

COMPARISON OF PERCEPTIONS OF PRINCIPALS AND TEACHERS IN MISSOURI
HIGH PERFORMING SCHOOLS CONCERNING THE PRINCIPLES OF PROFESSIONAL
LEARNING COMMUNITIES

LORI WILSON

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The undersigned, approved by the Department Chair of Graduate Studies in Education, have examined a dissertation entitled:

COMPARISON OF PERCEPTIONS OF PRINCIPALS AND TEACHERS IN MISSOURI
HIGH PERFORMING SCHOOLS CONCERNING THE PRINCIPLES OF PROFESSIONAL
LEARNING COMMUNITIES

Presented by Lori D. Wilson a candidate for the degree of Doctor of Education and hereby certify that in their opinion it is worthy of acceptance.

Dr. Pam Hedgpeth, Advisor/Chair

Date

Dr. Robert Perry, Committee Member

Date

Dr. Stephen Kleinsmith, Committee Member

Date

COMPARISON OF PERCEPTIONS OF PRINCIPALS AND TEACHERS IN MISSOURI
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LEARNING COMMUNITIES

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Lori Dawn Wilson, B.S., M.S., M.B.A., Ed. Spec.

Dr. Pam Hedgpeth, Dissertation Advisor

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Dedication

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Also, to my sons Derek and Conner..... I hope I have set the example that education never ends. Your journey is just beginning.

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Abstract

Literature suggests that Professional Learning Communities in schools play an important part in high academic achievement of students. The purpose of this study was to examine the perceptions of principals and teachers regarding characteristics of PLCs and their importance for student performance in high performing secondary schools. Two research questions guided this study. The first question was which characteristic of Professional Learning Communities perceived by principals in high performing secondary schools is the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice? The second research question was which characteristics of Professional Learning Communities perceived by teachers in high performing schools is the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?

This mixed method descriptive study examined data gathered from the PLCA—R instrument (Olivier, Hipp, & Huffman, 2010). The sample population consisted of principals and teachers in 22 randomly selected secondary schools that were awarded Distinction in Performance for five consecutive years and were Professional Learning Communities. The findings of this study demonstrated significantly statistical differences in principal and teacher perceptions of the dimensions of Professional Learning Communities.

Based on the findings of this study, implications for principals in developing and sustaining Professional Learning Communities include (1) leaders should be aware of opportunities where teachers can participate and share responsibility in decisions and leadership roles, (2) Teachers will believe in a shared vision they help to create. A principal should involve the faculty in the collective activity of developing the vision and reaffirm the vision each year

and (3) to foster shared personal practice by teachers, principals need to encourage a culture of collaboration, risk-taking, reflection and feedback absent from judgment.

Chapter I

Introduction

COMPARISON OF PRINCIPALS AND TEACHERS IN MISSOURI HIGH PERFORMING SCHOOLS CONCERNING THE PRINCIPLES OF PROFESSIONAL LEARNING COMMUNITIES

Professional Learning Communities (PLCs), a model of school reform, is associated with various academic scholars and practitioners (Blankstein, Houston, & Cole, 2008; DuFour, 2004; DuFour, DuFour, Eaker, & Karhanek, 2004; DuFour & Marzano, 2011; Hord, 1997, 2004; Hord & Sommers, 2008; Louis & Kruse, 1995; Senge, 1990, 2000). In 1990, Senge published *The Fifth Discipline: The Art & Practice of Learning Organizations*. This work, grounded in human relations and organizational theory, provides the conceptual framework for PLCs. Senge (2006) defined the learning organization as one in which “people continually expand their capacity to create desired results, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continually learning how to learn together” (p. 3). After publication, the premise of creating and sustaining learning organizations was explored by leaders in educational reform. Senge et al. (2012) also stated:

A learning school is not so much a distinct and discrete place (for it may not stay in one building or facility) as a living system for learning – one dedicated to the idea that all those involved with it, individually and together, will be continually enhancing and expanding their awareness and capabilities. (p. 7)

Genuine learning organizations are characterized by five core guiding disciplines: personal mastery, mental models, shared vision, team learning and systems thinking (Senge, 1990, 2006).

Senge's work concerning learning organizations was originally created for the business sector, yet the concept became more prevalent in education circles. Learning organizations within schools became known as learning communities or Professional Learning Communities (Hord, 1997, DuFour & Eaker, 1998). According to Hord (1997), the idea of a learning organization is a method to increase a school's capacity and creativity. In 1992, Hord had the opportunity to work in a school that matched Senge's description of a learning organization. This experience, plus subsequent research at the Southwest Education Development Laboratory (SEDL), led to the development of PLCs within schools that supported continuous improvement and positive school cultures (Hord, 1997, 2004).

According to Hord (2004), the five-year study, *Creating Communities of Continuous Inquiry and Improvement (CCCI)*, created in conjunction with SEDL, determined five essential practices a learning organization must have in the development of PLCs. Shared leadership by the principal allows faculty and staff to participate in decisions that affect the school. A shared vision that is common with all members of a PLC leads to a collective commitment to student learning. Collective learning and shared practice are integral to the collaborative efforts of the PLC members. In PLCs teachers analyze, reflect and share instructional strategies that improve student achievement. The final essential practice of supportive conditions encompasses physical structures and interpersonal relationships. All practices are crucial development of a PLCs. (Hord, 1997, 2004)

Hord's (1997, 2004) extensive work with Professional Learning Communities (PLCs) affirms Senge's (1990) five core guiding disciplines of learning organizations: personal mastery, shared vision, mental models, team learning and systems thinking. Through Hord's (1997, 2004) work with Southwest Education Development Laboratory (SEDL) and the study of schools that

operated as PLCs, it was revealed that these schools paralleled Senge's (1990) learning organization. Whether schools are labeled as learning organizations or Professional Learning Communities, it is important to remember the need for a "learning approach to education" that involves everyone "in expressing their aspirations, building their awareness and developing their capabilities together" (Senge et al., 2012, p. 5).

Outline of the Study

Chapter I contains the overview of the study, including a brief introduction to the topic, the statement of the problem, the purpose of the study, the research questions, the research hypothesis, the limitations and delimitations of the study and definition of terms. Chapter II is a review of literature on the dimensions or tenants of PLCs based on the work of Peter Senge (1990, 2006) and Shirley Hord (1997, 2004) in conjunction with the Southwest Educational Development Laboratory. The tenants of PLCs are summarized into three broad categories:

- Leadership
 - *Shared and supportive leadership* requiring the "collegial and facilitative participation of the principal who share leadership – and thus, power and authority – by inviting input and action decision-making" (Hord, 2004, p. 7).
- Culture
 - *Shared vision and values* among school staff that guide decisions about teaching and student learning and support norms of behavior.
 - *Supportive conditions* that include a collaborative environment and has been described as "the single most import factor" for successful school improvement.

- Collaboration
 - *Collective learning and application of learning* engage school staff at all levels in processes to collectively seek new knowledge and ways of applying that knowledge to their work.
 - *Shared practice* involves the review of teachers' behavior by colleagues, including feedback and assistance (Hord, 2004).

Chapter III provides details about the design of the study, including information about the participants, data collection procedures, and statistical analyses. The results of the hypothesis are presented in Chapter IV. The discussion, implications, and conclusions about the findings are presented in Chapter V.

Problem Statement

Effective implementation of Professional Learning Communities (PLCs) characteristics may have a positive effect on high school students' achievement, but not all participants in a PLC may perceive the components as being of equal importance to the successful implementation of a PLC and providing a positive effect on high school students.

Purpose for the Study

To add to the existing knowledge of PLCs, this study will examine the perceptions of principals and teachers regarding characteristics of PLCs and their importance for student performance in high performing secondary schools. During the fourth Missouri School Improvement Program (MSIP) Cycle, performance determines the accreditation level of a school district. For the purpose of this research, Missouri school districts awarded Distinction in Performance for five consecutive years, 2007-2012, and are Professional Learning Communities will be considered high performing. The researcher seeks to determine which dimension of

PLCs principals and teachers perceive to have the most impact on student performance. In this study, the dimensions of Professional Learning Communities and statements about these dimensions were taken from The Professional Learning Community Assessment – Revised (PLCA-R) (Olivier, Hipp, Huffman, 2010).

Research Hypothesis

Null Hypothesis: Principal and teacher perceptions of high level implementation of the Professional Learning Communities characteristics defined by d: shared and supportive leadership, shared vision and values, collective learning and application of learning, supportive conditions and shared practice, will not differ.

Research Questions

1. Which characteristics of Professional Learning Communities are perceived by principals in high performing secondary schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?
2. Which characteristics of Professional Learning Communities are perceived by teachers in high performing schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?

Limitations

Several limitations represented in this study are discussed to provide additional understanding. The findings of the study were limited by the validity and reliability of the instruments. The accuracy and perception of the participants also limited the findings of this study. It is assumed the principals and teachers responded honestly and interpreted the

instrument as intended. Years of service, levels of experience, and levels of education may lead to different responses from varied educators. Limitations of the survey data collection method may influence the inability to collect a large representative sample. Finally, the findings of the study were limited by the variance of the practice of Professional Learning Communities (PLCs) tenants from school to school.

Delimitations

The parameters of this study limit generalization. The researcher assumes the tenants of Professional Learning Communities are not practiced consistently or equally in all schools surveyed. Data received from the PLCA-R are an accurate representation of teacher perceptions and how they relate to the tenants of PLCs. The Missouri schools surveyed were chosen based on Distinction in Performance and practicing PLCs. Only principals and teachers were asked to participate in this study.

Definition of Terms

Collaboration. Dufour and Marzano (2011) defined collaboration as “a systematic process in which teachers work together interdependently to analyze and impact professional practice (and) improve results for students and school” (p. 10).

Collective learning and application of learning. Hord (2004) described collective learning and application of learning as the dimension of Professional Learning Communities which “requires that the school staff at all levels are engaged in processes that collectively seek new knowledge among staff and application of the learning to solutions that address students’ needs” (p. 7). Inquiry is developed through reflective dialogue and creates community, forces debate, and promotes understanding and appreciation of the work of others (Hipp & Huffman, 2010; Hord, 1997; Louis & Kruse, 1995; Senge, 2000; Sergiovanni, 1994).

Culture. There is not an accepted definition of organizational culture. Edgar Schein, (2004) an authority on organizational culture, defined organizational culture, as including what employees do, don't do, say, decide, et, based on a specific cultural context. Culture is also characterized by norms of continuous learning and improvement and opportunities for staff reflection, collective inquiry and sharing personal practice (Peterson, 2002).

Professional Learning Community. Professional educators work collectively and purposefully to create and sustain a culture of learning for all students and adults (Hipp & Huffman, 2010). Hord (1997) described the professional learning community as an organizational structure that is characterized by the following: 1) supportive and shared leadership; 2) shared values and vision; 3) collective learning and application; 4) shared personal practice; and 5) supportive conditions – relationships and structures.

Shared practice. This dimension of Professional Learning Communities “involves the review of teacher behavior by colleagues and includes feedback and assistance activity to support individual and community improvement” (Hord, 2004, p. 7). This review and feedback encourages and provides opportunities for teachers to work diligently, utilize best practices and keep up with current research (Louis & Kruse, 1995; Sergiovanni, 1994).

Shared values and vision. Hord (2004) described shared values and vision as the dimension of Professional Learning Communities, which “include an unwavering commitment to learning that is consistently articulated and referenced in the staff's work” (p. 7). A vision is a mental image that is vital to an individual and an organization. Shared vision “is a preferred image of the future that compels staff to work toward that image” (Hord, 2004, p. 9).

Supportive and shared leadership. The dimension of Professional Learning Communities which “requires the collegial and facilitative participation of the principal who

shares leadership – and thus, power and authority – by inviting staff input and action in decision making” (Hord, 2004, p. 7).

Supportive conditions. The dimension of Professional Learning Communities which “include physical conditions and human capacities that encourage and sustain a collegial atmosphere and collective learning” (Hord, 2004, p. 7). The physical conditions include: having the time, place proximity to peers, norms of behavior, schedule, policies and processes for communicating and collaboration. The human capacities include: the willingness of teachers to work together by being able to trust, support, and interact positively and purposefully with others.

Summary

Professional Learning Communities (PLCs) or learning organizations are comprised of five dimensions: shared and supportive leadership, shared vision and values, collective learning and application, shared personal practice and collective conditions relationships and structures. This study will explore the dimensions of PLCs, as well as, the perceptions of principals and teachers in high performing Missouri secondary schools that were awarded Distinction in Performance for five consecutive years and PLCs.

Chapter I set the stage for this study by providing background information on PLCs. This chapter also includes the outline of the study, problem statement, purpose for the study, research hypothesis and research questions. Chapter II reviews the literature providing support and context to the dimensions of PLCs. This chapter is divided into three sections: leadership, culture and collaboration. The section on leadership includes shared leadership; the section on culture includes vision and supportive conditions relationships and structures, and the section on collaboration includes collective learning and application and shared practice. The research

methodology is presented in Chapter III. The validity and reliability of the survey instrument, Professional Learning Community Assessment Revised (PLCA-R), are also explained in this chapter. The findings of this study are presented in Chapter. IV. The research hypothesis is addressed, findings for each of the research questions are addressed, as well as comments made by principals and teachers are presented. Chapter V of this dissertation reports the summary of findings, implications and recommendations for future research based on the findings of this study.

Chapter II

Review of Literature

Professional Learning Communities (PLCs) is a form of educational reform that has grown in popularity as a means to improve student achievement and one that has evolved throughout the years. Educational leaders such as Richard Dufour, Shirley Hord, and Robert Marzano have agreed that shared vision and values, collective responsibility, reflective professional inquiry, collaboration and supportive and shared leadership capacity are fundamental tenants for Professional Learning Communities to be effective (Blankstein, Houston, & Cole, 2008, DuFour, 2004; DuFour, DuFour, Eaker, & Karhanek, 2004; DuFour & Marzano, 2011; Hord, 1997, 2004; Hord & Sommers, 2008; Louis & Kruse, 1995; Senge, 2000; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). A review of the literature illustrated specific characteristics and themes that comprise quality Professional Learning Communities.

Genuine learning organizations are characterized by five core guiding disciplines or “bodies of theory and technique that must be studied and mastered to be put into practice” (Senge, 2006, p. 10). Personal mastery, mental models, shared vision, team learning and systems thinking comprise the heart of the five disciplines (Senge, 1990, 2006). Personal mastery is the underpinning of the learning organization; it deepens personal vision by developing patience, seeing reality objectively and developing a commitment to lifelong learning. Elsewhere, Raines (2009) argued personal mastery involves clarifying what is personally meaningful, visualizing it and learning how to assess current reality in relation to the vision. Senge (1990) maintained an individual becomes a lifelong learner by becoming committed to personal mastery.

Senge defined mental models as “deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action” (2006,

p. 8). The discipline of mental models improves reflection and inquiry skills that focus on developing an individual's consciousness and views of other's attitudes and perceptions (Senge et al., 2012). Mental models typically exist below the level of awareness, thus limit the ability of an individual to change. When met with a new experience most individuals only remember the information that supports their own mental models (Senge et al., 2012). According to Senge (2006), true learning in an organization occurs when members have the ability to have meaningful conversations without the fear of criticism.

