

PROFESSIONAL LEARNING COMMUNITIES  
AND THE ROLE OF ENABLING SCHOOL  
STRUCTURES AND TRUST

by

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## ABSTRACT

Over the last two decades many school districts have developed professional learning communities (PLCs) as a means of unifying teachers within school organizations toward common goals and collaborative efforts. This study purports that there are certain enabling school structures that influence the success or failure of PLCs implementation. Hoy and Sweetland summarize that “school structures vary along a continuum from enabling at one extreme to hindering at the other” (Hoy, 2002, p. 88). Other key aspects of PLCs relate to the role of collegial trust, teacher’s collegial trust, and trust in principal. One of the assumptions underlying the theoretical framework is that trust is an essential aspect of building a PLC. While there is emerging research about trust and enabling school structures, none has been linked to PLCs. This study will examine enabling school structures, collegial trust, and trust in principal in context to professional learning communities, which are also called communities of learning, teacher communities, and communities of continuous inquiry and improvement.

## DEDICATION

This thesis is dedicated to my parents and grandparents who always encouraged me to pursue my education and taught me the value of such by their example. My father, Robert William Gray, Jr., has been an integral force in my academic and professional life, always pushing me beyond my perceived limits. He is my hero and my rock. My mother, Margaret Saxon Gray, also a teacher, led by her example of serving others and sharing her God-given talents. My Grandmother Saxon educated her six children and returned to college in her 40s, much as I have done as a graduate student (minus the children, of course). She always reminded me that I was a survivor and that an education was a woman's investment in herself and her future. Also, my 93-year-old Grandfather, Robert William Gray, Sr., urges me on and wonders if he will have to call me "Dr. Julie" in the future. I also want to thank my best friend, Irene Daughenbaugh, who has encouraged me, listened patiently, and cheered me on. I love and appreciate all of you and could not have achieved this project without your support. I also thank God for giving me the faith, strength, ability, and persistence to complete this dissertation.

## LIST OF ABBREVIATIONS AND SYMBOLS

<i>a</i>	Cronbach alpha index of internal consistency
<i>df</i>	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
<i>ESS</i>	Enabling school structures
<i>F</i>	Fisher's <i>F</i> ratio: A ration of two variances
<i>M</i>	Mean: the sum of set of measurements divided by number of measurements in set
<i>p</i>	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
<i>PLCs</i>	Professional learning communities
<i>PLCA</i>	Professional Learning Community Assessment
<i>PLCA-R</i>	Professional Learning Community Assessment – Revised instrument
<i>r</i>	Pearson product-moment correlation
<i>t</i>	Computed value of <i>t</i> test
<	Less than
=	Equal to

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## CHAPTER 1

### INTRODUCTION

In this age of high-stake accountability teachers are feeling pressure to increase student achievement, grow professionally, and satisfy all stakeholders with passing test scores and annual yearly progress. The traditional role of teachers to promote and ensure student learning is being overshadowed by policies and mandates of the *No Child Left Behind Act of 2001* and other governmental agencies. Over the last two decades many school districts have developed professional learning communities (PLCs) as a means of unifying teachers within school organizations toward common goals and collaborative efforts. Why are some schools more effective professional learning communities than others? Which characteristics do those successful PLCs possess that others lack?

I contend that there are certain enabling school structures that influence the success or failure of PLCs implementation. Hoy and Sweetland summarize that “school structures vary along a continuum from enabling at one extreme to hindering at the other” (Hoy, 2002, p. 88). Other key aspects of PLCs relate to the role of collegial trust, teacher’s collegial trust, and trust in principal. One of the assumptions underlying the theoretical framework is that trust is an essential aspect of building a PLC. While there is emerging research about trust and enabling school structures, none has been linked to PLCs. I plan to examine enabling school structures, collegial trust, and trust in principal in context to professional learning communities, which are also called communities of learning, teacher communities, and communities of continuous inquiry and improvement.

Professional learning communities allow principals and teachers to improve the culture and climate of the school while promoting student achievement. Although a relatively new concept, the PLCs research conducted by Hord, McLaughlin, Louis, Kruse, Bryk, and their colleagues demonstrates the positive influence this approach can have for teachers' sense of professionalism, participation in shared decision-making and vision for the school, and trust in colleagues (Hipp & Huffman, 2010; Hord, 1997, 2004, 2007, 2009; McLaughlin & Talbert, 2001, 2006; Louis & Kruse, 1995; Kruse & Louis, 1993a, 1993b; Kruse, Louis, & Bryk, 1994).

Human resources – such as openness to improvement, trust and respect, teachers having knowledge and skills, supportive leadership, and socialization – are more critical to the development of professional community than structural conditions . . . The need to improve the culture, climate, and interpersonal relationships in schools has received too little attention. (Kruse, Louis, & Bryk, 1994, p. 8)

This study hypothesizes that there is a relationship between enabling school structures and professional learning communities, as well as collegial trust and trust in principal and PLCs.

#### Statement of Research Questions

The research question framing this quantitative study is: What are the roles of enabling school structures, collegial trust, and trust in principal in the development of professional learning communities? Furthermore I plan to address the role of collegial trust and trust in principal in PLCs based upon survey data from an existing database of approximately 90 schools. More specifically, other questions will be considered in order to narrow the focus of the study and attend to relevant issues that arise during the study. Other questions to be considered include: (a) What are the individual effects of enabling school structure, collegial trust, trust in principal, socioeconomic status of schools, and school level in the development of professional

learning communities?; and (b) What is the collective effect of the variables in regard to the development of professional learning communities?

### Purpose of the Study

The goal of this study is to investigate the roles of enabling school structures and trust in the development of professional learning communities. The formal aspects of the school, the factors that enable school structures, and the informal aspects of the organization, collegial trust and trust in principal, need to be further examined in context to professional learning communities. Little is known about the interaction of these variables, therefore a study is needed to expand the explanation of such relationships and guide teacher and leader practice in the field.

This study plans to address a gap that exists in the literature about these concepts and their interactions with each other. Furthermore the theoretical knowledge base can be expanded in order to allow theory to guide classroom practice. In PLCs teachers realize the benefits of collective efforts, rather than closing their doors, and teaching in isolation. “If our aim is to help students become lifelong learners by cultivating a spirit of inquiry and the capacity for inquiry, then we must provide the same conditions for teachers” (Sergiovanni, 1996, p. 152). By researching the relationship of enabling school structures and trust among colleagues in professional learning communities, this study plans to examine the role of each in context to professional learning communities.

### Sample of the Study

For the purpose of this study, each school is viewed as a unit of analysis, so collective scores will represent the overall results for the school. This sample consists of 76 public elementary, middle or high schools in the large metropolitan area of a Southeastern city.

Approximately 3,700 teachers and 190 principals and other administrators were invited to participate in this study.

### Definition of Concepts

#### *Professional Learning Communities*

There are many definitions of professional learning communities in the research, but none that is universally accepted. I selected the Hord definition as the best fit for this study as its research led to the development of the Professional Learning Communities Assessment – Revised (PLCA-R) instrument, which was implemented to gather empirical data for this project (Olivier, Hipp & Huffman, 2003; See Appendix D). A significant number of researchers have accepted Hord’s definition of professional learning communities as well. A more detailed description of the measure and the research of Hord will be presented in chapter two.

Hord provides the constitutive definition for this study for professional learning community as a collegial group of faculty and staff who are united in their commitment to student learning (Hord, 1997). According to Hord PLCs encompass these attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Seashore and her colleagues further elaborate:

By using the term professional learning community we signify our interest not only in discrete acts of teacher sharing, but in the establishment of a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student outcomes. ...The hypothesis is that what teachers do together outside of the classroom can be as important as what they do inside in affecting school restructuring, teachers’ professional development, and student learning. (Seashore, Anderson, & Riedel, 2003, p. 3)

Operationally, professional learning community will be defined by a shortened version of the Professional Learning Community Assessment (PLCA) instrument which was developed by Olivier, Hipp, and Huffman in 2003 (See Appendix B).

Other literature supports the collaborative aspects of Hord's definition of PLCs. McLaughlin and Talbert further explain that "we use the term 'teacher learning community' to define teachers' joint efforts to generate new knowledge of practice and their mutual support of each others' professional growth" (McLaughlin & Talbert, 2001, p. 75). "It suggests a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way" (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006, p. 223). Stoll and Louis further contend that:

The term 'professional learning community' suggests that focus is not just on individual teachers' learning but on (1) professional learning; (2) within the context of a cohesive group; (3) that focuses on collective knowledge, and (4) occurs within an ethic of interpersonal caring that permeates the life of teachers, students and school leaders. (Stoll & Louis, 2007, p.3)

### *Enabling School Structures*

An enabling school structure (ESS) describes the teachers' belief that the administration and rules of the school help them in their work. Organizations that are characterized as enabling structures tend to facilitate problem solving, enable cooperation, protect participants, and encourage collaboration, flexibility, and innovation (Hoy & Sweetland, 2001). In an earlier study, Hoy and Sweetland used the term enabling bureaucracy which evolved into enabling school structures (Hoy & Sweetland, 2000). Hoy and Sweetland provide the constitutive definition for enabling school structures which are "characterized by principals who are disposed

to help teachers solve problems, encourage open communication, and help teachers do their jobs” (Hoy & Sweetland, 2001, p. 310).

Hoy describes a model for an enabling structure as “a hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching learning mission of the school” (Hoy, 2002, p. 91). In contrast, a hindering school structure would be more strictly controlled or managed by the leader with a top-down approach. Operationally, enabling school structures will be defined by Enabling Schools Structures instrument as developed by Hoy in 2003 (See Appendix E).

Enabling school structures tend to look beyond traditional means for solving problems, considering creative, innovation alternatives instead. In order to sustain a professional learning community, supportive conditions must exist in the form of administrative support, time for collaboration and planning, and open communication among all faculty members regarding instructional goals (Hord, 1997). Miskel, Fevurly, and Stewart summarized that “more effective schools, as perceived by teachers, are characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity” (Miskel, Fevurly, & Stewart, 1979, p. 114). In other words, teachers perceive the school to be more effective when they are involved in collegial relationships and shared decision making, rules are more formalized, and professional activity is encouraged.

#### *Trust - Collegial Trust and Trust in Principal*

Trust in schools has evolved from the business literature over the last sixty years. Hoy and Tschannen-Moran provide the constitutive definition for trust. “Trust involves taking risk and making oneself vulnerable to another with confidence that the other will act in ways that are

not detrimental to the trusting party” (Hoy & Tschannen-Moran, 2003, p. 183). They further surmise that “benevolence, reliability, competence, honesty, and openness are all elements of trust” (Hoy & Tschannen-Moran, 2003, p. 183). Operationally, trust, collegial trust, and trust in principal will be defined by the Omnibus Trust instrument (Omnibus T Scale) which was developed by Hoy and Tschannen-Moran in 1999 and revised in 2003 (Hoy & Tschannen-Moran, 1999, 2003) (See Appendix F).

For this study, the constitutive definition for collegial trust is that “the faculty believes that teachers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Hoy, Tarter, & Kottkamp, 1991, p. 93). Those who view their colleagues as honest, open, competent, reliable, and professional have greater collegial trust. Furthermore, collegial trust is based upon the teacher’s willingness to be vulnerable to his fellow teachers, while trust in principal varies because of the power structure of the organization and the supervisory role of the principal over the teacher.

The constitutive definition for trust in principal is also based upon the research of Hoy, Tarter, and Kottkamp (1991). The terms as related to faculty trust were expanded from the earlier research of Hoy and Kupersmith (1985). Faculty members who trust the principal “have confidence that the principal will keep his/her word and will act in the best interests of their colleagues” (Hoy et al., 1991, p. 93). Furthermore, “the principal who is friendly, supportive, open, and collegial in interactions with teachers is able to command respect and trust from teachers, and trust is further enhanced by protecting teachers from unreasonable community and parental demands” (Hoy et al., 1991, p. 96).

## Theoretical Assumptions

The factory model of the late nineteenth century that promotes top-down management, standardization of practices, and efficiency is no longer a viable approach to education. What we have discovered about teaching and learning has changed over the last century. Because of school reform and restructuring, change is an ongoing aspect of schools. Rather than accepting the status quo and adapting, schools should embrace the good that comes with change. In this study I am making assumptions that professional learning communities are an effective approach to restructuring, that enabling school structures enhance PLCs, and that trust is an integral aspect of PLCs. Furthermore I am assuming that the schools I am researching are seeking change through the model of PLCs and are open to the benefits of such.

Hord asserts that there are “two types of supportive conditions necessary for PLCs to function productively: (1) logistical conditions such as physical and structural factors and resources, and (2) the capacities and relationships developed among staff members so that they may work well and productively together” (Hord, 2007, p. 3). There are circumstances when a school must consider resources available outside of the school environment or untapped resources within the organization. Stoll and her colleagues summarize that “creating and developing PLCs appears to depend on . . . focusing on learning processes; making the best of human and social resources; managing structural resources; and interacting with and drawing on external agents” (Stoll et al., 2006, p. 231).

Trust and sharing among teachers and school leaders are essential aspects of developing a professional learning community. How can a professional learning community exist without trust and collaboration? If teachers are not open to sharing best practices and examining their classroom practices, then little change can occur. When unwilling to be vulnerable, the

development of a professional learning community is obstructed. “Under conditions of vulnerability, risk, and interdependence, trust can be thought of as the extent to which a trustor (one who trusts) perceives a trustee (the trust referent) as trustworthy” (Forsyth, Adams, & Hoy, 2011, p. 18).

Hoy and Sweetland contend that “teachers need to do more than trust each other if they are to be innovative and effective; they must trust their leader” (Hoy & Sweetland, 2001, p. 310). They assert that there is a reciprocal relationship between enabling bureaucracy and trust in principal (Hoy & Sweetland, 2001). “That is, enabling structure facilitates faculty trust in the principal, and conversely, faculty trust in the principal reinforces enabling bureaucracy” (Hoy & Sweetland, 2001, p. 311). Covey further supports that “trust is critical for a productive environment because it enables the bureaucracy to function effectively” (Covey in Hoy & Sweetland, 2001, p. 310).

In Figure 1.1, Hoy and Sweetland compare the characteristics of enabling and hindering hierarchy within the structures of a school organization. This type of hierarchy encourages problem solving, collaboration, cooperation, flexibility, and innovation, and protects those who participate in each of these.

**Figure 1.1 Contrasting Enabling and Hindering Centralization**

<b>Characteristics of Enabling Hierarchy</b>	<b>Characteristics of Hindering Hierarchy</b>
Facilitates problem solving Enables cooperation Collaborative Flexible Encourages innovation Protects participation	Frustrates problem solving Promotes control Autocratic Rigid Discourages change Disciplines subordinates

**FROM: HOY & SWEETLAND, (2007), p. 345**

In an enabling hierarchy, the principal is more likely to invite teachers to take part in shared decision making. Halpin describes such enabling behavior of the principal as “open . . . low hindrance” (Halpin, 1966, p. 175). Teachers and principals working together in an open climate tend to be more cooperative (Halpin, 1966). In contrast, a hindering hierarchy prevents change and problem solving from occurring and controls the organization in an unyielding, autocratic approach that discourages participation of its members.

When a principal does not encourage teacher input in the decision making process, then teachers perceive that they have no say in decisions made. Moreover, “trust is a key aspect of organizational life; it enables a leader to innovate and deal with resultant confusion that often accompanies change” (Bennis & Nanus in Hoy & Sweetland, 2001, p. 310). It is important that teachers trust each other and their principal. Hoy and Sweetland summarize that “enabling schools encourage trusting relationships between teachers and between teachers and the principal” (Hoy & Sweetland, 2001, p. 314).

### Conceptual Framework

The development of a PLC takes years of effort, planning, and focus on the part of the members of the organization. Change for the sake of change can create additional problems for a school to overcome. Hord elaborates “changing schools is highly challenging, complex, and messy work - and change is rarely welcomed” (Hord, 2004, p. 3). In her research, she found that many schools considered the model of PLCs because of demands from outside forces to make improvements and immediate changes. Often schools were considered failing because of high student dropout rates, low scores on standardized testing, low teacher morale or a combination of all three. The high level of accountability that accompanies the No Child Left Behind Act of 2001 and other governmental interventions raised the level of stress and pressure in many school

districts. Schools were given the directive to improve or else. When did our focus change from student learning to student mastery of standardized tests?

“It is also generally agreed that effective professional learning communities have the capacity to promote and sustain learning of professional in a school with the collective purpose of enhancing student learning” (Louis & Kruse, 1995; Bolam et al., 2005). The purpose of every teacher should be to improve student achievement and learning, which is more likely to occur in PLCs. There are many questions that accompany the challenges that face schools and those developing PLCs. “Assuming we find the means to nurture democracies in schools [in the form of PLCs], how do we train and retrain principals, superintendents, and other district personnel to let go of the reins and allow these democracies to flourish?” (Hord, 2004, p. 4) Bolam and his colleagues summarize that “professional learning communities are created, managed and sustained through four key processes: optimizing resources and structures; promoting individual and collective professional learning; . . . and leadership and management supporting PLC development” (Bolam, Stoll, & Greenwood in Stoll & Louis, 2007, p. 19).

### Theoretical Framework

This study asserts that certain enabling school structures are likely to exist in professional learning communities and that a relationship exists between the two. Secondly, trust plays an integral role in the relationships between colleagues and school principals in PLCs. Finally, there is a collective relationship among enabling school structures, collegial trust, trust in principal, and the development of professional learning communities.

Teachers are more likely to grow professionally if provided opportunities to share, plan, and collaborate with colleagues. Learning is a social activity for teachers and students alike. “Much of the literature on PLCs is grounded in theories that highlight the social nature of

learning and detail practices through which teachers share and build their work” (Feger, Arruda, Pringle, & Briggs, 2008, p. 5). Learning is a social activity, which explains the nature of teacher collaboration. Furthermore, enabling school structures promote trusting relationships amongst colleagues. In 2002 Hoy concluded:

As theoretically expected, enabling school structure correlated positively with collegial trust in teachers . . . In other words, when school structure was enabling, teachers trust each other, demonstrate professional autonomy, are not bound by rigid rules, and do not feel powerlessness. (Hoy, 2002, p. 91)

In sum, this study hypothesizes a correlation between enabling school structures and the development of professional learning communities. Further, it is posited that there is a correlation between collegial trust and trust in principal and the development of professional learning communities. The hypotheses for this study are stated thus:

H1: The greater the enabling school structures of the school, the greater the development of the professional learning community.

Enabling school structures would include the following characteristics: “facilitates problem solving, enables cooperation, collaborative, flexible, encourages innovation, and protects participation” (Hoy & Sweetland, 2007, p. 345)

H2: The greater the collegial trust of the school, the greater the development of the professional learning community.

Collegial trust allows for collaboration and sharing within professional learning communities, as collaboration and sharing build collegial trust.

H3: The greater the trust in principal of the school, the greater the development of the professional learning community.

Teachers who trust their school leader are more likely to participate in the professional learning communities when they feel respected and valued as a professional educator.

