional insights. During question development, I took care to avoid questions that might be leading (Merriam, 1998). General questions began the interviews, followed by questions that were interpretive in nature. Interpretive questions provided the opportunity to "check for … understanding, as well as provide an opportunity for yet more information, opinions, and feelings to be revealed" (Merriam, 1998, p. 78). In addition to interpretive questions, "ideal position" (Merriam, 1998, p. 77) questions were written to develop an understanding of the interviewee's knowledge base regarding the development of PLCs as to well solicit examples from personal experiences. There are many surveys and self-reflection instruments that are part of the knowledge base surrounding the PLC process (DuFour et al., 2006; Hord & Sommers, 2008; Huffman & Hipp, 2003). During the question writing process, these materials were utilized for background information to ensure development of a comprehensive set of questions. In some cases, these references

were designed for program evaluation, but that was not their purpose in this study. Questions for the interview and focus groups can be found in Appendix D.

Individual Interviews

I conducted two interviews with the principal during data collection. The first interview provided general background information and served to deepen the observation process as well as other interviews. The second interview was conducted mid-way through the data collection process and served to provide additional information, as well as clarify earlier information. By utilizing a semi-structured interview, this allowed for some organization, yet provided the opportunity to follow-up with spontaneous questions related to team characteristics and leadership in this context, as well as development of a PLC. The principal interviews provided information on how the school functions as a PLC and the historical context as to how faculty interacted prior to implementing the PLC process. This also provided guidance as to opportunities for data collection through document analysis and follow up focus group questions (Merriam, 1998).

Individual interviews were also conducted with the five teachers who volunteered. These volunteers were selected after soliciting participation from the entire faculty via e-mail, with the assistance of the principal. Every volunteer was interviewed. Each interview lasted approximately 20 minutes, with questions selected from the same pool of interview questions. In two cases, interview times overlapped, so although designed as individual interviews, some portions of the interviews involved participants as a pair. All interviews took place at the school in order to keep the data collection bounded within the context of the study (Cresswell, 1998).

As suggested by both Creswell (1998) and Merriam (1998), I developed an interview protocol for use during the interviews. Space was provided for my notes and reflections, but interviews were also recorded and transcribed verbatim with the consent of participants.

Focus Group Interview

A focus group interview served as another mode of data collection. Krueger and Casey (2000) define a focus group interview as "a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment" (p. 5). The purpose of a focus group interview is "to uncover factors that influence opinions, behavior, or motivation" (Krueger & Casey, 2000, p. 21). In addition, respondents are more likely to volunteer information in a group of likeminded peers and ideas will likely be generated from the group dialogue (Creswell, 1998; Krueger & Casey, 2000), making it an effective data collection strategy. In this context, a focus group interview was especially useful in bringing out the ideas from the group, particularly because it mirrors the collaborative nature of the PLC process.

The school's department chairs meet weekly to assist in facilitating the ongoing work of collaborative groups, as well as to discuss other leadership responsibilities. A focus group interview was conducted with this group lasting approximately 30 minutes. Another potential focus interview group was the group of facilitator coaches who went through the Statewide PLC Project training process and guided the implementation process for the first 3 years. Discussions with the principal revealed this group was no longer meeting regularly and it was not feasible to conduct this focus group interview

All interviews took place at the school, with incentives for participation limited to food and/or PLC-related resources (books) valued at no more than $100.00. Every effort was made to accommodate the participants' schedules. Establishing trust between myself and participants was critical to obtain meaningful data. I worked to demonstrate shared knowledge and understanding with participants by providing background information and by meeting participants prior to interviews.

Observations

During a 3 month period, multiple observations of collaborative work and professional development were conducted at the school. In each case, I compiled detailed field notes (Cresswell, 2003) the day of each observation. I developed an observation protocol (see Appendix E) to aid in compiling field notes. Three weekly collaborative group meetings were observed, each lasting approximately 40 minutes. One group consisted of five 6th grade communication arts teachers. Another group was two 7th grade science teachers. Finally, a group of six 8th grade communication arts teachers were observed, which included one special education teacher. In each case at least one participant knew I was to be there. In two cases, the observation was initiated by the principal, the third was initiated by a member of the group who volunteered.

In addition to small group collaborative work sessions, I observed two whole faculty inservice sessions on days when classes were dismissed early for this purpose. These observations lasted 2 hours each. In one case, the faculty was split into two smaller groups to rotate between two different one hour sessions. In the other observation, the time was split between whole faculty work and department level meetings. During the department level time, I observed eight members of the science department. I also

observed a presentation by the principal, assistant principal, and special education teacher at a Statewide PLC Conference. The presentation addressed the school's work regarding homework and latework.

Document Collection

Various documents served to triangulate data from interviews and observations (Creswell, 2003; Merriam, 1998). While there are some limitations in the use of documents for data collection and analysis, such as their incomplete nature or lack of clarity to an outsider (Merriam, 1998), data gleaned from documents provided by the school served to provide information that was "thoughtful, in that participants have given attention to compiling and creating them" (Creswell, p. 187). Documents collected included notes taken by individuals, group agendas, minutes of meetings, documents developed for planning and evaluation, forms developed and/or utilized by collaborative teams for their work, and products of collaborative groups (see Appendix F for a list of documents). In some cases, these documents had been gathered by the original leadership team near the end of their 3 year training cycle for the purpose of an onsite evaluation conducted by PLC specialists. While nearly 2 years had gone by since these documents had been created and compiled, this collection served to add historical context, and in many cases, reflected current practice. In other cases, documents were collected from participants who described them in interviews. Also, some documents were collected during observations. In the case of the collaborative meetings held before school, document collection was sometimes difficult because teachers were leaving to begin class for the day and did not have time to provide additional copies of documents.

Data Analysis

Creswell (2003) described data analysis as "an ongoing process involving continual reflection about the data asking analytic questions …It is not sharply divided from the other activities in the study" (p. 190). In keeping with this description, I began to examine and reflect on data from interviews, observations, and documents throughout data collection.

Following the transcription of interview recordings, interview data were examined to develop a broad, general view of possible patterns (Cresswell, 2003). Following this examination, I coded the data according to the categories that emerged (Creswell, 2003; Merriam, 1998). Next, I examined and coded the documents obtained in the same manner. The coding process emerged after careful consideration of the interviews, observations, field notes, and documents, while also considering the related literature presented earlier in the study.

As part of describing the findings, I included a detailed description of the school, being careful to protect the school's identity. The patterns that emerged from the data were described, along with my analysis. Creswell's (1998) description of the data analysis spiral is a useful representation. I first read and reflected on the data, including written reflection, then shifted to the "describing, classifying and interpreting loop" of the spiral (Creswell, 1998, p. 144). The result of this cyclical process is a synthesis of what has emerged from the process of implementing PLC at this school.

Dependability and Trustworthiness

Given that the researcher is an instrument in qualitative research (Creswell, 1998; 2003; Merriam, 1998), my own dependability and trustworthiness is of primary

importance. During my years as a classroom teacher and reading specialist, as well as through my studies in my doctoral program, I have come to value collaboration and adult learning and see these processes as key to organizational improvement. My recent work as a professional learning communities specialist has affirmed this belief. These values will naturally influence my perception and interpretation of what has occurred at these schools.

Since the region I work in only recently began providing PLC implementation services, the participating school in the study came from another part of the state and I had no previous involvement with it. However, my professional experiences in education and as a PLC specialist enabled me to relate to and communicate with participants in this study. Shared experiences and a common vocabulary formed the basis for a deeper understanding on my part of the PLC process in this school.

As part of this research process, I conducted the study in an organized and systematic way. Creswell (2003) and Merriam (1998) both delineate methods for ensuring the dependability of data in qualitative research. Several of these methods were used in this study. Data obtained from individual interviews, focus group interviews, and documents facilitated triangulation of multiple data sources. In addition, I used both peer and advisor review throughout the data analysis process to enhance trustworthiness and credibility. In describing the finding of the study I used *rich, thick description* (Merriam, 1998) to present a clear detailed picture of the situation and findings. I also included negative or discrepant information where appropriate (Cresswell, 1998). All of these strategies were used to enhance the overall trustworthiness of my study.

Ethical Principles

Ethical principles for conducting qualitative research guided this study (Cresswell, 1998; Merriam, 1998). Following approval of this proposal by my doctoral committee, permission to conduct the study was obtained through the Institutional Review Board of the University of Missouri. Before conducting interviews, observing, or collecting documents, I contacted potential participants personally to secure their participation. As mentioned, each participant signed a consent form that fully disclosed the nature and purpose of the study, the way findings will be disseminated, and the use of this study as part of my doctoral program. The only demographic data that were collected were related to years of teaching experience, years of experience teaching in the school under investigation, and experience in teacher leadership roles. Pseudonyms were used for the school as well as participants in discussion of the findings.

As mentioned, interviews were recorded and transcribed digitally. After transcription, original digital recordings were destroyed. Copies of interview transcripts and observation fieldnotes are kept in secure electronic locations. Documents obtained for analysis will also be stored in a secure location. All will be kept for 3 years as mandated by the Institutional Review Board. I maintained the confidentiality of all participants throughout data collection, analysis, and the description of the findings. Finally, as an instrument of data collection, I will maintain a personal commitment to balanced and credible analysis and discussion of the findings. My purpose was simply to answer the research questions and I tried to avoid, as much as possible, any preconceptions about what I would find.

Summary

      In chapter three, I described the research design for this case study. I described preparation for the study, including formulation of the research questions, selection of participants, and development of interview questions. I explained the data collection and analysis process, as well as the provisions for dependability and trustworthiness and the ethical principles guiding the study. In chapter four, I will provide an in depth description of the school under investigation, as well as the findings of the study organized by relevant themes which emerged.

CHAPTER FOUR

Results of the Study

As described in chapter three, data collection included observations, interviews and document analysis. When data from these sources are examined in a holistic manner, multiple themes emerge to present a comprehensive picture of the school and address the research questions. While some overlap among themes may be found, each presents a unique perspective relative to the overall case study. In this chapter, the setting for the case study, as well as themes that emerged from the data collections are examined.

Setting for the Case Study

Description of the School

Barrett Middle School opened 11 years ago as one of five middle schools in a growing suburban district which serves approximately 22,000 students. Construction of the building was spread out over 3 years, due to financial difficulties the district was facing at the time, and many staff were hired from other schools in the district. Currently the school houses 893 students in grades 6, 7 and 8., is served by 63 faculty members and 20 support staff members, and is lead by a principal and two assistant principals.

The student population is 90% Caucasian, 7% African American, 2% Asian, and 1% Hispanic. The current free/reduced lunch rate is 14%, up from 8% one year ago. Special education students make up 7% of the population. Over the past 5 years, building achievement levels at Barrett have been comparable or higher than other district buildings and have exceeded state averages in math and communication arts.