Shared vision is critical for a learning organization because it provides the focus and energy for learning. A sense of commitment is built within a group, and leadership must provide the tools to achieve the vision (Senge, 1990, 2006). A shared vision develops mental images of the future that will be created by the employees of the organization (Senge et al., 2012).

According to Senge (1990, 2006), a shared vision is a compilation of personal visions. Personal visions that are shared can bind employees together by providing focus and energy. Hord (2004) reiterated a shared vision is a mental image vital to an individual and an organization. Shared vision is an image of an organization's future; a guide to all future decisions.

Senge's (1990, 2006) fourth discipline, team learning, builds on shared vision, personal mastery and the discipline of mental models. It is the process of aligning individual thinking into collective thinking of a group; the sum of all is greater than the individual capacity. Team learning incorporates the aspect of collaboration by encouraging the dialogue and discussion among members of a team. Team members should feel free to discuss complex issues, listen to one another's ideas and support decisions that are made. Dialogue within a team is the ability of its members to suspend personal assumptions and create a genuine flow of information. Complex issues are explored as a means to discovering a new point of view (Senge, 2006).

According to Senge (1990, 2006), it is imperative all disciplines work together collectively. Systems thinking, the fifth discipline of a learning organization, is the foundation for all disciplines (Senge, 1990, 2006). Systems thinking is concerned with a “shift of mind from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants in shaping their reality, from reacting to the present to creating the future” (Senge, 2006, p.69). Schein (2010) maintained the ability to think systemically and understand the collective causal effects of forces on an organization is critical to a learning organization, while Bolman and Deal (2008) supported the theory that systems thinking must become part of an organization’s culture.

Hord’s (1997, 2004) extensive work with Professional Learning Communities affirmed Senge’s (1990) five core guiding disciplines of learning organizations: personal mastery, shared vision, mental models, team learning and systems thinking. In conjunction with Southwest Education Development Laboratory (SEDL), Hord (1997) conducted a study entitled, *Creating Communities of Continuous Inquiry and Improvement (CCCII)* with a purpose to define and determine how PLCs are developed. This study also described what happens when a school staff works collaboratively and collectively. Hord’s (1997) review of literature identified potential dimensions that make a PLC successful: supportive and shared leadership, shared vision and values, collective learning and application of learning, supportive conditions and shared practice.

During the first phase of this study, Hord (1997) in conjunction with Southwest Education Development Laboratory (SEDL), chose to study twenty schools that exhibited some characteristics of the proposed dimensions determined to be necessary for Professional Learning Communities: supportive and shared leadership, shared vision and values, and collective learning and application of learning. Hord and SEDL selected professional educators and

colleagues to become involved in the project and become co-developers. The co-developers were comprised of practitioners from higher education, state education agencies, local education agencies and individual school campuses. Their role in the study was to collaborate on the process of developing Professional Learning Communities (PLCs), to facilitate the development of Professional Learning Communities in schools, to contribute and document the research and to disseminate information about the study to others (Hipp & Huffman, 2000; Hord, 2004).

During the second phase of the study, the project co-developers collected and analyzed both qualitative and quantitative data from the selected schools. This data was collected through principal and teacher interviews and the administration of Hord's (1998) PLC questionnaire, *School Professional Staff as Learning Community*. The questionnaire, constructed from Hord's (1997, 2004) five dimensions of Professional Learning Communities, was administered three consecutive years (Huffman & Hipp, 2003). During phase three of the project, on-site structured interviews were conducted to gain further insight into the implementation of PLCs in the twelve schools that remained in the study. Upon further investigation it was determined that six schools exhibited characteristic of Hord's dimensions of PLCs (Huffman & Hipp, 2003).

According to Huffman and Hipp (2003), researchers analyzed the interviews using a variety of related indicators to examine and substantiate the thoroughness of Hord's five-dimensional model. Although Hord's dimensions are separate and distinct, overlapping characteristics were discovered within the dimensions. Four themes of Professional Learning Communities were developed as result of *Creating Communities of Continuous Inquiry and Improvement (CCCII)*. First, Professional Learning Communities are a way of operating; it is a continual process that evolves and changes to meet the needs of students. Second, due to the unceasing process of PLCs, change is a constant. To promote change, ongoing learning is

required and as one learns, it is a catalyst for change. The third theme is embedded value. As the teachers in Professional Learning Communities (PLCs) are supported to develop learning strategies for students, their own need for learning will increase. Finally, the five characteristics of PLCs work interdependently to support effective PLCs.

Hord's (1997), work was based in part on research conducted by Astuto. Astuto's work described a "professional community of learners" as a place in which teachers and administrators of a school continuously seek and share learning and act on that learning (Astuto, Clark, Read, McGree, & Fernandez, 1993). Through this work, three related communities were proposed. The first community was comprised of educators. Learning communities of teachers and students were the second, and the third was a community comprised of stakeholders. This continuous inquiry and improvement model was designed to enhance educator's effectiveness so that students benefit (Astuto, Clark, Read, McGree, & Fernandez, 1993).

Hord (1997, 2004), confirmed there were five essential dimensions of effective Professional Learning Communities: shared and supportive leadership, shared vision and values, supportive conditions, collective learning and application of learning, and shared practice. The first dimension, shared and supportive leadership, encourages the school administrator to invite teacher input in decision making. Through this dimension collegial input is promoted while sharing power and authority with teachers (Hord, 1997). Expertise is distributed throughout a school rather than one person holding all of the knowledge. The administrator becomes a leader of leaders by developing the capacity of people throughout the school to assume leadership positions (DuFour, DuFour & Eaker, 2008). Eaker, DuFour, and Burnett (2002) described this type of leadership as:

One of the most fundamental cultural shifts that takes place as schools become Professional Learning Communities involves how teachers are viewed. In traditional schools, administrators are viewed as being in leadership positions, while teachers are viewed as implementers or followers. In Professional Learning Communities, administrators are viewed as leaders of leaders. (p. 22)

Hord's (1997, 2004) next confirmed dimension, shared vision, was also identified by Marzano, Waters and McNulty (2005) as a component of school culture that had a positive impact on student achievement. Hord (1997, 2004), described shared values and vision as a collective benefit for the administrator and the teachers. A clear, shared vision motivates and energizes people, creates a proactive organization, gives direction, establishes standards of excellence and creates a clear agenda for action (DuFour, DuFour & Eaker, 2008). Morrissey's work related to PLCs, *Professional Learning Communities: An Exploration* (2006), described how shared vision and goals should be constructed by members of the PLC and values and beliefs should be embedded in daily practice and woven into the fabric of school and community life. Based on this research, the vision, beliefs and goals should be centered on student achievement, learning and growth (Annenberg Institute, 2003; DuFour & Eaker, 1998; Hord, 1997; Kruse, Louis & Bryk, 1994; Patterson & Rolheiser, 2004; Senge, 2000).

Supportive conditions, the third dimension of Professional Learning Communities (PLCs), would be considered the element that holds the other components of Professional Learning Communities together (Huffman and Hipp, 2003). Hord (1997, 2004) indicated supportive conditions fall into two categories: structural or human. These conditions determine when, where and how the teachers develop trust, work towards a shared vision and share decision making (Hord, 1997). Structural conditions include time for teachers to meet and share

information, optimum physical proximity to fellow teachers, teaching roles that are interdependent, communication structures that encourage the exchange of ideas and teacher empowerment and school autonomy (Kruse, Louis, Byrk, 1994). The second type of supportive condition is human capacities or collegial relationships. Collegial relationships include support for teachers to take risks for critical inquiry and improvement, mutual respect and trust, supportive leadership and a caring relationship among students, teachers and administrators (Huffman & Hipp, 2003; Kruse, Louis, Byrk, 1994). According to Morrissey (2000) the key to maintaining the growth and development of a community of professional learners is the creation of supportive conditions.

Schools that function as an effective PLC developed a collaborative culture of collaborative teams, collective inquiry, action orientation and continuous improvement (DuFour, DuFour & Eaker, 2008). To address this need, the fourth dimension of collective learning and application of learning are evidenced by administrators, faculty and staff seeking knowledge, skills, and strategies and applying this knowledge to their work (Huffman, & Hipp, 2003). According to DuFour, Eaker, and DuFour (2005):

The Professional Learning Community (PLC) concept is specifically designed to develop the collective capacity of a staff to work together to achieve the fundamental purpose of the school: high levels of learning for all students.

Leaders of the process purposefully set out to create the conditions that enable teachers to learn from one another as part of their routine work practices.

Continuous learning becomes school based and job embedded. (p. 18)

Educators that participate in collective learning engage in inquiry that builds shared knowledge about best practices in teaching and learning. This collective inquiry allows for

clarification and application of current practices and assessment of student learning (DuFour, DuFour, Eaker, 2008).

The fifth dimension of high quality Professional Learning Communities (PLCs) identified by Hord (1997, 2004), involved shared personal practice. Elmore (2000) stated “isolation is the enemy of improvement” (p. 5). To combat teacher isolation, administrators engage in direct observation of practice in classrooms without criticism and judgment. Systems are created to permit interaction among classrooms allowing teachers to focus on acquisition of new skills and knowledge (Elmore, 2000). In a study commissioned by The National Commission on Teaching and America’s Future, it was determined when teachers are given the time and tools to collaborate, they become lifelong learners. As a result of collaboration, instructional practice improves which leads to an increase in student achievement (Carroll, Fulton, & Doerr, 2010).

In 2005, an executive report, commissioned by the Department for Education and Skills, General Teaching Council for England and the National College for School Leadership, summarized their findings about PLCs in a report titled, *Creating and Sustaining Effective Professional Learning Communities*. This work reiterated Hord’s (1997, 2004), research related to effective Professional Learning Communities (PLCs) by noting schools must incorporate the key tenets of shared and supportive leadership, shared values and vision, collective learning and application of learning, supportive conditions and shared practice. The study noted PLCs are a school improvement method used to promote student and professional learning. In developed PLCs, student and teacher learning is at the center of its effectiveness. The characteristics that reflect Hord’s five dimensions of PLCs are critical in school and system wide capacity building for sustainable improvement and student learning (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005).

Each of Hord's dimensions are not discrete; they are intertwined (Morrissey, 2000). Leadership standards issued by the Interstate School Leaders Licensure Consortium and adopted by the National Policy Board for Educational Administration (Council of Chief State School Officers, 2008) reinforced the fact that the tenants of Professional Learning Communities (PLCs) are intertwined. According to these standards an educational leader should facilitate the development, articulation, implementation and stewardship of a vision of learning. To accomplish the coexistence of these tenants, an educational leader should advocate, nurture and sustain a school culture that is favorable to student growth. An educational leader should collaborate with faculty and manage resources in such a way that promotes the success of every student (Council of Chief State School Officers, 2008). These standards emulate the essence of effective leadership of a Professional Learning Community.

Hord's (1997, 2004) dimensions of PLCs can be summarized into three broad categories:

- Leadership
 - *Shared and supportive leadership* requiring the “collegial and facilitative participation of the principal who share leadership and thus, power and authority by inviting input and action decision-making” (Hord, 2004, p. 7).
- Culture
 - *Shared vision and values* among school staff that guide decisions about teaching and student learning and support norms of behavior.
 - *Supportive conditions* that include a collaborative environment and have been described as “the single most import factor” for successful school improvement.

- Collaboration
 - *Collective learning and application of learning* engage school staff at all levels in processes to collectively seek new knowledge and ways of applying that knowledge to their work.
 - *Shared practice* involves the review of teachers' behavior by colleagues, including feedback and assistance (Hord, 1997, 2004).

In the next three sections, these three broad categories of Hord's (1997) work will be defined and explained.

Leadership

Leaders make a difference; they are the catalyst for school change (Hord & Sommers, 2008). A leader is responsible for focusing on staff and student learning throughout the school. A school's ability to improve student achievement is directly related to the degree an administrator aligns building beliefs and programs with the characteristics of Professional Learning Communities (Mattos, 2008). In a Professional Learning Community (PLCs), the principal is responsible for creating ongoing conversations, encouraging teacher participation and sharing educator's learning (Hord & Sommers, 2008). One of an administrator's primary responsibilities is to create conditions that help teachers improve upon the collective capacity to ensure all students obtain the knowledge, skills and dispositions essential to success. Based on this element of leadership, an administrator should disperse leadership throughout the school. A shared leadership model allows for empowerment of teachers and develops the capacity of educators to become school leaders. The leader of a school should align the structure and culture of the school with its core purpose; ensuring students learn at high levels (DuFour, DuFour & Eaker, 2008).

In support of Hord's discoveries on leadership, Reeves (2006) also classified seven dimensions of leadership. Reeves (2006) believed one single leader cannot possess all aspects of leadership, but he/she ensures every dimension is provided by a member of the organization's leadership team. A leader hires people with different skillsets, intelligence and behavioral characteristics. Visionary leadership, Reeves (2006) first dimension, necessitates knowing one's personal role in the vision and seeing a clear path on how it is fulfilled. Visionary leaders will challenge the status quo, they articulate the vision, and communicate actions that will achieve this vision. Bohlman and Deal (2008) reiterated a vision should be voiced; it should set standards for performance and create focus and direction, while Hord and Sommers (2008) restated a leader should involve others in creating a shared vision. A vision that involves others develops conversation and encourages shared practice that is vital to PLCs.

Relational leadership is Reeves (2006) second dimension. Reeves described relational leaders as those who demonstrate listening without interrupting or prejudgment, reflect confidence and practice empathy through deliberate inquiry. Relational leaders rely on trust and integrity, the foundation of any enduring relationship (Reeves, 2006). Kouzes and Posner (2003, 2010) revealed in studies of over one million leaders, the trust and credibility that stem from meaningful relationships is essential for leadership success.

Reeves (2006) noted a third dimension for effective leaders is the quality of systems thinking. This involves the ability to understand the interaction of individuals and their impact on the entire organization. These actions are then communicated in a manner that allows each member of the organization to understand (Reeves, 2006). Senge (2006) defined systems thinking as a body of knowledge and tools that help people see underlying patterns and how they can be changed. "Systems thinking is a discipline for seeing wholes. It is a framework for seeing

interrelationships rather than things, for seeing patterns of change rather than static snapshots” (Senge, 2006, p. 68). Understanding these patterns will allow a school leader to be proactive rather than reactive when making changes in programs and practices (Gregg, Niska, & Thompson, 2004).

Reflective leadership is the fourth dimension as suggested by Reeves. According to Reeves (2006), leaders must reflect on lessons learned, document the small wins and setbacks, record conflicts between values and practice and notice trends over time. Reflective practices allow a leader to bridge the gap between intended outcomes and actual outcomes. To bridge this gap a leader should reflect on difficult issues faced, challenges associated with the outcome and progress made toward the result.

Reeves (2006) fifth dimension of leadership focused on collaboration. A collaborative leader embraces shared decision making and encourages shared leadership among teachers (Hord & Summers, 2008). Reeves (2006) communicated there are three levels of decision making in collaborative leadership. Level One allows teachers to use professional discretion and their ability to make decisions on instruction, practice, and assessment. Level Two decisions are made together between teachers and administrators. To accomplish a true sense of collaboration, teachers and administrators try to reach a consensus or reach common ground on decisions. Any decisions made unilaterally by leaders are Level Three decisions, and these decisions involve issues of safety and values and are not open to collaboration.