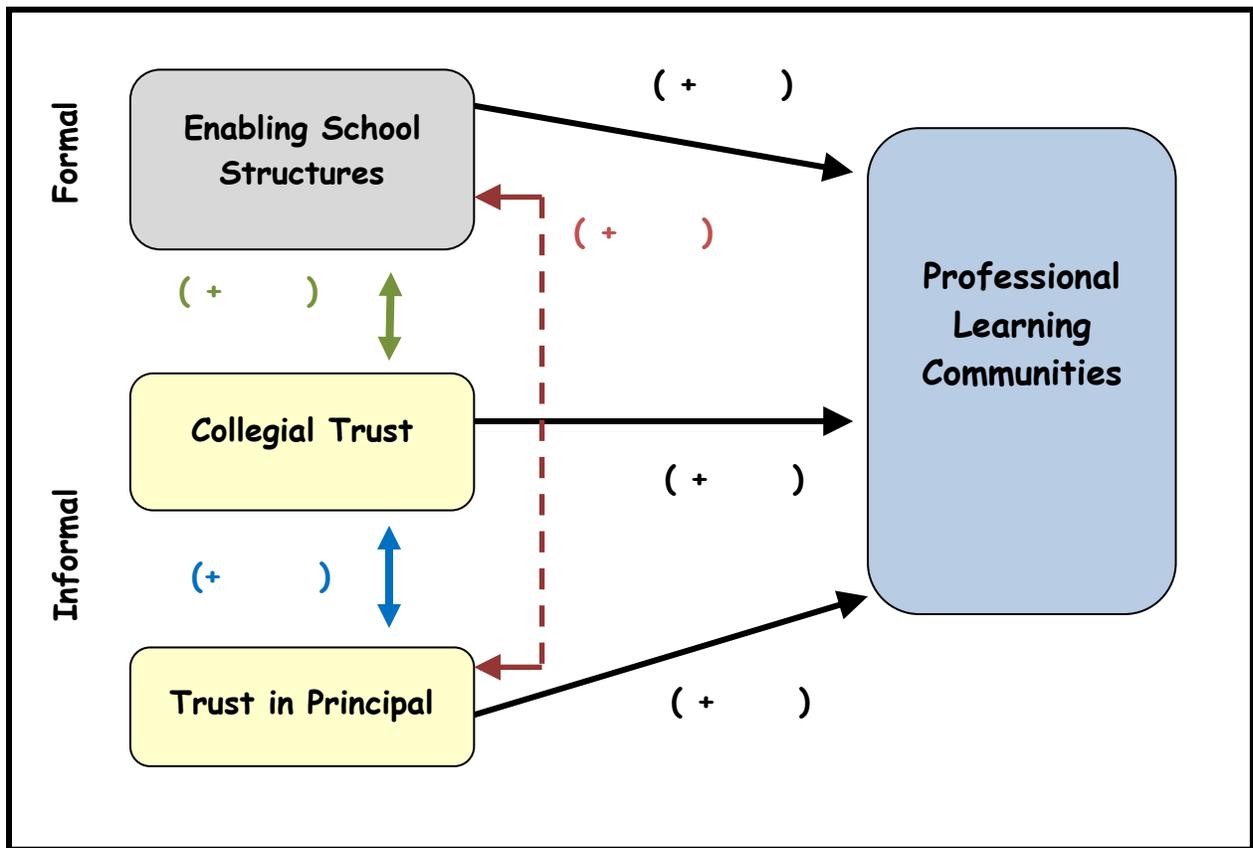
H4: Enabling school structures, collegial trust, and trust in principal will be jointly and individually related to professional learning communities.

There is a relationship between each of the variables, jointly and individually.

H5: There is a relationship between collegial trust and trust in principal.

Teachers who trust each other are more likely to trust the principal and vice versa.

**Figure 1.2 Conceptual Diagram of Hypothesized Relationships**



Significance of the Study

Over the last twenty years researchers have begun to study professional learning communities and the benefits of such for schools. There are characteristics that are found in

PLCs that have been successful in bringing colleagues together toward a common goal of improving student achievement. Three aspects that need to be examined closer are the role of enabling school structure, collegial trust, and trust in principal in PLCs. Developing PLCs that promote collegiality, a sense of accomplishment for teachers (self-efficacy and collective efficacy), and shared vision of improvement for teachers, students, and parents alike seem to be more than an educational trend. Recent research and literature demonstrates the staying power of this approach to education and staff development. Often in the field of education trends come and go, only to be quickly replaced by the next fad or trend, especially in the area of staff development.

As teacher's trust in leaders and colleagues increases, so does the strength of the school's climate and culture as a PLC. Stoll et al. contend that "developing professional learning communities (PLCs) appears to hold considerable promise for capacity building for sustainable improvement" (Stoll et al., 2006, p. 221). "Though difficult to form, professional learning communities can lead to authentic change in teaching practice and improved student learning" (Lieberman & Miller, 2008, p. 2). When we question our practices and beliefs, consider alternative strategies, and participate in professional collaboration, we have an opportunity to make changes and improvements in our schools.

#### Researcher Positionality

Over the last twelve years I have been a participant, leader, and facilitator of several PLCs, which has shaped my thinking and perceptions of such. As a teacher, I was a part of a team of teachers, a member of, and chairperson for a foreign language department in several schools during my eleven years in middle and high school classrooms. Each of these were professional learning communities, but on a limited or smaller scale. As an instructional lead

teacher at a middle school I was responsible for establishing a professional learning community with my colleagues, providing staff development, and facilitating the overall school improvement plan. I was also a participant in a district level PLC with other instructional lead teachers from other middle schools. So, I learned as a participant and facilitator about how important trust, shared vision, professionalism, collaboration, and cooperation were in an organization. It will be important to recognize my past experiences with PLCs although my goal is to maintain objectivity of the study findings and results.

### Limitations

During a search of the literature about professional learning communities, I recognized that there was much more qualitative research than quantitative research. There are many case studies which describe an individual school and its programs, rather than generalizable, empirical findings. The research in publications for practitioners “focuses mainly on accounts of the processes and stages that occur along their development path” (Feger et al., 2008, p. 17). Therefore, I believe that the bias of the literature can be a limitation for the quantitative researcher. It is difficult to assess the effectiveness of a PLC. Therefore more empirical research is needed to expand the literature about PLCs and their effectiveness. This study moves beyond the prescriptive and description literature about professional learning communities to fill in the gray area of the research.

### Summary

Over the last twenty five years, there has been much research about professional learning communities. “The professional learning community is seen as a powerful staff development approach and a potent strategy for school change and improvement” especially if sustained over time (Hord, 1997, p. 1). Rather than the initiative or program of the year, school communities

need the opportunity to grow over time, to develop into professional learning communities. This study will investigate the relationship of enabling school structures, collegial trust, and trust in principal in context to the development of professional learning communities. There is a gap in the literature, which this study plans to address.

Professional learning communities share five dimensions including: “supportive and shared leadership, shared values and vision, collective learning and application of learning, supportive conditions, and shared practice” (Hord, 2004, p. 7). The theoretical framework for this study demonstrates that enabling school structures represent the formal part of the school organization. In other words, a school with enabling school structures provides the “supportive leadership” and “supportive conditions” needed to sustain a professional learning community.

Further, collegial trust and trust in principal correspond to the informal part of the school organization. Without trust in colleagues and school leader, “shared values,” “collective learning,” and “shared practice” are difficult, if not impossible, to attain (Hord, 2004, p. 7). Hargreaves contends that “the backbone of a strong and sustaining PLC is trust” (Hargreaves in Stoll & Louis, 2007, p. 187). In Chapter Two a literature review will be provided for professional learning communities, enabling school structures, collegial trust, and trust in principal and how each relates to the other within the school community.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This section provides a literature review of organizational learning, professional learning communities, enabling school structures, collegial trust, and trust in principal. A conceptual framework will be described and a theory developed. A literature review will be provided for the following concepts: organizational learning, professional learning communities, enabling school structure, and trust, in colleagues and principal. The theoretical framework will describe how structures and trust influence professional learning communities. A hypothesis will be derived to test the theory.

#### Organizational Learning

Senge defines a learning organization as a place “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured . . . where people are continually learning how to learn together” (Senge, 1990, p. 3). Senge and executive leaders developed the concept of organizational learning in the late 1980 at the Massachusetts Institute of Technology, which led to the establishment of the Center for Organizational Learning in 1991. Led by Senge the center was founded with “a mission of fostering collaboration among a group of corporations committed to fundamental organizational change . . . [focusing on] collective inquiry . . . and nurturing personal and shared vision” (Clanon, 1999, p. 2).

Members of the Society for Organizational Learning (SoL) believe all humans are born with an innate desire to learning, learning is social, and the capacity for learning is increased in community and through collaboration (Clanon, 1999). For organizational learning to be most

effective they promote shared responsibility and decision making, openness to learning from colleagues, and innovation (Clanon, 1999). Like many trends the concept of organizational learning is borrowed from the business literature and adapted to the field of education in regard to professional development and collaboration.

Argyris and Schön (1978) developed the concept of organizational learning through single-loop and double-loop learning. Easterby and Araujo summarized the research of Argyris and Schön in the following:

Thus single-loop learning is linked to incremental change, where an organization tries out new methods to be able to make continuous adjustments and adaptations. Double-loop learning is associated with radical changes, which might involve a major change in strategic direction, possibly linked to replacement of senior personnel. (Easterby & Araujo, 1999, p. 3)

In other words single-loop learning takes place over time and is adjusted and adapted as necessary, while double-loop learning involves more dramatic change within the organization. An example of single-loop learning could be adjusting to a new curriculum program, while a double-loop example could be the replacement of a well-liked principal in an established school.

Historically, “teachers in most . . . schools were left ‘on their own’ to practice as they chose, in keeping with norms of professional autonomy in American education” (McLaughlin & Talbert, 2001, p.2). Yet the trend has shifted to more collective organizational learning in schools. “Organizational learning is the ability of an organization to gain insight and understanding from experience through experimentation, observation, analysis, and a willingness to examine successes and failures” (Serrat, 2009, p. 1). Brown and Duguid state that “working, learning, and innovating are closely related forms of human activity that are conventionally

thought to conflict with each other” (Brown & Duguid, 1996, p. 58). However they recognize a shift has occurred linking theory and practice, thus the interrelation between working, learning, and innovating. This type of organizational learning has been called a professional learning community, community of practice, or learning community. Rather than being isolated within their classroom and individual teaching practices, educators are becoming more open to collaboration and collegial learning.

Simon describes the social aspect of the phenomena of organizational learning in which knowledge is constructed with others rather than individually (Simon, 1996). According to Senge a learning organization is a place “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, 1990, p. 3).

Based upon decades of research in public schools, Sergiovanni insists that classrooms must become communities of learning, where teachers are involved in a community of learning, caring, and inquiring. “Key to community in both classrooms and schools is a commitment to inquiry, and a commitment to learning as the basis for decisions” (Sergiovanni, 1996, p. 147). “Organizational learning can provide necessary and valuable contribution to organizational health by advancing the shared values, clarify the purpose [of the organization], institutionalized leadership, technical capability, open and honest channels of communication, and ability to deal constructively with conflict” (Serrat, 2009, p. 2). In other words, organizational learning has a positive impact on the health of the school and communication among colleagues.

McLaughlin and Talbert “confirmed Rosenholtz’s (1989) findings, suggesting that when experienced teachers had opportunities for collaborative inquiry and its related learning, the

result was a body of wisdom about teaching that could be widely shared” (Rosenholtz in Hord, 1997, p. 10). Rosenholtz, who studied the school as a workplace in the late 1980s, found that “teachers who felt supported in their own ongoing learning and classroom practice were more committed and effective than those who did not receive such confirmation” (Rosenholtz in Hord, 1997, p. 2). In summary “teachers’ regard for their work – their sense of optimism, hope, and commitment – tends to reside in workplace conditions that enable them to feel professionally empowered and self-fulfilled, that keep them reaching for new teaching challenges” (Rosenholtz, 1989, p. 165).

“Building learning community into the work lives of American high school teachers is fundamentally a problem of reculturing the profession – changing the ethos of teaching from individualism to collaboration, from conservatism to innovation” (McLaughlin & Talbert, 2001, p. 125). Leaders of such organizations “are responsible for building organizations where people continually expand their capabilities to understand complexity . . . that is, they are responsible for learning” (Senge, 1990, p. 340). Sergiovanni compares a school as a learning community to “a kind of connectedness among members in a family, a neighborhood, or some other closely knit group” (Sergiovanni, 1992, p. 47). It seems only natural that organizational learning has evolved into what we now call professional learning communities in context to schools.

### Professional Learning Communities

#### *Defining the Concept*

Hord provides the constitutive definition for this study for professional learning community (PLC) as a collegial group of faculty and staff who are united in their commitment to student learning. According to Hord PLCs encompass these attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared

personal practice (Hord, 1997). Operationally, professional learning community will be defined by a shortened version of the Professional Learning Community Assessment (PLCA) instrument which was developed by Olivier, Hipp, and Huffman in 2003 (See Appendix B and D).

The terms professional learning community, teacher community, professional community, community of continuous inquiry and improvement, and community of practice are often used interchangeably, although their meanings vary slightly (Lave & Wenger, 1991). “Broadly speaking, we use the term professional community to refer to schools in which interaction among teachers is frequent and teachers’ actions are governed by shared norms focused on the practice and improvement of teaching and learning” (Bryk, Camburn, & Louis, 1999, p. 753).

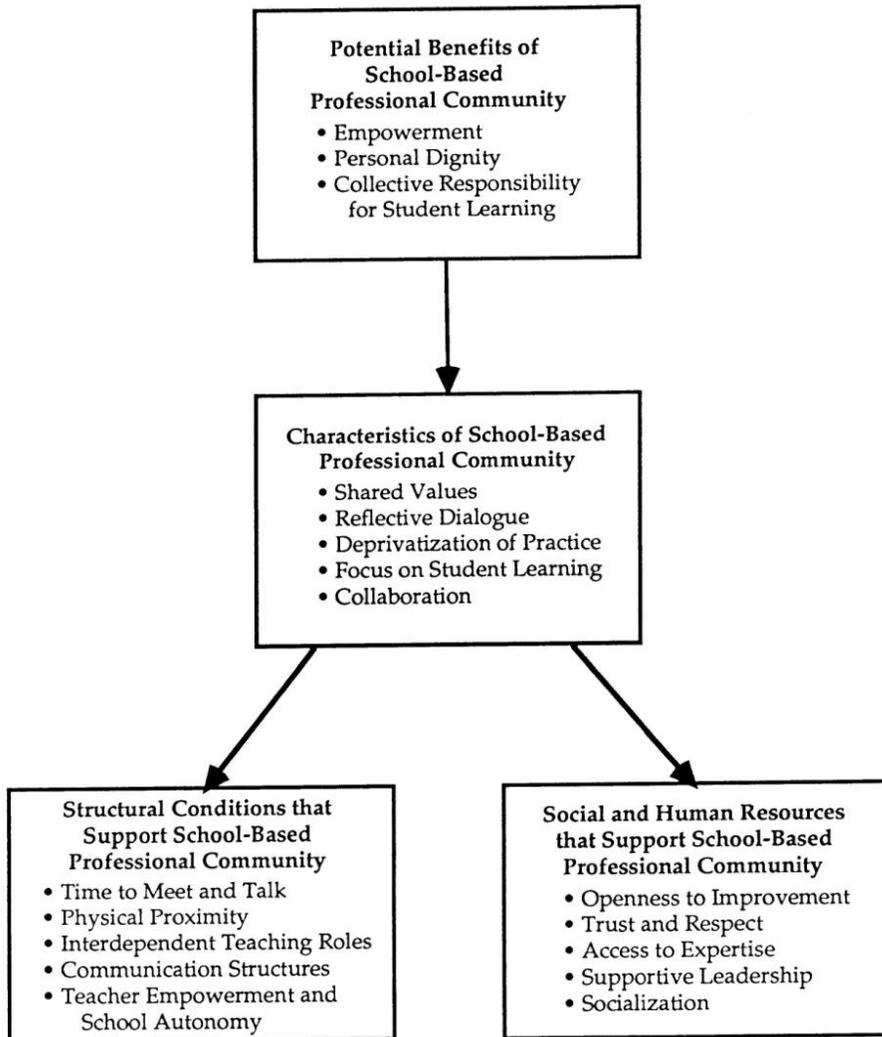
#### *Characteristics of Professional Learning Communities*

Louis and Kruse characterize a professional learning community as an organization with the following characteristics: “shared values, reflective dialogue, deprivatization of practice, focus and student learning, and collaboration” (Louis & Kruse, 1995, p. 25). Lieberman and Miller summarize that “as ongoing groups of teachers who meet regularly for the purposes of increasing their own learning and that of their students [in] . . . an environment where new ideas and strategies emerge, take root, and develop” (Lieberman & Miller, 2008, p. 2).

In Table 2.1, Louis and Kruse provide a framework for analyzing school-based professional community based upon three-year longitudinal study of schools as a part of the Office of Educational Research and Improvement’s Center for Organizational and Restructuring of Schools (Louis & Kruse, 1995). They summarize the benefits of a school-based professional community, characteristics of such, structural conditions needed, and social and human resources of support (See Table 2.1). Louis and Kruse’s framework provides support of the theoretical

framework for this study. Enabling school structures are represented by the structural conditions that support school-based professional community, while trust is represented by the social and human resources of support.

**Figure 2.1 Framework for School-Based Professional Community**



FROM: LOUIS & KRUSE, (1995), p. 25

We must not forget that the ultimate goal of schools is to create an environment where students and teachers are actively engaged in learning and teaching (Rud, 2008). According to Mitchell and Sackney, a professional learning community is where “educators collaboratively

analyze current practices, experiment with new practices, and assess the relationship between the practice within the community context” (Mitchell & Sackney, 2001, p. 1). Stoll continues:

A professional learning community is an inclusive group of people, motivated by a shared learning vision, who support and work with each other, finding ways, inside and outside their immediate community, to enquire on their practice and together learn new and better approaches that will enhance all pupils’ learning. (Stoll et al., 2006, p. 5)

Educators reflect upon instructional practices and determine how improvements can be made.

Teachers who participate in PLCs no longer work in isolation and called to become members of a collaborative team within their school environment.

#### *Supportive and Shared Leadership*

When schools have supportive leaders, shared decision making, opportunities for collaborative planning, common vision and goals, and an opportunity for sharing of best practice, then a professional learning community is more likely to be sustained over time (Hipp & Huffman, 2000, 2002, 2003 & 2010; Hipp, Huffman, Pankake & Olivier, 2008; Hord 1997, 2004, 2007, 2009; Huffman et al., 2001; Huffman & Hipp, 2003; Kruse & Louis, 1993a; Kruse & Louis, 1993b; Kruse, Louis & Bryk, 1994; Lieberman, 2000; Lieberman & Miller, 2008; Louis & Kruse, 1995; McLaughlin & Talbert, 2001; McLaughlin & Talbert, 2006; Stoll et al., 2006). While there is no step-by-step guide for developing a PLC that principals can follow. Teachers must move beyond individual professional goals and towards a more collective one in order to establish a positive culture of a professional learning community. By involving stakeholders in the decision-making process, they are more likely to support the decisions made (Yukl, 1989).

There are many benefits for teachers in PLCs as noted by McLaughlin and Talbert. They found that “teachers who participated in strong-innovative communities enjoyed a greatly enriched teaching career, marked by continuous growth and intrinsic professional rewards” (McLaughlin & Talbert, in Lieberman & Miller, 2008, p. 27). In 1995 the Center on Organization and Restructuring of Schools published the results of a large study involving over 800 schools across the United States. Newmann, King and Youngs performed a study over two years in nine schools and reported that “the schools which demonstrated the highest student learning outcomes, even in areas of disadvantage, were those . . . where staff worked collaboratively sharing common goals and . . . had significant input into decision-making about their work” (Newmann, King, & Youngs in Stoll & Louis, 2007, p. 132).

Gordon purports that there are four primary reasons for promoting shared decision making in a school.

First, better decisions will result if the principal involves other members of the school community in the decision-making process . . . Second, shared decision making will increase collaboration among members of the school community, thus moving the school closer to a collaborative culture. Third, if allowed to participate in decisions about change, members . . . are far more likely to develop a sense of ownership in the decision and thus support implementation of the change. Fourth, if we really wish to empower students to be contributing members of a democratic society, they need to be members of a school community that empowers all of its members. (Gordon, 2004, p. 166)

Professional learning communities “afford opportunities for engagement in joint work, critical reflection, and problem solving that is aimed at individual, collective, and schoolwide improvements in curriculum, instruction, and organization” (Lieberman & Miller, 2008, p. 2).