The current principal, Sandy, has been here for 8 years. She was previously a principal at another district middle school, and has a total of 32 years experience in

education. One assistant principal has been here for 4 years, joining the school from another assistant principal's position in the district; the other has been here for one year. The building has a low attrition rate, replacing only three staff members in the last 2 years. In two cases, staff members left because they were moving. In the third case, a teacher who had been teaching two subjects had the opportunity to teach one subject in another district middle school.

With respect to scheduling collaborative time, it is important to understand the current schedule, as well as a limited historical perspective. The school operates on a traditional, 7 periods per day schedule, with teams of four core subject area teachers serving groups of students. These four teachers have their planning period at the same time, to enable collaboration and communication regarding students. This team of content area teachers is expected to meet regarding specific students during their common planning period. Until approximately 7 years ago, the district utilized a middle school model. In the middle school model, core teachers had two planning periods per day, one devoted to individual planning, the other set aside for team planning. The teams were able to collaborate regarding students, but not within content areas. This additional planning period for core teachers was eliminated due to budget cuts.

In addition, the day begins with a 20 minute period called academic lab. In this class, students work on homework, receive tutoring on an as needed basis, have character education lessons, as well as participate in self selected reading on a rotating basis. One morning each week, some academic labs do not meet. Instead, those students stay in the gym so teachers may collaborate in small groups. For example, the two seventh grade science teachers collaborate, rather than the whole science department. Department level

meetings are held at other times. The number of students staying in the gym is divided evenly between the 5 days, and some staff are regularly assigned to supervise the larger group of students, rather than to supervise an academic lab.

Context for Implementation

The principal at Barrett Middle School began learning about PLCs about7 years ago. She attended a conference in Lincolnshire, IL, sponsored by Rick DuFour and his associates. Her district initiated involvement in this conference, which she attended along with other district teachers and administrators. She was enthused about the process, but wary of throwing out a new concept to her building:

> I had in mind to start the process and not really label it as professional learning communities, because at the time the district had been pretty scattered with 'let's do this, and then let's do something else,' and I thought that if I came back to the faculty and even threw out the term PLC, it wouldn't work.

The principal began the process of reexamining the school mission, which had been developed 4 years earlier. Around the district, more and more buildings were involved in the PLC process, and her building was among several that applied for a grant to participate in the Statewide PLC Project. As awareness for the process grew at Barrett, as well as other buildings around the district, and as district leadership became more vocal in support of PLCs, she began using the term PLC in connection with some of their building wide activities.

After receiving a grant, the building sent a team of seven faculty members to the initial summer conference for the Statewide PLC Project, the kickoff event of a 3 year process. This leadership team attended monthly regional training sessions with other area

schools for that school year, four trainings in the following year, and two the year after that. In addition, school representatives attended a statewide conference that included breakout presentations conducted by other schools involved in the process. These training sessions were conducted in a train-the-trainer format, with members of the leadership team expected to pass along information and skills to the schoolwide faculty. After the initial training process was complete, Barrett continued to participate in the statewide conference, both as participants and as presenters, and also attended a networking session once each year with other schools from their cohort group.

<center>*Themes Emerging from Data*</center>

District Influences

Examination of data revealed several key sources of district involvement that influenced the implementation of the PLC process, both in ways explicitly addressing PLCs and in one way related to professional learning in general. The current commitment to professional learning communities at the district level is readily apparent, both from documentation on the district's website (including its 5 year strategic plan), as well as in interviews with staff members.

The district has provided training designed to improve implementation of this process in many ways. As noted earlier, the district initially sent the principal, along with other personnel from the district to a national conference presented by Rick DuFour and his colleagues. In addition, the district provided workshops conducted by a teacher from a DuFour's high school during the summer of 2003. Faculty members were able to attend these workshops as part of ongoing staff development opportunities in the district.

Barrett Middle School was one of the first schools in the district to undertake the 3 year training process from the Statewide Missouri PLC Project. Interviews with the principal and staff members indicate the ongoing training process was valuable to the school. Specifically, the principal noted the value of networking with other area schools, both from this district as well others, as well as the personal accountability of meeting regularly as part of a larger group. When the first year of training was complete and the training sessions occurred less frequently, she missed participating in the training sessions as often. In the years since then, each of the 22 buildings in the district has gone through this process, some at district expense when grant funding was no longer available. Statewide PLC Project training sessions for the leadership team from Barrett centered on activities designed to help the faculty as a whole develop a common mission and vision, conduct data analysis for the purpose of goal setting, examine and refine curriculum, develop quality common assessments, and develop structures for students who are not successful academically. As part of ongoing training, the building received support from state PLC specialists in the form of regular visits to the school and consultation with the principal and leadership team.

An examination of the district's website also indicates a level of commitment to the PLC process. For example, Professional Learning Communities are included as part of the district's comprehensive school improvement plan. In addition, in the building specific information provided on the website, each building explicitly states their mission, vision, values, and goals. The district also regularly hosts conferences related to PLCs during summer months. Most of the faculty members at Barrett Middle School have attended one of these 3 day local workshops sponsored by the district; these

workshops are conducted by a team of trainers associated with Rick DuFour. The principal, as well as department chairs, point to the value of the faculty at large participating in these conferences. They report faculty members attending the conferences come back more enthusiastic toward the process, and often feel like Barrett is a more collaborative PLC than they realized. The district has also partnered with a local university to provide graduate level courses on PLCs. A comment by Susan, the German teacher, indicated she was making a connection between course content and her collaborative work. During an interview, Susan specifically referenced content from the course related to collaborating with other adults, "she [the instructor] said to presume positive intentions, assume they're trying to make things better." This example indicates application of collaborative knowledge from district sponsored training in small group collaborative work.

In addition to providing training, the district has also encouraged, mandated or provided time to collaborate on an ongoing basis. Beginning in 2005, the district mandated that all buildings in the district schedule collaborative time for 45 minutes each week. Initially, building leaders were instructed to schedule time according to the specific needs of each school. Two years ago, the high schools requested, and were granted, an early dismissal time one day each week for collaborative time. This year, the middle schools in the district requested, and were granted, similar time. As part of this decision making process, the district required 75% of the middle school staff to support this, through a written survey. Only after teacher support was in place did the district agree to change the student bussing schedule to accommodate a weekly early dismissal.

The district has also influenced PLC development through a related program, the QuIL program, which was repeatedly mentioned during interviews and noted during observations. Four teachers from the building were selected and trained in an ongoing manner regarding nine broad instructional strategies based upon research by Marzano, Pickering, and Pollack (2001). These teachers are part of a cohort group from every building in the district. Teachers were selected for this based on an application process. Applications were reviewed by principals and a subcommittee of the district professional development committee. They are paid a stipend to meet regularly after school with the Director of Adult Learning and use a train-the-trainer format. It is their responsibility, in collaboration with the principal, to take this training back to staff at their building. Generally, they provide training to staff during the monthly early dismissal inservices.

Initially, the group began meeting last school year, with the intent to focus on Marzano's work for one year, then another topic for the current year. Largely because of teacher input, they have continued to focus on Marzano's strategies for a second year. Teachers felt they still had more to learn, and implementation and use of these strategies were not yet at a high level, so the district agreed it was in the best interest of all to continue the work that had already begun.

Also, 8 early release days are scheduled this year. Two hours of professional learning takes place on each of these days. During data collection, I was able to observe 2 of 3 scheduled days. Rather than dictate tasks for this time, the district allowed building level control for planning these days. "I meet with the QuILs (Quality Instructional Leaders) at least monthly after school, and we discuss and plan for the inservice time," said the principal. In the cases, inservice time was facilitated by teacher leaders. In the

other case, some time was spent as a whole faculty, before breaking up into departments for more in depth collaborative work.

Principal Leadership

Throughout data collection, the leadership of the building principal has emerged as a contributing factor to the implementation of PLCs. There is compelling evidence to indicate she has deep knowledge and understanding of the collaborative work in which she expects teachers to be involved, has a real sense of the level of commitment and understanding of teachers regarding PLC implementation, places a high priority on professional learning for staff, and continuously brings attention to their collaborative work and how it relates to building goals. In addition, she has had a relatively long tenure as principal (8 years), and based upon interview and observation data, appears to have a positive relationship with staff.

Interviews with Sandy indicated she is keenly aware of her teachers' collaborative work. She readily provided information regarding the 18 groups who collaborate each week, particularly in groups that face challenges from reluctant members. Interviews with teachers affirmed this, particularly for those who are in groups that are less cohesive. She gives feedback to groups regarding the specific work in which they are involved, demonstrating a high degree of knowledge regarding the grade level expectations and depth of knowledge needed to be addressed in writing common assessments. During the 5 years collaborative groups have been meeting, each group has used a form to record the work that took place during their collaborative meetings. Sandy regularly reviews these and provides specific written feedback to groups.

Sandy has an accurate view of the level of commitment her teachers have to PLCs. Observation of several groups aligned with her assessment of where these groups were at with respect to cohesiveness and focus. She readily admits that not everyone is fully vested in this, but she continues to focus on the progress her staff has made over the last 5 years. She has made changes in supervision of students in the mornings, which allows teachers who teach more than one grade level to collaborate with multiple groups (e.g., a teacher who teaches two sections each of sixth grade, seventh grade, and eighth grade communication arts is able to collaborate with all three grade-level groups as a result of the schedule changes.

Sandy demonstrates her commitment to professional learning in her building. She meets regularly with the QuIL group and is active and involved in setting direction for the monthly early dismissal sessions. At the early dismissal I observed, she led the first 30 minutes of the session with the entire faculty, drawing on examples of specific teachers and how they involved students in assessment in the classrooms. The next block of time in the afternoon inservice session was focused on the use of mastery manager, a data management system that was being used for the first time this year. She then stated the goals for the next hour of department level collaborative time, and conducted an informal pre-assessment of teachers' current knowledge regarding the data management system. This pre-assessment included five charts around the room, with a level of knowledge regarding the management system on each chart. Teachers were each given a sticker and placed their sticker on the chart that best described their level of knowledge. Groups were dispersed to work as departments, and Sandy led the group of electives teachers. When the groups returned, Sandy checked for understanding of the group

regarding the data management system, then assessed teacher knowledge again. Teachers were given another sticker and asked to choose which level of knowledge was most appropriate for them. Overall numerical comparisons were made, indicating more teachers had a greater level of understanding following the training.

In an interview following the data management inservice, I asked Sandy about her skills in leading groups of adult learners, because her work was deliberate and well-planned, as opposed to loosely structured and spontaneous. This level of preparation regarding the structure and process of the session reflects a commitment to adults as learners. She said that as part of their regular evaluation process, principals are required to set personal goals, and she had developed a goal for herself related to becoming more skilled at leading staff development. She now sees herself as a model for professional learning among her staff.

Sandy's support for staff development was also evident during another early dismissal inservice I observed. During the lunch break between student dismissal and the start of the professional development session, Sandy joined a group of approximately 15 teachers for an optional working lunch session that targeted the use of electronic whiteboard technology. In the sessions that followed, which were led by the QuILs, she was an engaged participant alongside teachers. Each of these examples indicates she places a high priority on collaborative adult learning. She is willing to learn herself, and not just say her staff should learn.