Analytical leadership, Reeves (2006) sixth dimension, noted leaders are persistent questioners with raw intellect and problem solving abilities. Evidence of analytical leadership is found in a person’s ability to master the understanding of budgets, assessment scores, and statistical data. According to Ventura (2011), leadership driven by data leads the way to better

inquiry and decision making. Even though analytical leaders and collaborative leaders are at the opposite end of the leadership continuum, Reeves (2006) asserted analytical leaders require extensive collaborative skills to apply and distribute the lessons that inquiry and analysis can provide.

Communicative leadership, Reeves (2006) final dimension, stressed a leader must master traditional written and oral communication skills, as well as, be adept in voice mail, email, and webcasts. Leaders can utilize twenty-first century technology and resources to optimize their effectiveness with the power of personal communications (Reeves, 2006). According to Rebore (2003), effective educational communicators realize a positive learning environment is constructed when communication is used effectively. A positive learning environment is developed when the leader appreciates there are consequences to every communication transmitted and the content of the communication sets the tone for how the communication is perceived. A leader also recognizes there are multiple strategies to ensure effective communication, with two-way dialogue as the means which is most common between educators and members of the community. Through effective communication leaders are able to anticipate problems, make decisions, coordinate projects, teach others and develop relationships (Anderson, 2006).

Effective leadership is necessary, according to Hord (1997, 2004), in successful Professional Learning Communities. Reeves (2006), concurred by elaborating that effective leadership is multi-dimensional. The next section will provide information on shared leadership related to Hord's research (1997, 2004).

Shared Leadership

As one of the five characteristics of Professional Learning Communities (PLCs), Hord believed shared leadership is applied when administrators and teachers participate democratically by sharing power, authority and decision making (Huffman and Hipp, 2003). Bureaucratic and management theory has shaped traditional school leadership during most of the twentieth century, using a top-down approach to leadership. In this model the leader makes the key decisions and motivates and inspires in an attempt to lead the school. Through research and implementation of this model, an evaluation of shared leadership has prevailed, supporting the theory that a single administrator cannot serve as the instructional leader (Hart, 1995; Lambert, 2002; MacNeil, & McClanahan, 2005). It is no longer the belief that one administrator can serve as the instructional leader without participation of other educators (Elmore, 2000; Lambert, 1998; Spilane, Halverson, & Diamond, 2001). As the instructional leader, it is difficult for the principal to meet all the challenges of building an organizational culture that focuses on continual improvement, teachers' capacities and skills and student learning. Because of this, leadership authority should be dispersed within a school (Fullan, 2001; Harris & Muijs, 2005; Lambert, 1998; Leithwood and Riehl, 2003; Sergiovianni, 2001).

Professional Learning Communities are built around the concept that leadership should be dispersed through the school (DuFour, Eaker, DuFour, 2005; Hord 1997, 2004; Hord and Sommer, 2008; Huffman & Hipp, 2003). To achieve this, effective leaders acknowledge leadership capacity is "broadly distributed in the population and is accessible to anyone who has passion and purpose to change things as they are" (Kouzes & Posner, 2010, p. 5). According to Lambert, this shared leadership allows for learning together and developing knowledge collectively and collaboratively (Lambert, 2002). Senge (1990) believed a school will flourish if

the teachers and administrators develop the capacity to learn and lead in all facets of the school processes.

A culture of trust is the foundation of shared leadership (Allison, Misra, & Perry, 2011). Rebecca Dufour described the process of earning trust in Professional Learning Communities:

Trust is built over time. It goes back to the idea of leaders modeling their priorities when leaders do the thing they are asking others to do. People, over time, will see that the norms leaders set, and the commitments they make really do drive the work. They must recognize that leaders are going to do what they say they'll do, rather than just talk about it. (Eaker, DuFour, DuFour, 2002, p.89)

Austin Buffum, Ed.D., (2008), retired Senior Deputy Superintendent of Capistrano Unified School District in South, Orange County, California, concurred the secret to shared leadership is trust. Buffum (2008) suggested multiple ways a principal can lay the foundation of trust. A principal should operate with honesty, integrity and demonstrate a caring attitude. Principals should be available to their faculty and staff and listen to their concerns. Sharing decision-making with the staff and encouraging risk-taking builds a culture of trust that is imperative to a PLC. In order to ensure trust, a principal should support teachers by making certain teachers have what they need to teach: books, supplies and protection from negative aspects of accountability systems.

Lambert (2002) acknowledged leadership is about learning together and developing knowledge collectively and collaboratively. Shared leadership is based on the premise that everyone has the responsibility and ability to be a leader. Leadership can be found in every educator and the action of a leader influences how teachers will participate and respond (Lambert, 2003). Shared leadership allows learning to become a collective responsibility in

Professional Learning Communities (PLCs); everyone learns how to learn. To reach this goal, an administrator or leader, as well as teachers must be learners (Hord and Sommers, 2008).

Murphy (2005) suggested enlisting teacher participation and developing leadership skills as essential to building shared leadership. Leaders facilitate this process by linking shared leadership to the school's vision. This shared vision, embraced by teachers, induces teachers to work collaboratively toward the image (Hord, 2004). Leaders identify potential teacher leaders and recruit them into the process. Liz Wiseman (2010) stated these leaders are multipliers; individuals who encourage growth and creativity from their workers. Multipliers magnify and stimulate the intelligence of others around them, and work to create the capacity of learning in an organization. To accomplish this, leaders build relationships with teachers and build supportive infrastructure to support teachers (Murphy, 2005). Leaders that are multipliers find a way to maximize the genius to the organization's benefit and remove barriers so work can be done (Wiseman, 2010). Leadership shared with teachers and stakeholders is a key tenant defined by Hord (1997, 2004) as an essential attribute of effective Professional Learning Communities.

Culture

According to Hord and Sommers (2008), a specific culture develops while working as a Professional Learning Community. The relationship among the tenants of PLCs is woven throughout the culture of a school and is considered the setting for which a PLC operates. Hord's dimension of shared vision and values promote a culture for continuous improvement, while shared leadership and supportive conditions cultivate the development of teachers (Hord 1997, 2004; Hord & Sommers, 2008; Huffman & Hipp, 2003). Schools that operate as Professional Learning Communities must have a culture that shares a sense of purpose and values, have a collective responsibility for the learning of all students and share collaborative and

collegial relationships. This culture is characterized by norms of continuous learning and improvement and opportunities for staff reflection, collective inquiry and sharing personal practice (Peterson, 2002). Because of this, Professional Learning Communities challenge the assumptions, beliefs, expectations and habits that are the norm of a school. While exploring the impact of culture on school improvement, Kruse and Louis (2009) identified Professional Learning Communities as a feature of school culture that has a positive impact on student learning. The culture of effective PLC schools demonstrate shared norms and values, practice reflective dialogue and participate in collaboration with a sense of collective responsibility for student outcomes. Although Kruse and Louis identified professional learning as a feature of school culture, Protheroe (2008) defined a PLC as a school culture itself that recognizes and capitalizes on collective strengths of its staff. Andy Hargreaves affirmed the work of Protheroe by noting, “A professional learning community is an ethos that changes every single aspect of a school’s operation” (Sparks, 2004, p. 48).

The definition of organizational culture is an abstract term than many professionals have tried to define, but have not yet reached a consensus. Even though the concept of culture dates back to the 1940’s, with an explosion of popularity in the 1980’s, there is not an accepted definition of the term. Edgar Schien (2004) provided clarity on organizational culture by describing it as what people do, don’t do, say, decide, et, based on a specific cultural context. The culture of an organization can be divided into three levels: artifacts, espoused beliefs and values and basic underlying assumptions (Schein, 2010). Artifacts are visible and observed behaviors and documents, such as, the physical environment, manner of dress, myths, stories, rituals and ceremonies. Espoused beliefs and values are ideals, goals, values and aspirations of the culture. They are the ideologies and rationalizations that influence the group to accept a

certain approach to a problem. Espoused values and beliefs may be abstract and leave areas of cultural behaviors unexplained. To understand espoused values and beliefs, the third level, basic underlying assumptions, must be taken into account. The underlying assumptions of any organization are the taken-for-granted beliefs of the organization. It is the how, what, when and where of the culture and determines the behavior, perceptions, thought and feelings of the organization (Schein, 2010).

Further investigation divides culture into many components: shared vision, values, beliefs, myths, traditions, norms, symbols, ceremonies, assumptions (Deal & Peterson 1999; Marzano 2003; Marzano, Waters & McNulty 2005; Peterson 2002; Senge 2006). Positive school culture comes from its vision and values, while actions, traditions, symbols and ceremonies determine if the culture is strong (Jerald, 2006). Kent Peterson and Terrance Deal (2002), leaders in the area of research on organizational culture, defined school culture as an “underground flow of feelings and folkways [wending] its way within schools” in the form of vision and value, beliefs and assumptions, rituals and ceremonies, history and stories and physical symbols (p. 8). Deal and Peterson (1998) suggested that schools with positive cultures have staff that share a sense of purpose. Teachers and administrators follow a common norm of collegiality and collaboration that leads to student improvement. Teacher innovation and student achievements are celebrated through traditions and rituals. Positive cultures share a commitment to student learning, as well as care and concern for students and fellow coworkers.

Hobby (2004) facilitated a study with Hay Group Education to examine the values and beliefs of over 4000 teachers in 134 different schools were examined. This study affirmed the research of the majority of leading researchers in the field of organizational culture. It concurred that the definition of culture is evasive because it is made up of various concepts that are difficult

to interpret: values, mission, vision, norms, atmosphere, and essence. Hobby (2004) of the Haywood Group stated, “viewed more positively, culture can also be the ultimate form of ‘capacity’ – a reservoir of energy and wisdom to sustain motivation and co-operation, shape relationships and aspirations, and guide effective choices at every level of the school” (p. 6).

A school which implements Professional Learning Communities effectively has a positive, supportive collaborative culture. According to Hord (1997, 2004), Professional Learning Communities support a school culture that cultivates inquiry, teacher collaboration and collective commitment of staff in the development of a shared vision. Vision, described in the next section, as noted in the work of Hord (2007, 2004), is critical to ensuring a positive PLC culture.

Vision

One of the ingredients of a productive school culture is a shared vision. According to Senge (2006), Fullan and Hargreaves (1992), and Deal and Peterson (1990), vision is a cultural element that impacts student achievement. An unwavering commitment to student learning is a shared vision that is a characteristic of PLCs according to Hord (2004). Hord (2004) believed a shared vision is a mental image that guides an organization towards the future. Senge (2006) believed that a shared vision fosters commitment to a common purpose and a learning organization cannot exist without it. In a learning organization, a shared vision establishes a principal goal and provides direction to keep the learning process on course (Senge, 2006).

In PLCs a shared vision creates a clear purpose and collective responsibility for the future and is beneficial to the culture of the school (DuFour, DuFour & Eaker, 2008). It motivates and energizes, gives direction, creates a proactive school and establishes specific standards of excellence (Dufour, Dufour and Eaker, 2008). A shared vision, as a component of school

culture, is one of the most significant actions of school leadership that impacts student achievement (Marzano, Waters, McNulty, 2005).

In positive cultures, a school's vision reflect values, beliefs, traditions, symbols, as well as reinforces learning and motivation (Peterson, 2002). A school's vision has a direct relationship with its values and beliefs and will guide policy, decisions and practice within a school. A school's vision

“should provide a compelling sense of where the school is headed and in broad terms, what must be accomplished in the future to fulfill the school's purpose.

Every decision made, every program implemented, every policy instituted, and all goals should align with the vision” (Blankstein, 2004, p. 77).

In a background paper for The Denver Commission on Secondary School Reform, (Brown, 2004) it was presented that an inspiring vision supports a school culture that values hard work and student achievement. A clear and inspiring vision also leads to a manifestation of purpose. Teachers who are associated with schools that have a strong vision or purpose exhibit characteristics of shared relationship of caring about the school. This begins to mold the culture around common values, ideas and hopes. A strong vision leads to decisions about what is essential and enables teachers to begin to have buy-in and feel they belong (Brown, 2004).

DuFour, DuFour and Eaker (2008) believed it is difficult to overstate the importance of a shared vision in PLCs. A shared vision is essential to the improvement process in a school and has been cited as a critical element of effective leadership (Bennis, 2003; Blanchard, 2007; Fullan, 2007; Interstate School Leaders Licensure Consortium, 2008; Kouzes & Pozner, 2006; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004). A culture that embraces a shared

vision has a leader that keeps a positive uplifting focus, empowers people to act, inspires others and dramatizes core beliefs (Lashay, 2006).

Hord's (1997, 2004) research on effective Professional Learning Communities (PLCs) focused on the importance of vision. To create a culture centered on a shared vision, the leader must articulate the vision, celebrate it and communicate it on a constant basis (Lassiter, 2011). Kamm (2011) stated a clear vision inspires people to action and encourages them to work collaboratively towards a common goal.

Supportive Conditions

Productive Professional Learning Communities have both physical and structural conditions in place to support the vision of the school, as well as effective use of human capacities (Hord, 2004). Physical and structural conditions that support PLCs enable teachers and administrators to participate in shared leadership, collective learning and shared practice. Huffman and Hipp (2003) described supportive conditions as collegial relationships and structures. Collegial relationships are the human side of supportive conditions. Trust, respect, and caring among students and teachers are integral to supportive conditions that support PLCs. Supportive structures which include time for staff to collaborate, proximity of staff to one another and methods of communication are important in developing a positive PLC culture. According to Hord (1997) supportive conditions “determine the when, where and how the staff regularly comes together as a unit to do the learning, decision making, problem solving and creative work that characterize professional learning community” (p. 20).

Hord (1997, 2004) indicated supportive conditions, such as physical or structural conditions and human capacities, are essential for PLC's to be effective in improving student achievement. Structural factors which include the size of the school, proximity of staff to each

other, communication procedures, teacher schedules, time and space for staff to examine current practices and availability of resources are imperative for effective Professional Learning Communities (PLCs) (Hord, 1997; Hord, Roussin & Sommers, 2010). Human and interpersonal factors such as openness, truth telling and attitude of respect for fellow teachers also support PLCs (Hord, Roussin & Sommers, 2010). Effective use of structural conditions, physical conditions and human capacities provide infrastructure for teachers to come together as a PLC.

A two year study evaluating the effectiveness of professional development determined supportive conditions were a significant factor in the program's success (Gilrane, Roberts & Russell, 2008). Collegial dialogue and discussion when developing program needs influence teacher reflection and behavior. Physical structures, such as time and location for collaborative planning and resource materials, enhance collaboration. Supportive conditions of the availability of peer mentors and support personnel, as well as teacher access to data on student learning are necessary for effective professional development and PLCs. (Gilrane, Roberts & Russell, 2008). This research supports Hord's (1997, 2004) work on supportive conditions in PLCs.

Louis and Kruse (1995) also identified interdependent teaching roles, teacher empowerment and policies provide greater autonomy as physical factors in supporting PLCs. DuFour and Eaker (1998) contended structures are critical in cultivating an effective PLC culture. Daily schedules, faculty meetings and agendas that shape instructional learning, and time and space for teacher collaboration, are examples of physical structures critical to PLC success (Garmston, 2005; Halverson, 2007). A recent study revealed course specific or grade-level teams had a positive effect in improving learning for adults and students (Gallimore, Ermeling, Saunders, & Goldenberg, 2009). Teachers are more likely to improve their practices

when learning is content based and they work with teachers that share the same learning goals for students (Little, 2006; Saphier, King, & D'Auria, 2006; Stigler & Hiebert, 2009).