“Shared leadership is a fundamental principle and dynamic of learning communities. Leaders spread responsibility and ownership for community values throughout the district, school, or department” (McLaughlin & Talbert, 2001, p. 121).

House and Aditya surmise that “leadership involves collaborative relationships that lead to collective action grounded in the shared values of people who work together to effect positive change” (House & Aditya, in Gill, 2006, p. 29). Furthermore, Gordon contends that principals who share their power are “in fact increasing their power as change agents by increasing the capacity of the school to change” (Gordon, 2004, p. 166). Bryk and his colleagues contend that “school leadership functions as the driver, directing attention to strengthening the ties among school professionals, parents, and the local community and to expanding the professional capacity of the school’s faculty to advance student learning” (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010).

### *Collective Creativity*

It is important that teachers are provided the opportunity to share ideas about best practices, participate in shared decision-making, and collaborate with colleagues on a regular basis within the workday. There are three essential characteristics of professional communities which include: “reflective dialogue among teachers about instructional practices and student learning, a deprivatization of practice in which teachers observe each others’ practices and joint problem solving is modal and peer collaboration in which teachers engage in actual shared work” (Bryk et al., 1999, p. 753). “Building community in schools is about a shared quest to do things differently, to develop new kinds of relationships, to create new ties, to make new commitments” (Sergiovanni, 1994, p. 152).

There is a shift of how teachers think and act as they become acculturated to PLCs. The benefits of participation in PLCs include: a reduced isolation of teachers, better informed and committed teachers, and academic gains for students (Hord, 1997). “Teachers take a collective stance on the issue of teaching expertise, seeing one another as resources for their improved practice with students in all of their classes” (McLaughlin & Talbert, 2001, p. 75). There are many positive attributes of PLCs including: empowerment of teachers and leaders, teacher self and collective efficacy, and collective responsibility for student learning (Louis & Kruse, 1995).

Teachers focus on authentic student learning, that which is real-world experience rather than contrived in nature. “High-quality student learning is achieved in classrooms through authentic pedagogy (instruction and assessment), and students of all social backgrounds benefit equally” (Hord, 2004, p. 12). Teachers support and help one another to improve instructional practices and engage students in the learning community (Hord, 2004). Furthermore, there is “evidence that schools organized as communities promote greater teacher commitment and more student engagement in school work” (Bryk et al., 1999, p. 752).

In such communities, teachers together address the challenges of their student body and explore ways of improving practices to advance learning. This collective inquiry generates knowledge of practice, while a teacher’s individual learning in strong traditional communities draws upon knowledge for practice, derived from research and theory outside the teaching setting. (McLaughlin & Talbert, 2001, p.63).

Senge contends that a learning organization is “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, 1990, p. 3).

### *Shared Values and Vision*

Schools, which were considered PLCs, “engaged students in high intellectual learning tasks, and students achieved greater academic gains in math, science, history, and reading than student in traditionally organized schools” (Lee, Smith, & Croninger, in Hord, 2004, p. 12). Teachers in PLCs tended to have higher morale, while student attendance improved, and the student drop-out rate decreased. “Through their participation in professional learning community, teachers become the first learners, continuous learners, and more effective teachers” (Hord, 2004, p. 14).

“A core characteristic of the vision is an undeviating focus on student learning” (Louis & Kruse, in Hord, 1997, p. 5). Teachers move beyond individual thinking and consider the effect of their actions on the entire organization. “Little by little, researchers are helping provide evidence that learning communities make a real difference to students and their teachers” (Lieberman in Stoll & Louis, 2007, p. 202). When teachers work towards a shared vision, “stronger ties are created that bond people together more tightly and that bind them more tightly to shared ideals and shared traditions” (Sergiovanni, 1994, p. 148).

In a study by Andrews and Lewis schools reported academic gains that “indicate[d] the power of school-wide change from within the organization, through engagement in [professional learning communities]” (Andrews & Lewis in Stoll & Louis, 2007, p. 144). Furthermore, “sustainable professional learning communities renew teachers’ energy by invigorating their collective learning,” focus on student and teacher learning, and share in decision making and leadership within the school (Hargreaves in Stoll & Louis, 2007, p. 192). “In these communities of practice, teachers are mutually engaged in teaching; they jointly develop their practice; and they share a repertoire of resources and history” (McLaughlin & Talbert, 2001, p.41).

### *Supportive Conditions*

McLaughlin and Talbert describe the phases that teachers in PLCs go through, from the novice to intermediate to advanced stage (Lieberman & Miller, 2008). Teachers begin by questioning things and gathering data in the novice stage, then realize that data is insufficient for reform. By collaborating with others, the intermediate stage yields to the advanced stage, where practice is changed in order to improve student learning. “Collegial cultures [as opposed to congenial ones] develop bonds of trust among members that transcend congeniality” (Lieberman & Miller, 2008, p. 18). Teachers move beyond merely being kind to open, deeper conversations about instructional practices. “This new relationship forged among administrators and teachers leads to shared, collegial leadership in the school where all staff members grow professionally as they work toward the same goal” (Hord, 2007, p. 2).

“The professional learning communities envisioned by others break down the walls imposed by a building structure or even the reach of school division controls to encompass networks of like-minded professionals in a learning community” (Tylus, 2009, p. 37). Louis and Kruse surmise that certain factors must exist in the school community for a professional learning community to be developed. There must be “time to meet and talk, small school size and physical proximity of the staff to one another, interdependent teaching roles, well-developed communication structures, school autonomy, and teacher empowerment” (Louis & Kruse, in Hord, 1997, p. 6). These factors demonstrate the supportive conditions essential to the success of a professional learning community.

### *Shared Personal Practice*

In order to establish a professional learning community, teachers must perceive themselves to be professionals and expect to be respected as such. “It is argued that enhanced

teacher professionalism (i.e., increasing the professional status of teaching and providing teachers with greater opportunities for professional growth) is a prerequisite in efforts to promote more challenging academic work for all students” (Bryk et al., 1999, p. 752). Beyond professionalism, it is critical for teachers in PLCs to be willing to grow professionally and collaborate with colleagues. PLCs “are collegial cultures where teachers develop the capacity to engage in honest talk” about instructional practices and beliefs (Lieberman & Miller, 2008, p. 18).

Teachers discuss instructional practice at a deeper level than in the past. They begin to question their practices, reflecting upon their rationale for such, and asking what is best for students. “Teacher learning communities break the rule of professional privacy that commonly keeps high school communities weak, and they resist myriad forces in secondary education to stratify students and teachers” (McLaughlin & Talbert, 2001, p. 91). Barth contends that “by building community in schools we increase the likelihood that capacity will be tapped, conditions will become right, and the culture of the school will be improved” (Barth, 1990, p. 45).

Teachers move away from individualism, isolation, and privacy of practice as they engage in the community with their colleagues. Principals have the opportunity to “nurture the human capacities needed for PLCs by helping staff relate to each other, providing some social activities for staff members to get to know each other on a personal level, and creating a caring environment” (Hord, 2004, p. 11). Collaboration “requires a commitment to time and to the conditions that support collegiality and trust” (Lieberman & Miller, 2008, p. 19).

McLaughlin and Talbert performed the first study focused on high school teachers working in community. Based upon this study they developed a table that demonstrates the

varying degrees of professional community, ranging from weak to learning community (See Table 2.2). Their research is significant as it considers the professional learning community in the high school, rather than elementary or middle school, as most studies had previously. They categorized how teacher communities are different in regard to the technical culture (beliefs about students, pedagogy, etc.), professional norms (collegiality and expertise), and organizational policies (teacher assignment and resources) (McLaughlin & Talbert, 2001, p. 19). “They [the teachers] get real benefits from collaborating with colleagues on classroom practice, seeing this joint work translate into success with their students” (McLaughlin & Talbert, 2001, p. 88).

**Figure 2.2 How Teachers Communities Differ in Culture**

<b>Professional Community Type</b>	Typical (Weak) Community	Strong Traditional Community	Learning Community
<b>TECHNICAL CULTURE</b>			
<i>Belief about students</i>	Students differ in ability to succeed academically	Students differ in ability to succeed academically	All students can achieve at high academic standards
<i>Student role as learner</i>	Passive role in content learning	Passive role in content learning; active role in advanced classes	Active role in content learning for all students
<i>Content</i>	Text-based subject content	Sequential, hierarchical subject topics and skills	Core discipline-based concepts spiraled through curricula
<i>Pedagogy</i>	Knowledge transmission; emphasis on text coverage	Knowledge transmission; emphasis on teacher lecture	Bridging subject and student knowledge; learning community
<i>Assessment practices</i>	Text-based homework and tests; curve grading	Special tests for screening and sorting students; curve grading	Performance assessments using standards-based rubrics; feedback for improvement
<b>PROFESSIONAL NORMS</b>			
<i>Collegial relationships</i>	Isolation enforced by norm of privacy	Coordination around student testing and assignment policies	Collaboration around teaching and learning; mentoring
<i>Professional expertise</i>	Expertise as developed through private practice	Expertise as based in discipline knowledge	Expertise as collective, based in knowledge shared and developed through collaboration
<b>ORGANIZATIONAL POLICIES</b>			
<i>Teacher course/class assignment</i>	Prerogative of seniority	Teacher tracking by expertise	Course rotation and sharing for equity and learning
<i>Resource allocation</i>	Tenure-based access to resources	Resource access according to teacher expertise and track	Collective definition of resource needs and sources; resource creation and sharing

Source: Adapted from Milbrey W. McLaughlin & Joan E. Talbert, *Professional Communities and the Work of High School Teaching*, Chicago: University of Chicago Press, 2001.

FROM: MCLAUGHLIN & TALBERT, (2006), p. 19

Developing a PLC takes time, sometimes years, and a commitment of the participants to take risks as professionals. Teachers learn to “go public with their teaching, opening themselves to collegial scrutiny, feedback, critique, and taking advantage of the opportunity to display their successes and to influence others” (Lieberman & Miller, 2008, p. 38). Teachers may need to unlearn and relearn instructional practices during this process. Brandt summarizes that “when a school creates such a community, individual talent and commitment are harnessed into a group effort that pushes for high-quality learning for all students” (Brandt in Hord, 2004, p. 9).

Brown and Duguid assert that “for working, learning, and innovating to thrive collectively depends on linking these three, in theory and in practice” (Brown & Duguid, 1996, p. 79). In other words, collaboration allows teachers the opportunity to put theory into practice. “Building learning community into the work lives of American high school teachers is fundamentally a problem of reculturing the profession – changing the ethos of teaching from individualism to collaboration, from conservatism to innovation” (McLaughlin & Talbert, 2001, p. 125).

### *Historical Examples of Professional Learning Communities*

While there is no way to pinpoint the establishment of the first professional learning community, the concept seems to have developed from organizational learning in the business literature. “The influence of work in the disciplines of organizational learning and learning organizations clearly played a foundational role that would guide educational research (Astuto, in Tylus, 2009, p. 31). According to Hord, there was a shift in the research during the 1980s from looking at school culture to the teacher workplace in context to teacher effectiveness (Hord, 2004). “This emphasis was timed with the work of Senge (1990) who others (Dietz, 2008) note brought in the conceptual components of learning organizations that would become the

cornerstone theoretical framework for research on professional learning communities in schools” (Tylus, 2009, p. 32).

Meanwhile, other researchers were investigating teacher collaboration and collective efforts being made in schools around the country. In particular, Rosenholtz (1989), Kruse, Louis and Bryk (1994), and Darling-Hammond (1997) were examining the role of collaboration in schools. “This led to organizations, like the Southwest Educational Development Laboratory, to design and develop methods for determining what types of structures constituted professional learning communities” (Hord, in Tylus, 2009, p. 32). The work of the SEDL led to many studies of PLCs, particularly in the Southwest.

Hord provides a brief history of the concept, mentioning a PLC that began in 1982 by Lucianne Carmichael, an elementary school principal and the first principal of the Harvard University Principal Center. Carmichael recognized the need for a change in the role of the principal in the school organization. She described the principal’s “sense of omnicompetence” which is acts as a barrier to professional development for the principal (Hord, 2004, p. 8). Because of the hierarchical nature of the school, the principal is viewed as powerful, capable of performing all leadership tasks and decision making. Carmichael argued that this pattern needed to be changed so that the principal can be seen as a learner as well as a colleague. She summarized that “to foster shared leadership, the principal must encourage others to assume leadership roles and to be able to recognize when staff, parents, or others are ready to take on leadership roles (Hord, 2004, p. 8).

In the 1990s the Southwest Educational Development Lab (SEDL) began a nine year study of teachers who worked as a community of learners. Hord and her colleagues called these schools communities of continuous inquiry and improvement and eventually professional

learning communities (Hord, 2004). Hord learned that transforming a school into a learning community can be a challenging task that takes time to achieve. Her research provides a foundation for other researchers of PLCs and this study. Building upon the research of Hord, Hipp and Huffman conducted two longitudinal, qualitative studies in the 1990s. These studies are the basis for the development of the PLCA instrument (Hipp & Huffman 2000, 2002, 2003, & 2010; See Appendix D).

From 1989 to 1991 McLaughlin and Talbert studied sixteen schools in seven school districts in California and Michigan (McLaughlin & Talbert, 2006). In this quantitative study, several survey scales were used to measure teacher perceptions about collegiality, technical culture, expectations for student achievement, bureaucratic constraints, teacher learning community, job satisfaction, commitment to teaching career, professional engagement, satisfaction with professional support, and principal leadership (McLaughlin & Talbert, 2006, pp. 177- 184).

McLaughlin and Talbert found that the schools that were innovative, strong learning communities had certain characteristics in common. The school leaders were supportive, people-oriented, and encouraging as opposed to commanding and controlling. They assert that an effective principal in a strong learning community will protect teachers from outside forces, integrate shared decision making, provide leadership opportunities for faculty, and support teacher collaboration (McLaughlin & Talbert, 2001). Further, they contend that schools need to change norms from individualism (teacher concerned about his classroom) to collaboration and reflexive conservatism to innovation. “In these communities of practice, teachers are mutually engaged in teaching; they jointly develop their practice; and they share a repertoire of resources and history” (McLaughlin & Talbert, 2001, p.41).

### *Limitations of Professional Learning Communities*

PLCs are not the norm in the field of education and are often misunderstood, despite having been touted as a significant school improvement strategy for nearly 15 years” (Hord, 2007, p. 1). Many schools claim to be PLCs when in reality they do not possess the characteristics described by Hord and her colleagues: shared beliefs, values, and vision; shared and supportive leadership; collective learning and application of such; supportive conditions; relational factors and human capacities; and shared personal practice (Hord, 2007).

These characteristics may shift and adjust to the school climate, teacher and student needs, and as changes in the environment occur. In other words, the development of professional learning communities is contextual and depends upon the characteristics of individual school organizations. The degree of characteristics demonstrated with a PLC may vary greatly, as each is a continuous variable. In other words, the degree of shared personal practice may range from very little to very much. Additionally, schools may appear to be professional learning communities, but lacking certain characteristics. “Fullan asserts that there are many examples of PLCs that are implemented superficially, without an awareness of the depth that is needed for producing an impact on learning” (Fullan, in Feger et al., 2008, p. 10).

Developing a PLC takes time and a commitment to the process of implementation. If one area is weak, then the others are affected. For example, if there is lacking support of time for teachers to meet and collaborate, then this aspect will weaken the overall implementation of the PLC. Fullan argues that the overall effectiveness of the PLC should be considered rather than a checklist of characteristics (Fullan, in Feger et al., 2008). Is there an overall improvement in the school that shows the efforts are worth the investment of time and energy?

Another limitation of PLCs involves to structural conditions that may hinder collective efforts. If teachers are divided into departments without shared planning time or time to meet outside of the regular work day, then collaboration is not likely to occur. “Among these challenges are the complex organizational structures of high schools with department boundaries that limit school-wide learning communities” (Feger et al., 2008, p. 9). Further, teacher may be reluctant to share instructional practice, for fear of being criticized by colleagues. “Teachers expressed concerns about developing common assessments, and found it difficult to negotiate individual differences in philosophy, style, and content” (Wells and Feun, in Feger et al., 2008, p. 9).

There is a limited amount of research about professional learning communities, much of which is qualitative, descriptive, and based upon case studies (Feger et al., 2008). “Similarly, the literature from practitioner publications, while noting a research basis for the implementation of PLCs, focuses mainly on accounts of processes and stages that occur along their developmental path” (Feger, 2008, p. 17). “Efforts to change teaching by restructuring schools or by mandating new education standards will fail if teachers lack the vision and will to change their professional lives and practice” (McLaughlin & Talbert, 2001, p. 125). This study and other quantitative studies are needed to expand the literature about professional learning communities.

#### Enabling School Structures

Hoy and Miskel elaborate that “an enabling school structure is a hierarchy that helps rather than hinders and a system of rules and regulations that guides problem solving rather than punishes failure” (Hoy & Miskel, 2008, p. 110). Hoy and Sweetland define formalization as “the degree to which the organization has written rules, regulations, procedures, and policies” (Hoy & Sweetland, 2001, p. 297). In contrast, “centralization of authority is the locus of control for

organizational decision making; it is the degree to which employees participate in decision making” (Hoy & Sweetland, 2001, p. 299).

Further, the organizational structure of a school may vary from enabling to coercive formalization or from enabling to hindering centralization (Hoy & Sweetland, 2000; Hoy & Sweetland, 2001; Sinden, Hoy & Sweetland, 2004). “Formalization was conceptualized along a continuum from enabling at one extreme to coercive at the other” (Hoy & Sweetland, 2001, 306). In the same sense, centralization can be helping or hindering the functions of the school, also along a continuum from enabling to hindering (Hoy & Sweetland, 2001). Abbott concludes that “the school organization as we know it today . . . can accurately be described as a highly developed bureaucracy” (Abbott, 1965, p. 45). Keeping this in mind, there are different types of bureaucracy to be considered.

Adler and Borys describe two types of bureaucracy, enabling and coercive (Adler & Borys, 1996). While many view bureaucracy as a negative form of organization, they contend that bureaucracy “provides needed guidance and clarifies responsibilities, thereby easing role stress and helping individuals be and feel more effective” (Adler & Borys, 1996, p. 61). In contrasting the enabling and coercive types of bureaucracy, Adler and Borys assert that there is “formalization designed to enable employees to master their tasks, and formalization designed to coerce effort and compliance from employees” (Adler & Borys, 1996, p. 62). Finally, they purport that “enabling procedures help committed employees do their jobs more effectively and reinforce their commitment” (Adler & Borys, 1996, p. 83).

Much of the research about bureaucracy is based upon the seminal work of Weber that describes the “structural element of the school as social system . . . found in its formal organization” (Hoy & Miskel, 2008, p. 90). Weber argues that every bureaucracy produces a

hierarchy of authority (Weber, 1947). “This bureaucratic trait is made manifest in the organizational chart, with the superintendent at the top and assistants, directors, principals, teachers, and students successively lower levels” (Hoy & DiPaola, 2008, p. 91). Further, Weber contends that bureaucracies have a system of regulations and rules, “a consistent system of abstract rules which have normally been intentionally established” (Weber, 1947, p. 330). Adler and Borys argue that these rules and regulations either enable teachers to do their jobs effectively or coerce them to comply with such policies (Adler & Borys, 1996).

Gouldner establishes that there are two types or patterns of bureaucracy: representative or punishment-centered (Gouldner, 1954). These types differ “according to whether or not they enforced the rules, and the manner in which they did so” (Gouldner, 1954, p. 243).

Representative bureaucracy is accepted by both workers and supervisors, while punishment-centered bureaucracy tends to be a top-down approach that is not accepted by workers. Weber considered bureaucracy to be “one of the most efficient forms of organization” (Gouldner, 1954, p. 19).