As part of her leadership at the building level, Sandy continues to draw attention to the elements of PLCs the building began implementing 5 years ago. Documents from her back- to- school inservice day showed a focus on these elements, with time spent

revisiting current school data, as well as the current building vision, mission, and goals. Staff were also directed toward previously developed norms and participated in an activity to value the diverse collaborative styles of everyone. One building goal this year was to decrease the number of students with ten or more absences. Staff were asked to highlight the students on their rolls with ten or more absences last year. As the second semester began, she drew attention to the goals established at the beginning of the year. She also communicates with collaborative teams regularly regarding their work through the school's shared computer drive. In each of these examples, staff were expected to maintain focus on issues related to PLCs, as well as continue to develop skills related to collaboration.

Finally, Sandy's 8 years as principal, as well as her approachable demeanor, seem to contribute to an overall positive rapport with staff. In one interview a teacher described Sandy, saying "Just because you approach her with something, she's not going to jump down your throat, or hold a grudge against you." Her willingness to begin holding faculty forums this year as a vehicle for teachers to communicate concerns with administrators was viewed by those interviewed as a valued process that not many principals would undertake. She seems to be valued not just as an approachable person, but also as someone who has continuously kept the PLC initiative at the forefront. "I think we've been very fortunate to have Sandy as our leader pushing us along," was a comment made during the focus group interview. She has set expectations of staff regarding collaboration at a relatively high level, and plays a significant role in promoting the efforts of those positively engaged.

Teacher Leadership

Another theme emerging from the data collection is the high degree of teacher leadership within important aspects of the school. As part of the theme teacher leadership I have included examples of teachers in formal leadership roles, teacher input, and teacher involvement and ownership in the PLC process. Within this theme I examined teachers within the context of collaborative PLC groups, as well as within the wider school context.

Teacher leadership is evident in various forms throughout the building. Initially, a group of seven teachers and Sandy led implementation of the PLC process. This group met regularly for the first several years, but now does not meet regularly. Document analysis of faculty inservice work, particularly during the first year of implementation, shows the group was actively engaged in educating staff about what PLCs were and what should happen during collaboration times. The QuIL program also provides opportunities for teacher leadership. Evidence that teachers at Barrett are active in teacher leadership is reflected in the number of applicants they have for this program as compared to other schools. During an interview, Sandy discussed the application process and high number of applicants from Barrett. "Some buildings may not have enough teachers to fill their slots; we have turned away teachers the last two cycles."

Teacher leadership is also evident within the department chair group. This group consists of a representative from each department. They meet each Monday with Sandy, and have an extra planning period scheduled during the day to allow for additional work related to these responsibilities. During the focus group interview, the group acknowledged the perception that teachers in the building may view them as a decision

making body with too much power. However, they do not see themselves in that role, stating that one of their primary purposes is to facilitate groups and assist Sandy with maintaining a connection to teachers' views and needs.

In observing collaborative groups, teacher leadership was evident in various forms. In four observations of small collaborative groups, teachers were interacting in balanced, natural ways, with a high degree of participation and interaction among participants in three cases. In these groups, the identity of the facilitator was not overtly apparent. The interaction among the group followed a natural ebb and flow, with most participants showing evidence of leadership at various points. In the fourth group, interaction was more forced, with one person assuming leadership responsibilities reluctantly. The overall tone of this group was more negative and uncomfortable.

With respect to leading collaborative groups, teachers pointed to the level of flexibility they have in determining what to address in meetings and how their meetings are run. Each group is expected to follow norms, but the groups themselves determine what the norms will be. Amy, a science teacher, gave a recent example of her students not understanding simple machines well. She and her partner were able to change the agenda of the meeting and address that issue, pushing aside what they had previously planned to do. In another example, I observed two teachers working together to dissect a pig's heart during collaboration time; one of the teachers was not as comfortable with her ability to accurately identify the parts on a real heart, as opposed to on a diagram. They each had their hands in the heart, confirming their anatomical knowledge. They were not able to finish this during the time allotted, and were going to work again after school rather than wait for the next collaborative session. These examples indicate the PLC

structure is flexible enough to allow for adaption and to facilitate genuine adult learning, and that teachers have come to rely on each other, allowing for a degree of collaborative interdependence.

In several interviews, teachers addressed the level of commitment to the PLC process throughout the school. In most cases, teachers who had been in the school for the last 5 years noted teachers as a whole placed more value on PLCs now than they did 5 years ago. In an individual teacher interview, a member of the original leadership team recalled that 5 years ago when teachers were asked to hold up a fist (meaning no support), five fingers (meaning complete support), or fingers indicating some degree in between during a staff meeting, there were a number of people who did not support the PLC process at all. However, in the focus group interview, as well as in the interviews with Mary and Susan, estimates of the number of teachers in the building who viewed the PLC process as valuable ranged from 80 to 90%. Although observations of collaborative groups were limited in number, this is also consistent with my observations. Across the board, teachers with whom I spoke agreed that over the past 5 years teachers in the school have increasingly valued PLCs. Next year, Barrett will maintain their current collaboration schedule in addition to the weekly early dismissal schedule established for all middle schools, indicating the faculty values their collaborative work within the PLC process.

Focused Professional Learning

Another pattern that emerged from the data was the high level of focus related to professional learning opportunities. Professional learning in the form of collaborative groups, faculty meetings, and whole faculty inservice time was highly integrated and

focused on a limited number of topics (e. g., common assessment data, standards that cut across subject areas, Marzano's instructional strategies). Also, there were coordinated efforts in place to insure application and follow-through of instructional strategies, and staff members were generally engaged and receptive to their work as a whole faculty. It is also worth noting that the level of focus related to professional learning was a factor in informal learning that occurred. For example, during interviews, teachers provided descriptions of informal collaboration that had occurred in connection with structured collaborative time. Amy cited work by the science teachers after school. The math department met several times over the summer, and German teachers from different buildings meet as often as once a month on a Saturday. In addition, teachers made plans to continue collaborative work outside the designated times in two of the observations I conducted.

A graphic organizer created by the original leadership team serves as an example of how professional learning is viewed by the building (see Figure 1). Student learning is represented at the center of the diagram, with the interconnected relationships between parent involvement, implementation of best practices, collaboration, and mission/vision/values/goals. This was designed and utilized to assist faculty in recognizing the way multiple activities influence each other.
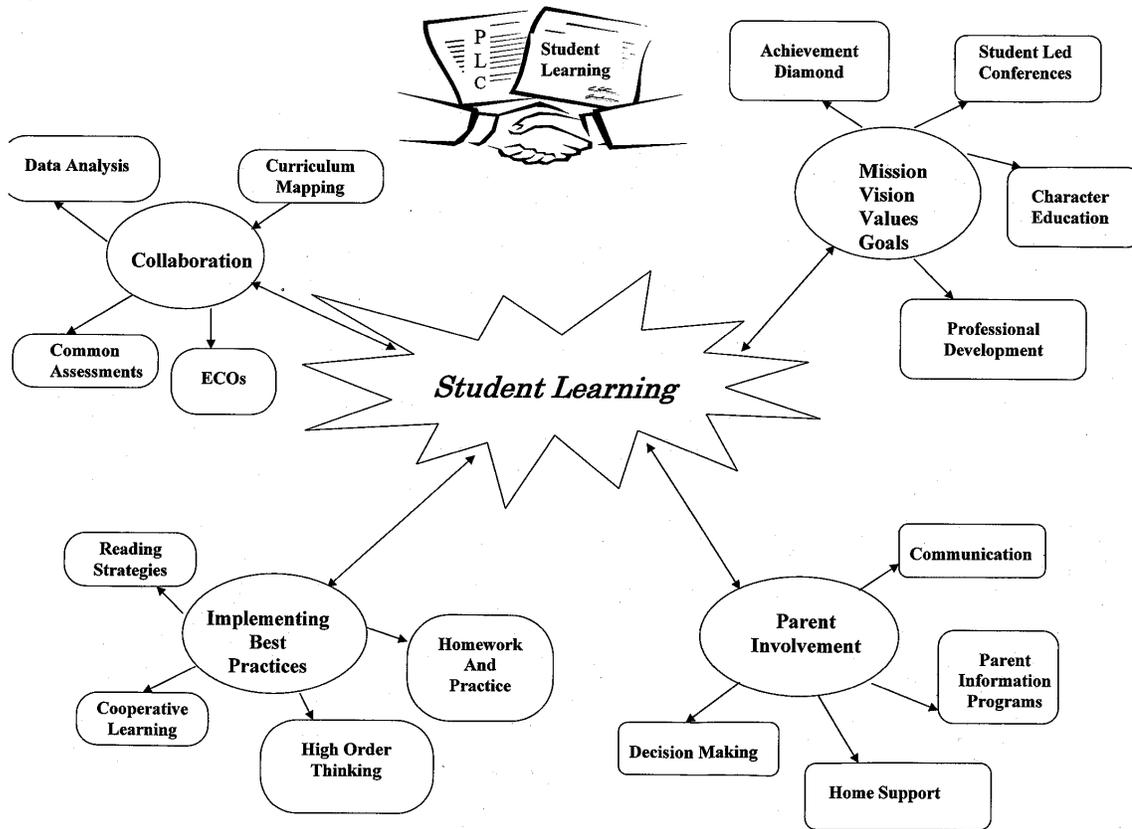
Figure 1.

Professional development provided by the QuILs took place largely during faculty

inservice time, yet interviews provided evidence that the Marzano work was also being

utilized in collaborative groups. In an interview with Holly, a family and consumer

sciences teacher, she specifically pointed to the use of these strategies as a point of

collaboration for her group. "We talk about how we can support each other, like

somebody will come across a good rubric, and will say 'I used this in my class,' and you

could use it this way or that way by tweaking it a little bit." She also mentioned making

an effort to be more explicit in her teaching, being very up front with students about what

she expected them to know, something she had taken from the staff development

facilitated by the QuILs. The German teacher also referenced the graphic organizers the

QuILs had shared: "I can use the same kind of a graphic organizer that Sara can use and

it'll be on two totally different subjects or skills, but it works, and then we have something in common and we can build on that."

Teachers also referenced commonalities and integration among subject areas. Part of their work this year has centered on certain "power standards" in communication arts and math. These are learner objectives that are broad in scope and are assessed repeatedly on state level assessments. Teachers from other subject areas have been asked to integrate these standards into their assessments and report on the results. This is a district level expectation.

Structures also are in place to follow up on learning from inservices and see that instructional strategies are implemented. At the whole faculty inservice I observed, the facilitators presented data they had collected from classroom observations. They had focused previous sessions on one strategy, stating an objective in student friendly language and communicating that objective to students. The QuILs followed up on the training with classroom observations to see how many teachers were posting the objective for each lesson on the board. In a later interview, I asked how the data were collected. "The four of us divide up the staff into groups, and we rotate groups so each time we look at a different group of people. We're up to about 86% of teachers having an objective clearly marked." These data were reported back to teachers, along with feedback at the inservice, and additional guidance regarding the difference between an activity and an objective. This attention to data collection is evidence of a willingness to apply work from inservice time to classroom practice and focus on application of professional learning.