In 2009, a survey conducted by the Organization for Economic Co-operation and Development (OECD) reported in most surveyed member countries of the OECD there is regularly scheduled collaboration among teachers on instructional issues in the vast majority of schools. Strategies that allow for teacher collaboration during the regular contractual day included: common preparation time, parallel schedules, adjusting the start or end of the teacher work day, sharing classes, using faculty meeting time and dedicated early release or late start times of schools (DuFour & Marzano, 2011).

Collegial relationships that include trust and mutual respect are conditions that support an effective Professional Learning Community (PLC) (DuFour & Eaker, 1998; Halverson, 2007; Hord, 2004; Huffman and Hipp, 2003). Hord (2004) acknowledged the relational perspective teachers have for each other include respect for all teachers and attitudes that support learning together. Through the supportive condition of human capacity, teachers participate in collegial learning, shared leadership and shared professional practice. A culture of trust is built on the foundation of honesty, integrity, encouragement of risk-taking and shared decision making.

Bringing together teachers without mutual trust and respect may be problematic for Professional Learning Communities. Mitchell and Sackney (2000) identified trust and mutual respect as key principles in developing PLCs. Trust allows teachers to take risks which are imperative to school improvement. Not only is trust a critical factor in shared leadership and a positive school culture, but it is also imperative to teacher collective collaboration. Supportive conditions, a key tenant of PLCs, support collective collaboration by the development of trust among colleagues.

Collaboration

Teacher collaborative inquiry is weaved tightly throughout the characteristics of an effective Professional Learning Community (PLC). Hord (1997, 2004) determined that collective and application of learning, a characteristic of effective PLCs, is evidenced by administrators, faculty and staff seeking knowledge, skills, and strategies and applying their collective knowledge to their work. Hord (2009) described learning within PLCs as “a habitual activity where the group learns how to learn together continually” (p. 40). In PLCs teachers must work interdependently to bring about positive results in student learning by analyzing their practice. (DuFour, DuFour & Eaker, 2008).

Dufour (2004) endorsed a culture of collaboration as a necessity for Professional Learning Communities. In an effective Professional Learning Community, collaboration allows teachers to develop a process to analyze their classroom practice which leads to higher levels of student achievement. In a PLC a results-oriented collaborative culture leads to interdependence, shared responsibility and mutual accountability and is more effective than reinforcing teacher isolation (DuFour & Marzano, 2011). Research has concluded that a collaborative culture, created by focusing on individual teacher development, does not create the collaboration and collective effort needed to reach the higher levels of student achievement. (Carroll, 2009; Kruse, Louis, & Byrk, 1994; Little, 2006; McCauley & VanVelsor, E., 2003) A collective focus on improvement is needed for a true collaborative culture to evolve and to reach higher student performance.

One of the five key disciplines of Senge’s (2006) work concerning learning organizations is team learning, a parallel to the frameworks of PLCs: collective learning and application of learning and shared practice. Team learning incorporates the aspect of collaboration by

encouraging the dialogue and discussion among members of a team. Dialogue within a team is the ability of its members to suspend personal assumptions and create a genuine flow of information where complex issues are explored as a means to discovering a new point of view. Decisions are not made while a team is engaging in dialogue (Senge, 2006); discussion leads to a decision. Various views are presented as a method of analysis to reach consensus and both dialogue and discussion are necessary to master team learning. This learning approach allows educators to “express their aspirations, build their awareness and develop their capabilities together” (Senge, 2000, p. 5). According to Hord (2004), reflective dialogue and inquiry is essential for congenial collaboration. This dialogue is of vital importance to collective learning and application of learning when it is continuous and focuses on students (Hord, 2004). According to Hord (2004) collaborative teaming is a crucial Professional Learning Communities characteristic.

Collective Learning and Application of Learning

Learning organizations are “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 how to learn together” (Senge, 2010, p. 3). In a learning organization leaders are designers, teachers and stewards, and there is a belief that analyzing and reflecting is a necessary part of the collective learning and application of learning (Senge, 2010). According to Hord (2008), the most promising context for collective and application of learning is the professional learning community: professionals coming together as a community to learn.

Inquiry developed through reflective dialogue creates community, forces debate, and promotes understanding and appreciation of the work of others (Hipp, Huffman, Pankake &

Olivier, 2008; Hord, 1997; Louis & Kruse, 1995; Sergiovanni, 1994; Senge, 1990). This practice embeds teacher learning as an integral part of the school culture (Hipp and Huffman, 2010). A commitment to continuous learning in a Professional Learning Community (PLC) includes participating in meaningful, job-embedded professional development. Collaborative job-embedded learning for teachers provides opportunities for purposeful planning, implementing, reflecting and sharing best practices across teams and schools. Continuous teacher learning leads to improved student learning and improved student learning is the focus of the PLC (Blankenstein, Houston, & Cole, 2007; Olivier, 2003).

In the five-year research project supported by Southwest Educational Development Laboratory (SEDL) (2000), attributes of the dimension of collective learning and application were identified. These attributes were sharing information, seeking new knowledge, skills, and strategies, and working collaboratively to plan, solve problems, and improve learning opportunities (Hipp & Huffman, 2003; 2010). When these characteristics of collective learning and application are used, teachers become intentional learners (Hord, 2008).

To promote collective and application of learning, the focus for staff should be directed towards meeting the needs of the students. Staff learning preceded student learning when its focus was derived from student needs (Hord and Hirsh, 2008). According to Blankstien et al. (2008), intentional learning occurs when faculty look outside of the box for ideas, question their own practice, share successes and failures and participate in reflective dialogue with their coworkers. DuFour and Marzano (2011) endorsed that staff be organized into meaningful teams and develop shared responsibility by addressing the four fundamental questions of a Professional Learning Community (PLC):

- What is it we want our student to know?
- How will we know if they are learning?
- How will we respond when individual students do not learn?
- How will we enrich and extend the learning for students that are proficient? (DuFour & Marzano, 2011, p. 71)

Collective learning promotes the capacity for teams of teachers to seek answers to questions about what students need to learn, how to know it has been learned, and how to act when students struggle (Cohen & Hill, 2001; DuFour, 2004; Lovett & Cameron, 2011).

Effective teams establish expectations on how they will work together. These expectations turn into collective commitments and monitor the teams' working relationship (Garmston & Wellman, 1999; Goleman, Boyatzis & McKee, 2002; Katzenback & Smith, 2003; Lencioni, 2005; Patterson, Grenny, Maxfield, McMillan, & Switzler, 2008). Goals to be achieved by the team must be identified. Without a common goal, teacher teams are unlikely to have an impact on student learning. The goal must focus on concrete evidence of student learning (Elmore, 2003). Organizational and educational research has revealed a connection between effective teams and improved student performance (Blanchard, 2007; Dolejs, 2006; Gallimore, Ermeling, Saunders & Goldenberg, 2009; Lencioni, 2005; O'Hora & Maglieri, 2006; Schmoker, 2006; WestEd, 2000).

Professional Learning Communities must depict clarity of purpose and priorities for a team to build collaborative collective capacity according to DuFour and Marzano (2011). The ability for administrators to set priorities to guide the work of teams is essential to reciprocal accountability (DuFour, DuFour, Eaker & Many, 2010). Richard Elmore (2006) referred to reciprocal accountability as a relationship where for every increment of performance a leader

demands, they have an equal responsibility to provide the capacity to meet the expectation. The greatest potential for positive impact on student achievement is reached when teachers and administrators collectively worked together to develop purpose and priorities for the team. Collaboration that leads to collective learning and application of learning was most effective when protocols were in place to identify these priorities (Gallimore et al., 2009). Gains are observed in student achievement when there is clarification concerning what students are to learn. A team should jointly plan instruction, track student progress through team developed common assessments, reflect on the effectiveness of the instruction and assessment and develop a system of revisions based on the results (Gallimore, et al., 2009).

DuFour and Marzano (2011) maintained there must be a constant collective inquiry into what students are learning so professionals will know when each student has mastered a goal. According to Little (1982), one of the earliest researchers in the area of teacher collaboration, recognized in order for student goals to be mastered, teacher collaboration should involve specific behaviors. Teachers should discuss and teach the practice of teaching with their colleagues. To facilitate and encourage these discussions, teachers should observe other teachers while they teach and provide feedback after the observation. Teachers should collaborate on planning, designing, evaluating, and preparing instructional materials. Little (1987) concluded that as teachers engage in collective learning and application of learning, they use their combined “organizational skills and resources to attempt innovations that would exhaust the energy, skill or resources of an individual teacher...a proficient and well-organized group are greater than the accomplishment of isolated individuals” (p. 16).

The highest level of collaboration was defined as individuals working jointly to build a team of leaders and learners (Fullan, 1996). Schools who reached this stage had a school culture

and climate where members give quality feedback, share responsibility, spend time in critical dialogue, value collective knowledge, demonstrate consistent instructional practices and honor all voices on the team (Richardson, 1998). Hord and Sommers (2008) believed collegial learning and collaborative work was a significant factor for productive Professional Learning Communities (PLCs). A collaborative professional learning culture facilitates capacity building among colleagues. Hord and Sommers (2008) emphasized collegial learning should be intentional, purposeful and based on a common goal of facilitating student learning.

Shared Practice

Shared practice is embedded in the collaborative culture of PLCs and holds significant benefits for teachers. To encourage fellow teachers to talk to their colleagues when confronted with a difficult teaching situation a collaborative environment is needed. In order for teachers to learn from each other and seek help from their peers, they are encouraged to develop the collaborative effort referred to as shared practice. Teachers benefit from processes aligned to promote the learning of their students and from the accountability of high expectations for continuous improvement (DuFour, DuFour, & Eaker, 2008). For shared practice to be an essential aspect of PLCs, Hord (2004) specified this strategy include a peer review of teacher practice and behavior.

Shared personal practice improves instruction when teachers teach each other the practice of instruction (Little, 1982). Mike Schmoker (2004) concurred that shared practice by teachers benefits teachers of a professional learning community by developing collaborative solutions to instructional problems. Shared practice by teachers also increases support among teachers and allows teachers to view other instructional ideas, methods and resources (Schmoker, 2004).

Shared personal practice also includes classroom observations, peer coaching and feedback by teachers. Glickman (2003) defined peer coaching as a structure where fellow teachers conduct cycles of supervision with each other. For peer coaching to be successful, all teachers involved should understand the procedures and reasons for peer coaching by determining the emphasis of the observation. Teachers should practice an observation that involves peer coaching to notate the difference between observing a class and interpreting events that happen during the observation. Finally, reflective, nondirective and collaborative feedback should be discussed by the teacher being observed and the teacher observing (Glickman, 2003). Peer review and feedback of instructional practices increases individual and organizational capacity (Hord, 1997). Peer reviews that support shared practice are not evaluative, but more about de-privatization of teacher practice. There must be mutual respect and trust for the practice of peer review to include open exchange (Hord & Summers, 2008). In a culture of collegiality, educators participate in the following: talk to one another about their practice, share their knowledge, observe teachers while they are teaching, celebrate one another's successes (Barth, 2006).

When teachers operate in isolation there is limited transfer or sharing of knowledge throughout the school. To enhance a teacher's personal mastery, as defined by Senge, teachers must engage in conversation with peers (2012). According to Hord and Summers (2008) unless teachers engage in conversation with peers they are limited by their own thinking and level of consciousness. To promote and encourage shared practice within a PLC, teachers need to be aware of personal consciousness, creativity and the practice of peer coaching (Hord & Summers, 2008). Dialogue among teachers leads to a teachers' knowledge of their own level of consciousness about their professional practice. In the practice of dialogue, teachers pay

attention to not only words and the results of an action, but the spaces between the words and the timing of the actions. During the dialogue process, people learn how to think together. This process leads to teachers having combined thoughts and actions instead of thoughts and actions belonging to one individual (Senge, 2012). Being conscious of one's own behavior leads to sharing of information, group learning, creation of new possibilities and development of communities of practice (Hord & Summers, 2008). Creative strategies, shared by more than one person, increases the collective learning among teachers. Peer coaching enhances personal practice in schools by increasing learning conversations. When teachers and administrators are able to observe classroom practices, learning conversations are developed and the students, teachers and administrators learn (Hord & Summers, 2008). The use of shared practice provides a framework for collaboration utilized in quality Professional Learning Communities.

Summary

The Professional Learning Communities (PLCs) model, used as the conceptual framework for this study, is defined as an organizational structure for sustaining continued growth for the teacher and student (Hord, 1997, Huffman & Hipp, 2003) and creating a school culture focused on student learning (Huffman & Hipp, 2003). The review of literature focused on the dimensions or tenants of PLCs based on the work of Peter Senge (1990, 2006) and Shirley Hord (1997, 2004) in conjunction with the Southwest Educational Development Laboratory. The tenants of PLCs are summarized into three broad categories:

- Leadership
 - *Shared and supportive leadership* requiring the “collegial and facilitative participation of the principal who share leadership – and thus, power and authority – by inviting input and action decision-making” (Hord, 2004, p. 7).

- Culture
 - *Shared vision and values* among school staff that guide decisions about teaching and student learning and support norms of behavior.
 - *Supportive conditions* that include a collaborative environment and has been described as “the single most important factor” for successful school improvement.
- Collaboration
 - *Collective learning and application of learning* engage school staff at all levels in processes to collectively seek new knowledge and ways of applying that knowledge to their work.
 - *Shared practice* involves the review of teachers’ behavior by colleagues, including feedback and assistance (Hord, 2004).

Professional learning communities can increase staff capacity to serve students, but success depends on what the staffs do in their collective efforts (Hord, 1997). This study is designed to determine which tenant is perceived by principals and teachers as the most important criteria in improving student achievement.

Chapter III of this directed research defined the research methodology and design of the study. This research employed a study design using quantitative measures, which are fully described in Chapter III. Also, the instruments for collecting data and specific methods for analyzing this data are explained in Chapter III.

Chapter III

Methodology

The researcher examined the perceptions of principals and teachers regarding characteristics of Professional Learning Communities and their effect on student performance in high performing secondary schools in Missouri. Schools were selected through a two-step process. First, an email was sent to superintendents of 257 school districts identified as receiving Distinction in Performance for the years of 2010-2011 and 2011-2012 surveying if they had been accredited Distinction in Performance for five consecutive years and if the district was a Professional Learning Community. Eighty-six superintendents responded with 40 districts stating they were accredited Distinction in Performance for five consecutive years and a Professional Learning Community. Second, 20 districts were randomly selected from the 40 districts accredited Distinction in Performance and Professional Learning Communities to take the Professional Learning Communities Assessment – Revised questionnaire (Olivier, Hipp, and Huffman, 2010). Twenty-two high schools were randomly selected to receive the survey from a list of high schools meeting the criteria established by the researcher.

The study results were disaggregated by four demographic questions: 1) What is your position? 2) How many years of educational experience do you have? 3) How many students are enrolled in your high school? 4) How many years has your school operated as a Professional Learning Community?