According to Gouldner, Weber looks at bureaucracy as a “Janus-faced organization, looking two ways at once . . . on the one side, it was administration based on expertise; while on the other, it was administration based on discipline” (Gouldner, 1954, p. 22). More simply put, rules are accepted as the best way to meet a goal or for the sake of obedience of such rules (Gouldner, 1954). According to Gouldner, Weber defends that “bureaucracy is superior . . . to other historically known forms of administration, because of its stability, reliability, the calculability of results which it permits, and the large scope of its operations” (Weber in Gouldner, 1954, p.25).

Miskel, Fevurly and Stewart researched the organizational structures and processes in schools. They summarized that “more effective schools, as perceived by teachers, are characterized by (1) more participative organizational processes, (2) less centralized decision-making structures, (3) more formalized general rules, and (4) more complexity or high professional activity” (Miskel, Fevurly & Stewart, 1979, p. 114). In other words, if teachers work in a structured environment that is enabling, share in decisions that affect them, and view themselves as professionals, then they perceive the school to be effective (Miskel et al., 1979). Their research leads to later studies about enabling school structures.

Hoy investigates the enabling and mindful facets of school structures (Hoy, 2002). In regard to bureaucracy, Hoy recognizes the negative and positive aspects, however promotes benefits of enabling formalization as it “helps participants find solutions to problems because here the rules and procedures are view as flexible guidelines that reflect ‘best practices’ rather than rigid rules” (Hoy, 2002, p. 89). In contrast, coercive procedures impede open communication, avoid innovative practices and change, and further mistrust (Hoy, 2002). According to Hoy, the following are characteristics of enabling structures: “view problems as opportunities, foster trust, value differences, learn from mistakes, anticipate the unexpected, facilitate problem solving, enable cooperation, encourage innovation, and flexible” (Hoy, 2002, p. 92) (See Table 2.3).

**Figure 2.3 A Typology of School Bureaucracy**

		Formalization	
		Enabling	Coercive
Centralization	Enabling	Enabling Bureaucracy	Rule-bound Bureaucracy
	Hindering	Hierarchical Bureaucracy	Hindering Bureaucracy

**FROM: HOY & SWEETLAND, (2001), p. 302**

Figure 2.3 demonstrates the types of bureaucracy that can exist in schools as related to formalization and centralization. Hord and Sweetland summarize that:

If formalization and centralization are two independent dimensions of organizational structure, then at least four types of schools can be theoretically formulated - - enabling bureaucracy (enabling hierarchy, enabling rules), hindering bureaucracy (hindering hierarchy, enabling rules), hierarchical bureaucracy (hindering hierarchy, coercive rules), and rule-bound bureaucracy (enabling hierarchy, coercive rules). (Hoy & Sweetland, 2001, p. 396)

Hoy and Sweetland (2001) predicted two independent dimensions within bureaucracies, formalization and centralization. However, only one dimension was revealed in the factor analysis. “The results of two empirical studies, however, demonstrated that enabling formalization and enabling centralization were not independent, but rather formed a unitary bipolar factor” (Hoy & Sweetland, 2007, p. 350). This type of bureaucracy ranging from enabling to hindering is called enabling school structure. Hoy and Sweetland further contend

that in an enabling bureaucracy “an organization is imbued with trust; faculty trust the principal and each other” (Hoy & Sweetland, 2007, p. 362.).

Hord asserts that “for learning communities to function productively, supportive conditions include the physical or structural conditions that enable shared leadership, collective learning, and shared practice” (Hord, 2004, p. 10). Enabling structures determine the what, when, where, and how professional learning will occur and who will be involved in such. Time to collaborate, plan, and learn together can be a supportive factor when it is available for teachers, however a constraint when limited (Louis & Kruse, 1995; Hord 1997; Hord, 2004).

Louis and Kruse assert that for a professional learning community to be effective certain structural conditions must be in place: “time to meet and talk, physical proximity, interdependent teaching roles, communication structures, and teacher empowerment and school autonomy” (Louis & Kruse, 1995, p. 25). Staff development and professional growth need to be promoted and nurtured within the way the organization is structured. “Support by means of teacher networks, cooperation among colleagues, and expanded professional roles increased teacher efficacy for meeting students’ needs” (Hord, 1997, p. 10).

“Staff community is nurtured by formal and informal structures that evolve to meet the needs of faculty and students” (McLaughlin & Talbert, 2001, p. 85). Lieberman contends that the following practices promote the success and sustainability of PLCs: “honoring teacher knowledge; situating learning in practice and relationships; . . . and sharing leadership as well as . . . dialog and critique about the work” (Lieberman in Stoll & Louis, 2007, p. 201). Peterson and his colleagues warn that “while school structures can provide opportunities for learning new practices, the structures, by themselves, do not cause the learning to occur” (Peterson, McCarthy, & Elmore, 1996, p. 119).

McLaughlin and Talbert found that successful schools “moved toward a distributed rather than centralized leadership role, engaged students as a part of governing committees, and developed communication across departments around common themes, such as inquiry” (McLaughlin & Talbert, in Feger et al., 2008, p. 9). Rosenholtz recognizes that the school informal and formal structures can act as links or roadblocks to teacher professional growth. “Opportunities provided and constraints imposed on teacher learning may carry profound implications for teachers’ professional certainty and willingness and commitment to meet new situations and challenges” (Rosenholtz, 1989, p.104).

Boyd lists several physical and structural factors that promote school improvement and change, including: “the availability of resources; schedules and structures that reduce isolation; and policies that provide greater autonomy, foster collaboration, provide effective communication, and provide for staff development” (Boyd in Hord, 2004, p. 10). Beyond the physical factors, Boyd describes the human capacities needed to implement and sustain a successful PLC. Faculty members should demonstrate respect for and trust in their colleagues, an openness to receive constructive feedback, a desire to continuous growth for themselves, students, and the organization, a willingness to participate in shared decision making, and a sense of community in the school (Boyd in Hord, 2004, p.p. 10-11). The role of trust, in colleagues and principal, is an essential aspect of the informal structure of the school organization.

### The Role of Trust

While there are several ways to view trust within the school setting, this study will focus on the relationship between collegial trust, trust in principal, and enabling school structures in professional learning communities. Trust is a fundamental aspect of relationships. Everyone wants to trust his colleagues, supervisor, and to be trusted by them in return (Hoy & Tschannen-

Moran, 2003). For the sake of this study, the constitutive definition for trust is “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (Hoy & Tschannen-Moran, 1999, p. 189). Baier surmises that:

Most of us notice a given form of trust easily after its sudden demise or severe injury.

We inhabit a climate of trust as we inhabit an atmosphere and notice it as we notice air, only when it is scarce or polluted. (Baier, 1994, p. 98)

Tschannen-Moran continues that “trust is a multi-faceted construct . . . it is also a dynamic that can change over the course of a relationship” (Hoy & Tschannen-Moran, 2003, p. 182). In a review of the literature on trust Hoy and Tschannen-Moran discovered five facets of trust: benevolence, reliability, competence, honesty, and openness (Hoy & Tschannen-Moran, 1999 & 2003; Tschannen-Moran & Hoy, 1998a, 1998b, & 2000).

Benevolence is defined as “confidence that one’s well-being or something one cares about will be protected and not harmed by the trusted party” (Hoy & Tschannen-Moran, 1991, p. 187). In other words, teachers who are confident that their colleagues and principal will protect their best interests rather than harm them consider them to be benevolent colleagues (Baier, 1986; Frost, Stimpson & Maughan, 1978; Hoy & Kuper-Smith, 1985). According to Hoy and Tschannen-Moran “benevolence is an important element of trust relationships because a mutual attitude of goodwill is so important to interpersonal relationships” (Hoy & Tschannen-Moran, 2003, p. 184).

In contrast, reliability relates to a person’s level of predictability and can be combined with benevolence in regard to trust of another. If a person’s actions are consistent and well-intended, then they are more likely to be reliable. While a person can be reliable, this is not

always sufficient for building a trusting relationship. More is needed, usually in the form of the other facets of trust. “Reliability implies that there is a sense of confidence that one’s needs will be met in positive ways” (Hoy & Tschannen-Moran, 2003, p. 184).

Another facet of trust is competence, “the ability to perform as expected and according to standards appropriate to the task at hand” (Hoy & Tschannen-Moran, 2003, p. 184). In a school it is important that teachers, colleagues, and principals perceive each other to be competent in carrying out his or her professional responsibilities. When working interdependently, teachers need to have faith in the abilities of colleagues to execute individual tasks for the good of the group.

The remaining facets of trust are honesty and openness, which relate to the intention of the parties to be truthful and share relevant information with each other. A person must align their actions and words so that others can rely on them to be true or honest. “Indeed, honest is assumed when we think of what is entailed in trust” (Hoy & Tschannen-Moran, 2003, p. 185). We tend to think about integrity and character when conceptualizing honesty. Furthermore, “openness is the extent to which relevant information is shared; it is a process by which individuals make themselves vulnerable to others” (Hoy & Tschannen-Moran, 2003, p. 185). Each of the five facets of trust is based upon the expectations and beliefs of teachers and school leaders of the school organization.

Historically, social scientists have studied the concept of trust in context to ongoing world events (Hoy & Tschannen-Moran, 2003). In the 1950s researchers performed empirical studies of trust in response to the threat of the Cold War (Hoy & Tschannen-Moran, 2003). 1960s are characterized by the disenchanting youth who rebelled against authority, which led a study of trust that shifted to the personality traits of individuals (Rotter, 1967). Later in the

1980s the American family structure was changing, divorce rates increasing, and studies of trust looked at its role in relationships (Hoy & Tschannen-Moran, 2003). It was not until the 1990s that the role of trust in schools was examined by researchers (Hoy & Tschannen-Moran, 1999, 2003).

Others assert that trust plays an important role in collegial relationships. Barth contends “the nature of relationships among the adults within a school has a greater influence on the character and quality of that school and on student accomplishment than anything else” (Barth, 2006, p. 8). Hord believes that “building trust requires substantial time and appropriate activities that enable the individual to experience the trustworthiness of colleagues and to extend or become trustworthy to complete the cycle” (Hord, 2007, p. 3). Covey further asserts that “trust is the highest form of human motivation . . . but it takes time and patience” to develop trusting relationships (Covey, 1990, p. 178).

### *Collegial Trust*

Can teachers solve problems and work collaboratively if they do not trust and respect each other? Many would argue that it is impossible to achieve organizational success without trust. “Increasingly, trust is seen as a vital element in well functioning organizations” (Tschannen-Moran & Hoy, 1998a, p. 334). Beyond working effectively, schools are constantly dealing with change and improving instructional practices, which can be better achieved in a trusting environment. “When school professionals trust one another and sense support from parents, they feel safe to experiment with new practices” (Bryk & Schneider, 2003, p. 43). The constitutive definition for collegial trust is that “the faculty believes that teachers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Hoy, Tarter, & Kottkamp, 1991, p. 93).

It is understandable that teachers who have healthy relationships with their colleagues are more likely to trust them. Hoy, Tarter, and Kottkamp state that “morale and principal influence best predicted faculty trust in colleagues” (Hoy et al., 1991, p. 96). They define morale as “the teachers’ liking of one another and working with enthusiasm” (Hoy et al., 1991, p. 96). Further, McLaughlin and Talbert assert that “fundamentally, leadership builds from trust and respect for the history and culture of a school or teacher community . . . leadership to transform school culture builds upon its core values, rather than attacking them” (McLaughlin & Talbert, 2001, p. 100).

Tschannen-Moran contends that “trust is important because it serves as both a glue and a lubricant in organizational life: as glue, ‘trust binds organizational participants to one another,’ and as a lubricant, ‘trust greases the machinery of an organization” (Tschannen-Moran, 2004, p. 16). Some schools encourage teachers to plan collaboratively, share best practices, and open their classroom doors for others to visit, yet until a foundation of trust exists, such efforts may be futile. “Trust was also essential for genuine collaboration among educators, enabling them to work together to develop a shared understanding of the reforms” (Cosner, 2009, p. 250).

By far, the strongest facilitator of professional community is social trust among faculty members. When teachers trust and respect each other, a powerful social resource is available for supporting the collaboration, reflective dialogue, and deprivatization characteristics of a professional community. On balance, we note that the dynamic relationship between community and social trust is likely to be mutually reinforcing. As the practices of community are enacted, trust and respect should deepen. (Bryk, Camburn, & Louis, 1999, p. 767)

Many researchers have found there to be a relationship between collegial trust and a willingness to embrace school reform more openly.

[We] uncovered connections between collegial trust and (a) teacher willingness and efforts to innovate in the midst of reform initiatives, (b) public problem solving within schools, (c) social controls that develop within teacher communities, and (d) teacher commitment and attachment to the school and its mission. (Bryk & Schneider, 2003, p. 43)

Each of these connections can enhance the organizational effectiveness as educational reform and problems are addressed by the leadership team and teachers. They further define this type of trust as relational trust, a “connective tissue that binds individuals together to advance the education and welfare of students” (Bryk & Schneider, 2003, p. 44). Furthermore, “collegial trust has been found to enhance employees’ perception of the support they receive from the organization, thereby increasing employees’ emotional attachment to their organizations and reducing” attrition (Cosner, 2009, p. 253).

“Strong relational trust also makes it more likely that reform initiatives will diffuse broadly across the school because trust reduces the sense of risk associated with change” (Bryk & Schneider, 2003, p. 43). “Trust between colleagues has been linked to a variety of positive organizational outcomes such as collaboration between colleagues, organizational citizenship, healthy and open schools, organizational mindfulness . . . and improved student achievement” (Cosner, 2009, p. 253). Bryk and his colleagues surmise that “trust facilitates core organizational change processes that instrumentally contribute to improving academic productivity” (Bryk et al., 2010, p. 140).

To accept another as a colleague, one does not need to share the same beliefs or opinions. “On the contrary, the real power of seeing each other as colleagues comes into play when there are differences of view” (Senge, 1990, p. 245). Through dialogue colleagues gain a greater understanding of other perspectives and alternative solutions to problems. Collegial trust can be built upon open and honest relationships between professionals. “Fundamentally, leadership builds from trust and respect for the history and culture of a school or teacher community . . . Leadership to transform school culture builds upon its core values, rather than attacking them” (McLaughlin & Talbert, 2001, p. 100). “Establishing professional community helps build the kinds of relational trust in schools that helps teachers set aside structures that protect their autonomy and relax the cultural barriers for collaborative action” (Halverson, 2007, p. 94).

Senge contends that “when organizations foster shared visions [beliefs], they draw forth this broader commitment and concern” of the members (Senge, 1990, p. 275). A teacher’s relationship with colleagues and the principal can affect his perceptions of trust, shared decision-making, professionalism, and professional community, which in turn influence instructional practices (Wahlstrom & Louis, 2008, 468.). Halverson asserts that “leaders and teachers must establish considerable levels of trust to set aside traditional protective behaviors in order to work together toward alternatives” (Halverson, 2007, p. 94).

Adams summarizes the findings of several trust studies by Hoy and his colleagues. “Behaviors found to foster trust were physical and emotional engagement in the teaching environment, collaboration on teaching and learning issues, and professionally oriented actions” (Adams, 2008, p. 38; Geist & Hoy, 2002; Hoffman, Sabo, Bliss & Hoy, 1994; Hoy, Hannum, & Tschannen-Moran, 1998; Smith, Hoy, & Sweetland, 2001; Tarter, Bliss & Hoy, 1989; Tschannen-Moran, 2001; Tschannen-Moran & Hoy, 2000). Furthermore, “feelings of positive

morale within the faculty role group, openness among teachers and the principal, cognitive beliefs of teacher efficacy and authenticity were significant predictors of faculty trust” (Adams, 2008, p. 38; Smith et al., 2001; Tarter, Bliss, & Hoy, 1989; De Costa, 1995; Tschannen-Moran & Hoy, 1998b). These findings support the hypotheses of this study.

### *Relational Trust*

Bryk and Schneider performed a ten-year study of the Chicago Public Schools following the major decentralization reform of inner-city schools. They developed a new construct, relational trust, which seemed to explain why some schools sustained change while others did not (Forsyth, 2008). “In their landmark study of school trust, Bryk and Schneider explore a kind of social trust (relational trust) based on social interactions, mutual dependencies, and power asymmetry among school members” (Forsyth, Adams, & Hoy, 2011, p. 21). Bryk and Schneider define:

Relational trust, so conceived, is an organizational property in that its constitutive elements are socially defined in the reciprocal exchanges among participants in a school community, and its presence (or absence) has important consequences for the functioning of the school and its capacity to engage fundamental change. (Bryk & Schneider, 2002, p. 22)

In other words, how teachers socially interact with each other determines how effectively the school functions and sustains change over time. “For relational trust to grow and be reinforced, however, both teachers and principal must repeatedly discern the behavior of the other as consistent with mutually held expectations” (Forsyth, 2008, p. 13).

According to Bryk and Schneider, a person conceptualizes relational trust on three levels: intrapersonal, interpersonal, and at an organizational level. At the intrapersonal level, a teacher

bases trust of a colleague on what he perceives to be the intentions of said colleague (Bryk et al., 2002). The interpersonal level relates to the structure of the school, how colleagues are expected to interact, and the culture of the school organization (Bryk & Schneider, 2002). Finally, at the organizational level, relational trust establishes how colleagues make important decisions, support each other, and work cooperatively for the best interests of their students (Bryk & Schneider, 2002).

“For Bryk and Schneider, relational trust is a joining together of individual discernments” (Forsyth et al., 2011, p. 21). Bryk and his colleague further assert that a person’s decision to trust a colleague, a demonstration of relational trust, is based upon the following: “respect, competence, personal regard for others, and integrity” (Forsyth, 2008, p. 13). They argue that trust does not have a direct impact on student achievement, but rather on structural conditions that can promote student success (Forsyth, 2008).

In their study, they discovered four organizational conditions which could be measured: “orientation to innovation (teacher ‘can do’ attitude . . . ), outreach to parents, professional community (collaborative work practices . . . ), and high expectations and high academic standards” (Forsyth, 2008, p. 14). These conditions were identified in schools with high levels of relational trust (Forsyth, 2008). In contrast to collegial trust, relational trust extends deeper as teachers commit to trust in relationships based upon their discernment of their colleagues’ intentions and actions (Bryk & Schneider, 2002). Relational trust is established in every day social interactions among colleagues (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). In summary, “trustworthiness across the organization helps coordinate meaningful collective action” (Bryk et al., 2002, p. 34).

### *Trust in Principal*

“The major explanation for the establishment of a climate of trust in the principal seems to arise from behavior of the principal that is caring, collegial, supportive, and protective” (Hoy et al., 1991, p. 96). Teachers learn from actions of their leader. “When teacher trust their principal, for example, they are also more likely to trust each other and their clients” (Hoy & Tschannen-Moran, 2003, p. 203). Furthermore, “the faculty has confidence that the principal will keep his or her word and act in the best interests of teachers” (Hoy & Sabo, 1998, p. 68). Adams contends that “school leadership is central to effective performance and from the evidence reviewed teachers expect administrators to be supportive, collegial, and transformational” (Adams, 2008, p. 36).

“Trust-health relationships are ones of mutual dependence and reciprocal influence; that is, healthy organizations promote trust and trust produces healthy organizations” (Hoy & Sabo, 1998, p. 68). Hoy and Sabo argued that the healthier the organizational climate of the school, the greater degree of teacher trust in the principal (Hoy & Sabo, 1998). They found that “collegial leader behavior the strongest contributor to faculty trust in the principal” (Hoy & Sabo, 1998, p. 70). In other words, if the principal invites teachers to participate in shared decision making and treats the teachers as colleagues, then their trust in the principal will be greater (Hoy & Sabo, 1998). Teachers view the principal as supportive of their professional efforts. Forsyth, Adams, and Hoy summarize:

For schools, trust in principal is predicted to have direct and indirect benefits for both individual and organizational performance. Trust in the principal maximizes teacher effort and performance and helps to focus collective energy on what is important.