As a next step related to Marzano's strategies, the QuILs led the faculty in examples of how to use metaphors and analogies. Participants were engaged in activities they could apply to their diverse subject areas. In general, I observed a high level of engagement among staff members during the inservice. The learning activities designed by the QuILs were challenging and appropriate for adult learners, and the staff was positive and receptive. The facilitators also integrated photographs of Marzano's strategies they had seen in use around the building, demonstrating the expectation that teachers would apply strategies from inservices.

Evaluation tools used at the end of each inservice were designed to assess quality of the work provided, but also designed to encourage reflection and application by teachers. For example, "Create a T-Chart to list advantages and disadvantages you feel would be present with SMART [interactive whiteboard] ideas." This question was used following a technology presentation, but shows the presenters focus on integration and application of work on graphic organizers, not simply presentation of information. Participants were also asked to complete the stem, "As a result of today's presentation I will commit to…"

Weekly collaborative sessions were focused on a limited number of items. Each group used a collaboration report form developed by the original leadership team (see Appendix G). While specifically developed for this building, the suggestions of group tasks closely follow guidance from DuFour, Eaker, and Many (2006). The form includes possible activities at the top, norms determined by each group, an agenda for the day, and tasks for next time. Groups complete these forms and submit to Sandy weekly. So while collaborative teams operate independently, each teams work is closely aligned with other

teams' work, as well as aligned with building goals, the PLC process, and faculty professional learning. My observations also indicate alignment and application of collaborative group work and professional learning. For example, I observed the sixth grade communication arts group work with the wording of test times to see that they were aligned with their objective and that the questions were clear to students.

One key focus of the Statewide PLC Project training is the identification of essential learner outcomes. In interviews with teachers, several mentioned the impact of identifying these key learnings for students. When asked what activities really had an impact on their work, Joan had this to say:

> I think the one thing, and we can go back to collaboration, but getting to the point of what is it exactly kids are supposed to know, get rid of the fluff…this is what we want them to know, so let's focus on that and teach that to the best of our ability, instead of teaching them all the stuff nobody expects them to know.

The narrow focus on specific learner outcomes appears to have been embedded in faculty work, and is viewed as a significant factor in groups' professional learning.

With essential learnings established, much of current collaborative group work is centered on developing common assessments for students. When developing questions for assessments, teachers take into account the state standard to be assessed, as well as the complexity of the question as determined by the depth of knowledge level, and also which process standard is assessed. They utilize a data management system to have access to student performance across classes, then use this as a basis for assessing the quality of their work.

I observed a group of communication arts teachers developing such an assessment. Their focus on assessing the skills at hand included a comprehensive discussion of what the skill was and how to teach it. The discussion began with specific questions on the quiz they were developing, "This is really two questions, I think it's confusing the way we have it worded." This discussion also generated conversation related to teaching strategies. One teacher opened the novel they were teaching and pointed to a specific example of symbolism, then other examples were discussed. As the group shared examples of symbolism in the book, they discussed how to effectively teach symbolism to students. So the focus on developing and utilizing common assessments formed a bridge to discussion of classroom instruction, and at the same time focused on student results. Assessment and instruction then became integrated thorough their collaborative work.

I observed another example of the focused professional learning during science department collaboration where teachers were working with their data management system. When teachers create common assessments, the multiple choice portion of the assessment can be given and scanned electronically, facilitating data analysis. Teachers can examine not only group scores, but individual scores, with information including not only which questions were answered correctly, but also which were answered incorrectly. The group was interested in a question where one incorrect answer was chosen disproportionately, looking for possible explanations. The engagement level of the group was extremely high, with participants eager to use this knowledge to inform their instructional practices. Teachers were making connections between the common assessment they had written and teaching strategies they were sharing.

While there exist multiple opportunities for teachers to work formally in small groups, it is also apparent that teachers collaborate informally. In each of the weekly collaborative group sessions I observed, plans were made to follow up on the work of the group at other times. For example, the two science teachers working on a dissection project were to finish it after school. Teachers in two different communication arts groups were going to share ideas at a lunch or during planning periods. When asked about how much collaboration occurs, Amy simply answered, "A lot! We meet with each other before school, during lunch, whenever, and you just kind of meet up with each other and try to get everything accomplished… We clamor for more time." The extension of formal collaboration into informal collaborative learning then provides another example of the integrated and focused nature of Barrett's professional learning.

School Culture

Data revealed evidence of a positive schoolwide culture, one of pride, enthusiasm, and commitment to students and one another, both from an historical perspective, before implementing PLCs, and since beginning the PLC process. Data also reveal the culture is generally collaborative, with teachers placing significant worth on collaborative processes, and is also focused on student success in a comprehensive manner.

Participants indicated the building climate was generally positive, and had been that way since the building opened 8 years ago. In an interview with the principal, Sandy stated "I really think our building was pretty cohesive anyway. We had a good climate here, even when I came." Within the focus group of department chairs, Selena also mentioned this: "I think as a sped [special education]teacher this building has always been wonderful, three of us are originals, and it's an absolutely great place to work." The

other teachers in the focus group agreed with this assessment. The building's low staff turnover rate (one teacher in the past 2 years) may also be an indicator of a positive building culture. In the past 2 years, only one teacher has left the building to work elsewhere in the district, and no teachers have left for opportunities in neighboring districts.

Teachers with experience in other buildings also recognize the positive culture of Barrett. Susan divides her time between buildings and noted that even though the other building has many of the same structures in place, the culture is not nearly as positive. Michelle, who once worked as a secretary in another district middle school, and said Barrett was noticeably more positive.

The staff at Barrett set an explicit goal related to creating a positive school culture, an indicator of the value they place on culture. Last school year as part of the state review process, students in the building were given questionnaires to assess building climate and culture. Seventy-one percent of students strongly agreed or agreed that teachers respected them and 51% strongly agreed or agreed that teachers cared about them. The teachers see these perceptions as an indicator of school culture. Collectively, staff were dissatisfied with these numbers. As a result, the building is working to improve this perception and will formally reassess the culture at the end of the year. Conversations with the principal indicate students take a brief survey each week regarding building culture, and they have incorporated more specific questions related to this issue into the end of year survey. They would like to see at least 82% of students feel respected by teachers at the end of the year, with further increases in coming years. Michelle discussed these efforts, "We have positive contact with students every day, you

know it's like our character traits, respect, responsibility, integrity, and it's expected that we demonstrate those so the students know what those are and we act that way with each other too."

Interviews with the principal and teachers each indicated the building culture as a whole is centered on collaboration. Susan, who works half time in the building, shared, "As a brand new teacher, it was wonderful, instant mentoring. I had someone who I knew would consistently meet every week" Susan is the only German teacher, but collaborates with the French and Spanish teachers. Carol spoke to the strength her collaborative math team draws from its diversity. "One person is really good with finding clips and games on the internet and the other one really enjoys digging into the GLEs [grade level expectations established by the state department of education] and I'm good at evaluating what we've done to adapt and change for next year." Joan commented on her inclusion in the collaborative process as a special education teacher. "I have a voice, and that wouldn't always happen. Everyone is treated equally… there's a lot of sharing ideas and knowledge."

Cathy, a department chair noted their building was farther along regarding collaboration compared to other district buildings, and the others concurred. She also spoke to the value of time in overcoming resistance to working collaboratively, "I would say that in the next year and a half, most people will get to where our best PLCs are now, they'll get to 'I would rather do it this way,' not 'you have to make me'." As previously stated, Susan also noted Barrett's culture was more collaborative than the high school where she worked in the afternoon.

The nature of Barrett as a middle school may also have influenced the value

teachers place on collaboration. When the district operated middle schools using the

middle school model, core subject area teachers had an additional plan time dedicated to

meeting collaboratively and maintaining parent contacts. Many interviewed mentioned

the district's decision to discontinue the middle school model as having a negative impact

on building culture. One of the participants described it this way, "It was willy nilly

trying to keep the teams, trying to do some collaboration, and it was very stressful,

because we had common plan time, but not really." The familiarity with grade level

collaborative work may have paved the way for departments to focus on PLC efforts.

One of the most powerful statements regarding collaboration came from Cathy

regarding a building wide goal from last year regarding reading.

> We had a goal this past year that was a reading goal, not based on MAP, just
>
> reading, and we had that time together to implement reading strategies across the
>
> curriculum and although we didn't see huge gains, we saw consistent growth …
>
> and you could see teachers around the building, in the exploratory wing, putting
>
> those reading strategies into practice. And if they hadn't had that collaboration
>
> time, I don't think that would be a part of it. It's like we used to say 'one more
>
> thing,' and we still say 'one more thing,' but you feel the team is working on and
>
> it's not one more thing you've got to figure out by yourself.

In this case, collaborative time appears to be an enabling factor in helping teachers

applies new learning across disciplines.

In addition to a positive, collaborative culture, Barrett is also characterized by a

comprehensive focus on learning and student success, and this focus has become so

noticeable students are observing it. While teachers' comments varied, when considered as a whole, their comments pointed to changes in student attitudes regarding how much teachers cared about them, as well as the quality of instruction from teachers. Michelle mentioned the benefits of the Good Friend program specifically. This program assigns students with more than 20 absences to a teacher mentor to help build student-teacher relationships. She saw this as an invaluable part of how they connect with kids, and saw it making a critical difference in kids' attitudes about school.

Teachers also gave examples of how their own teaching had been influenced by the increasing focus on student success. For example, Holly, who teaches home economics said:

I find that I've looked at students differently since this whole PLC process. Well before, you know it was like, you're going to do it, and maybe you don't get it, and oh well, maybe you'll catch on, but now I find that I really strive for everybody to get it every time, and I go back and reteach if I have to. And I did some of that before, but it wasn't like this.

Teachers noted the differences in interactions with students, and the ways they felt students' perceptions of teachers had changed. Barb noted:

I think they notice things more, and I think they talk about it more, they know what their friends' teachers are like. You know, 'Katie said that Ms. So and So is really interesting, she has a lot of good stories and she explains it really well' … I don't ever remember kids actually talking about their education, or caring about that…noticing that they're not even being taught, and you know what I mean, I think they are becoming much more aware.

During the interviews, teachers were excited and proud of the increased focus on what students were actually learning and their relationships with students. They sensed they were making a positive difference and students were noticing it too. "I think they see that their teachers really do care about them that we're there to help, not just to say 'OK, this is what you need to learn, go learn it.'" A focus on student results, including creating an environment to improve student outcomes, is key to the PLC process, and appears to be strongly embedded in Barrett's culture.