For the purpose of this study, the tenants of PLCs are summarized into three broad categories:

- Leadership
 - *Shared and supportive leadership* requiring the “collegial and facilitative participation of the principal who share leadership – and thus, power and authority – by inviting input and action decision-making” (Hord, 2004, p. 7).
- Culture
 - *Shared vision and values* among school staff that guide decisions about teaching and student learning and support norms of behavior.
 - *Supportive conditions* that include a collaborative environment and has been described as “the single most important factor” for successful school improvement.
- Collaboration
 - *Collective learning and application of learning* engage school staff at all levels in processes to collectively seek new knowledge and ways of applying that knowledge to their work.
 - *Shared practice* involves the review of teachers’ behavior by colleagues, including feedback and assistance (Hord, 2004).

Chapters I and II presented a synopsis of the study and review of related literature. Chapter III presents the research design, describes the quantitative data collection techniques used, and explains how schools and individual respondents were selected for the study.

Quantitative and qualitative methods were used to answer the research questions that guide this study. The research questions will be answered by using The Professional Learning Community Assessment – Revised (PLCA-R) (Olivier, Hipp, and Huffman, 2010). The following research questions were addressed in this study.

1. Which characteristics of Professional Learning Communities are perceived by principals in high performing secondary schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?
2. Which characteristics of Professional Learning Communities are perceived by teachers in high performing schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?

Participants

High school principals and certified classroom teachers of Missouri schools determined to be awarded Distinction in Performance for five consecutive years and a Professional Learning Community were invited to participate in an online survey, Professional Learning Communities Assessment – Revised (Olivier, Hipp, and Huffman, 2010). Fifty-two principals and 1,778 teachers represent secondary schools that varied in student enrollment. A link to the survey was emailed to the principals and teachers to determine their perception regarding the dimensions of PLCs. Demographic data was collected to assist in analyzing and comparing various sets of data.

The directed research, survey and accompanying instructions were approved through the university's institutional review board. Participation in this study was completely voluntary. By completing the survey, each participant provided consent to participate in the survey and could withdraw from the study at any time. The principal and teachers of each school were instructed to read each statement and use the scale to select the scale point that best reflects their personal degree of agreement with the statement. This scale is based on the Likert scale of Strongly

Disagree (SD), Disagree (D), Agree (A), and Strongly Agree (SA). The principals and teachers were instructed that comments made after each dimension section are optional

Instrumentation

The researcher used the Professional Learning Communities Assessment-Revised (PLCA-R) to survey the teachers and administrators of the Professional Learning Communities (Olivier, Hipp, and Huffman, 2010). Permission was granted by Dr. Dianne Olivier, to use the PLCA-R as the instrument for data collection (see Appendix B). The initial Professional Learning Communities Assessment (PLCA) was developed by Huffman and Hipp (Olivier, 2003) and revised in 2009 (Hipp & Huffman, 2010) as a tool to assess the perceptions of school principals, staffs, and stakeholders regarding the critical attributes of the five dimensions of a PLC identified by Hord (1997). According to Oliver (2003) the PLCA is a tool used to assess the perceptions of principals, teachers, staff and community members in regards to the dimensions of developing a PLC. The questionnaire was also developed to “gauge the level at which schools function along the continuum of PLCs” (Olivier et al., 2009, p.4). The PLCA-R consists of 52 statements describing the five PLC dimensions: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions – people capacities and structures. The creation of the PLCA-R is an extension of the early work by Hord at the Southwest Educational Development Laboratory (SEDL) (Olivier, 2003). The participants rate each statement using a forced choice Likert scale (Hipp & Huffman, 2010). The scale ranges from 1 equals Strongly Disagree, 2 equals Disagree, 3 equals agree and 4 equals Strongly Agree.

The initial PLCA questionnaire consisted of 44 statements concerning practices which occur at the school level. The statements were each aligned to the corresponding professional

learning community dimensions conceptualized by Hipp and Huffman (2002; 2003). Olivier conducted an initial phase of study which was designed to provide evidence of construct validity for the PLCA (2003). The first field test was assessed by seventy-six expert educators to provide data as to the relevance and importance of the forty-four statements as it related to PLCs at the school level. Ninety-eight percent of the items were rated as high in importance; only one item received a medium rating. One statement was divided into two resulting in forty-five statements being tested for validity and reliability (Olivier, 2003). The field test resulted in 247 completed and usable surveys. Descriptive statistics, factor analysis, and Cronbach's Alpha internal consistency reliability coefficient were used to determine validity and reliability (Oliver, Huffman, & Hipp, 2003).

Through data analysis the PLCA was found to both be valid and reliable (Oliver, 2003). The PLCA has undergone construct validity and been utilized in field tests (Huffman & Hipp, 2003). Cronbach's Alpha internal consistency reliability coefficients were computed for the factored subscales of the measure. For the five factored subscales, the Alpha coefficient ranged from a low of .83 (Collective Learning and Application and Supportive Conditions) to a high of .93 (Shared Values and Vision). The instrument yielded internal consistency (Alpha coefficient) reliability for the factored subscales (Huffman & Hipp, 2003). Huffman and Hipp suggested the PLCA was an appropriate measurement tool to assess perceptions based on Hord's five dimensions of a PLC.

Oliver, Hipp and Huffman reviewed and confirmed the internal consistency of the dimensions on the PLCA in 2008. The Cronbach Alpha reliability coefficients for factored subscales (n=1209) were as follows: Shared and Supportive Leadership (.94); Shared Values and Vision (.92); Collective Learning and Application (.91); Shared Personal Practice (.87);

Supportive Conditions: Relationships (.82); Supportive Conditions: Structures (.88); and a one-factor solution (.97). In addition, Olivier, Huffman and Hipp (2010) recognized the importance of collection, interpretation, and use of data for focused student learning improvement.

Referring to Hord and Hirsh's (2008) finding regarding the importance of teacher learning preceding student learning, the researcher identified the importance of intentional teacher learning based on data-driven student learning needs. As a result, the researchers integrated seven new statements. The researchers utilized a three-point rating scale, and participants rated all seven statements high. This resulted in the inclusion of all seven new items in the PLCA-R (Olivier, Huffman, and Hipp, 2010).

Demographic data on the participants was gathered to provide information regarding the study population. The following questions added to the beginning of the PLCA-R allowed for data analysis based on student enrollment in the high school, years of PLC implementation in the high school and years of principal and teacher experience in education.

Analysis

Demographic criteria were used to determine the difference in perceptions of teachers and principal as to the dimension of PLC was most essential. The demographic data used was: years of teaching experience, student enrollment in the high school and the number of years ears of PLC implementation.

Summary

The results of this study will provide data for principals and teachers to discuss effective implementation of PLCs in high schools. An analysis of the open-ended questions responses was performed to determine if there was a theme and area addressed in Chapter IV.

In Chapter Three the process the researcher followed in order to complete this study was described. The research design and methodologies were described that were used to investigate the research questions proposed in this study. Research instruments were identified that would allow for objective analysis and demonstrated adequate reliability.

Chapter IV presents the analysis of data for this study. Findings for each of the research questions are presented in this chapter. Descriptive statistics are presented to help the reader better understand the data.

Chapter IV

Research Finding and Data Analysis

Introduction

Chapter IV presents the results of this study and data analysis utilizing the methods described in Chapter III. This mixed method descriptive study focused on investigating the perceptions of principals and teachers on the level of implementation of the five dimensions of Professional Learning Communities (PLCs): shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions of relationships and structure. Quantitative and qualitative data were collected using the Professional Learning Community Assessment – Revised (Oliver, Hipp & Huffman, 2010) through an online survey. A total of 279 principals and teachers from 22 randomly selected Missouri high schools met the criteria established by the researcher. All high schools included for random selection were PLCs and awarded Accredited in Distinction for five consecutive years.

Analysis of Quantitative Data

An analysis of the quantitative and qualitative data included demographic data and responses to the PLCA-R. A presentation of the data analysis follows.

Demographic Data of the Participants

Demographic data collected from the principal and teacher participants included number of years of experience as an educator, number of students enrolled in the high school and number of years the school has been a Professional Learning Community. The 22 participating schools reported 65.5 percent of the schools have been a Professional Learning Community longer than five years and were represented by 16 principals and 263 teachers. Frequency counts for years

of experience for the principals and teachers indicated that each category represented in Table 1 were participants. The majority of the respondents, 37.8 percent, had 11-20 years of experience while only 8.7 percent of the respondents had less than five years' experience.

Table 1

Frequency Counts of Participants' Experience as an Educator for Total Sample

Year of Teacher Experience	Number of Respondents	Percentage
1-2 years	11	4.0
3-4 years	13	4.7
5-10 years	68	24.5
11-20 years	105	37.8
21-30 years	82	29.0

Demographic data was also disaggregated by number of students enrolled in the high school. The vast majority of respondents, 70.1 percent, shown on Table 2, represented student enrollment of over 1,000.

Table 2

Frequency Counts of Participants' Student Enrollment for Total Sample

Student Enrollment	Number of Respondents	Percentage
0-250 students	12	4.3
251-500 students	22	7.9
501-1000 students	49	17.6
>1000 students	196	70.2

The demographic data collected offered valuable understanding into the characteristics of the total sample.

Analysis of PLCA-R Data by Dimension for the Total Sample

The five dimensions of Professional Learning Communities (PLCs): shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions of relationships and structure, were examined by the PLCA-R (Olivier, Hipp & Huffman, 2010) online questionnaire. The respondents recorded their

perceptions of the 52 statements pertaining to the five dimensions of PLCs in their school. A Likert scale of Strongly Disagree (SD), Disagree (D), Agree (A), and Strongly Agree (SA) was used to quantify their perceptions. A value of 1, 2, 3 or 4 was assigned to each category: strongly disagree (SD), disagree (D), agree (A) or strongly agree (SA) respectively.

According to Oliver, Hipp and Huffman (2010) the PLCA-R is used to determine the implementation level of the five dimensions of PLCs. The PLCA-R is not intended to yield a total score. A mean and standard deviation is calculated for each of the 52 statements and is used to determine the strength of the dimensions in the implementation of PLCs. A mean of three or more specifies an agreement with the strength of the PLC dimension. A mean of 3.5 and greater represents a strong agreement. A disagreement with the presence of the PLC dimension is reflected by a mean of below three.

Table 3 illustrates the mean and standard deviation for each dimension. The means for the five PLCA-R dimensions for the 279 respondents ranged from 2.85 ($SD = .76$) for shared personal practice to 3.06 ($SD = .73$) for supportive conditions which focused on structures. Means for supportive conditions of relationships and structures and collective learning and application were greater than 3.0 illustrating the perception of the alignment and strength of the PLC practice in the sample schools with shared values very close to 3.0. It is important to note the standard deviation of each of the dimensions ranged from .70 for collective learning and application to .76 for shared personal practice. The standard deviation is widely distributed indicating strong and varied perceptions of the implementation of the PLC dimensions. A complete table of means by PLC dimension and individual statement is located in Appendix D.

Table 3

Professional Learning Communities Assessment-Revised Dimensions Mean and Standard Deviation (SD) Scores for all responses (n):

Dimensions	<i>n</i>	Mean	SD
Supportive Conditions – Structures	279	3.06	0.73
Supportive Conditions – Relationships	279	3.05	0.73
Collective Learning and Application	279	3.04	0.70
Shared Values and Visions	279	2.98	0.71
Shared and Supportive Leadership	279	2.94	0.75
Shared Personal Practice	279	2.85	0.76

Null Hypothesis

Principal and teacher perceptions of high level implementation of the Professional Learning Communities dimensions defined by shared and supportive leadership, shared vision and values, collective learning and application of learning, supportive conditions and shared practice will not differ.

Table 4 reports principal and teacher means, degrees of freedom, and *t* score for each dimension of PLCs. It can be determined by the results of the data significant differences can be found between teacher and principal perceptions on four of the five dimensions. The researcher compared the principals’ mean value for each dimension of the PLC to the teachers’ mean value for each dimension by calculating a *t*-test to obtain the *t* calculated score for comparison to the *t* critical listed in the *t* table. If the value of the *t* calculated was greater than the *t* critical the difference between the two means were considered to be a significant difference. If the *t* calculated was less than the *t* critical then the difference between the two means was not a significant difference. The following is a summation of those calculations. Principal perceptions on the implementation of supportive conditions of structures ($M = 3.42, SD = .63$), shared values and visions ($M = 3.24, SD = .55$), shared and supportive leadership ($M = 3.23, SD = .57$), shared personal practice ($M = 3.13, SD = .59$) and collective learning and application ($M = 3.23, SD = .49$), are significantly different than teacher perceptions on the implementation of supportive

conditions of structures ($M = 3.03, SD = .73$) $t(1) = 4.85. p < .05$, shared values and visions ($M = 2.97, SD = .72$) $t(1) = 4.34. p < .05$, shared and supportive leadership ($M = 2.92, SD = .75$) $t(1) = 4.18. p < .05$, shared personal practice ($M = 2.83, SD = .77$) $t(1) = 2.14 p < .05$, and collective learning and application ($M = 3.03, SD = .71$) $t(1) = 3.71 p < .05$. There is not a significant difference in the principal ($M = 3.26, SD = .59$) and teacher ($M = 3.04, SD = .73$) $t(1) = 1.81 p < .05$ perception of the implementation of supportive conditions relationships. The means of principal perceptions of PLC dimensions are 3.0 and above and indicate favorable perceptions of the implementation of PLC dimensions. A mean below 3.0 indicate teacher perceptions differ from principals in shared values and vision, shared and supportive leadership and shared practices.

The researcher in studying the data presented fails to reject the null hypothesis as stated. The null hypothesis as stated is: principal and teacher perceptions of high level implementation of the Professional Learning Communities characteristics defined by Hord (1997, 2004): shared and supportive leadership, shared vision and values, collective learning and application of learning, supportive conditions and shared practice will not differ.

The data does not indicate a significant difference in all dimensions of PLCs between the principal and teacher perceptions. There is not a significant difference in the principal and teacher perception of the implementation of supportive conditions relationships. Principal perceptions on the implementation of shared and supportive leadership, shared values and visions, collective learning and application of learning, supportive conditions of structures are significantly different than teacher perceptions. However, the researcher stated all; therefore the null hypothesis is not rejected.

The researcher does note that the data in a disaggregated null hypothesis could reject four of the five dimensions. Those supported are supportive conditions structures, shared values and vision, shared and supportive leadership, collective learning and application and shared personal practice.

The standard deviation of principal perceptions of each dimension range from .63 to .49, while the standard deviation of teacher perceptions of each dimension range from .77 to .71. This indicates the teacher responses are more widely distributed than the principals and has a greater variance in their responses. It appeared principal and teacher perceptions do vary on the implementation of the dimensions of PLCs.

Table 4

Comparison of principal responses to teacher responses and t-test results

Dimensions	Principals	Teachers	df	t	p
	Mean	Mean			
Supportive Conditions – Structures	3.42	3.03	18	4.8505	.05
Supportive Conditions – Relationships	3.26	3.04	8	1.8093	.05
Shared Values and Vision	3.24	2.97	16	4.3376	.05
Shared and Supportive Leadership	3.23	2.92	20	4.1797	.05
Collective Learning and Application	3.23	3.03	18	3.7141	.05
Shared Personal Practice	3.13	2.83	22	2.1425	.05

Research Questions

The first research question asked which characteristics of Professional Learning Communities are perceived by principals in high performing secondary schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice. The mean scores in Table 5 indicated principals perceive the implementation of the dimensions of PLCs is favorably present within their school. Supportive conditions structures was reported to be the most developed with the highest mean score, 3.42, while shared personal practice was the lowest, 3.13. All means fall

between 3.0 and 3.5, with none above 3.5. The principals from high achieving high schools indicate all five dimensions are prevalent practices in their schools.