Moreover, the principal’s role as teacher-supervisor makes collective trust in the principal

undeniably critical, especially when conditions are difficult. (Forsyth, Adams, and Hoy, 2010, p. 157)

Principals play a key role in the development of relational trust within the school organization (Bryk et al., 2010). “Principals establish both respect and personal regard when they acknowledge the vulnerability of others, actively listen to their concerns, and eschew arbitrary actions” (Bryk et al., 2010, p. 207). By providing opportunities for teacher collaboration and shared decision making, the principal models an openness through collegial trust in a less threatening manner. “As leaders act in predictable and reliable ways, community members begin to see them as competent to do the job well, and in turn, increased trust grows” (Johnson & Kruse, 2009, p. 196). The principal models collegial trust by his actions.

“The principal initiated relationship building by modeling with all teachers individually what it meant to trust, support, and encourage others” (Fleming, 2004, p. 27). “The role of school leaders in stimulating professional community is to create structures for building and fulfilling obligations to improve student learning” (Halverson, 2007, p. 94). In addition, “the principal’s people-oriented leadership style focuses on persuading and bolstering, rather than commanding and controlling, faculty learning and change” (McLaughlin & Talbert, 2001, p. 101). Furthermore, “principals are more likely to be perceived as trustworthy if they are mindful of the criteria that will be used to judge their trustworthiness, namely, honesty, openness, reliability, competence, and benevolence” (Forsyth et al., 2011, p. 167).

Teacher trust in principal is “operationalized as principals being attuned to the needs of teachers and the task of teaching, being open to teacher feedback and listening to teacher ideas, setting a positive example and building a healthy climate, and respecting the professional judgment of teachers” (Adams, 2008, p. 36). In their study, Bryk and Schneider found “years of

teaching experience and a predominantly minority population to inversely affect principal trust” (Bryk & Schneider, in Adams, 2008, p. 36). In other words, teachers in minority population schools with more years of experience were less likely to trust the principal. Adams summarizes that “leadership styles that were more person-centered and relationship oriented, specifically supportive, collegial, and transformational were found to be powerful independent predictors of teacher-principal trust (Adams, 2008, p. 34).

### Theoretical Framework

The development of a PLC takes years of effort, planning, and focus on the part of the members of the organization. While many are resistant to change, it is a part of every organization and path towards improvement. Hord elaborates “changing schools is highly challenging, complex, and messy work - - and change is rarely welcomed” (Hord, 2004, p. 3). While teaching can be an isolated profession, the research supporting professional learning communities promotes the benefits of collective and collaborative professional development for teachers. Such efforts can benefit the school as a whole, improving teacher morale and student achievement. Rosenholtz summarizes:

Further where teachers collaborate . . . where teachers and principal work together to consistently enforce standards for student behavior, and where teachers celebrate their achievements through positive feedback from [others] . . . they collectively tend to believe in a technical culture and their instructional practice. (Rosenholtz, 1989, p. 137)

“Leaders use a number of strategies and opportunities for teachers to work together in ways that clarify norms of practice and expectations for students. They create various structures to support conversation and exchange, both formal and informal, and enable teachers to negotiate different understandings about practice” (McLaughlin & Talbert, 2001, p. 121).

Learning for teachers and students is a social process, one that is strengthened through discussion, sharing, and collaboration. This study asserts that certain enabling school structures are likely to exist in professional learning communities and that a relationship exists between the two. Trust is essential in building strong relationships between colleagues and school principals in PLCs. Furthermore, there is a collective relationship among enabling school structures, collegial trust, trust in principal, and the development of professional learning communities. There are specific conditions needed for a PLC to be developed, including:

Leaders creating a shared sense of purpose for the improvement of learning, teachers actively engaged in developing new structures which enable them to collaborate both within and across department, administrators focusing on instructional leadership, and differentiated support from the district, based on school needs. (Feger et al., 2008, p. 12)

In 2002 Hoy found a positive correlation between enabling school structure and collegial trust. When the structures were enabling, teachers were more apt to trust others and feel empowered as professionals (Hoy, 2002). Schmoker summarizes that “thousands of school and even entire districts have utilized a learning communities approach with positive results evident in teaching practice and student achievement” (Schmoker, in Feger et al., 2008, p. 13).

Halverson asserts that “professional community can serve as a means for strengthening ties between leadership and instruction in schools . . . leaders can influence teaching practice through the artifacts they employ” (Halverson in Feger, 2008 , p. 15). By artifacts, Halverson is referring to lesson plan format, curriculum maps, and the academic calendar (Halverson in Feger, 2008). This idea supports the shared values and vision characteristic for professional learning communities. “Whenever a school makes time or resources available to improve teachers’

instructional methods, it is increasing the opportunities for successful teaching, and thus for mastery experiences [for teachers]” (Hoy et al., 1991, p. 107).

#### Rationale for Hypothesis

The purpose of this section is to explain the theoretical rationale of the relationships hypothesized in this study. Figure 2.3 below demonstrates the hypothesized direct and indirect relationships between the independent and dependent variables of this study. Further, this study will investigate the combined indirect effects of enabling school structures and collegial trust and that of enabling school structures and trust in principal.

In sum, the hypothesis of this study is there is a correlation between enabling school structures and the development of professional learning communities. Further, it is posited that there is a correlation between collegial trust and trust in principal and the development of professional learning communities. The hypotheses for this study are stated thus:

H1: The greater the enabling school structures of the school, the greater the development of the professional learning community.

Enabling school structures would include the following characteristics: “facilitates problem solving, enables cooperation, collaborative, flexible, encourages innovation, and protects participation” (Hoy & Sweetland, 2007, p. 345)

H2: The greater the collegial trust of the school, the greater the development of the professional learning community.

Collegial trust allows for collaboration and sharing within professional learning communities, as collaboration and sharing build collegial trust.

H3: The greater the trust in principal of the school, the greater the development of the professional learning community.

Teachers who trust their school leader are more likely to participate in the professional learning communities when they feel respected and valued as a professional educator.

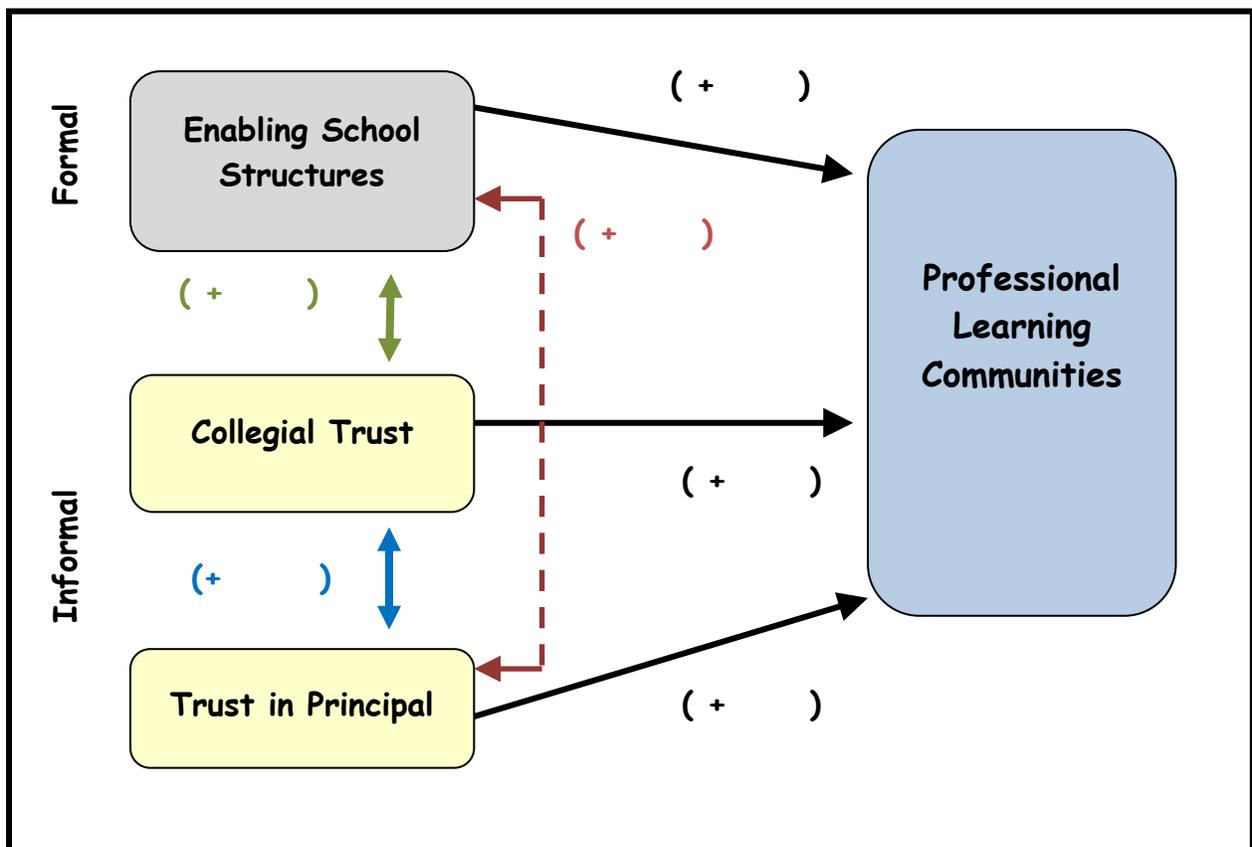
H4: Enabling school structures, collegial trust, and trust in principal will be jointly and individually related to professional learning communities.

There is a relationship between each of the variables, jointly and individually.

H5: There is a relationship between collegial trust and trust in principal.

Teachers who trust each other are more likely to trust the principal and vice versa.

**Figure 2.4 Conceptual Diagram of Hypothesized Relationships**



## CHAPTER 3

### METHODOLOGY

#### Research Design

The focus of this study is to investigate the roles of enabling school structure and trust, in colleagues and principal, in the development of professional learning communities. This chapter will describe the sample, the process of data collection, and statistical analysis. To test the relationships of enabling school structures and trust in professional learning communities, specific instruments were selected in order to measure the independent and dependent variables of this study.

For the purposes of this study, a quantitative approach was implemented using surveys in order to determine the correlation between several variables. “The research goal of this approach is discovery of some truth through generalizability, the degree to which findings in one context may be applied to other settings” (Glanz, 2003, p. 52). Because enabling school structures and collegial trust and trust in principal were considered institutional variables, the school was the unit of analysis. It was predicted that enabling school structures and trust will have a direct effect upon the development of professional learning communities.

Hord provides the constitutive definition of a professional learning community as a collegial group of faculty and staff who are united in their commitment to student learning. According to Hord PLCs encompass these attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). In 1998 Hord created the School Professional Staff as a Learning Community questionnaire.

While Hord's *School Professional Staff as Learning Community questionnaire* (1998) had been successfully utilized as a measure to assess teacher perceptions about the school staff as a learning organization, some misalignment has been noted between the responses indicated by staff on the questionnaire and actual observations and interviews with the school setting. (Olivier et al., 2003, p. 69)

Building upon the work of Hord, Olivier, Hipp, and Huffman developed the Professional Learning Community Assessment (PLCA) in 2003, which was revised as the Professional Learning Community Assessment – Revised (PLCA-R) in 2010 (Olivier & Hipp, 2006; Olivier, Hipp & Huffman, 2003; Olivier, Hipp & Huffman, 2010) (See Appendix D). Their purpose in creating the PLCA was “to more accurately represent the phase of development from initiation to implementation to institutionalization” (Olivier et al., 2003, p. 69). Operationally, professional learning community will be defined by a shortened version of the Professional Learning Community Assessment (PLCA) instrument (See Appendix B and D).

Hoy constitutively defines an enabling structure as “a hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching learning mission of the school” (Hoy, 2002, p. 91). Hoy and Sweetland describe enabling school structures as “characterized by principals who are disposed to help teachers solve problems, encourage open communication, and help teachers do their jobs” (Hoy & Sweetland, 2001, p. 310). Operationally, enabling school structures will be defined by Enabling Schools Structures instrument as developed by Hoy in 2003 (See Appendix E).

Hoy and Tschannen-Moran provide the constitutive definition for trust. “Trust involves taking risk and making oneself vulnerable to another with confidence that the other will act in ways that are not detrimental to the trusting party” (Hoy & Tschannen-Moran, 1999, p. 189).

They further summarize that “benevolence, reliability, competence, honesty, and openness are all elements of trust” (Hoy & Tschannen-Moran, 2003, p. 183). Operationally, trust, collegial trust, and trust in principal will be defined by the Omnibus Trust instrument (Omnibus T Scale) which was developed by Hoy and Tschannen-Moran in 1999 and revised in 2003 (See Appendix F).

The constitutive definition for collegial trust is the faculty belief “that teachers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Tschannen-Moran & Hoy, 1998, p. 342). Furthermore, “faculty trust is a collective property – the extent to which the faculty as a group is willing to risk vulnerability” (Hoy & Tschannen-Moran, 2003, p. 186). The constitutive definition for trust in principal is also based upon the research of Hoy, Tarter, and Kottkamp (1991). The terms as related to faculty trust were expanded from the earlier research of Hoy and Kupersmith (1985). Faculty members who trust the principal “have confidence that the principal will keep his/her word and will act in the best interests of their colleagues” (Tschannen-Moran & Hoy, 1998a, p. 342).

There were other factors that were to be considered: socioeconomic status of students enrolled and school level (elementary, middle or high). These factors acted as control variables for this study.

## Sample and Procedures

### *Pilot Study*

A shortened version of the Professional Learning Communities Assessment – Revised (PLCA-R, 2003) was developed and a pilot study was completed in order to validate the items of the revised instrument (See Appendix B and D). The purpose of a pilot study is “a small-scale, preliminary investigation that is conducted to develop and test the measures . . . that will be used in a research study” (Gall, Borg, & Gall, 1996, p. 766). The pilot study included eight schools

from a small southeastern school district ranging from elementary to high school level. Each of the eight principals completed the principal survey, while 78% (219/282) of teachers completed the survey. Of the approximate 300 teachers invited to participate, 41% had a bachelor's degree, while 52% had a master's degree and 6% had advanced degrees beyond a master's degree. The final sample consisted of 4 elementary schools, 3 intermediate schools, and 1 high school.

For the purposes of this study, the results from the PLCA-R (shortened version) were analyzed for validity and reliability. Because the data were gathered as a part of another study and a previously existing database, additional instruments were included as a part of the larger study. The data from the other surveys were not analyzed for the study, only that which related to the PLCA-R instrument.

### *Main Study*

An existing database from a large southeastern school district provided the data for this study. The sample consisted of 66 public elementary, middle or high schools in the large metropolitan district. Approximately 3,700 teachers and 190 principals and other administrators were invited to participate in this study. The final sample was made up of 44 elementary schools, 16 middle schools, and 6 high schools.

Finding a sample of schools all of which were engaged in the development of professional learning communities was fortuitous. I seized upon this opportunity to test the relationships of structure, trust, and professional learning community whose connections had been conjectured in previous scholarship (Hord, 1997, 2004; McLaughlin & Talbert, 2001, 2006; Louis & Kruse, 1995; Stoll et al., 2006; Stoll & Louis, 2007). Principals were asked to complete the survey and to invite all certificated staff, teachers, support staff, and administrators to

participate. Of the 89 schools in the district all were in the process of establishing professional learning communities and 66 schools agreed to participate in the study.

Student enrollment for this large school district was over 62,000 students, ranging from 90 to 2,123 students, with a mean of 685 students per school. The number of teachers employed at each school ranged from 12 to 126 teachers, with a mean of 41 teachers per school. Of the 3,700 teachers invited to participate, 42% had a bachelor's degree, while 51% had a master's degree and 4% had advanced degrees beyond a master's degree.

The completion rate for teacher data was 74% (66 participated out of 89 schools invited). Of the respondents represented 42% (1713 surveys completed out of 4082 teachers) participated, however the school was the unit of analysis. The principals who chose not to participate mentioned time constraints, busy schedules, and voluntary nature of the survey as reasons for nonparticipation. The final sample consisted of 44 elementary schools, 16 middle schools, and 6 high schools. Of the 89 principals invited to provide feedback, 69 completed the Qualtrics Research Suite™ survey online, representing a 78% completion rate for principal surveys (See Appendix G).

### Instrumentation

The study took place in a large school district made up of 89 schools. There were five separate instruments which were divided into two teacher packets and a third principal packet. Each teacher completed one set of two possible sets of instruments. Each packet consisted of two or three instruments altogether. The principals completed a set of three surveys in sum. Each principal completed the Enabling School Structures (ESS), Academic Emphasis (AE), and shortened Professional Learning Communities – Revised (PLCA-R) instruments.

The superintendent requested that participants only be asked to respond to 40 questions or less, so the surveys were divided into two packets. Teachers with a surname of A-L were invited to complete the Omnibus Trust (Omnibus T) and Academic Emphasis (AE) surveys, while teachers with a surname M-Z were invited to complete the Enabling Schools Structures (ESS), Collective Efficacy (CE), and shortened Professional Learning Communities – Revised (PLCA-R) instruments. Qualtrics ensured that all responses were anonymous and that no individuals were identified (See Appendix G).

*Professional Learning Communities Assessment – Revised (PLCA-R)*

Once validated in the pilot study, the shortened version of the Professional Learning Communities Assessment – Revised (PLCA-R, 2003) was used to measure the development of professional learning communities. The PLCA-R (2003) expands Hord’s School Professional Staff as Learning Community questionnaire (1998). The instrument measures teacher perceptions of five characteristics of professional learning communities: “shared and supportive leadership; shared values and vision; collective learning and application; shared personal practice; and supportive conditions, both relationships and structures” (Olivier, 2003, p. 69).

The original PLCA instrument (2003) included 45 items, which was revised in 2010. The revised version is a 52-item, four-point Likert-type scale and consists of six subscales, shared and supportive leadership (10 items), shared values and vision (8 items), collective learning and application (8 items), shared personal practice (6 items), and supportive conditions both relationships (4 items) and structures (7 items) (Olivier, 2003, p. 70).

The superintendent requested that the number of questions be limited to less than 40 per survey packet. Because other surveys were a part of the study, only twelve items could be included. Two items were selected from each subscale, shared and supportive leadership,

collective learning and application, shared values and vision, shared personal practice, supportive conditions – relationships, and supportive conditions – structures. The selections composed the shortened version of the instrument (PLCA-R shortened form) (See Appendix B and D).

Because the factor loadings for the items of the PLCA and PLCA-R were unavailable, another method for choosing the items was utilized.

Face validity, which “means that an indicator seems, on face value, to provide some measure of the variable” guided the selection of survey items (Babbie, 1992, p. 188). Although Fawcett argues that “face validity is not validity in a technical sense and so it has little direct psychometric importance,” the circumstances required an immediate reconfiguration of the instrument (Fawcett, 2007, p. 182). Face validity is also describes as “a causal, subjective inspection of the test items to judge whether they cover the content that the test purports to measure” (Gall, Borg, & Gall, 1996, p. 250). The researcher uses subjective judgment to determine which items best represented the subscale at face value. For this study a panel of experts confirmed that the items selected best represented each subscale appropriately.

The choices for response ranged from “strongly disagree” (coded as one) to “strongly agree” (coded as four). In the original study by Olivier and her colleagues, the reliability of the subscales ranged from .83 to .93 (Olivier, 2003, p. 74). Sample items include, “Leadership is promoted and nurtured among staff members,” “Shared values support norms of behavior that guide decisions about teaching and learning,” and “Time is provided to facilitate collaborative work” (Olivier, 2003, p. 70) (See Appendix B and D).

#### *Enabling School Structures Instrument*

The Enabling School Structures scale used for this study was developed by Hoy and Sweetland (2001, 2003). The 12-item, five-point Likert-type scale measures the enabling or

hindering structures of the school on a continuum. The choices for response ranged from “strongly disagree” (coded as one) to “strongly agree” (coded as five). “The reliability of the scale is consistently high - usually .90 or higher” (Hoy & Sweetland, 2001). Sample items include, “Administrative rules help rather than hinder,” “The administrative hierarchy of this school enables teachers to do their job,” and “Administrative rules in this school enable authentic communication between teachers and administrators” (Hoy & Sweetland, 2001, p. 307).