School Structures

Over the course of the last 5 years, the building has implemented several changes in school structures that seem to be directly or indirectly linked to their work as a professional learning community. Among these, the faculty has changed its schedule to include an academic lab period, which has continued to change and evolve over the years. Another example is the Homework Club. Students who are at risk for learning difficulties may participate in this program, or are placed in a guided study hall during the day. Most recently, the faculty began an examination of teacher practices regarding homework, and developed a schoolwide policy regarding latework. Finally, administration established a faculty forum to allow staff a greater voice in school governance. Three of these practices directly relate to school intervention structures intended to foster student success, while the fourth is connected to shared leadership. Both intervention structures and shared leadership are integral to the PLC process.

Barrett was encouraged to examine structures for addressing the needs of kids who are not successful as part of their Statewide PLC Project training. An academic lab period was established 4 years ago at Barrett Middle School. A 20 minute daily period

occurs at the beginning of each day. Originally, this was a multiage group of students to whom each teacher was assigned. This period was designed for teacher flexibility, with students able to travel to teachers for tutoring. Regular time in this multiage group was devoted to sustained silent reading, character education lessons. With regard to this structure, Amy commented, "it was working, but we basically wanted to change our focus, we wanted to use that time with kids from our teams."As a result of that need, academic lab time was redesigned. Four core teachers who are on a team, plus two electives teachers, are grouped together for academic lab. Students who are on the same core team are scheduled within this group. In addition, some attention is given to where students are placed. For example, a student who is likely to have problems in communication arts may be placed with the communication arts teacher, and students who are unlikely to have academic problems are placed with electives teachers. The electives teachers' classrooms are not grouped in the same location, so these students may travel a distance if they need to see a core teacher for tutoring or homework assistance. However, this structure limits time for travel for those students most likely to need attention; student achievement results are at the core of these changes.

Academic lab was established as part of the school's investigation of how they met the needs of students who were not successful. An interview with the principal indicated that feedback from teachers was the primary reason they changed the organization of academic lab. With the old system, a sixth grade student who needed math tutoring might be placed in a tutoring group, but with students who needed math help from different grade levels. Also, travel time between classrooms around the building was high. The new system is intended to increase time on task and the

engagement of teachers with students, as they are already working with students they have in class. Interviews with teachers indicate support for this system, but still a need for improvement. Interview data points to a willingness to continuously improve, learning from current practices and making changes aimed at improving results for students.

Homework Club is a weekly afterschool program once a week that students may attend on a voluntary or suggested basis. The district provides transportation to designated dropoff points. Each core team has one teacher who stays each week and monitors students. Interviews with teachers indicated Homework Club was part of what they viewed as an overall commitment to student success.

> I think the kids kind of see the difference, too, the students. I think they see that their teachers really do care about them, that we're there to help, not just to go, ok, this is what you need to learn, go learn it. If you're struggling, I always tell my students let me know. If you don't get it don't feel bad that you don't get it … and if it means I come in early or stay late one day, arrange a ride, or come to Homework Club.

A more structured intervention for struggling students is guided study hall. As Sandy explained,

> These are typically kids, either they have a lot of F's or they might be lacking in skills or work completion…They're assigned to a guided study hall of five to eight kids and the teacher works with them and also communicates with those teachers to make sure they're getting their work done, getting it in, and helping them with some skills.

According to Sandy, approximately 10% of students are enrolled in a guided study hall in place of an elective.

Most recently Barrett Middle School undertook an ambitious change in its schoolwide policy regarding latework. In a presentation at a statewide conference, a team from Barrett explained the process they used to examine current grading practices. In the spring of 2005, the PLC leadership team began this work as a result of concerns regarding the number of 'F's. They began by surveying teachers of their perceptions regarding reasons for 'F's, the reasons for giving homework, and the effects of not turning work in according to their current grading practices. After presenting the results of the survey to teachers, they began as a faculty to explore research on the role of homework, what makes for a high quality homework assignment, what reasons there were for current policies regarding latework, and what alignment there currently was between grades and learning. After much discussion, the faculty agreed to a schoolwide policy that insists students turn in work at a satisfactory level. As part of a presentation at the Statewide Powerful Learning Conference, staff explained they began accepting late work to teach students responsibility for following through with assignments, to assure that they knew what students had learned, and in recognition of middle school aged students' brain development.

As part of this schoolwide policy, the faculty came agreed to guidelines for which assignments are eligible for "redo's" and a policy regarding no zero's allowed. In interviews with teachers, this was a source of pride for several in terms of their commitment to kids. As Michelle said, "Redos, and the No Zero policy of you keep bugging them until you get it. This year I have not had the problem with late work that

I've had in the past. I do think it is helping." Data highlighted in the school's presentation do indicate a dramatic decrease in the number of students with 'F's, suggesting this structural change has helped students

One final structural change of note is the addition of faculty forums. During the department chair focus group, Amy described the development of this program this way, "A survey showed people were upset because their voice wasn't being heard, or a small number of people were making the decisions for the whole school." This feedback led to the establishment of faculty forums, which happen on one morning and one afterschool time period each week. According to the principal, at least one administrator is there each week. Selena described the forums:"Just whoever wants to show up can, it's very casual, but it's nice. A lot of people don't have that kind of communication with their principals."

The most notable outcome from the faculty forums as a vehicle for change occurred shortly before a scheduled early dismissal day. The department chairs and Sandy had planned for teachers to keep their academic lab group for the entire shortened day, about 4 hours, so they could have extra time for character education lessons and other activities. Many teachers expressed concern during faculty forum about needing to continue classes to prepare for upcoming achievement tests. As one teacher said, "People really flocked to that forum, and so they changed the schedule." In this example, this new structure can be linked to a greater degree of collaborative decision-making.

Negativity in Collaborative Groups

While the overall attitude about collaboration and PLCs is positive among staff members, a small, but strong, sense of negativity was also evident. When asked to

consider the staff as a whole, each person agreed that the majority of teachers in the building were generally positive and the majority of collaborative groups were positive and generally productive. However, they did agree that the few individuals who contributed to unproductive conflict in groups had a noticeable effect, and for the groups in which they participated, it was a major detractor from their work.

Barb described an especially resistant person. Especially in a group of two people, she felt forced to address the issue directly. "I have to say, well we're doing it, I'm sorry, but this is what we should be doing." Michelle mentioned the conflict she experienced with her group, and the impact one negative person could have: "How do you discipline grownups? You can't give each other detention."

Selena commented on her collaborative group and issues with strong personalities, "..Talking to each other in condescending ways, there are some that think they're always doing the right thing and their way is always the right way." A few weeks prior to our interview, I had observed the collaborative group of six teachers she described. I noted the tension in the room, and the limited interaction of teachers with one teacher who was defensive toward the group. The group managed to collaborate about instruction in spite of her, but it didn't seem to be a time anyone would look forward to. Selena collaborates with a different group every year, depending on what she is teaching. She shared that she was looking forward to working with a different group next year.

Two different teachers commented on the personality issues some teachers bring to the group. "One of the teachers on my team is behind and we'd been trying to catch her up and there's been a layer of bitterness there … and even after I sat down and talked to her, I found out she's still not happy with me." Mary, who previously had a career in

human resources made this general comment: "There are some teachers who have problems separating their egos from what they do. And that's true in other professions, but not as much."

I asked teachers what mechanisms were in place to help them deal with conflict. At least three had made Sandy aware of their difficulties. One of these teachers also commented, "People know we're having trouble, and we seem to have more than our share of drop in visitors… department chairs, administrators, they're trying to support us." Two different teachers mentioned calling attention to the group norms, but were not convinced that was helpful. In response to these issues, the group of department chairs is working to develop a survey to address conflict with the whole staff. "We're trying to find out what's going on, what are things that need to be improved, just having more honest conversations with each other; just holding each other more accountable for our norms."

The issue of conflict did seem to generate a considerable level of interest and concern from those interviewed, even though they emphasized it was an issue for a limited number of groups. I could sense it was frustrating for these teachers to have some groups work less effectively than others. However, in most cases, there did appear to be a general sense of optimism with regard to the situation.

Conclusion

Chapter 4 included a description of the setting for the case study, including a description of the school and the context for implementation of the PLC, as well as themes that emerged from interviews, observations, and document analysis. These themes included district influences, principal leadership, teacher leadership, focused

professional learning, school culture, and negativity in collaborative groups. I examined

data from a holistic perspective, combining these multiple perspectives for insight into

the research questions. Chapter 5 will focus on a discussion of these findings, organized

around the research questions. This chapter will also include limitations and implications

of my study, as well as an overarching conclusion.

CHAPTER FIVE

Discussion of Findings

This case study of Barrett Middle School and its development as a professional

learning community yielded several findings of interest to the organization itself, those

also engaged in similar initiatives, as well as researchers in the field. As these findings

are explored, it is important to remember Barrett was selected for study because it

appeared to be implementing PLCs at a high level. Discussion of the findings as they

relate to the two research questions are outlined in the next section, followed by

limitations of the study, implications for both research and practice, and overall

conclusions.

What is the Nature of This School as a PLC?

Barrett Middle School is characterized by embedded teacher leadership, both

formal and informal, as well as integrated professional learning. As a PLC, it has changed

structurally and culturally, with a greater focus on collaboration, but is challenged to

address a small but significant element of negativity. The sections below emerged from

the data, but are also consistent with much of the interpretive literature related to PLCs

(DuFour et al, 1998; 2006, Eaker et al, 2002).

Teacher Leadership

As an organization, Barrett Middle School relies on the involvement, engagement,

and leadership of its teachers in multiple ways. While some teachers are designated as

teacher leaders throughout the organization, others share leadership through knowledge

and involvement in their collaborative groups, and input from teachers is regularly sought

and utilized in decision making. Leadership and ownership of collaborative PLC

processes over the past 5 years reflects the distribution of leadership in the building

(Ogawa & Bossert, 1995). In addition, Barrett's ability to sustain and develop this

initiative over the last 5 years is likely related to the level of teacher involvement in

leadership (Chrisman & Supovitz, 2005; Wood, 2007).

Teachers at Barrett are involved in leadership in many ways, including through

professional development (Chrisman, 2005; Hord, 2004), which is deeply embedded in

the school's improvement processes. Teachers currently guide collaborative groups as

facilitators and department chairs. The building's group of QuILs typically leads large

group professional development on a monthly basis. Specifically in the first 3 years of

PLC implementation, a group of teacher leaders collectively guided the PLC process and

led the faculty in whole and small group inservices related to establishing PLCs.

Supovitz (2002) linked teacher empowerment through work in collaborative

teams to improved student learning. This connection indicates the importance of teacher

leadership. This empowerment may also be evidenced through the multiple ways teacher

input is sought at Barrett, although teacher surveys were most often mentioned as a

method for receiving input. Teacher groups are active in the development of building

level goals, teacher input has been the impetus for changes in policy regarding

homework, and input from a teacher survey resulted in faculty forums for teachers to

regularly communicate with administrators. Study participants identified all these tools

as connected to a commitment to improved student learning.