Disaggregating principal perceptions based on demographic questions indicated the same results, except when disaggregated by student enrollment. Weakness was shown in shared personal practice by principals with student enrollment of 251-500 and 501-1000. Weakness was also indicated in supportive conditions relationships in schools that have enrollment of 501-1000. Both dimensions involve building teacher relationships and examining the culture of the school. These areas could be underdeveloped in schools with student enrollment of 251-500 and 501-1000.

Table 5

<u>Principal Perceptions of Professional Learning Communities Dimensions Mean Scores</u>		
<u>Dimensions</u>	<i>n</i>	<u>Principals</u> <i>Mean</i>
Supportive Conditions – Structures	16	3.42
Supportive Conditions – Relationships	16	3.26
Shared Values and Vision	16	3.24
Shared and Supportive Leadership	16	3.23
Collective Learning and Application	16	3.23
Shared Personal Practice	16	3.13

The second research question asked which characteristics of Professional Learning Communities are perceived by teachers in high performing schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice. The mean scores in Table 6 indicate teachers perceive the implementation of two dimensions of PLCs to be favorably present within their school, while three dimensions were not. Supportive conditions structures, supportive conditions relationships and collective learning and application was reported to be the most developed with the highest mean scores, 3.04, 3.03 and 3.03 respectively. Shared values and vision, shared and supportive leadership and shared personal practice means were 2.97, 2.92, and

2.83 respectively. Means below 3.0 indicated dimensions of Professional Learning Communities are not favorably developed in their school. This would indicate teachers perceived shared values and vision, shared and supportive leadership and shared personal practice as areas that need to be further developed as essential dimensions of PLCs in their high performing secondary schools.

Table 6

Teacher Perceptions of Professional Learning Communities Dimensions Mean Scores

Dimensions	<i>n</i>	<u>Teachers</u> <i>Mean</i>
Supportive Conditions – Relationships	263	3.04
Supportive Conditions – Structures	263	3.03
Collective Learning and Application	263	3.03
Shared Values and Vision	263	2.97
Shared and Supportive Leadership	263	2.92
Shared Personal Practice	263	2.83

Difference in Principal and Teacher Perceptions by Dimension

Shared and Supportive Leadership

Shared and supportive leadership is the first section of the questionnaire and is comprised of eleven questions. The mean score for principals was 3.23 and the mean score for teachers was 2.92. According to the data, the highest agreement between principals and teachers was statement 6 (principal $m = 3.56$; teacher $m = 3.09$), “the principal shares responsibility and rewards for innovative actions” while both agreed with statement 10 (principal $m = 2.75$; teacher $m = 2.68$), “stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority” was an area that needed improvement. One of the greatest differences between principal and teacher perceptions was shown on statement 7 (principal $m = 3.31$; teacher $m = 2.85$), “the principal participates democratically with staff sharing power and authority.” Comments made by the teachers on the survey, noted disagreement with principals’ responses. One teacher commented, “There is an illusion that staff

makes policies, but the administration typically makes its decisions autonomously.” Another teacher stated, “Although options are brought to the teachers/staff when a decision is to be made, most of the time our input means nothing because the decision is made according to the principal wants.”

Shared Values and Vision

Shared values and vision is the second section of the questionnaire and is comprised of nine questions. The mean score for principals was 3.24 and the mean score for teachers was 2.97. According to the data, the highest agreement between principals and teachers was on statement 15 (principal $m = 3.38$; teacher $m = 3.11$), “decisions are made in alignment with the school”. Both teachers and principals agree that statement 14 (principal $m = 2.94$; teacher $m = 2.98$), “staff members share visions for improvement that have an undeviating focus on student learning” is an area that needs improvement. One of the greatest differences in principal and teacher perception was revealed on statement 17, “school goals focus on student learning beyond test scores and grades.” Principal and teacher means for this statement was 3.31 and 2.79 respectively. Teacher perceptions are evident by their comments on the survey. One teacher believes, “Administration could care less about the student, only concerned about the scores!!” Another teacher noted, “Test scores above all else!!!!” To further illustrate teacher perceptions, another teacher stated, “Data is the MOST important thing. Student learning is geared to the test, and the students and teachers hate it. Fewer tests should be given, and administrators need to remember we are dealing with people and not statistics in data.”

Collective Learning and Application

Collective learning and application is the third section of the questionnaire and is comprised of ten questions. The mean score for principals and teachers was 3.23 and 3.03

respectively. According to the data, principals and teachers strongly agreed on statement 22 (principal $m = 3.25$; teacher $m = 3.16$), “collegial relationships exist among staff members that reflect commitment to school improvement efforts”. The greatest difference in principal and teacher perceptions was exposed on statement 27 “school staff members and stakeholders learn together and apply new knowledge to solve problems.” Principal and teacher means for this statement was 3.19 and 2.81 respectively. The majority of the comments made by teachers do not reflect a positive attitude for the application of collective learning in their schools.

“Teacher’s morale is low. They would love to participate in organizing learning for students but CFA’s, PLC, and EOC’s dictate. Good data is all that is emphasized, not student creativity or interests.” “I personally strive to analyze student work and my own pedagogy to improve my teaching and learning, but I don’t believe we have a culture of that here.” “Rather than “collaborative” (sharing)...we have become “competitive.” EOC has become the #1 priority. Teachers whose students score well are praised, and teachers whose students do not, are admonished. PLC, and the culture it intends to promote cannot—in my opinion—overpower the forces of EOC. While we are in a PLC school, we have abandoned many of the PLC ideals.”

Shared Personal Practice

Shared personal practice is the fourth section of the questionnaire and is comprised of seven questions. The mean score for principals and teachers was 3.13 and 2.83 respectively. Principals and teachers strongly agreed on statement 33 (principal $m = 3.38$; teacher $m = 3.22$), “staff members informally share ideas and suggestions for improving student learning”. Except for statement 33, teachers perceived all other statements in shared personal practice as needing improvement in implementation in their schools. Teacher means in this category range from 2.59 to 2.98 excluding statement 33, with a mean score of 3.22. Principals and teachers both

perceived statement 32 (principal $m = 2.88$; teacher $m = 2.61$), as needed improvement, “staff members provide feedback to peers related to instructional practice.” The greatest difference in principal and teacher perceptions was uncovered on statement 36 (principal $m = 3.44$; teacher $m = 3.01$), “individuals and teams have the opportunity to apply learning and share the results of their practices.” Comments from teachers in the survey further supported their thoughts on the limited application of learning and sharing results of their practice. One teacher noted, “Just let teachers teach. Most teachers do not have time or motivation to observe others because of all the minutia passed down.” Another teacher noted, “In over 15 years of teaching I have never observed a lesson taught by one of my peers. We talk the PLC talk, but we are still isolated in our individual worlds.” Additionally, a teacher indicated, “Not many formal opportunities for teachers to observe others and provide helpful feedback.”

Supportive Conditions Relationships

Supportive conditions relationships is the fifth section of the questionnaire and is comprised of five questions. The mean score for principals and teachers was 3.26 and 3.04 respectively. Principals and teachers strongly agreed on statement 38 (principal $m = 3.50$; teacher $m = 3.29$), “caring relationships exist among staff and students that are built on trust and respect”. The greatest difference in principal and teacher perceptions was noted on statement 39 (principal $m = 3.25$; teacher $m = 2.98$), “a culture of trust and respect exist for taking risks.” Comments from teachers reflect their passion for building relationships with coworkers and students. One teacher stated, “While the national climate for education tries to rob teachers of their love for their craft, the one thing that cannot be taken away is the love for students and creating a good environment for them.” Another teacher that completed the survey believes, “Positive relationships between students and teachers are the best aspect of the school.” Finally,

one teacher reflects enthusiastically, “Caring relationships among staff and students has always been the culture of our school and community.”

Supportive Conditions Structures

Supportive conditions structures is the final section of the questionnaire and is comprised of ten questions. The mean score for principals and teachers was 3.42 and 3.03 respectively. According to the data, principals and teachers agreed on statement 48 (principal $m = 3.56$; teacher $m = 3.34$), “the school is clean, attractive and inviting”. The greatest difference in principal and teacher perceptions was uncovered on statement 45 “fiscal resources are available for professional development.” Principal and teacher means for this statement was 3.63 and 2.85 respectively. Comments made by teachers on the survey give additional insight into this dimension. One teacher believes physical proximity of rooms is important to collaboration, “Our classrooms are all on the same side of the hall. I wish we had classrooms across the hall to allow for more collaboration.” Another teacher noted, “The structure is intact but the flow, motivation, initiative, and support is not sustained and change is not nurtured.” Additionally, one teacher indicated, “Great place to teach; colleagues are tremendous and kids are awesome. Usually very good academic support from the parents.”

There were only two comments made by two principals on the entire survey. One principal commented on the areas in shared and supportive leadership he perceived needed further development. This comment was based on statement 7, “the principal participates democratically with staff sharing power and authority” and statement 9, “decision-making takes place through committees and communication across grade and subject areas.” He noted, “The areas that are marked disagree are areas in which positive movement is taking place. We still have a ways to go I just did not feel like we are in the agree category.” The second comment

was made on the dimension of collective learning and application. “This is all true for our core teachers and some of our career education teachers, but physical education and fine arts are not always involved in data analysis, so I could not answer strongly agree for all staff.” A complete table of principal and teacher comments can be found in Appendix E.

Summary

In Chapter IV quantitative and qualitative data collection and analysis from the study was presented. Research design, location and demographics of the selected schools and participants were described providing the context for the study. Descriptive statistics were generated to give understanding into the survey results data. In analyzing and presenting the data, it was demonstrated there was not a significant difference in all dimensions of PLCs between the principal and teacher perceptions. There is not a significant difference in the principal and teacher perception of the implementation of supportive conditions relationships. Principal perceptions on the implementation of shared and supportive leadership, shared values and visions, collective learning and application of learning, supportive conditions of structures are significantly different than teacher perceptions. However, the researcher stated all; therefore the null hypothesis is not rejected.

Data was examined in reference to each research question. It was determined principals perceive all dimensions of PLCs as favorably implemented and essential to high performing secondary high schools. Teachers did not share the same perceptions. Supportive conditions structures, supportive conditions relationships and collective learning and application was reported to be the most developed while shared values and vision, shared and supportive leadership and shared personal practice were areas that need to be developed as essential dimensions of PLCs in high performing secondary schools.

Finally, differences in principal and teacher perceptions by dimension were presented. Respondents' comments relating to each dimension was noted and inspected for themes and areas of importance. The respondents gave insight into implementation of the dimensions of PLCs and how essential each dimension is to the success of secondary high schools.

Chapter V

Discussion, Implications and Recommendations

Introduction

Professional Learning Communities (PLCs), a model of educational reform, is implemented by schools as a means to improve student achievement. Shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions relationships and supportive conditions structures are dimensions of PLCs according to Hord (1997, 2004, 2008; Hord & Hirsh, 2008; Hord, Roussin, James & Sommers, 2010; Hord & Sommers, 2008). The framework of this study is based on the work of Shirley Hord (1997, 2004) in conjunction with the Southwest Educational Development Laboratory. The dimensions of PLCs are organized in this study into three broad categories:

- Leadership
 - *Shared and supportive leadership* requiring the “collegial and facilitative participation of the principal who share leadership – and thus, power and authority – by inviting input and action decision-making” (Hord, 2004, p. 7).
- Culture
 - *Shared vision and values* among school staff that guide decisions about teaching and student learning and support norms of behavior.
 - *Supportive conditions* that include a collaborative environment and has been described as “the single most import factor” for successful school improvement.

- Collaboration
 - *Collective learning and application of learning* engage school staff at all levels in processes to collectively seek new knowledge and ways of applying that knowledge to their work.
 - *Shared practice* involves the review of teachers' behavior by colleagues, including feedback and assistance (Hord, 2004).

Chapter V presents the summary of findings, implications and recommendations. This mixed method descriptive study investigated the perceptions of principals and teachers on the implementation of the dimensions of Professional Learning Communities (PLCs) in their secondary schools. This chapter is divided into four broad sections. The first section, summary of research design, includes the study's purpose and problem statement, research hypothesis, research questions and design methodology. The second section, summary of findings, presents the findings and conclusions based on the findings of the null hypothesis and the two research questions. The third section provides the implications this study has provided for improving the implementation of the dimensions of PLCs in secondary schools. The final section includes recommendations for educators and principals implementing PLCs and for future research to add to the knowledge base.

Summary of Research Design

Purpose and Problem Statement

The purpose of this study was to investigate the perceptions of principals and teachers on effective implementation of Professional Learning Communities (PLCs) dimensions essential in high performing secondary schools.

The problem of this study was to add to the existing knowledge of Professional Learning Communities (PLCs). This study will examine the perceptions of principals and teachers regarding characteristics of PLCs and their importance for student performance in high performing secondary schools.

Research Hypothesis

Null Hypothesis: Principal and teacher perceptions of high level implementation of the Professional Learning Communities characteristics defined by shared and supportive leadership, shared vision and values, collective learning and application of learning, supportive conditions and shared practice will not differ.

Research Questions

The following questions provide the framework for presenting the conclusions of this research:

1. Which characteristics of Professional Learning Communities are perceived by principals in high performing secondary schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?
2. Which characteristics of Professional Learning Communities are perceived by teachers in high performing schools as the most essential: shared and supportive leadership, shared vision and values, collective learning and application of learning or supportive conditions or shared practice?

Design Methodology

Selection of Missouri secondary schools were made based on responses from superintendents identifying their district as receiving Distinction in Performance for five consecutive

years and classifying their district as a PLC. Twenty districts were randomly selected from the 40 districts accredited Distinction in Performance and Professional Learning Communities (PLCs) to take the Professional Learning Communities Assessment – Revised questionnaire (Olivier, Hipp, and Huffman, 2010). Twenty-two high schools were randomly selected to receive the survey from a list of high schools meeting the criteria established by the researcher.

The participants were high school principals and certified classroom teachers of Missouri schools determined to be awarded Distinction in Performance for five consecutive years and a Professional Learning Community. Fifty-two principals and 1,778 teachers represent secondary schools that varied in student enrollment. A link to the survey was emailed to the principals and teachers to determine their perception regarding the dimensions of PLCs. Demographic data was collected to assist in analyzing and comparing various sets of data.

Summary of Findings

The findings from this study suggest there is a disconnect between the principals and teachers on the strength of the dimensions of PLCs in their schools. Principals agreed all dimensions of PLCs are implemented in their schools, yet teachers did not agree to the strength of the dimensions in their schools. The survey suggests principals and teachers agree on the power of collective learning and application of learning and supportive conditions structures and relationships, but differ in their perception on shared and supportive leadership, shared values and vision and shared practice. The PLC dimension most represented by principals and teachers as being present in high performing secondary schools was supportive conditions relationships and structures. This dimension is based on relationships built on trust and respect and structures in place which to provide support for collegial dialogue and collective learning. Teachers agreed these dimensions are represented in their respective PLCs but definitely were not a strong

presence. Teachers did not indicate an agreement that shared and supportive leadership, shared values and vision and shared personal practice were being implemented in their PLCs. Each of these areas involved teachers stepping out of classroom isolation and becoming involved in leadership responsibilities and collaborating with principals and teachers.