### *Omnibus Trust Scale*

The Omnibus Trust Scales used in this study were developed by Hoy and Tschannen-Moran (1999, 2003) which expanded on the trust scale originally developed by Hoy and Kupersmith (1985). The final version of the scale is a 26-item, six-point Likert-type scale and consists of three subscales, teacher trust in principal (eight items), teacher trust in students and parents (ten items), and teacher collegial trust (eight items). The choices for response ranged from “strongly disagree” (coded as one) to “strongly agree” (coded as six). In previous studies by Hoy and his colleagues the factor loadings for the trust in principal subscale ranged from .84 to .97, while the factor loadings for collegial trust subscale ranged from .71 to .93 (Hoy & Tschannen-Moran, 2003, p. 202). The alpha coefficients of reliability for faculty trust in principal was .03 and for collegial trust is .93 (Hoy et al., 2002, p. 203). Sample items include, “Teachers in this school trust each other,” “The teachers in this school have faith in the integrity of the principal,” and “Teachers in this school are open with each other” (Hoy & Tschannen-Moran, 2003, p. 2002; Hoy & Tschannen-Moran, 1999) (See Appendix F).

### Data Collection

Each principal acted as the liaison for the school, sharing the invitation to participate, survey guidelines, and online links to the Qualtrics Research Suite™ surveys with teachers

accordingly (Qualtrics, 2011) (See Appendix G). The results for each school were gathered and averaged together for an overall school score for enabling school structures, trust, professional learning communities, collective efficacy, and academic emphasis.

The data were collected over six weeks. Email reminders were sent with each invitation to complete the surveys, however it was communicated that participation was voluntary in nature. The superintendent who had invited us to perform the study also sent two letters endorsing this study and promoting participation. Additionally, the local teaching union encouraged teacher and principal participation via their newsletter. Principals received at least three reminder emails and phone calls to promote support of the study, as well as a written description of the project and copies of each survey instrument.

All data were collected electronically using Qualtrics, an online survey software program (Qualtrics, 2011) (See Appendix G). The College of Education of The University of Alabama had a site license and training available for this program which provided user-friendly tools for developing, distributing, and evaluating online surveys (Qualtrics, 2011). The data collection began in December 2010 and was completed at the end of January 2011.

#### Data Analysis

The independent variables for this study were enabling school structures and trust, in colleagues and principal, while the dependent variable was development of professional learning communities. The unit of analysis was the school; therefore individual respondent scores were aggregated to the school level for the independent and dependent variables of this study. The Pearson Correlation Coefficient was used to consider the relationship between enabling school structures and professional learning communities and trust and professional learning communities. Multiple regression analysis was used to determine the individual and collective

relationships between the independent variables, enabling school structures and trust, to the dependent variable, professional learning communities. The data were exported to SPSS for statistical analysis. The results of these statistical analyses will be presented in Chapter Four.

## CHAPTER 4

### RESULTS

#### Overview

The purpose of this section is to provide descriptive and inferential statistics. Descriptive statistics for the variables, characteristics of the sample, measures, pilot study, and main study will be given. Finally, statistical analysis of the findings, description of reliabilities, testing of the hypotheses, and unhypothesized findings will be presented.

#### Pilot Study

A pilot study was conducted in a small, rural school district in the Southeast that was made up of four elementary schools, three intermediate, and one high school. The final sample consisted of seven schools, excluding one intermediate school. Of the 282 teachers invited to participate, 219 completed the online survey for a response rate of 78%. In looking at the teachers in this district (2008-9), 41% had a bachelor's degree, while 52% had a master's degree, and 6% had advanced degrees beyond a master's degree. Fifty-three percent of students in the district were eligible for free or reduced lunch services.

For the purposes of this study, a shortened version of the Professional Learning Communities Assessment – Revised (PLCA-R) was used, which needed to be analyzed for validity and reliability (Olivier, Hipp & Huffman, 2010). The revised version of the Professional Learning Communities Assessment (PLCA) was made up of 52 items, while the shortened version included two items from each subscale, consisting of 12 items total. The descriptive statistics for the 12-item shortened PLCA-R scales can be seen in Table 1. There were 211

teacher responses for the online survey. The Qualtrics program protects the identity of respondents in order to maintain confidentiality. The means for the 12-item instrument ranged from 2.81 to 3.27 as seen in Table 1.

**Table 1: Descriptive Statistics for Shortened Version of PLCA-R**

**Descriptive Statistics (N=211)**

	Mean	Std. Deviation
PLC1	2.9505	.79134
PLC2	3.0099	.73023
PLC3	3.1182	.62930
PLC4	3.0147	.59744
PLC5	3.1200	.62152
PLC6	3.2673	.58377
PLC7	2.8128	.72666
PLC8	2.9901	.63238
PLC9	3.2673	.64573
PLC10	3.0099	.62481
PLC11	3.0099	.77454
PLC12	2.9360	.72430

Because the items were selected using a face-validity approach, a factor analysis was needed to determine internal reliability of the shortened measure. For this study, the two items selected for each of the six subscales were reviewed by a panel of experts and determined to be representative, yet a factor analysis was still recommended. The factor analysis was conducted and the 12 items loaded into two groups or factors. “Each set of variables that is combined forms a factor, which is a mathematical expression of the common element in the variables that are combined” (Gall, Borg, & Gall, 1996, p. 448). These factors represent the items that are most intercorrelated (Gall et al., 1996).

The overall variance is explained in Table 2, which demonstrates that Factor One accounts for 55% of the variance and Factor Two for 8% of the variance.

**Table 2: Variance Explained (1<sup>st</sup> Order Factor analysis)**

**Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.146	54.966	54.966	7.146	54.966	54.966
2	1.100	8.461	63.427	1.100	8.461	63.427

Extraction Method: Principal Component Analysis.

In Table 3, the items that loaded for Factor One are in bold and include items 1-6 and 9-10, while those that loaded for Factor Two are also in bold and include items 7-8 and 11-12. The extraction method was a principal component analysis, using a rotation method of Varimax with Kaiser Normalization. The purpose of factor analysis is “to discover patterns among the variations in values of several variables . . . through the generation of artificial dimensions (factors) that correlate highly with . . . the real variables and are independent of one another” (Babbie, 1992, p. 444).

The items that clustered together for Factor One consist of shared and supportive leadership, shared values and vision, collective learning and application, and supportive conditions related to relationships. Sample items for Factor One include: “leadership is promoted and nurtured among staff members,” “collegial relationships exist among staff members that reflect commitment to school improvement efforts,” and “caring relationships exist among staff and students that are built on trust and respect” (Olivier et al., 2010). Therefore, the items that cluster around Factor One will be called “Collaborative Practices.”

Four items clustered together for Factor Two included shared personal practice and supportive conditions as related to structure. Sample items for Factor Two include: “opportunities exist for coaching and mentoring” and “time is provided to facilitate collaborative work” (Olivier et al., 2010). These items will be called “Supportive Structures.” The 12-item instrument will also be renamed the Professional Learning Communities – Short (PLC – S) instrument (Appendix B).

**Table 3: Structure Matrix**

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
PLC1	<b>.822</b>	.228
PLC2	<b>.738</b>	.357
PLC3	<b>.762</b>	.431
PLC4	<b>.677</b>	.316
PLC5	<b>.776</b>	.249
PLC6	<b>.542</b>	.481
PLC7	.239	<b>.794</b>
PLC8	.263	<b>.796</b>
PLC9	<b>.729</b>	.135
PLC10	<b>.774</b>	.320
PLC11	.380	<b>.604</b>
PLC12	.176	<b>.629</b>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

To determine the internal consistency of the factors, collaborative practices and supportive structures, a test of reliability using the Cronbach’s Alpha was performed. Both factors were reliable as shown in Table 4. The internal consistency for collaborative practices

was excellent, while the internal consistency for supportive structures was good, but not as strong (George & Mallery, 2003).

**Table 4: Reliability Coefficients - Collaborative Practices and Supportive Structures**

	N of Cases	N of Items	Alpha
Collaborative Practices	211	8	.93
Supportive Structures	211	4	.75
Professional Learning Communities	211	12	

In a second-order factor analysis was performed to determine if the two factors would load on a single factor, which they did not. The overall variance is explained in Table 5, which shows that Factor One accounts for 84% of the variance and Factor Two for the remaining variance of 16%.

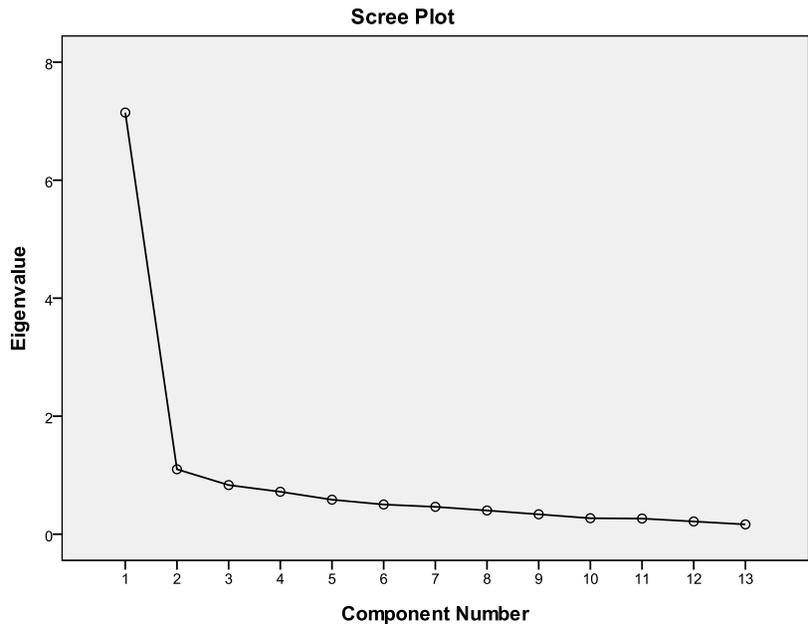
**Table 5: Variance Explained (2<sup>nd</sup> Order Factor analysis)**

Component	Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.680	84.001	84.001	1.680	84.001	84.001
2	.320	15.999	100.000			

Extraction Method: Principal Component Analysis.

The results of the Scree plot are shown in Figure 4.1. The first two factors account for the majority of variance among the items being analyzed while the remaining variance is minimal.

**Figure 4.1 Scree Plot of Factor analysis of Shortened Version PLCA-R Instrument**



### Main Study

Approximately 3,700 teachers in a large, southeastern, metropolitan school district were invited to participate in this study. The final sample consisted of 66 schools, comprised of 44 elementary schools, 16 middle schools, and 6 high schools, and approximately 900 teacher participants. Fortunately for this study, all schools were in the process of developing professional learning communities.

Demographic data, including ethnicity, gender, and free/reduced lunch information were gathered from the state department of education website for the 2009-2010 school year. There was no evidence of significant change in the data from the 2009-10 to the 2010-11 school year. Teacher educational information was found in the state department of education system profile report for 2008-2009. The state reported that 68% of students (41,908 out of 61,582) were eligible for free or reduced lunch services, representing an overall low socioeconomic status for

the district. The socioeconomic status of the majority of the students enrolled in the district is important as SES is a control variable for this study.

Student enrollment for this school district was over 62,000 students in 89 schools with a mean of 685 students per school. The number of teachers employed at each school ranged from 12 to 126 teachers, with a mean of 41 teachers per school. Of the 3,700 teachers invited to participate, 42% had a bachelor’s degree, while 51% had a master’s degree, and 4% had advanced degrees beyond a master’s degree, according to the system profile report (2008-2009).

### Descriptive Statistics

Teachers with a surname of A-L were invited to complete Teacher A surveys, including the Omnibus Trust (Omnibus T) and Academic Emphasis (AE) instruments, while teachers with a surname M-Z were invited to complete Teacher B surveys, including the Enabling Schools Structures (ESS), Collective Efficacy (CE), and shortened Professional Learning Communities – Revised (PLCA-R) instruments. Qualtrics ensured that all responses were anonymous and that no individuals were identified (See Appendix G). The survey data were aggregated to the school level, which was the unit of analysis, as seen in Table 6 below. For the purposes of this study, only the data related to the major variables were analyzed.

**Table 6: Descriptive Statistics of All Variables (N = 66 schools)**

	Minimum	Maximum	Mean	Std. Deviation
School Level	1.00	3.00	1.4131	.65407
SES (1 –FRL)	.01	.66	.2589	.18913
Trust Principal	2.79	5.15	4.2658	.50121
Trust Colleagues	3.29	5.80	4.6096	.52694
Enabling Structures	2.43	4.77	3.9694	.46449
Professional Community	2.17	3.81	3.0174	.34847

The independent variables are trust in principal, collegial trust, and enabling school structures, while the dependent variable is the development of professional learning communities and control variables are school level and SES. The descriptive statistics for the subscales of the Professional Learning Community – Short scale are shown in Table 7.

**Table 7: Descriptive Statistics of PLC – S Subscales (N = 66 schools)**

	Minimum	Maximum	Mean	Std. Deviation
Shared Leadership	1.50	3.81	2.9652	.44491
Shared Vision	2.00	3.81	3.0102	.36241
Collective Learning	2.35	4.21	3.2001	.35562
Shared Practice	1.50	3.86	2.8836	.45173
Supportive Relationships	2.08	3.81	3.0534	.41456
Supportive Structures	2.00	3.88	2.9915	.39931

Sixty-six schools had teachers who completed both Teacher A and Teacher B surveys, while up to 73 schools responded to either Teacher A or Teacher B surveys, but not both. For the purposes of this study, only the data provided by the 66 schools could be analyzed, as both sets of surveys were completed and could be compared. The data of the seven schools with missing data were removed prior to statistical analysis.

#### Reliability Coefficients for Major Variables

The descriptive analysis of the results for the teachers' responses to both sets of surveys demonstrates high reliability coefficients, as shown in Table 8. Collegial trust, enabling school structures, and professional learning communities indicate the strongest Cronbach's alpha reliability coefficients, meaning that each measure has good internal consistency of the items in the scale. Trust in principal demonstrates a good internal consistency, while the other three scales have excellent internal consistency (George et al., 2003).

**Table 8: Reliability Coefficients: Teacher Responses**

	N of Cases	N of Items	Alpha
Trust in Principal	901	8	.815
Collegial trust	902	8	.912
Enabling School Structures	745	12	.911
Professional Learning Communities	738	12	.924

Because different teachers were completing the Omnibus Trust, Enabling School Structures, and Professional Learning Communities surveys, the number of cases (respondents) ranged from 738 to 902. Given that the level of analysis was the school, the data in Table 9 revealed higher reliability than the teacher response data, as would be expected. Teachers at 69 schools responded to the trust scales, while 74 completed the enabling schools and professional learning community surveys. In the end, there were 66 schools with data to be analyzed.

**Table 9: Reliability Coefficients: School Data**

	N of Cases	N of Items	Alpha
Trust in Principal	69	8	.87
Collegial trust	69	8	.95
Enabling School Structures	74	12	.95
Professional Learning Communities	74	12	.94

#### Bivariate Correlations for All Variables

Correlation coefficients were used to examine the descriptive statistics between the continuous variables. This study involves three independent variables: trust in principal, collegial trust, and enabling school structures. The dependent variable for this study is the

development of professional learning communities. The control variables are school level, elementary, middle or high, and socioeconomic status (SES), which was calculated by subtracting the percentage of students eligible for free or reduced lunch services from one. Since quantitative data is being analyzed, it is appropriate to use the Pearson correlation coefficient, as shown in Table 10. As a rule of thumb, the following guidelines for analyzing correlations are widely accepted: 0.8-1.0 = very strong correlation, 0.6-0.8 = strong, 0.4-.06= moderate, 0.2-0.4= weak and 0.0-0.2= very weak (Gall et al., 1996).

**Table 10: Pearson Correlations of All Variables (N=70)**

	Trust Principal	Trust Colleagues	Enabling Structures	Collaborative Practices	Supportive Structures	School Level	SES
Professional Community	<b>.57**</b>	<b>.57**</b>	<b>.73**</b>	<b>.98**</b>	<b>.90**</b>	<b>-.36**</b>	-.07
Trust Principal		<b>.66**</b>	<b>.49**</b>	<b>.59**</b>	<b>.45**</b>	-.01	.07
Trust Colleagues			<b>.35**</b>	<b>.60**</b>	<b>.41**</b>	<b>-.24*</b>	.16
Enabling Structures				<b>.69**</b>	<b>.69**</b>	-.17	-.14
Collaborative Practices					<b>.78**</b>	<b>-.35**</b>	-.03
Supportive Structures						<b>-.33**</b>	-.13
School Level							.15

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

For all of the correlations in Table 10 there were 70 cases (schools) for trust in principal, collegial trust, and school level, while there were 66 cases (schools) for enabling structures and professional community. All correlations that were significant were at the 0.01 level (two-tailed), with the exception of collegial trust and school level which was significant at the 0.05 level (two-tailed). SES was not significant in any case.

The .57 ( $p < .01$ ) correlation is the same for both the relationship between professional community and collegial trust and between professional community and trust in principal and is moderate and positive in direction. The .73 ( $p < .01$ ) correlation between professional community and enabling structures indicates a very strong relationship with positive direction. The .98 ( $p < .01$ ) correlation between professional community and collaborative practices is extremely strong in a positive direction. It is understandable that there is a high correlation as theoretically professional community and collaborative practices are one element.

The .90 ( $p < .01$ ) correlation between professional community and supportive structures is very strong and positive in direction. In the same way that professional community and collaborative practices are correlated, supportive structures is derived from professional community. The  $-.36$  ( $p < .01$ ) correlation between professional community and school level is moderate and negative in direction. The  $-.07$  correlation between professional community and SES represents a negative direction and no relationship at all.

The .66 ( $p < .01$ ) correlation between trust in principal and collegial trust indicates a strong relationship with a positive direction. The .49 ( $p < .01$ ) correlation between trust in principal and enabling structures also shows a strong relationship with a positive direction. The .59 ( $p < .01$ ) correlation between trust in principal and collaborative practices is strong and positive in direction. The .45 ( $p < .01$ ) correlation between trust in principal and supportive

structures demonstrates a moderate, positive relationship. The  $-.01$  correlation between trust in principal and school level indicates no relationship with a negative direction for the current study. The  $.074$  correlation that occurs between trust in principal and SES shows no relationship in a positive direction.

The  $.35$  ( $p < .01$ ) correlation between collegial trust and enabling structures demonstrates a weak relationship with a positive direction. There is a  $.60$  ( $p < .01$ ) correlation between collegial trust and collaborative practices, which signifies a strong, positive relationship. The  $.41$  ( $p < .01$ ) correlation between collegial trust and supportive structures is moderate and positive. The  $-.24$  ( $p < .05$ ) correlation between collegial trust and school level shows a weak relationship in a negative direction. The  $.161$  correlation that occurs between collegial trust and SES has no relationship in a positive direction.