Within Barrett Middle School, teacher interviews demonstrated the connection

teachers saw between their collaborative work and their overall instructional

effectiveness (Leithwood & Duke, 1999). Specific examples include the ability to

provide timely and specific assistance to new teachers, the ability to respond when students are struggling with a particular concept, as well as the ability to make connections across disciplines. These activities can increase motivation among teachers (Yukl, 2002), who are highly committed to this process.

Currently the department chair group is more involved in data analysis and goal setting (Lambert, 2002), than the wider faculty. Utilizing department chairs as resources can influence teacher leadership within the building (Printy, 2008), although the perception of this group as too powerful may develop; this perception can reduce the collaborative benefits of a PLC. At Barrett, this perception was part of the impetus for development of a faculty forum.

Focused, Comprehensive Professional Learning

Professional learning at Barrett Middle School is ongoing and job embedded, as evidenced by weekly collaborative meetings, monthly schoolwide inservices, and faculty meetings that align with practices endorsed by advocates (National Staff Development Council, 2001). These structures are not necessarily unique, but it is noteworthy that Barrett utilizes these structures in a focused and integrated manner. These continued processes allow for teachers to engage in shared inquiry (Garmston & Wellman, 1999) for the purpose of improving student achievement, as well as sharing best practices (DuFour et al., 1998, 2005) and developing problem solving skills and strategies (Hord & Sommers, 2008).

An example of the focused, integrated nature of professional learning at Barrett is the work related to Marzano's (2001) instructional strategies. Begun as a district initiative, QuILs representing each building in the district meet in a train-the-trainer

format each month. These teacher leaders design and facilitate monthly faculty inservices to enable teachers to use strategies effectively in the classroom. In teacher interviews, they noted the discussion of these strategies in weekly collaborative groups, particularly how the strategies cut across different subject areas. The integration of Barrett's multiple forms of professional learning may be a contributing factor in overall success. Research points to the value of focused efforts in implementing PLCs, particularly with regard to increased student achievement (Chrisman, 2005; Fisher & Frey, 2007).

In addition to work related to instructional strategies, other professional learning efforts at Barrett are devoted to developing and analyzing common formative assessments (DuFour et al, 2006). Teams have first spent time agreeing on the most important outcomes for students, developing meaningful assessments targeting these outcomes, and then examining student work and related student data. These practices are foundational pieces of the guidance DuFour (1998) gives to PLC schools. In interviews, teachers noted the value of the first of these processes, coming to agreement on what was most important to teach, and the impact this had on learning.

Structural Changes

The structural changes at Barrett over the past 5 years are indicative of an organization that is adaptive in nature (Senge, 1990), responsive to changes in the educational environment (Leithwood & Louis, 1998), and reflects continuous evaluation and examination of practices (Argyris & Schon, 1997; Patton, 1997; Preskill & Torres, 1991), all of which are part of a learning organization.

Barrett's academic lab period was created in recognition of a need to support students academically as well as behaviorally. Through continuous examination and

evaluation of practices (Preskill & Torres, 1991), the school recognized the need to redesign this intervention and alter its focus. This intervention, in combination with guided study hall and Homework Club, provides students with multiple avenues for success.

Perhaps the most compelling evidence that Barrett operates as a learning organization comes from its collective efforts surrounding homework. The schoolwide examination of homework policies and practices was a project directly linked to examination of data (DuFour, 1998) as well a clarification of purpose and shared values (Schmoker, 2006). The scope of this project included a collective analysis of research related to homework practices, as well as examination of current reality, and the examination of faculty beliefs related to homework. This significant change in practice can arguably be considered second order change (Marzano, 2005), in that individual and collective beliefs and practices were examined, and a new set of practices adopted by the group.

The collaborative culture at Barrett, from both a formal and informal perspective, also indicates they are developing the ability to create new knowledge (Bruffee, 1999). For example, the flexibility of the staff in utilizing Marzano's (2001) instructional strategies in common and diverse ways has led to application of this in a widespread network. The formal professional learning provided by the QuILs and continued through weekly collaborative groups has provided the impetus for informal learning, adaption, and innovation (Nonaka & Takeuchi, 1995) with respect to teachers utilizing the strategies in a variety of ways.

Given the current focus on high levels of learning for all in the wider educational arena (Jennings, 2006), as well as the level of focus on student success in the PLCs model Barrett has followed (DuFour et al., 1998), it is not surprising that Barrett's recent efforts are directly linked to the success of all students. Whether or not Barrett continues to adapt and change in the future remains to be seen, but the level of teacher leadership in the school indicates this level of organizational learning may be sustained (Chrisman & Supovitz, 2005; Glickman, 2002).

Cultural Changes

Though it is challenging to gain insight into the culture of a building as a whole, particularly one of this size, both observations and interviews indicate the culture is highly collaborative and is focused on student results (DuFour et al, 1998, 2006). The culture at Barrett also supports reflection, knowledge sharing, and problem solving (Garmston & Wellman, 1999; Hord & Sommers, 2008), all important elements of a PLC.

Bruffee (1999) describes collaborative groups as interdependent, relying heavily on others in the group for shared knowledge. This is reflected in the ways teachers described their reliance on others in their groups, and through noting the value of input from others. Observations of the science department and the sixth grade communication arts team working together showed exemplary levels of interdependence.

In considering descriptions of teams (e.g., Hackman, 2002; Katzenbach & Smith, 1993; Lencioni, 2002; and Yukl, 2002), multiple examples of attributes associated with teams can be found in Barrett's collaborative work. For example, in at least two of the meetings observed, the responsibility for leading the meeting seemed to flow naturally among multiple members (Katzenbach & Smith, 1993). Also, several interviews pointed

to the value members gave to the diversity of members and their respective skills (Hackman, 2002; Katzenbach & Smith, 1993). In addition, many teams produced collective products in the form of common assessments (Katzenbach & Smith, 1993) and held each other accountable through analysis of student data (Katzenbach & Smith, 1993; Lencioni, 2002). However, it is noteworthy that teams are not always willing to address conflicts among members with respect to negativity (Lencioni, 2002; Katzenbach & Smith, 1993).

Further evidence of a culture that values collaboration is also found in the decision of the building to collaborate twice weekly the following school year. This decision was supported by a vote of the faculty, and is consistent with the value advocates place on regular scheduled time within the school day (DuFour et al., 1998; Hord, 1997). At Barrett, there is also the expectation that everyone will collaborate; participation is not voluntary (Eaker, 2002). Collaboration has become the norm, and this may be due in part to these structural expectations.

Finally, evidence indicates faculty value collaboration, and formal collaboration also helps generate and nurture informal collaboration. Both interviews and observations indicated there was a connection between formal work and informal work. The practice of documenting formal collaborative group meetings on a record keeping form developed by the implementation leadership team is common and accepted. This contradicts the work of Leonard and Leonard (1999), who caution against the use of accountability structures that may restrict groups' ability to collaborate, and as a consequence, restrain creativity and problem solving. While the accountability structure seems to be working

for Barrett, if Leonard and Leonard are correct, this practice may erode PLC efforts over time.

Negativity

Negativity among a limited number of people is influencing the work of some collaborative groups and gaining the attention of others involved in this process. The literature related to group effectiveness emphasizes the need for trust among groups (Bryk & Schneider, 2003; Lencioni, 2001), specifically to pave the way for dealing with conflict openly and productively (Lencioni, 2001). While complex, the connection between trust and group productivity indicates a need for collaborative groups to further develop trust among members and clarify member roles and purpose (Bryk & Schneider, 2003). Groups at Barrett that are reluctant to address the issue of negativity may be lacking in trust, either in each other or in the PLC process.

Teachers working in groups where negativity is present have made attempts to address the issue, with only limited results. Increasing awareness of the issue, possibly through a survey developed by the department chairs, may result in greater ability to understand collaborative tensions (Snow-Gerono, 2004) and seems to be a natural first step in addressing this issue. The challenges faced by groups would seem to reflect Lambert's (2002) assertion that group knowledge of collaborative skills is critical to effectiveness. My observation of the group with a negative member seems to align with Achinstein's claim that the potential for group learning is connected to the group's ability to understand and address differences (2002). The group's work was stiff and laborious, with members' progress in addressing issues limited and slow. Those interviewed recognized the need to address the issue more openly, but have not yet firmly resolved to

do so on an organizational level. This is also consistent with Katzenbach and Smith (1993) who state effective teams are willing to engage in constructive conflict. Given the lack of effort to confront conflict, it is likely that some groups are not yet as effective as they might be; which may limit the effectiveness of the overall PLC process.

While the overall attitude about collaboration and PLCs is positive, a small but strong element of negativity was documented. However, it is probable that our human tendency to focus on the negative rather than the positive is a factor in the level of attention participants are giving to this subject. We focus so heavily on what we would like to change, that it can appear to be a more important issue than it actually is. However, this element of negativity should be addressed in the future so that Barrett may develop more fully at the team and organizational level.

What Factors Influenced the Development of This School as a PLC?

Barrett's development over the past 5 years as a professional learning community has been influenced significantly by input from the district level and also by leadership from its principal. Barrett's positive culture and guidance from outside sources during implementation have also influenced its journey as a PLC.

District Level Influences

Involvement from the district throughout the development of the PLC process had a demonstrable influence at Barrett, which supports the work of multiple researchers who concluded district level support can positively impact a school implementing PLCs (Chrisman, 2005; Fullan, 2002; Togneri & Anderson, 2003; Wood, 2007). The first identified move toward Barrett's involvement in the PLC process came when the district sent a team that included Barrett's principal to a PLC conference. This initiative was

initially approached as a pilot process, however, to date all buildings in the district have

gone through trainings albeit at varying rates. Chrisman and Togneri and Anderson point

to the value in allowing time for implementation to take place, which seems to support

the variations in implementation districtwide.

At the district level, buildings were required to schedule 40 minutes of

collaboration time weekly for all staff members, but were not given specific direction as

to how this should be accomplished. While this might be considered a top-down

directive, it does provide for some site specific flexibility, which Phillips (2003) found to

be instrumental in establishing PLCs in another middle school. Since establishing that 40

minute per week expectation, the district has accommodated a request from high schools

to dismiss early one day each week for collaborative work, and beginning next year

middle schools will do the same. Providing this essential support when schools are ready

to utilize it was viewed positively by teachers, and has allowed time for ownership of this

process to become integrated into the school's culture (Wood, 2007).

Support from the district in terms of training related to PLCs has taken varied

forms and has varied outcomes. Training from external sources, such as the Statewide

PLC Project and events sponsored by the DuFour group, have influenced the building's

work, both in the form of providing appropriate knowledge and skills related to

collaboration as well as providing appropriate structures and activities for collaborative

groups (DuFour et al., 2006). In establishing the QuIL group, the district has provided a

way to develop the knowledge and capacity of those in the district, both as instructional

leaders and teachers of adults. The impact of training many participants at all levels

aligns with the concept of dispersing leadership throughout the organization in order to

sustain initiatives (Fullan, 2002; Glickman, 2002; Wood, 2007). While this represents distributed leadership throughout the district, it has trickled down to the school level at Barrett as well. In addition, the concepts of continuous learning and action research (Chrisman & Supovitz, 2005; Glickman, 2002) are consistent with the framework for training in instructional strategies carried out by the QuILs.