Even though principals perceived all dimensions of PLCs to be present in their schools, the weakest dimension noted was shared personal practice. This dimension involved classroom observation, peer coaching and feedback by teachers to each other. Teachers also perceived shared personal practice as the weakest dimension and an area that needed further development. Principals and teachers agree there is a lack of feedback among peers relating to instructional practices.

The PLCA-R incorporates seven statements throughout the questionnaire directly addressing the use of data in instruction and assessment. The principals recognized data as an essential tool in school practice, while teachers see this area as one that is over emphasized. Through teacher comments, it was revealed teachers believe their schools are overly dependent on data.

Limitations

In addition to the limitations presented in Chapter I, the researcher acknowledges several limitations that could affect the validity of this study. First with 52 principals and 1,778 teachers represented, the size of the sample ($n = 279$) was not as large as anticipated. Second generalizations to all PLC schools is difficult to make due to the majority of the respondents were employed at schools with student enrollment of greater than 1,000. Third, the data collection procedure presented problems. The research experienced some principal reluctance to

participate in the survey and reluctance to encourage their staff to participate. Also, the window for data collection represented only a snapshot in time.

Implications

The results of this study have implications for principals in developing and sustaining Professional Learning Communities (PLCs). The three dimensions in which principals' and teachers' perceptions differed the most in this study included: shared and supportive leadership, shared vision and values and shared personal practice. These results align to previous educational research on PLCs conducted by leading educational reformers. DuFour, Eaker, and DuFour (2005) believe developing and sustaining PLCs will be met with challenges. Three of the greatest challenges are creating a collective commitment to a shared vision, developing processes for shared knowledge among the teachers and creating a climate of supportive leadership.

Principals may benefit from this study by realizing it is a collaborative effort between teachers and themselves. Shared leadership is dependent on principals willing to share power, authority and decision making. Effective leaders should be aware of opportunities where teachers can participate and share responsibility in decisions and leadership roles. A culture of trust is imperative in shared and supportive leadership and can be created when principals collaborate with teachers. Through this collaboration, principals encourage teachers to make meaningful decisions about student learning, empower teachers to take risks and support the teachers in the decisions that are made.

DuFour, DuFour and Eaker (2008) believed it is difficult to overstate the importance of a shared vision in PLCs. As a critical element to effective leadership, a principal should be able to model the shared vision and values of the school. Shared vision creates unity and loyalty within

the faculty and is seen as a collective commitment that guides teachers and principals. Teachers will believe in a shared vision they have helped to create. A principal should involve the faculty in the collective activity of developing the vision and reaffirm the vision each year. Early in the maturity of PLCs, a principal should over emphasize the driving vision for the school. As a PLC matures, or as a school grows, the principal should be cognizant to reinforce the shared vision. A principal should always reiterate a guiding vision for PLCs; all students will learn.

According to Hord (2004) studies have shown there is a slow acceptance of shared practices as a dimension of PLCs. These studies indicate teachers were aware of the benefits of shared practice, yet cited time, teacher refusal and lack of support from administration as barriers to shared practice. Principals need to encourage a culture of collaboration, risk-taking, reflection and feedback absent from judgment. De-privatization of classroom instruction and sharing best practices should be the norm. Principals should provide opportunities for teachers to observe peers and offer feedback on instructional practices. Feedback should be reflective, encouraging and free from criticism. Shared practice is found when teachers have mutual respect and trust for each other. Principals can promote shared practices by offering ongoing job-embedded professional opportunities for teachers. Teachers are more willing to share and open themselves up for feedback, when they are learning best practices together.

Hargreaves and Shirley (2009) contended improper use of data in education can be detrimental. Data should contribute rather than dictate what teachers and principals should do (Hargreaves and Shirley, 2009). In the current educational era of high-stakes testing, teachers are being instructed to use data to drive instruction. Teachers perceive data-driven-decision-making as narrowing the curriculum and teaching to the test. Principals need to reassure teachers their professional judgment and experience is just as important as interpreting data. When used

and interpreted correctly, data leads to teacher self-examination of their own pedagogy, as well as professional conversations between teachers to promote practices that lead to student achievement.

Recommendations

Further research into the impact of each dimension of Professional Learning Communities (PLCs) would provide greater insight into the effective implementation of PLCs in secondary schools. Building on the findings of this study, shared leadership, shared vision and shared personal practice would be areas of emphasis. Additional research could be completed to understand why teachers regarded these dimensions so differently than principals.

This study should be replicated by surveying all secondary schools in Missouri that are PLCs. It would add to the ongoing research to survey all principals and teachers in PLCs to determine the strength of the dimensions of PLCs in their schools. A longitudinal study could be conducted to determine if principal and teacher perceptions change as they gain more experience or if the size of the school changes. These studies would validate the findings of the current study.

Ongoing professional development in PLC practices for principals and teachers should be provided. Principals and teachers of all years of experience need to understand or be reminded the purpose of PLCs. Professional development should also be offered on developing a culture of collaboration and shared practice. Principals that involve teachers in decisions, invite a culture of collaboration. This is done through the development of a leadership style that supports shared authority throughout the PLC.

This study was conducted in secondary schools where the perceptions of the dimensions of PLCs may differ from junior high or elementary schools. Further research conducted on junior high and elementary schools to determine if principal and teacher perceptions are similar to principals and teachers in secondary schools would add to the knowledge of PLCs.

Based on the overwhelming negative comments made by teacher towards the use of data, principals should investigate programs or procedures on effectively incorporating the use and interpretation of data by teachers. Professional development opportunities should be offered on data-driven-decision-making. Through this professional development, teachers should begin to realize that teacher accountability through the use of data can lead to enhance instructional practices and greater student achievement.

Summary

Professional Learning Communities are comprised of principals and teachers that hold true to the shared vision that all students can learn. According to Hord, members of PLCs share a vision, work collaboratively, share creative ideas and instructional practices and participate in decisions with principals. This study focused on the perceptions of principals and teachers on the dimensions of PLCs: shared and supportive leadership, shared vision and values, collective learning and application, shared personal practice and supportive conditions of structure and relationships.

This study did confirm the hypothesis that principal and teacher perceptions differ in the perceptions of the dimensions of PLCs. Based on the findings of this study, principals should be aware of opportunities where teachers can participate and share responsibility in decisions and leadership roles. Teachers will believe in a shared vision they help to create. A principal should involve faculty in the collective activity of developing the vision and reaffirming the vision each year. Additionally, principals should work to develop shared personal practice by teachers. A culture of collaboration, risk-taking, reflection and feedback absent from judgment is essential for de-privatization of teacher practice.

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Appendix A



*Department of Educational Foundations
and Leadership
P.O. Box 43091
Lafayette, LA 70504-3091*

August 16, 2013

Lori Wilson
135 Katie Lane
Strafford, MO 65757

Dear Ms. Wilson:

This correspondence is to grant permission to utilize the *Professional Learning Community Assessment-Revised* (PLCA-R) as your instrument for data collection for your doctoral study through Southwest Baptist University. I believe your research *examining perceptions of principals and teachers on PLC characteristics and the effect on student performance in high performing schools* will contribute to the PLC literature and provide valuable information related to overall school accountability. I am pleased that you are interested in using the PLCA-R measure in your research.

This permission letter allows use of the PLCA-R through paper/pencil administration, as well as permission for the PLCA-R online version. For administration of the PLCA-R online version, services must be secured through our online host, SEDL in Austin, TX. Additional information for online administration can be found at www.sedl.org.

While this letter provides permission to use the measure in your study, authorship of the measure will remain as Olivier, Hipp, and Huffman (exact citation on the following page). This permission does not allow renaming the measure or claiming authorship.

Upon completion of your study, I would be interested in learning about your entire study and would welcome the opportunity to receive an electronic version of your completed dissertation research.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,

Dianne F. Olivier

Dianne F. Olivier, Ph. D.
Assistant Professor
Joan D. and Alexander S. Haig/BORSF Professor
Department of Educational Foundations and Leadership
College of Education
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
(337) 482-6408 (Office) dolivier@louisiana.edu

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Appendix B

Professional Learning Communities Assessment -Revised

Directions:

This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement. Comments after each dimension section are optional.

1. What is your position?
 - a. Principal/Teacher
2. How many years of educational experience do you have?
 - a. 0-1 years b. 3-4 years c. 5-10 years d. 11-20 years e. 21-30 years
3. How many students are enrolled in your high school?
 - a. 0-250 b. 251-500 c. 501-1000 d. greater than 1000
4. How many years has your school operated as a Professional Learning Community?
 - a. 0-3 years b. 4-5 years c. 6-10 years d. greater than 10 years

Key Terms:

Principal = Principal, not Associate or Assistant Principal

Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students

Stakeholders = Parents and community members

Scale:

- 1 = Strongly Disagree (SD)
- 2 = Disagree (D)
- 3 = Agree (A)
- 4 = Strongly Agree (SA)

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

15	Decisions are made in alignment with the schools values and vision				
16	A collaborative process exists for developing a shared vision among staff.				
17	School goals focus on student learning beyond test scores and grades				
18	Policies and programs are aligned to the schools vision				
19	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.				
20	Data are used to prioritize actions to reach a shared vision				
Comments:					
	Collective Learning and Application	SD	D	A	SA
21	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.				
22	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.				
23	Staff members plan and work together to search for solutions to address diverse student needs.				
24	A variety of opportunities and structures exist for collective learning through open dialogue.				
25	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.				
26	Professional development focuses on teaching and learning.				
27	School staff members and stakeholders learn together and apply new knowledge to solve problems				
28	School staff members are committed to programs that enhance learning.				
29	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.				
30	Staff members collaboratively analyze student work to improve teaching and learning.				

	Comments:				
	STATEMENTS				
	Shared Personal Practice	SD	D	A	SA
31	Opportunities exist for staff members to observe peers and offer encouragement				
32	Staff members provide feedback to peers related to instructional practices				
33	Staff members informally share ideas and suggestions for improving student learning				
34	Staff members collaboratively review student work to share and improve instructional practices				
35	Opportunities exist for coaching and mentoring.				
36	Individuals and teams have the opportunity to apply learning and share the results of their practices.				
37	Staff members regularly share student work to guide overall school improvement.				
	Comments:				
	Supportive Conditions - Relationships	SD	D	A	SA
38	Caring relationships exist among staff and students that are built on trust and respect.				
39	A culture of trust and respect exists for taking risks.				
40	Outstanding achievement is recognized and celebrated regularly in our school.				
41	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.				
42	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.				
	Comments:				

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

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Appendix C: Consent Email

Dear Colleague:

My name is Lori Wilson and I am the principal at Nixa Junior High in Nixa, MO. As a doctoral student at Southwest Baptist University, I am conducting a research study to gather information about teacher and principal perceptions regarding principal leadership, school culture and teacher collaboration in schools that are Professional Learning Communities. I am surveying all high school building principals and teachers in Missouri that have received Distinction in Performance for five consecutive years and are Professional Learning Communities. As the principal at your current high school, I would like to ask for your participation. I realize that you are very busy; the survey should take no more than 10 minutes of your time to complete. The survey is completely anonymous. It will ask you for demographic information and your perceptions of principal leadership, school culture and teacher collaboration.

Your privacy is important; your answers will be combined with other participants and reported in aggregate form. Information reported will not indicate individual participants or school districts. There is no penalty should you choose not to participate or answer all of the questions. Your completion and submission of the survey will indicate your consent to participate and permission to use the information that you have provided in my study.

Before you make a final decision about participation, please read the following statements about how your responses will be used and how your rights as a participant will be protected:

- Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- You need not answer all of the questions.
- Your answers will be kept confidential. Results will be presented to others in summary form only, without names or other identifying information.
- Your participation will take approximately 10 minutes. You will answer questions about how you perceive principal leadership, school culture and teacher collaboration in schools that are Professional Learning Communities.

This project has been reviewed and approved by the RRB Committee at Southwest Baptist University (326-1659). The committee believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties and rights.

You may contact me at 417-241-3606 if you have questions or concerns about your participation. If you would like a copy of the results of this study, you may reply to this email. **Please click on the link below to take the survey. Once you have taken the survey, please forward this email to your faculty and request that they take the survey as well.** Thank you for your time and consideration.

<https://www.sedl.org/plc/survey/index.cgi?sc=pvqut4>

Lori Wilson
Nixa Junior High Principal

Appendix D: Mean Scores for All Responses

Dimensions	<i>n</i>	Mean
Shared and Supportive Leadership	279	2.94
1. Staff members are consistently involved in discussing and making decisions about most school issues.	279	2.88
2. The principal incorporates advice from staff member to make decisions.	279	3.03
3. Staff members have accessibility to key information.	279	2.90
4. Staff members have accessibility to key information.	279	3.07
5. Opportunities are provided for staff members to initiate change.	279	2.91
6. The principal shares responsibility and rewards for innovative	279	3.09
7. The principal participates democratically with staff sharing power and authority.	279	2.85
8. Leadership is promoted and nurtured among staff members.	279	2.97
9. Decision-making takes place through committees and communication across grade and subject areas.	279	2.91
10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority	279	2.68
11. Staff members use multiple sources of data to make decisions about teaching and learning.	279	3.03
Shared Vision and Values	279	2.98
12. A collaborative process exists for developing a shared sense of values among staff.	279	3.01
13. Shared values support norms of behavior that guide decisions about teaching and learning.	279	3.01
14. Staff members share visions for school improvement that have undeviating focus on student learning	279	2.98
15. Decisions are made in alignment with the schools values and vision	279	3.11
16. A collaborative process exists for developing a shared vision among staff.	279	3.03
17. School goals focus on student learning beyond test scores and grades	279	2.82
18. Policies and programs are aligned to the schools vision	279	3.09
19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	279	2.80
20. Data are used to prioritize actions to reach a shared vision	279	2.99
Collective Learning and Application	279	3.04
21. Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	279	3.12

22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	279	3.16
23. Staff members plan and work together to search for solutions to address diverse student needs.	279	3.10
24. A variety of opportunities and structures exist for collective learning through open dialogue.	279	3.03
25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	279	3.03
26. Professional development focuses on teaching and learning.	279	3.11
27. School staff members and stakeholders learn together and apply new knowledge to solve problems.	279	2.84
28. School staff members are committed to programs that enhance learning.	279	3.15
29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	279	2.91
30. Staff members collaboratively analyze student work to improve teaching and learning.	279	2.94
Shared Personal Practice	279	2.85
31. Opportunities exist for staff members to observe peers and offer encouragement	279	2.77
32. Staff members provide feedback to peers related to instructional practices	279	2.61
33. Staff members informally share ideas and suggestions for improving student learning	279	3.22
34. Staff members collaboratively review student work to share and improve instructional practices.	279	2.76
35. Opportunities exist for coaching and mentoring.	279	2.92
36. Individuals and teams have the opportunity to apply learning and share the results of their practices.	279	3.01
37. Staff members regularly share student work to guide overall school improvement.	279	2.63
Supportive Conditions - Relationships	279	3.05
38. Caring relationships exist among staff and students that are built on trust and respect.	279	3.29
39. A culture of trust and respect exists for taking risks.	279	2.98
40. Outstanding achievement is recognized and celebrated regularly in our school.	279	3.16
41. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	279	2.81
42. Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	279	3.02
Supportive Conditions - Structures	279	3.06