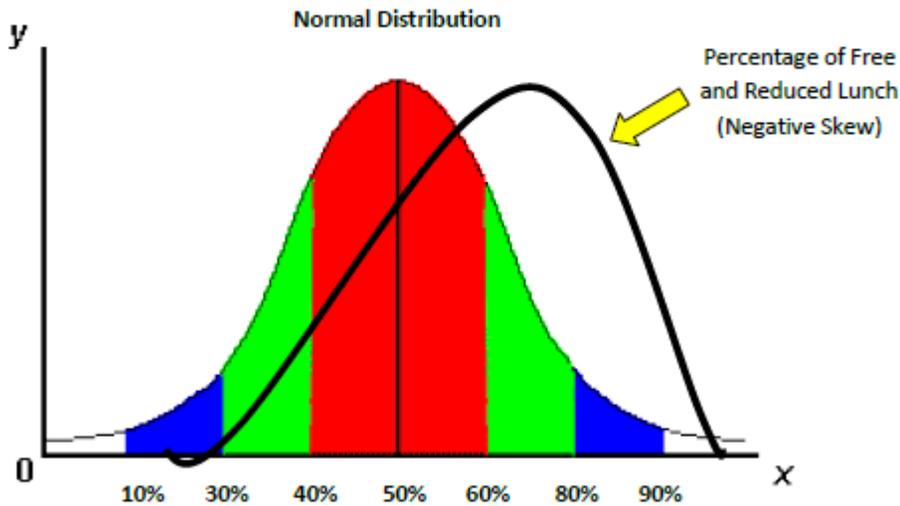
There is a  $.69$  ( $p < .01$ ) correlation between enabling structures and collaborative practices, as well as supportive structures, which demonstrate a strong, positive relationship. The  $-.17$  correlation of enabling structures and school level represents a negative direction with no relationship. The  $-.143$  correlation of enabling structures and SES is negative and has no relationship.

The  $.78$  ( $p < .01$ ) correlation that exists between collaborative practices and supportive structures is strong and positive. There is a moderate and negative correlation of  $-.35$  ( $p < .01$ ) between collaborative practices and school level and a negative and very weak relationship of  $-.03$  between collaborative practices and SES. The  $-.33$  ( $p < .01$ ) correlation between supportive structures and school level is moderate and negative in direction while the  $-.13$  correlation between supportive structures and SES is negative and has no relationship. The  $.147$  correlation between school level and SES indicates a positive direction with a very weak relationship.

In summary the strongest relationship is that of professional learning communities and enabling school structures, while trust in principal and enabling school structures also share a strong correlation. Enabling school structures also shared a strong relationship (.69 ,  $p < .01$ ) with collaborative practices and supportive structures, both factors of professional learning communities. Collaborative practices and supportive structures were also strongly correlated (.78,  $p < .01$ ). In contrast, socioeconomic status (SES) has a weak or no relationship with any of the other variables. Since the majority of schools in the district shared low SES, it is not unexpected that there was little or no effect.

The results may have been different if there was a greater range of SES in the district. The normal distribution is demonstrated in Figure 4.2, with a bold line showing the skewed representation of students in this school district who were eligible for Free and Reduced Lunch Services. The fact that it is skewed to the right shows that a normal distribution pattern is not followed. In other words the majority of students in this district are of lower socioeconomic status. This restriction of range, which is negatively skewed, explains the insignificant effect of this control variable, SES. If there was a greater range of SES, then its effect may have been significant.

**Figure 4.2: Percentage of Students Eligible for Free and Reduced Lunch Services**



**SOURCE:** <http://www.intelligencetest.com/stan-deviation.htm>

#### Multiple Regression of Variables

According to Gall, Borg and Gall (1996) “multiple regression is used to determine the correlation between a criterion variable and a combination of two or more predictor variables” (p. 433). In Tables 10-11 professional learning communities, the dependent variable, is regressed on trust in principal, collegial trust, and enabling school structures, the independent variables. Furthermore, the criterion variable, professional learning communities, was also regressed on the control variables, socioeconomic status and school level. Taken together, the regression model for the independent variables explains 65% of the variance of professional learning communities (Table 11).

**Table 11: Regression Model (PLCS on All Variables)**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension 1	.822 <sup>a</sup>	.675	.649	.20522

a. Predictors: (Constant), SES= 1 -FRL, Trust\_Principal, School\_Level, Enabling\_Structures, Trust\_Colleagues

In Table 12 collegial trust was a unique and significant predictor at the .01 level and a .28 beta, enabling school structures was a significant predictor at the .01 and a .67 beta, and school level was a significant predictor at the .01 level and a -.19 beta. There is a partial correlation when professional community is regressed on collegial trust that is significant and unique, yet it lacks the magnitude of the relationship between enabling structures and professional community.

**Table 12: PLCs Regressed on Trust in Principal, Collegial trust, Enabling School Structures, Socioeconomic Status and School Level**

**Coefficients<sup>a</sup>**

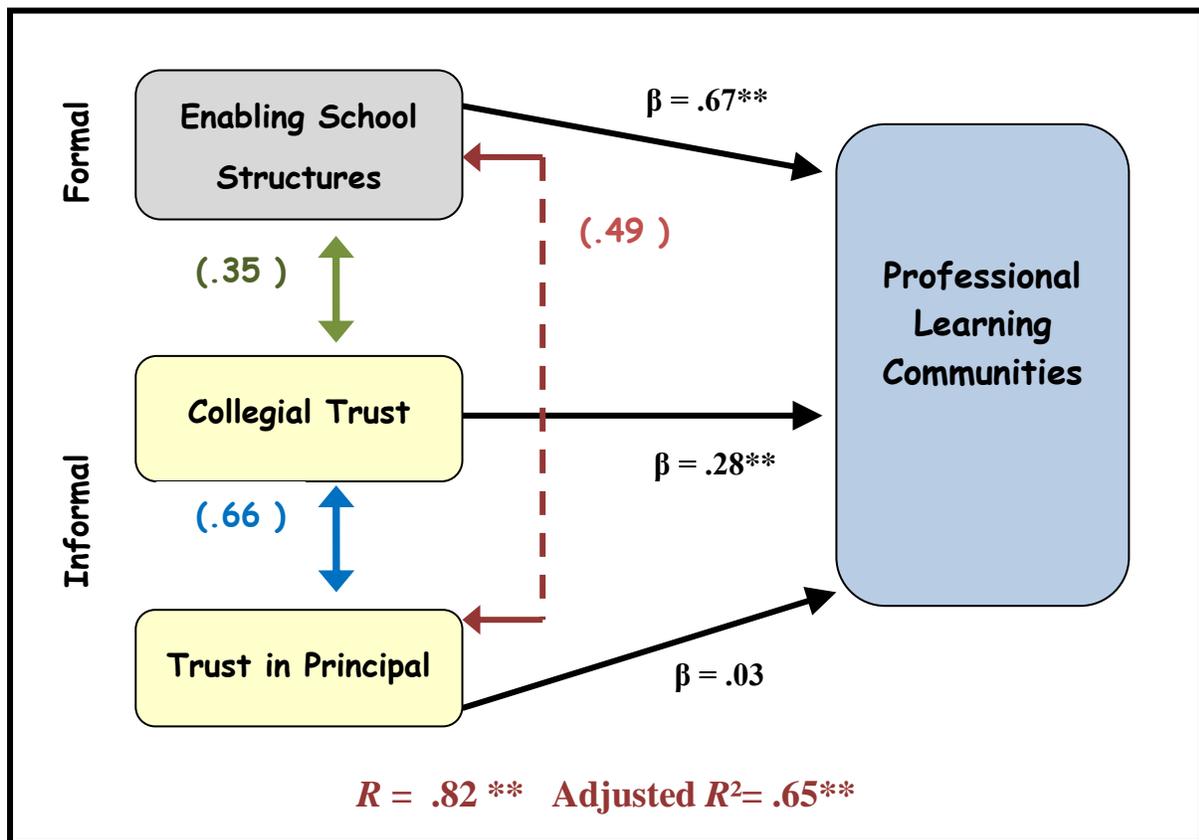
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.42	.26		1.64	.107
Trust Principal	-.02	.06	-.03	-.27	.785
Trust Colleagues	.18	.06	.28	3.09	<b>.003</b>
Enabling Structure	.50	.07	.67	7.25	<b>.000</b>
SES	-.12	.12	-.07	-1.06	.291
School Level	-.10	.04	-.19	-2.62	<b>.011</b>

a. Dependent Variable: Professional\_Community\_b

In looking at each variable in regard to PLCs, only collegial trust, enabling school structures, and school level were significant. When PLCs is regressed on trust in principal and SES, the results are not significant and could be occurring by chance. School level showed a weak relationship with PLCs, yet demonstrates a significant effect in Table 12. Furthermore, the negative beta for school level indicates that professional learning communities are more likely to be developed at the elementary level, then middle, and finally high school level. Since elementary schools tend to be more centralized and less departmentalized than middle or high schools, it is understandable that PLCs are more developed at the elementary level (Herriot & Firestone, 1984).

As previously discussed, Socioeconomic Status did not have a significant effect on PLCs nor a strong correlation. It is understandable considering the limited range of SES in the school district as most schools maintain low socioeconomic status. In the Revised Conceptual Diagram of Hypothesized Relationships in Figure 4.3, the collective effect of enabling school structures, trust in principal, collegial trust, school level (control), and SES (level) explains 65% of the overall variance of professional learning communities ( $p < 0.01$ ).

**Figure 4.3 Revised Conceptual Diagram of Hypothesized Relationships**



Note:  $** p < 0.01$

## Summary of Hypothesized Findings

In order to summarize the findings, it is important to review the hypotheses and how each was supported by the data in this study. The hypotheses for this study are stated thus:

H1: The greater the enabling school structures of the school, the greater the development of the professional learning community.

H2: The greater the collegial trust of the school, the greater the development of the professional learning community.

H3: The greater the trust in principal of the school, the greater the development of the professional learning community.

H4: Enabling school structures, collegial trust, and trust in principal will be jointly and individually related to professional learning communities.

H5: There is a relationship between collegial trust and trust in principal.

In sum, the first hypothesis of this study was there is a correlation between enabling school structures and the development of professional learning communities, which was supported by the findings. The strongest relationship between variables is that of the dependent variable, professional learning communities and one of the independent variables, enabling school structures with a .73 correlation, which is also significant at a .01 level and a .58 beta. Enabling school structures proves to be a theoretically and statistically significant variable, which supports Hypothesis 1.

Further, it was posited that there was a correlation between collegial trust and trust in principal and the development of professional learning communities. The relationship between collegial trust and professional learning communities was stronger and significant with a correlation of .57 with a significance level of .01 and a .31 beta, supportive of Hypothesis 2.

Trust in principal is strongly correlated to PLCs at .083 with a .17 beta without significance. While trust in principal and professional learning communities had a strong correlation, its effect was insignificant when PLCs is regressed on trust in principal, which provides some support for Hypothesis 3. These findings are in line with research of Forsyth, Adams, and Hoy. They assert that “faculty trust in colleagues was independent of principal behavior; that is, teachers could trust colleagues even if they were skeptical of their principals” (Forsyth et al., 2011, p. 8). Furthermore “when teachers trust each other and the principal, they are also more likely to view the school’s structure as enabling” (Forsyth et al., 2011, p. 80).

Collectively the independent variables, enabling school structures, collegial trust, and trust in principal, explain 65% of the variance of professional learning communities, the dependent variable, supportive of Hypothesis 4. Finally, there is another strong correlation of .66 between collegial trust and trust in principal, which supports for Hypothesis 5. If teachers trust their colleagues, they are more likely to trust the principal (Forsyth et al., 2011). “When the principal is perceived as trustworthy, teachers are more willing to take the risks inherent in innovation and creative efforts . . . especially in the face of great challenge” (Forsyth et al., 2011, p. 167).

Therefore, all hypotheses were tested and found to be acceptable based upon the data of this study. The findings support the theory that there is a relationship between professional learning communities, enabling school structures, trust in principal, and collegial trust.

#### Summary of Unhypothesized Findings

There were some interesting findings that were not related to the hypotheses of this study. School level and SES each maintained a unique relationship with professional learning communities. While the  $-.36$  ( $p < .01$ ) correlation between professional community and school

level is moderate and negative in direction, this is understandable when research about the effect of school level is considered. Herriott and Firestone surmise that high schools are more departmentalized and formally structured than elementary schools, which tend to be more centralized with a more limited curriculum (Herriot & Firestone, 1984). The middle school teachers are often grouped by grade level teams with common planning time, as opposed to high school teachers who are clustered by subject area departments (Herriot & Firestone, 1984).

The role of SES was not significant in relation to professional learning communities. The majority of students in the school district was eligible for free and reduced lunch services; therefore the district has overall low socioeconomic status (Figure 4.2). Because of the limited range of SES, it is understandable that SES had little or no effect or relationship with professional learning communities. In a different setting with a wider range of socioeconomic status, this would likely change, which could be a topic of future studies. In Chapter Five, conclusions, implications, and recommendations about these findings will be presented.

## CHAPTER 5

### SUMMARY AND DISCUSSION

#### Introduction

Primarily, this chapter presents an overview of the study and a summary of the findings, those hypothesized and un-hypothesized. Secondly, the theoretical and practical implications of this research are shared. Finally, recommendations for further research are provided.

The purpose of this dissertation was to investigate the effects of enabling school structures, collegial trust, and trust in principal in the developing professional learning communities (PLCs). Hord provides the constitutive definition for this study for professional learning community as a collegial group of faculty and staff who are united in their commitment to student learning; the concept was operationalized (Hord, 1997). This study considers the informal and formal aspects of the school organization as a professional learning community.

The formal facets of the school organization are represented by enabling school structures and operationalized by the ESS instrument (Appendix E). The informal components of the school organization include trust in colleagues and trust in principal, as operationalized by the Omnibus Trust scale (Appendix F). Hoy and Miskel define an enabling school structure as “a hierarchy that helps rather than hinders and a system of rules and regulations that guides problem solving rather than punishes failure” (Hoy & Miskel, 2008, p. 110).

Trust is defined as an “individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (Hoy & Tschannen-Moran, 2003, p. 185). Two aspects of trust were the focus of this study: collegial trust and trust in principal.

A close reading of the literature suggests this is the first study to investigate the relationships of enabling school structures, collegial trust, trust in principal, and professional learning communities, respectively. Other empirical studies have analyzed the interactions of enabling school structures and trust, however none investigated these factors in relation to professional learning communities.

### Statement of Findings

There was a very strong and significant relationship between enabling school structures and professional learning communities. In short, the greater the enabling structure is, the greater the development of professional learning community is.

When assessing the role of collegial trust in professional learning communities, there was a strong correlation and significant association between one of the independent and the dependent variable. A greater level of trust in colleagues leads to a greater development of professional learning community.

Although enabling school structure made a stronger contribution to PLC implementation than trust in colleagues, jointly and individually, each made a significant contribution.

While trust in principal was related to the development of PLCs as a zero-order correlation, it did not make a significant contribution to PLCs in the regression analysis.

However, trust in colleagues was significantly related to trust in principal.

There were unhypothesized findings related to the control variables, school level and SES. School level was inversely related to PLC implementation. In other words, professional learning communities tend to be more developed at the elementary level. This finding is supported by the research of Herriot and Firestone, who investigated school level (Herriot & Firestone, 1984). Furthermore, there was no relationship between SES and PLCs. The majority

of students in the school district was eligible for free and reduced lunch services; therefore the district has overall low socioeconomic status.

In summary, all hypotheses were supported. The findings tend to confirm the theory that there is a relationship between enabling school structures, trust in principal, and collegial trust in professional learning communities.

### Theoretical Implications

This study is based upon the notion that any structural implementation, in this case, professional learning communities (PLCs), must be built upon a foundation from both the informal and formal organization. The formal structure allows change to be accepted as a permanent part of the organization. Change, although many are resistant to such, becomes more routine (Hord, 2004). The principal acts as a change agent within the school (Hord, 2004). For change to occur the principal relinquishes some of the power of the formal organization through shared decision making and encouragement of leadership opportunities for teachers (Hord, 2004).

According to Hord, certain physical and structural conditions must be in place for a professional learning community to be established in a school (Hord 2004; Hord 2007). Further, open and trusting relationships must exist between teachers and with the principal (Hord, 2007). This study asserts that enabling school structures represent the formal aspect of the organization while the informal is represented by collegial trust and trust in principal. In other words, enabling school structures and the two types of trust are antecedents to the development of a professional learning community.

Hoy contends that “when school structure was enabling, teachers trust each other, demonstrate professional autonomy, are not bound by rigid rules, and do not feel powerless”

(Hoy, 2002, p. 91). Enabling school structures allow the principal to “foster trust and value differences” in order to promote organizational learning (Hoy, 2002, p. 89). There is a relationship between enabling school structures and collegial trust and trust in the principal. In other words, as the enabling school structures are stronger, trust in colleagues and principal become stronger. In an earlier study, Hoy and Sweetland surmised that “enabling school structures encourage trusting relations among teachers and between teachers and the principal” (Hoy & Sweetland, in Hoy, 2002, p. 91).

Because PLCs are sub-organizational elements, they retain features of organizations generally; in varying degrees they have centralization, specialization, and formalization (Hoy & DiPaola, 2008; Mintzberg, 1983). Enabling structure is necessary for the formalization and centralization within professional learning communities. The principal empowers teachers by encouraging initiative and fostering trust via formalization, while promoting cooperation, innovation, and collaboration via centralization of the organization (DiPaola & Hoy, 2008).

This study demonstrates the importance and necessity of enabling school structures and trust in colleagues, yet the regression indicates that the structural dimension has more effect than the trust variable. The empirical findings emphasize the importance of established enabling school structures as an antecedent of professional learning communities. One cannot exist or be sustained without the others. This reciprocal relationship confirms the hypotheses, yet further extends what is known about professional learning communities. Prior to this study, the importance of establishing enabling school structures in professional learning communities, as described by Hord, had not been addressed. Therefore, this research adds to our knowledge about PLCs as well as to the field of literature.

The principal should consider the resources available in the school, in the form of the human capital within and in innovative ways to develop such resources (Hord, 2004; Hord, 2007; Stoll et al., 2006). The leader sets the stage for the growth of a professional learning community by establishing certain enabling school structures and developing a culture of trust by modeling trustworthy behaviors (Hoy & Sweetland, 2007; Forsyth et al., 2011). Teacher collaboration and cooperation is essential to sustaining professional learning community efforts over time (McLaughlin & Talbert, 2006). Innovative practices and shared decision making are two ways in which an organization can more effectively make use of its resources and empower teachers.

The structure of the school, how decisions are made and instruction is supported, allows or enables teachers to perform their jobs more effectively (DiPaola & Hoy, 2008). When the school rules, regulations, and policies of the school are enabling, teachers perceive themselves to be participative in the decisions that affect them and the school to be effective (Miskel et al., 1979). Finally, when teachers are active in the decision making process, they are more likely to support such decisions (Yukl, 1989).

McLaughlin and Talbert contribute empirical research about professional learning communities and the benefits of such, thus providing theoretical support for this study (McLaughlin & Talbert, 2006). They summarize their research about professional learning communities about changing school culture in three conclusions:

- A teacher community of practice develops through joint work on instruction, usually starting with a focus on one facet of instruction – subject content, students, or assessment of student learning

- Teacher learning in a community depends upon how well the joint work is designed and guided, or the extent to which an effective learning environment is created for the teachers
- Teacher learning community development, spread, and sustenance depends upon proactive administrator support and broad teacher leadership (McLaughlin, 2006, p. 39).

In many schools time is a factor, especially the lack of time available for professional development, teacher collaboration, and shared decision making. “Time is a significant issue for faculties that wish to work together collaboratively . . . a barrier (when it is not available) and a supportive factor (when it is present)” (Hord, 2004, p. 10). Principals must ensure that enabling school structures, as well as time for collaboration, are in place in order for professional learning communities to be sustained (Hord, 2004; McLaughlin & Talbert, 2006).

Trust is essential for the functioning of informal relationships, especially between teachers, colleagues and the principal (Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2000; Tschannen-Moran, 2004). However, in professional learning communities, the trust teachers have in their colleagues is the most important element of trust (Forsyth et al., 2011). When teachers trust their colleagues, they are likely to trust in the principal and vice-versa (Bryk & Schneider, 2002). Faculty trust in the principal is generally necessary, but plays an indirect role in PLCs (Forsyth et al, 2011). In this study, trust in principal is not significant when PLCs is regressed on the major variables. Therefore, its effect is indirect and mediated by other variables of the organization, most likely collegial trust.