Principal Leadership

The principal at Barrett Middle School is an effective principal, well respected by staff, and committed to the PLC process, as evidenced by interviews with teachers, my observations, and the recommendations of those involved in the school selection process. She has established processes and strategies with probability for success, and understood the specific culture of the building. Sandy has been the principal at Barrett for the past 8 years, and during the last 5, the school has explicitly focused on PLCs. While a principal does not operate in a vacuum and needs many tools and structures to be successful (Spillane, 2005), Sandy has made a unique contribution to the success of this endeavor. Teachers value her leadership and she deliberately engages herself and her staff in activities that move the building closer toward PLC goals, as well as nurtures a collaborative culture.

Both beginning of the year and mid-year staff development activities designed and led by Sandy were explicitly focused on PLCs just this year, 5 years after this process was begun. This clear purpose, (Aryris & Schon, 1997), as well persistence over time are indicators she has maintained focus (Fullan, 2002). However, her assessment of her staff's ownership and understanding of this process and her patience and willingness to let this process evolve are indicators she has realistic expectations for the PLC process.

An understanding of the organizational change process is essential for success (Fullan, 2001; Huffman, 2004; Wood, 2007). Sandy demonstrated knowledge of the change process in multiple ways. She invited teacher leadership (Chrisman & Supovitz, 2005; Fullan, 2002; Glickman 2002; Wood, 2007), she communicated openly regarding the future (Argyris & Schon, 1997), and she engaged in continuous evaluation of practices (Patton, 1997; Preskill & Torres, 1991).

In contrast with other schools I have observed in my work, Sandy displays a high level of relational knowledge regarding her staff. She appears to be finding the balance between individual challenge and collective purpose among staff members (Scribner, 2002). Her respectful, yet persistent, approach to school improvement practices grounds her role as a facilitator of collective learning (Barth, 2001; Lambert, 2005), skills important to a successful PLC process.

Culture and Implementation

Barrett's generally positive, stable culture likely contributed to the successful implementation and assimilation of professional learning communities within the building. Data show the building culture is positive. Data also support that a positive culture was in place before the building began the work of professional learning communities. This positive culture reflects a basic level of trust that was firmly established before undertaking this change process. As researchers have found, trust among members is an enabling factor for faculties implementing school change (Bryk & Schneider, 2003; Fleming & Thompson, 2004; Lencioni, 2002). However, given the complexities of measuring trust, it is difficult to say several years after the

implementation of PLCs at Barrett whether or not trust was firmly established at the time of implementation, and what role, if any, trust played in the PLC process.

PLC Guidance and Implementation

Both from an historical and recent perspective, much of the collaborative work in which Barrett is engaged is aligned with guidance provided by Rick DuFour and other associated authors (DuFour & Eaker, 1998; DuFour et al., 2006; Eaker et al., 2002). For example, the practice of organizing collaborative teams in the building according to subject taught, as well as grouping special area teachers together, is advocated by DuFour and Eaker. This is distinguishable from the middle school model in which many teachers in the building were previously engaged. Collaboration in the middle school model was largely based on individual students, with teachers sharing information regarding student progress and parent communication. Although teachers still spend time and effort addressing the needs of shared students, there is a much greater emphasis on shared subject matter, teaching strategies, and the development of common formative and summative assessments, all tasks specific to the guidance Barrett has received in implementing PLCs.

From an historical perspective, the initial awareness and exposure to professional learning communities came directly from a conference at Adalei Stephenson High School, where Rick DuFour was once a principal. Barrett's school district also sponsors yearly summer institutes in conjunction with Rick DuFour and/or his associates, which enable many teachers in the district to attend without leaving the area. Also, the 3 year training from the Statewide Professional Learning Communities Project has significant alignment with DuFour's work (see Appendix H).

In addition, much of the specific work done by the collaborative groups, including identifying essential learner outcomes, utilizing common pacing guides, developing and analyzing common formative and summative assessments, and identifying effective instructional strategies is consistent with the process outlined by DuFour et al (2006). In particular, the document used by teams to record their collaborative work consistently reflects DuFour's guidance related to the most important work of collaborative teams (see Appendix G). Barrett is implementing this model with a high degree of fidelity, yet their work seems singularly influenced from this source. Among other authors seeking to interpret research and provide guidance to schools (e. g. Hord & Sommers, 2008; Lambert, 2005), greater emphasis is given to the collaborative process and shared leadership. Barrett's work appears to have had limited influence from these and other sources.

Limitations of the Study

As with any research, there are limitations to what may be learned from this study. First of all, my limited experience in as a researcher is a constraining factor. My preparation through the doctoral program at the University of Missouri provided me with a foundational understanding of qualitative research, along with valuable opportunities to apply these skills, but I am not an experienced researcher. With respect to data collection and analysis, a more experienced perspective might have subtly changed the findings.

Second, the context of Barrett's implementation makes it unique. The previous experiences of the faculty working through the middle school model, their newness as a building, the level of influence from the district itself- these factors and other contextual factors are part of what makes this building unique. Those reading this study will need to

examine the findings within this context, although there are certainly elements of Barrett's work that will likely transfer to other settings. Barrett was selected for study because it had deliberately engaged in efforts to establish a PLC, specifically through an ongoing relationship with the Statewide PLC Project, and was viewed by those consultants in the Project as a school implementing PLCs at a high level. As the work of the Statewide Project is deeply embedded with DuFour and associates (1998; 2006), this narrowed the scope of the study.

Finally, this study is limited by the challenges faced when examining an organization from an historical context. Barrett's 5 years of involvement in PLCs adds a deep level of understanding to the findings, but also recollection of history is often incomplete, which creates limitations for the data in ways a school just beginning to implement the PLC process would not.

Implications

Several implications have emerged from this study, both for research and practice.

Research Implications

This study raises questions regarding implementation of PLCs over a period of time that may only be addressed during the process. Research designed to study PLC implementation over time would be of interest to both researchers and practitioners. A longitudinal study could be designed to better explain what happens to schools implementing PLCs over time, and might provide more detailed guidance to schools implementing this process.

Another possible avenue for research related to my study is the impact of PLCs on students. Comments from participants during this study raised interesting questions

regarding the impact of PLCs on students, and possible changes students perceive in school culture. Research that specifically included perceptual and achievement data from students would present a more comprehensive picture of the impact of professional learning communities.

My study also raises many questions from a district perspective. For example, how does Barrett's experience compare with other buildings in the district? District influences may have led to similar or different responses in other buildings. For that matter, how does this district's implementation of PLCs compare with other districts' implementations? How do districts tread the fine line between supporting and mandating implementation of PLCs or other endeavors?

The Quality Instructional Leader program would be interesting to study from an overall perspective. If the program itself were studied, as well as its implementation in multiple buildings, much might be learned related to teacher leadership and the influence of job embedded staff development. Of particular interest might be differences in implementation from building to building and possible influencing factors, such as principal leadership and type of school.

Finally, my study has also produced questions regarding the framework utilized by many schools in implementing PLCs. If a school implements professional learning communities using guidance from DuFour and associates (1998, 2006) almost exclusively, is the research base regarding PLCs adequately represented? Most school leaders are not likely to be direct consumers of research, often relying on others to interpret, analyze, and condense significant research studies for application to their

settings. Given this, what might be missing or over emphasized in the process of applying research to practice?

Implications for Practice

For those practitioners implementing PLCs, this study has potential implications with respect to their ability to successfully begin this as well as similar initiatives. As discussed earlier in the chapter, multiple factors positively influenced implementation, and if schools in similar circumstances are aware of those influences, they may be able to work to ensure similar positive conditions. For example, given the influence teacher leadership has at Barrett, schools may strongly consider efforts to embed teacher leadership in their own schools. Teachers at Barrett are involved in leadership in many ways, and schools implementing PLCs may explore these and other possible ways to involve teachers, while keeping perspective regarding the potential for select teachers to be viewed as too powerful. Schools may also wish to consider the ways they solicit input from teachers, whether in the form of surveys, representation on committees, via e-mail, etc., and the respective implications of each form of input.

While teacher leadership is a significant factor in establishing a PLC, the influence of principal leadership in this process should be considered. Given the potential for principal influence in PLC implementation, districts may focus more efforts in supporting principals in this process. A knowledgeable, supportive principal willing to share leadership on a broad scale may well be a qualifier for establishing a PLC in a building.

Finally, the influence of building culture should be considered. While PLC implementation will certainly impact building culture, potentially in a positive way as

faculty engage in collaborative efforts, buildings already characterized by a positive culture will likely be more successful at a faster rate than buildings with a less positive culture.

Conclusion

Barrett Middle School was chosen for this study because it considered itself a successful professional learning community, and others with an ongoing knowledge of the building agreed with this assessment. In general terms, the findings from this study agree with this initial assessment. This school is characterized by a culture of collaboration and student achievement, teacher leadership is readily apparent, and changes which have occurred indicate the school is capable of adapting to changes in its environment. Most importantly, this implementation appears to be sustainable, having become integrated in the wider school culture.

For those seeking guidance in implementing PLCs, they should consider the narrow scope of this implementation, both in terms of the focus and support it afforded the building, as well as the range of additional characteristics and components of PLCs it eliminated. Also, while the multitude of resources and advantages prevalent in this setting may be absent from other settings, practitioners should consider strategies to develop these characteristics, such as district level support, assistance through training, and high quality leadership. Finally, the rich descriptive nature of this case study provides readers with insight into the powerful potential of collaboration to influence teaching and learning, as well as the potential for negativity to hamper such efforts if groups do not develop the will and skills to address negativity.

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Appendix A

Preliminary E-mail to PLC Consultants
Purpose: Aid in school selection. This e-mail will be sent to PLC Consultants in nearby regions of the state, each of whom works with multiple school districts implementing the professional learning communities process.

Dear Consultant,
As many of you know, I am in the process of finishing the degree requirements for an Ed D in Educational Leadership and Policy Analysis from the University of Missouri. I would appreciate your help in selecting a school to participate in a qualitative case study. This school should be one which has been implementing professional learning communities for at least three years; one which you feel exhibits characteristics of a learning community. The study will address the following research questions: 1). What is the nature of this school as a Professional Learning Community and 2). What factors influenced the development of this school as a Professional Learning Community? Participation in the case study will involve an individual interview with the principal of the school and possibly other educators, a focus group interview with the leadership team, and a focus group interview with other teachers at the school. In addition, I it would be beneficial to observe several collaborative meetings, as well as review documents the school has produced as a result of its work, such as agendas, meeting notes, analyses of data, etc.
I would appreciate the names of two or three buildings you believe might be interested in participating in the study, and I will follow up on this e-mail with a phone call to you in the next week to discuss this further.