43. Time is provided to facilitate collaborative work.	279	3.17
44. The school schedule promotes collective learning and shared practice.	279	3.02
45. Fiscal resources are available for professional development.	279	2.89
46. Appropriate technology and instructional materials are available to staff	279	3.04
47. Resource people provide expertise and support for continuous learning.	279	3.04
48. The school facility is clean, attractive and inviting	279	3.34
49. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	279	3.10
50. Communication systems promote a flow of information among staff members.	279	3.10
51. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	279	2.97
52. Data are organized and made available to provide easy access to staff members.	279	2.88

Appendix E: Principal and Teacher Open Ended Comments

Comments for Shared and Supportive Leadership

- Our principals are fantastic at supporting staff; however, the district office does not.
- None of the teachers I know feel like they have anything to do with decision making. decisions are made and the teachers follow those directives that are handed down.
- The areas that are marked disagree are areas in which positive movement is taking place. We still have a ways to go I just did not feel like we are in the agree category.
- Every place I've worked is a GREAT district. My home district is the best I've ever been in (of five), but it is still very political (as all have been).
- Teachers are seldom left alone to just teach. Micromanaging has become the new way of dictating what and how things are taught. Only young teachers are asked to train or suggest new implementation. Older teachers have been kicked to the curb, except for a possible token older teacher, and overlooked for needed training.
- There is NO communication between schools/Grades
- The collaboration in this school is truly amazing. Everyone seems plugged in and has ownership.
- I would have agreed with these statements much more before we were an official PLC.
- Too often, responsibility in making decisions is placed on the leadership team and then administration makes a different decision, disregarding the input. Too much responsibility is placed on the faculty to handle areas of frustration and ineffectiveness while teachers would appreciate more of a authoritarian leader from administration.
- The principal makes the discision so I do not believe it is democratic but I believe that what your principal is for.
- We spend a lot of time talking about something and never coming to a conclusion. It feels democratic, but it isn't. A lot of staff feel that we talk until we come to the predetermined conclusion. I feel that we never really come to any conclusions, we just give up because of frustration and move on to the next topic.
- I did not want to answer #10, but I had to to submit
- We have lots of structures and procedures that look like dispersed leadership and collaboration, but the reality is very different. PLC is used as cover for top-down initiatives and decision-making.
- I am not just randomly clicking Strongly Agree on all of these choices...we just happen to have one of the best principals in the entire state!
- New principal this year, so a bit difficult to answer all questions accurately based on the little amount of time he has had to impact our climate/culture. We do have "academic council" meetings 1st hour every week for all department chairs and principals to meet and discuss.
- This is the first year for our principal, so it is hard to evaluate in some areas until he has been here longer.
- Opportunities for change are provided, but the counseling office usually pulls a lot of punches.

- Dr. Sharp (principal) provides faculty the opportunity to help guide the direction of the school, in both curricular and non-curricular areas.
- Some decisions are made above the principal level (district/DESE guidance and funding for example).
- There is the illusion that staff makes policies, but the administration typically makes its decisions autonomously.
- I marked # 10 down only because I'm not sure how involved the stakeholders are...
- We use multiple sources of data only when required to. Most, in my opinion, would like to make decisions without it. Yes, it is the better way to make decisions, but it is cumbersome and time-consuming (to collect the data) to many people, it seems.
- I believe that we have several organizations to share power and decision making in our school, but I believe that decisions are made outside of the organizations by the administration.
- Favoritism is a huge factor and obvious to all
- Although options are brought to the teachers/staff when a decision is to be made. Most of the time, our input means nothing, because the decision is made according to what the principal wants. Most of the time, the students know more about what is going on than the teachers/staff. No power sharing. We had a committee that met with the superintendent to deal with issues and give input for other decisions that were going to be made. I felt with this committee our input mattered. That is no longer available, because we changed superintendents. For number 10, some do some don't.
- Since this is only my 3rd year in the district, I am not sure how long the school has been a PLC school.

Comments for Shared Values and Vision

- Administration could care less about the student, only concerned about scores!!
- Test scores above all else!!!!
- If stakeholders are involved, I am not aware.
- Data is the MOST important thing. Student learning is geared to the test, and the students and teachers hate it. Fewer tests should be given, and administrators need to remember we are dealing with people and not statistics in data.
- It is impossible to focus on student learning beyond test scores because DATA is test scores! So when Data is used - we are focused on test scores. Administration suppresses the ability for the PLC to be healthy. There is a disconnect between what teachers know works and what the upper administration want us to accomplish.
- Decisions are made by administrators, and then faculty is encouraged to support those decisions. Data is 'cherry picked' and only represents administrators' concerns.
- Much of the creativity of teaching is lost in the quest for ever-higher test scores.
- Supposed to be using data but often don't--at least not on classroom level. Staff members share input but it may or may not be taken/used.
- Data is used not sure how they reach a decision on things sometimes.

- Data, data, data. Data has become a road block to true collaboration because our time is spent collecting data from CFAs, reviewing CFAs, building new CFAs based on data. I hate data.
- GROUP THINK....totally ineffective.
- I believe we play the game like most other school out there. We say that we want ALL kids to learn but we dumb down the classes that we require or offer a computer based system that they can guess and check their way through so they can pass without making much effort to understand the material. Entitlement is now our biggest problem.
- We are totally MSIP-driven.
- Our District Summative Assessments (DSA)are new, and there are quite a few kinks that still need to be worked out of the system.
- We have Professional Development and Character Education committees that have members from every department to help make decisions about direction and implementation.
- Just because data is being collected does not mean that it creates an atmosphere where improved processes will follow. Depending on how it is presented and collected there is a natural tendency to take it personally as an attack. In our case there is number of observations made by administration but it appears more of a scoring of the teachers for there is no effort to gain insight ahead of time. And there is no alteration fo the score no matter what is discovered afterwards.
- I wish the parents would take a greater interest in their child's education.
- We are overly dependent on "data", especially as it relates to testing/scores.
- Every decision is based on what is best for sports!! Admin talks a good game and has fantastic PR but could care LESS about student achievement. We have a PLC but is run by administration and faculty have NO input and are scared to death to challenge anything the administration says as we to will be "escorted out of the building and fired" for daring to disagree with them!!! It has happened.
- Perhaps a most of the time or a middle choice would be nice.
- Parents, as stakeholders, basically don't exist to support student achievement and learning. They are mostly concerned about how grades affect scholarships and how much late work and exceptions we will allow them to receive to make this possible. There are also some awesome parents who are definitely supportive of education and learning and teaching their teens to be responsible for learning.
- Data is readily available, but can sometimes be used to support a decision as easily as it can be used to oppose a decision.
- We are in the process of updating our mission and vision statements, so some of these statements are in flux right now.
- #19 has the same reason as #10
- But not by teachers, unless we are required to use data.
- Unfortunately parents don't take as active a role as we would like. You always get visits from parents, who have students that are doing well, but rarely see those that need help. With the changing of the guard so to speak, I don't know if the vision for the school will change, or remain the same.

- Test scores and failing students matter. We are not evaluating the efficacy of rigorous courses and outstanding students.

Comments for Collective Learning and Application

- No real opportunities to use data to reinforce or enrich instruction.
- I know other departments that do analyze data and student assessments effectively but mine does not.
- Teachers work together in our school and care about student learning.
- I have heard that #30 happens in other departments in my building, but has never happened in my department due to other assignments given to complete during PLC time.
- Teachers' morale is low. They would love to participate in organizing learning for students but CFA', PLC, and EOC's dictate. Good data is all that is emphasized, not student creativity or interests.
- Professional development is focused on making sure we do tasks that are required by the state or other entity. UOI, BYOC etc.
- Within our school culture, leadership is bestowed on individuals who have the most experience not individuals who are the best leaders. Teachers are encouraged and taught to fear administrators and department heads. I have seen many good teachers leave our district because appointed leaders isolated and demonized them to other staff members.
- 29.and30. I believe most teachers do this, but not collaboratively
- Very vocal teachers speak up and "engage in dialogue," which then causes the majority to sit quietly rather than publicly disagree and potentially open up difficult conflicts.
- I personally strive to analyze student work and my own pedagogy to improve my teaching and learning, but I don't believe we have a culture of that here.
- We have groups of teachers that work together but the culture of our school is not "safe" to talk about issues and what to do about them.
- Staff is very fractured. Most have no relationship with each other. Strong staff leadership has been discouraged through restructuring. Top-down decisions about curriculum and assessment management systems and standards-based grading have hamstrung any possibility for real improvement.
- The process is available for change and innovation but test scores and threatening results immobilize new possibilities/ change.
- These are areas I feel we could still use some improvement...
- We have one hour every Wednesday to meet with our learning communities to work on enhancing teaching and student achievement.
- Micro-management in an effort to meet a number of outside criteria has dropped the times we had to talk to each other without pressure, without being defensive, or protective. In an effort to manage everything to make the school better the moral of the school has dropped many long time teacher openly voicing the time left to their retirement. There is no effort to honor the past efforts of these teacher or to treat them as their input being valid or important. No matter how high our school has been rated and is rated we are not good enough.

- We did not get to go to interface conference this year due to lack of funding for PD.
- Rather than "collaborative" (sharing)...we have become "competitive." EOC has become the #1 priority. Teachers whose students score well are praised, and teachers whose students do not, are admonished. PLC, and the culture it intends to promote cannot--in my opinion--overpower the forces of EOC. While we are a PLC school, we have abandoned many of the PLC ideals.
- Not allowed. We are left to figure things out on our own
- I would like to see a neutral answer for a choice.
- 29. Not MULTIPLE sources, but one source.
- This is all true for our core teachers and some of our career education teachers, but physical education and fine arts are not always involved in data analysis, so I could not answer strongly agree for all staff.
- We analyze eoc test data

Comments for Shared Personal Practice

- The most have I have received has come from the other teachers in my department!!!
- A few STILL continue to not share resources, ideas, teaching strategies.
- #31--required to do two peer observations this school year
- Just let teachers teach. Most teachers do not have time or motivation to observe others because of all the minutia passed down.
- I have advocated for years that teachers on special assignment be utilized to mentor new teachers not be used to improve test scores. At the secondary level, the TOSAs seem to only communicate with department heads.
- lack of quality time given
- We do our own thing. No one forces the majority to do otherwise. However, some department teams have developed great collaboration and sharing that has worked well.
- In over 15 years of teaching I have never observed a lesson taught by one of my peers. We talk the PLC talk, but we are still isolated in our individual worlds. Furthermore the NEES teacher evaluation system fosters a culture of distrust. Those who strive for continual improvement are not rewarded, and those who just coast get by...
- If we want to look at student work we, most of the time, need to find time ourselves b/c our "PLC" time needs to have an agenda with steps to show that we accomplished something...I don't feel there is a trust by the administration that we will do what we should do during the time given to us. Some won't do what they should with no consequence.
- There is still productive work being done by small groups who share the same vision and values.
- Not many formal opportunities for teachers to observe others and provide helpful feedback. Teachers can elect to do it on their own time (plan period).
- #32: "Feedback" is seldom positive. #'s 34 & 37: If by "student work" you mean "test scores."

- Coaching/mentoring is more likely to take place within departments and not across departments. We tend to be so busy, that coaching is rare unless it's part of the official mentoring process.
- Greater collaboration between teachers would be appreciated. There is very little opportunity to observe other teachers in the classroom.
- 34-37 reflects on collaboration in my department
- We frequently share student work within our departments to guide improvement, but we don't usually share with the entire building.

Comments for Supportive Conditions - Relationships

- #42, there are still a few staff members that are not honest.
- While the national climate for education tries to rob teachers of their love for their craft, the one thing that cannot be taken away is the love for students and creating a good environment for them.
- Data is a problem. Most good Data takes too long to review with the workload of the average teacher. Test scores are easy but for teachers to "enhance teaching and learning" they need more time to investigate the more subjective methods of instruction.
- caring relationships among staff and students has always been the culture of our school and community.
- We only recognize athletic achievement. Furthermore the NEES teacher evaluation system fosters a culture of distrust. There is no incentive to improve other than my own intrinsic drive to push myself to be better each day. Each day, each faculty meeting, each walk-through evaluation extinguishes a bit of that flame. Only my interactions with my students reignite my passion in the classroom.
- #38 exists in groups but is not the culture of the school. I have taught for 16 years, which is 13 years longer than the admin. I also have my masters in educational leadership, but I am still questioned about new things I try in my class to encourage learning.
- Positive relationships between students and teachers are the best aspect of the school.
- Depends--some relationships are build on trust and collaboration. Other staff members don't share and are critical of others.
- If your school is consistently rated in the top 5 of area schools how much change needs to occur?
- We do a good job of celebrating success, but could do better. There is a feeling that responsibility for success is shared more with levels above the building level than responsibility for failure.

Supportive Conditions - Structures

- Our classrooms are all on the same side of the hall. I wish we had classrooms across the hall to allow for more collaboration.
- While professional development is emphasized with workshops, some of it is irrelevant and unproductive. When needing true professional development, it is not allowed because there is no money for it. Rather than reading what the "experts" who are making money

with their "innovative" ideas of what they believe should be taking place in school, administrators need to check the school climate with those who are actually in the classroom (teachers and students).

- Mandates, rather than dialogue, seem to so often be a response to student learning goals.
- Data....
- My one main concern about PLC in our building is this: a guest speaker from the group that created PLC presents at one of our PD days and tells the staff and administration very candidly that summer school classes should NOT be remedial in nature but should be used to enhance and enrich student learning. And yet, nothing has changed. Summer school is still remedial except for a few minor classes and there seems to be an unwillingness to make that change. Also, our STAR program is remedial in nature when in reality, very few of our students require the use of STAR to improve and get current in their classes.
- time is provided but it is not effective or quality time.
- too many places that information is located - we don't need all of them
- The communication infrastructure exists for adequate communication. Our school functions under the idea that knowledge is power - whoever has the knowledge has the power.
- We have abundant resources that need to be used in a more efficacious manner.
- The structure is intact but the flow, motivation, initiative, and support is not sustained and change is not nurtured.
- #46...With all of the newly adopted DSA requirements, we are critically short on computers in our building.
- Technology and instructional materials are usually available for staff and students to use, except during End of Course testing when all computers are taken for 5 weeks to administer exams (frustrating).
- As learning increases when students are allowed to help each other. teachers will help each other if administration is not driving everything and the mandate of satisfying a specific criteria is minimized.
- Our science department budget has been cut the last 3 years.
- Data is presented at monthly faculty meetings. Availability/access beyond that...???
- The needs to be a sometimes or neutral choice. Not all answers are agrees or disagree some are sometimes.
- Need a neutral option in the survey. Many of my choices I don't feel strongly for or against the statement. If you are trying to force a choice, okay, but that doesn't really reflect my interpretation of the situation. Also, should indicate how long the current administrator has been in place--an administrator in their first year has not had the time to review or implement changes in the program to make it better, this person is merely a reflection of the past principal for a period of time.
- Great place to teach; colleagues are tremendous and kids are awesome. Usually very good academic support from the parents.