Thank you,

Michelle Smith

Appendix B

District Permission for School Participation Letter

Dear School Administrator,

I am conducting a research study titled, *Professional Learning Communities: A Qualitative Case Study of One Midwestern School.* 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 information gathered should be useful to schools implementing professional learning communities, or other team based school improvement efforts.
For the study, one school building will be studied in an in depth, qualitative manner. (School building here) was recommended to me by PLC consultants from the St. Louis RPDC as a building implementing PLCs comprehensively and thoroughly. An individual interview will be conducted with the principal, a focus group interview will be conducted with both the leadership team and a voluntary group of other teachers. I will also gather data by observing 1-2 leadership team meetings, as well as 2-3 collaborative group meetings. I would appreciate the opportunity to see meeting notes, agendas, and other documents of PLC work.

I am seeking your permission as the administrator of the *<Name Here>* School District to allow participation by faculty members. Participation in the study is completely voluntary. The participants may withdraw from participation at any time they wish without penalty.
 Participants' answers and the building's identity will remain confidential, anonymous, and separate from any identifyinginformation. I will not list any names of participants, 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 (573) 341-7270, or by email at mlsmith@mst.edu. In addition, you are also welcome to contact the dissertation advisor
for this research study, Dr. Jennifer Hart, who can be reached at 573-882-4225 or by email at hartjl@missouri.edu. If you choose to allow 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.

Michelle Smith
Doctoral Candidate

Participant Consent Form

Date

Dear Participants:

Thank you for considering participation in a research study titled, *Professional Learning Communities: A Qualitative Case Study of One Midwestern School.* 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 information gathered should be useful to schools implementing professional learning communities, or other team based school improvement efforts.
Researcher: Michelle Smith, University of Missouri-Columbia Doctoral Candidate, mlsmith@mst.edu , (573) 437-3433.

Advisor: Dr. Jennifer Hart, 301C Hill Hall, University of Missouri, (660) 882-4225, hartjl@missouri.edu.
Procedures: For the study, your school will be studied in an in depth, qualitative manner. An individual interview will be conducted with the principal, a focus group interview will be conducted with both the leadership team and a voluntary group of other teachers. I will also gather data by observing 1-2 leadership team meetings, as well as 2-3 collaborative group meetings. I would appreciate the opportunity to see meeting notes, agendas, and other documents of your work. Your participation would take approximately 30 minutes for an interview.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty. 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 573-473-3433. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Jennifer Hart, who can be reached at 573-882-4225.

Confidentiality: Participants' answers will remain confidential, anonymous, and separate from any identifying information. 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 For inquiries about your participation, please contact the researcher Michelle Smith by phone

at (573) 437-3433, or by email at mlsmith@mst.edu .

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 the professional learning communities process. The findings could serve to assist schools engaged in these or other team based improvement efforts. If you have questions regarding your 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,
Michelle Smith, Doctoral Candidate

I, _____agree to participate in the study of the professional learning communities process being conducted by Michelle Smith.

By signing this consent form and participating in the focus group interview, I understand 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 the interview.
3. My identity will be protected in all reports 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

Appendix D

Interview Questions

The questions below will guide the individual interviews and focus groups:
Describe how your school decided to implement the PLC process.
      Probe: Describe what a PLC is.
As a result of your work as a PLC, has your school undergone any changes in the last two to three years?
      Probe: Describe the process used to implement that change.
How does your school assist struggling learners?
      Probe: Describe the process you used to develop these structures.
Describe the way your principal involves teachers in decisions.
Describe a situation where teachers were in conflict with one another with respect to their collaborative work.
      Probe: How was it resolved?
How do you recognize and celebrate accomplishments?
      Probe: (If only accomplishments of students are described). Are teachers or
      groups of teachers recognized?
Describe the culture of your school, the way it feels to work here.
You have time set aside to work in collaborative groups. Talk about the way that time is used.
      Probe: What are the expectations, structures, etc., for collaboration?
         How is the use of time for group collaboration decided?
Describe your school's vision.
      Probe: How does that influence collaboration?
What common expectations are there for those who work here?
      Probe: In order to work here, what do you have to commit to?
 (Assessments, curriculum, etc.) What guides student learning here?
      Probe: Talk about the processes you use to focus on learning?
How does your organization look now compared to how it looked three years ago?
      Predict how it will look three years from now?

Appendix E

Observation Protocol

1. **Structures.** Describe what is used to guide the meeting, including any agendas, roles for participants, norms for the group, or discussion protocols. Attach documents for artifacts. Note the source of these structures, whether they were developed by the group or come from another source.

2. Content/focus of meeting. Describe the work of the group, particularly as it may or may not relate to student data, learning and instruction. Does the group stick to their intended plan or deviate from it. Note approximate times spent on each topic.

3. Patterns of interaction. Note how the participants work together, including formal and informal language patterns. Do members appear to communicate openly and honestly, how are disagreements handled? Observe body language of participants as well as levels of participation. To what degree do participants share ideas, plan to collaborate at other times, demonstrate an interest in implementing the work. What leadership patterns emerge?

4. Resources/tools. Describe technology or other resources used, including materials related to assist in their work, informational resources (include source).

5. Products. Does the time spent together produce any tangible products, including assessments, charts, graphs, instructional plans, planning documents, etc.

6. **Tone.** Describe the energy level in the room, enthusiasm, mood, etc.

Appendix F

List of documents reviewed:

Collaborative team assignments and schedules

Minutes from leadership team meetings

Minutes from collaborative team meetings (completed using form developed by leadership team)

Faculty meeting/inservice agendas and handouts

Informational materials given to faculty

Common assessments developed by collaborative teams

School newsletters

School website

Surveys administered to faculty

Collaboration Report – Bryan Middle School

PLC Group: !   Date: January 20, 2009 _____

Facilitator: _____   Recorder: Mindy____
PLC Members Present:

Emily, Debbie, Mindy and Sabrina

Protocols/Strategies/Facilitation Tools (Check all that apply):

Common Assessment
___ Create formative common assessments
___ Data Analysis-District

___ Data Analysis-Grade Level Group
___ Collaboration inquiry/action research

GLE's/ SMART Goals/Curriculum
☐ SMART Goal Progress
___ Refine lessons or unit design

___ Curriculum pacing
___ Essential Course Outcomes (assess objectives)

MAP Strategies
___ Teacher/Student Preparation for MAP
___ Discuss MAP standards implementation

___ Data Analysis of MAP

Sharing (Best Practices)
___ Study differentiation strategies
___ Discuss shared reading
___ Lesson Plans
___ **Other (explain below)**

___ Analyze student work
___ Teaching Strategies
___ Sharing Successes
___ Celebrating Successes

Norms:
1. Be on time
2. Stay on topic
3. Email if not coming (due to absence or meeting)
4. Be prepared with your materials and selected topics
5. Don't work on anything but collaboration topics
6. Give everyone a voice

Today's Agenda:

For Next Time:

MISSOURI PROFESSIONAL LEARNING COMMUNITIES

CONCEPTUAL FRAMEWORK – TRAINING OUTLINE

It is assumed that an overview of the conceptual framework (six components and three themes) is covered in the Summer Academy for PLC Coaches. Given eight monthly meetings for coaching teams, the following outline covers suggested topics for those meetings.

1. **Laying the Foundation / Clarifying Priorities**
    a) Examine the Four Pillars: Mission, Vision, Values and Goals
    b) Define Mission: Fundamental Purpose of Schools is Student Learning
    c) Discuss the four Corollary Questions:
        ➢ What do we expect students to learn?
        ➢ How will we know when they have learned it?
        ➢ How will we respond when they don't learn?
        ➢ How will we respond when they already know it?
    d) Define Vision: Create a Compelling Future
    e) Define Values: Generate Collective Commitments
    f) Examine the Change Process
    g) Establish Baseline Data (PLC Formative Assessment Tool)

2. **Examining the Current Reality**
    a) Paint a Picture of the School with Data
    b) Examine Methods of Data Analysis
    c) Facilitate Data-Driven Dialogue
    d) Set School-wide Goals

3.1 **Forming Collaborative Teams**
    a) Build a Collaborative Culture
    b) Define Collaborative Teams
    c) Establish Norms and Protocols
    d) Discuss Meeting Management Strategies
    e) Examine Parameters of Time
    f) Use the Eighteen Critical Issues as a Guide

3.2 **Forming the Leadership Team**
    a) Model Collaboration (norms and protocols)
    b) Communicate and Coordinate
    c) Provide Data for Collaborative Teams
    d) Develop School-wide Systematic Interventions
    e) Monitor School-wide and SMART Goals

      f)   Collect Collaborative and Leadership Team Artifacts

4. Collaborative Teams Focus on Results
    a) Engage in Collective Inquiry (Analyze Student Achievement Data)
    b) Establish Grade Level or Department Achievement Targets
       (SMART Goals)
    c) Clarify Essential Outcomes (Clear Targets)
    d) Understand the difference between Assessment **of & for** Learning
    e) Understand 5 Keys to Quality Classroom Assessment **for** Learning
    f) Develop Formative and Summative Common Assessments
    g) Focus on Continuous Improvement
       (Implement the PDSA Learning Wheel)

5. Mid-Year Review of Progress
    a) Foster Results-Oriented Culture (Communication Audit)
    b) Benchmark Evidence of Progress on Goals
    c) Use Formative Assessment Tool for PLC

6. Refining the Work of Collaborative Teams
    a) Focus on Active Student Engagement
    b) Examine Best Instructional Practices (Powerful Learning / Marzano)
    c) Discuss Tuning Protocols for Examining Student Work
    d) Discuss How Collaborative Teams are Using Data

7. Establishing a Pyramid of Interventions
    a) Build Relationships with Students
    b) Identify Strengths and Build on Them
    c) Involve Students in Decision-Making and Measuring Progress (connection between assessment and student motivation)
    d) Response to students in need is systematic, school-wide and timely
    e) The response is increasingly directive (not invitational) and the number of students diminishes at the apex of the pyramid.

8. End-of-Year Review and Planning for Year Two
    a) Examine Formative Assessment Tool for PLC
    b) Share Successes for Year One
    c) Examine Barriers to Progress
    d) Plan for Year Two

A Project of the Statewide Department of Elementary and Secondary Education

VITA

Michelle Koepke Smith was born and raised in Owensville, Missouri, completing high school there in 1986. She earned a BA in Elementary Education from the University of Missouri-Columbia in 1989, followed by a Masters in Curriculum and Instruction in 1993. She joined the Statewide EdD Cohort program in 2005 and completed this degree in 2009.

Michelle was an elementary teacher in Owensville, Missouri from 1989-2004. In 2004, she joined the South Central Regional Professional Development Center at Missouri University of Science and Technology in Rolla, Missouri. She continues here work there as a Professional Learning Communities Specialist.