The degree of PLC implementation was inversely related to the level of the school (elementary, middle or high). This is understandable because elementary schools tend to be

more centralized and less departmentalized than high schools and vice-versa (Herriot & Firestone, 1984). Elementary schools, because of centralization, had more developed professional learning communities, while middle schools and high schools were less established respectively (Herriot & Firestone, 1984). The departmentalized structure that exists in high schools explains this finding.

Socioeconomic status (SES) had no effect on the implementation of PLCs either because SES is not related or because of the restricted range of the SES of the district. The majority of schools were low income, therefore the schools were more alike than different. If there was a more diverse range of SES, then the results could determine if SES has an effect on the development of PLCs or not.

#### Practical Implications

In this era of high-stakes accountability, schools need effective models for school reform and improvement for student success. Professional learning communities encompass the following traits: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Several previous studies provide statistical data that support the benefits of professional learning communities on student learning and achievement. McLaughlin and Talbert reference other research including National Longitudinal Study (NELS), Newmann (1996), Louis and Marks (1998), and their 2001 study. They summarize:

Positive effects of teacher learning community measure on student achievement for both regional and nationally represented school samples; strong correlations of teacher learning community with teaching practices that predict students learning gains; and

strong correlations of teacher learning community and student experiences of their school and class. (McLaughlin & Talbert, 2006, p. 9)

According to Morrissey and Cowan, the principal plays an important role in the development of an effective professional learning community. In a PLC the principal is responsible for:

- Developing collective values and vision – becoming student focused and using the vision to develop and recruit quality staff
- Supporting shared decision making – establishing structures and processes for shared decision making, promoting shared decision making on substantive issues, and increasing decision making capacity
- Promoting continuous learning – communicating the value of learning, monitoring growth and progress and connecting professional development to school improvement goals
- Encouraging support – providing time and support for collaboration and identifying outcomes of collaboration
- Providing support – establishing clear expectations, developing relationships, devising structures for communication, and acknowledging the human capacity for change (Morrissey & Cowan, in Hord, 2004, pp. 45-55).

Louis and Kruse contend that “professional community can reinforce a collective sense of efficacy as well as that of individuals” (Louis & Kruse, 1995). Investigating the role of individual teacher and collective efficacy, teacher’s perception of abilities of colleagues, within a professional learning community could provide valuable research for the field. Newmann (1991) “suggests that that giving teachers more individual autonomy, discretion, and control in

conducting their work will encourage a greater sense of ownership of and responsibility for quality in student learning” (Newmann, in Louis & Kruse, 1995, p. 26).

Traditionally teachers worked in isolation, with little or no opportunities for collaboration (Louis & Kruse, 1995). They may or may not be willing collaborators of instructional practices, so relationships need to be nurtured and opportunities for sharing allowed. Once educators are open to collaboration, then professional learning is more apt to occur (Hord, 1997). Bryk argues that more time should be allocated for professional development and sharing of best practice as “very little time is available in most U.S. schools for professional collaboration” (Bryk & Schneider, 2002, p. 130).

The principal is also responsible – but not solely – for building physical and structural conditions that support the development of the professional learning community. The school leader relies upon the teachers to do the work of the school, teaching, learning, and encouraging student achievement. “A most important job for principals involves establishing the normative, structural, and practical conditions a teacher learning community needs to thrive” (McLaughlin & Talbert, 2006, p. 80). Opportunities for participation in shared decision making, teacher leadership, and instructional collaboration are key to PLC implementation (Fleming & Thompson, in Hord, 2004; McLaughlin & Talbert, 2006). Johnson and Kruse recommend that the principal “develop commonly understood structures and systems in which the faculty and staff share ownership in building and maintaining systems and structures perceived as contributing to the success of all participants” (Johnson & Kruse, 2009, p. 201).

Kruse, Louis and Bryk offer five critical elements for strong professional learning communities (Kruse et al., 1994). In summary:

1. Teachers must participate in reflective dialogue about their beliefs and values related to learning and instruction;
  2. There should be a “deprivatization of practice” in which teachers observe colleagues, share practices, and provide support for one another;
  3. Teachers maintain a “collective focus on student learning” and maintain high expectations for student achievement;
  4. Teachers have opportunities to work together collaboratively; and
  5. School leaders and teachers share norms and values for the school and their students
- (Kruse et al., 1994, p. 3).

Kruse and her colleagues further surmise that specific structural conditions must exist: “time to meet and talk, physical proximity, interdependent teaching roles, communication structures, teacher empowerment, and school autonomy” (Kruse et al., 1994, p.4).

In support of participative leadership, Hord contends “sharing power increases power; the strength of an administrator is the power and authority that workers choose to give to their leader” (Hord, 2004, p. 112). Johnson and Kruse suggest that “decision making is an active and dynamic process” (Johnson & Kruse, 2009, p. 205). “Those principals who succeeded in implementing learning communities were supportive of the teachers and shared leadership as a part of their individual leadership practice” (Fleming et al., in Hord, 2004, p. 33). Finally, McLaughlin and Talbert surmise that “strong learning communities develop when principals learn to relinquish a measure of control and help others participate in building leadership throughout the school” (McLaughlin & Talbert, 2006, p. 81).

Schools where professional learning and development are valued and encouraged have a greater opportunity for sustaining reform and PLC efforts. “Professional identity and readiness

to join in the collective learning . . . is important for sustaining the community” (McLaughlin, 2006, p. 25). School districts and principals need to consider that school reform is ongoing and the development of PLCs takes time. “Building and sustaining teacher learning communities in schools involves more complex and demanding processes than many reformers want to consider in a ‘quick fix’ reform context” (McLaughlin & Talbert, 2006, p.114).

The principal plays a key role in establishing and encouraging trust amongst colleagues in the school organization, although the effect may be indirect statistically. Furthermore, the school leader sets the tone for participative decision making and collaboration by promoting enabling school structures and trusting relationships (Hord, 2004; Johnson & Kruse, 2009). “Collaborative practices, positive morale, openness, efficacy, and professional teacher behavior reflect leadership styles and practices, suggesting that the principal effect operates indirectly through the social network to influence faculty trust discernments” (Adams, in Hoy & DiPaola, 2008, p. 40). Trust is an integral aspect of building relationships, rapport, and mutual respect so that collaborative practices can be established (Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2000; Tschannen-Moran, 2004).

According to Hipp and Huffman, a principal should keep the following statements in mind when developing and sustaining a professional learning community:

- Make sure that the vision is always on the horizon,
- Embed leadership as a quality of the organization, not just in individuals,
- Learn and work together in new ways,
- Collaborate with others to ensure the success of all children,
- Maintain the structures that exist and create new ones as needed,
- Pay attention to the people in your organization, and

- Access and generate support from the larger external context. (Hipp & Huffman, 2010, pp. 122-128)

While the principal's role in the development of a professional learning community may be indirect, his actions guide those of his teachers. Bryk and Schneider offer the following practical suggestions for principals to develop a culture of trust:

The leadership task of the principal is to build social conditions that promote learning:

- (1) a can-do attitude in teachers;
- (2) internalized responsibility;
- (3) outreach to parents;
- (4) professional community, which focuses on collaborative work processes and commitment to teacher and learning; and
- (5) high expectations and academic standards (Bryk et al., in Forsyth et al., 2011, p. 170).

Hoy states that “such organizations are likely to have positive consequences for most of the important outcomes of schooling, including student learning and achievement” (Hoy, 2002, p. 106). Forsyth et al. surmise that “while leader behavior is not the only antecedent of collective teacher trust in the principal . . . it is an important one, and one that is under the direct control of the principal” (Forsyth et al., 2011, p. 170). Finally, Forsyth, Adams, and Hoy share some essential guidelines for practitioners about establishing trust in the school.

- Establish trust in the principal by being trustworthy,
- Be mostly a leader, sometimes a manager,
- Expect, respect, and model organizational citizenship, and
- Develop and nurture a culture of trust and optimism (Forsyth et al., 2011, p.p. 167-170).

## Recommendations for Future Research

This section proposes several areas for future research as related to professional learning communities and various organizational factors, including: collective efficacy, organizational citizenship behavior, trust in colleagues, and the role of socioeconomic status, when parent involved is controlled. Professional learning communities “change culture in a way difficult to accomplish in any profession, but most especially in the isolated, individualistic lives of schoolteachers” (McLaughlin & Talbert, 2006, p. 11).

McLaughlin and Talbert contend that professional learning communities vary in three ways: technical culture (student perception, subject area content, effective pedagogy, and beliefs about student learning), professional norms (how teachers work together and beliefs on professional expertise and professionalism), and organizational policies (course assignments, logistics, and allocation of resources) (McLaughlin & Talbert, 2006). Each of these types of cultures could be studied further in regard to collective efficacy, organizational citizenship behaviors, collegial trust, and trust in clients, and SES.

Forsyth and Adams suggest that there is a relationship between collective efficacy and teacher trust in colleagues and clients. (Forsyth et al., 2011). “Collective efficacy is a powerful determinant of faculty trust in clients and faculty trust in colleagues” (Forsyth et al., 2011, 60). This is further supported by Tschannen-Moran and Goddard who found that “collective efficacy explained more school-level variability in faculty trust in clients than any other school-level predictors” (Tschannen-Moran & Goddard, in Forsyth, 2011, p. 60). It would expand the theoretical explanation to investigate the role of collective efficacy in context to professional learning communities.

Additionally, there is a gap in the literature in connecting the effects of organizational citizenship behaviors in professional learning communities (Forsyth et al., 2011). Teachers are more likely to be better citizens, or in this case members of the school faculty, when they trust their colleagues. “There is also evidence that collective teacher trust in colleagues is strongly and positively related to the emergence of OCBs [organizational citizenship behaviors]” (DiPaola & Hoy, in Forsyth et al., 2011, p. 165). Forsyth and Adams further contend that “leadership behaviors of principals, directly and through their enhancement of trust and organizational citizenship, elicit cooperation and high teacher performance levels” (Forsyth et al., 2011, p. 166). Additional research in this area could address a gap in the literature.

Teacher trust within PLCs has been researched on a limited basis, which could be expanded to consider the different types of trust, trust in colleagues and in clients, and the five facets of trust, benevolence, reliability, competence, honesty, and openness (Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2000; Tschannen-Moran, 2004). “In short, teachers must work together to advance educational opportunities for children; but if teachers don’t trust their colleagues (which is often the case in schools most in need of reform), the required collaborative efforts are unlikely to be initiated and sustained” (Bryk & Schneider, 2002, p. 130). Teacher trust in colleagues can lead to greater trust in clients (Bryk & Schneider, 2002).

What role, if any, does socioeconomic status play in the development of a professional learning community? For this study, its role was insignificant, however the findings may have been different if there was a greater range of SES in the district. Much research has been conducted about at-risk schools and professional learning communities, especially in the Chicago Public Schools (Bryk et al., 2010). There are exceptional schools to be found where the odds for success have been defied. Schools would benefit from learning how effective schools have

overcome limited resources, lack of district and parental support, and low socioeconomic status to increase student achievement, especially those following a PLC model.

We need to gain a great understanding of the process in which PLCs are developed and sustained over time (Hipp & Huffman, 2010; McLaughlin & Talbert, 2006). The process needs to be investigated further so that others can learn about the process of developing PLCs effectively.

We know quite a bit about the structures, relationships, and activities associated with effective professional development efforts. We know much less about the process – how teacher learning communities get started, how they develop, and how requirements for their development and markers of maturity change (McLaughlin & Talbert, 2006, p. 129).

#### Summary

This chapter provided an overview of the study, summarized the findings, shared theoretical and practical implications of the research, and made recommendations for future research in the field. Bolam and his colleagues argue that “the idea of a PLC is one well worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning” (Bolam, et al., 2005a, p. 3). It can take years for a school to develop an effective professional learning community with much effort on the part of the teachers and school leaders. Hipp and Huffman summarize that the “process of reculturing schools as professional learning communities is a journey as evidenced by the time and energy exerted to move schools from one level to the next – from initiation to . . . sustainability” (Hipp et al., 2008, p. 192). If professional learning communities offer schools a model for reform and school improvement, and I believe the literature supports their potential, then educators should

work together to develop the structures and trust necessary to build these communities of learning.

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APPENDIX A

Institutional Review Board Letter of Permission  
The University of Alabama

Office for Research

Institutional Review Board for the  
Protection of Human Subjects

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

May 16, 2011

Julie Gray  
ELPTS  
College of Education  
The University of Alabama

Re: IRB # EX-11-CM-051 "Professional Learning Communities and the  
Role of Enabling School Structures and Trust"

Dear Ms. Gray:

The University of Alabama Institutional Review Board has granted  
approval for your proposed research.

Your protocol has been given exempt approval according to 45 CFR part  
46.101(b)(4) as outlined below:

(4) Research involving the collection or study of existing data, documents,  
records, pathological specimens, or diagnostic specimens, if these sources  
are publicly available or if the information is recorded by the investigator  
in such a manner that subjects cannot be identified, directly or through  
identifiers linked to the subjects.

Your application will expire on May 15, 2012. If your research will  
continue beyond this date, complete the relevant portions of Continuing  
Review and Closure Form. If you wish to modify the application,  
complete the Modification of an Approved Protocol Form. When the  
study closes, complete the appropriate portions of FORM: Continuing  
Review and Closure.

Should you need to submit any further correspondence regarding this  
proposal, please include the above application number.

Good luck with your research.

Sincerely,



Carpantato T. Myles, MSM, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama

152 Rose Administration Building  
Box 870117  
Tuscaloosa, Alabama 35487-0117  
(205) 348-5152  
FAX (205) 348-8882

**UNIVERSITY OF ALABAMA  
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS  
REQUEST FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS**

**I. Identifying information**

	Principal Investigator	Second Investigator	Third Investigator
Names:	Julie Gray	C. John Tarter	
Department:	ELPTS	ELPTS	
College:	Education	Education	
University:	The University of Alabama	The University of Alabama	
Address:	P.O. Box 870302	P.O. Box 870302	
Telephone:	205-310-6021	205-348-7827	
FAX:	205-348-2161	205-348-2161	
E-mail:	jagray4@crimson.ua.edu	ctarter@bamaed.ua.edu	

Title of Research Project:

"Professional Learning Communities and the Role of Enabling School Structures and Trust"

This is a follow-up study using an existing database from another study, IRB# 09-OR-103-R1, "The Role of Trust in Fostering Identification" (Dr. Roxanne Mitchell & Dr. Timothy Lewis).

Date Submitted: 05/11/2011

Funding Source: N/A

Type of Proposal	<input checked="" type="checkbox"/> New	<input type="checkbox"/> Revision	<input type="checkbox"/> Renewal Please attach a renewal application	<input type="checkbox"/> Completed	<input checked="" type="checkbox"/> Exempt
Please attach a continuing review of studies form					
Please enter the original IRB # at the top of the page					

UA faculty or staff member signature: \_\_\_\_\_

**II. NOTIFICATION OF IRB ACTION (to be completed by IRB):**

Type of Review: \_\_\_\_\_ Full board \_\_\_\_\_ Expedited

**IRB Action:**

\_\_\_ Rejected Date: \_\_\_\_\_

\_\_\_ Tabled Pending Revisions Date: \_\_\_\_\_

\_\_\_ Approved Pending Revisions Date: \_\_\_\_\_

Approved-this proposal complies with University and federal regulations for the protection of human subjects.

Approval is effective until the following date: 5-15-12

Items approved: \_\_\_ Research protocol (dated \_\_\_\_\_)

\_\_\_ Informed consent (dated \_\_\_\_\_)

\_\_\_ Recruitment materials (dated \_\_\_\_\_)

\_\_\_ Other (dated \_\_\_\_\_)

Approval signature \_\_\_\_\_

Date 5/16/2011

APPENDIX B

Professional Learning Communities – Short (PLC – S)

### Professional Learning Communities – Short (PLC – S)

**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.

**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			
		SD	D	A	SA
	<b>Shared and Supportive Leadership</b>				
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	Leadership is promoted and nurtured among staff members.	0	0	0	0
	<b>Shared Values and Vision</b>				
3.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
4.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
	<b>Collective Learning and Application</b>				
5.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
6.	Professional development focuses on teaching and learning.	0	0	0	0
	<b>Shared Personal Practice</b>				
7.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
8.	Opportunities exist for coaching and mentoring.	0	0	0	0
	<b>Supportive Conditions – Relationships</b>				
9.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
10.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
	<b>Supportive Conditions - Structures</b>				
11.	Time is provided to facilitate collaborative work.	0	0	0	0
12.	Appropriate technology and instructional materials are available to staff	0	0	0	0

Professional Learning Communities – Short (PLC – S) © Copyright 2010, adapted from PLCA-R by J. Gray

Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best*. Lanham, MD: Rowman & Littlefield.

APPENDIX C

Letter of Permission – Olivier, Hipp & Huffman (2010)

Professional Learning Community Assessment



Department of  
Educational Foundations  
and Leadership

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P.O. Box 43091  
Lafayette, LA 70504-3091

August 23, 2010

Julie Gray  
Doctoral Student  
University of Alabama  
College of Education  
Department of Educational Leadership, Policy and Technology Studies

Dear Ms. Gray:

This correspondence is to grant permission to utilize the *Professional Learning Community Assessment-Revised* (PLCA-R) as your instrument for data collection in your doctoral study on professional learning communities at the University of Alabama. I am pleased that you are interested in using the PLCA-R measure in your research. I have attached a copy of the *Professional Learning Community Assessment-Revised* (PLCA-R).

Upon completion of your study, I would be interested in learning about your results. If possible, I would appreciate the opportunity to receive raw data scores from your administration of the PLCA-R. This information would be added to our data base of PLCA-R administration. Should you require any additional information, please feel free to contact me.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools.

Sincerely,

Dianne F. Olivier, Ph. D.  
Assistant Professor  
The Joan D. & Alexander S. Haig  
Board of Regents Professor in Education III  
Department of Educational Foundations and Leadership  
College of Education  
University of Louisiana at Lafayette  
P.O. Box 43091  
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APPENDIX D

Professional Learning Community Assessment – Revised

## Professional Learning Communities Assessment – Revised

**Directions:**

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

**Key Terms:**

- Principal = Principal, not Associate or Assistant Principal
- Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders = Parents and community members

**Scale:** 1 = Strongly Disagree (SD)  
 2 = Disagree (D)  
 3 = Agree (A)  
 4 = Strongly Agree (SA)

STATEMENTS		SCALE			
	<b>Shared and Supportive Leadership</b>	SD	D	A	SA
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	The principal incorporates advice from staff members to make decisions.	0	0	0	0
3.	Staff members have accessibility to key information.	0	0	0	0
4.	The principal is proactive and addresses areas where support is needed.	0	0	0	0
5.	Opportunities are provided for staff members to initiate change.	0	0	0	0
6.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0
7.	The principal participates democratically with staff sharing power and authority.	0	0	0	0
8.	Leadership is promoted and nurtured among staff members.	0	0	0	0
9.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0
11.	Staff members use multiple sources of data to make decisions about teaching and learning.	0	0	0	0

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Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best*. Lanham, MD: Rowman & Littlefield.

	<b>Collective Learning and Application</b>	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
21.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0
22.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
23.	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	0	0
24.	A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0
25.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0
26.	Professional development focuses on teaching and learning.	0	0	0	0
27.	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	0	0	0
28.	School staff members are committed to programs that enhance learning.	0	0	0	0
29.	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	0	0	0
30.	Staff members collaboratively analyze student work to improve teaching and learning.	0	0	0	0

<b>STATEMENTS</b>		<b>SCALE</b>			
	<b>Shared Values and Vision</b>	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
12.	A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0
13.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
14.	Staff members share visions for school improvement that have an undeviating focus on student learning.	0	0	0	0
15.	Decisions are made in alignment with the school's values and vision.	0	0	0	0
16.	A collaborative process exists for developing a shared vision among staff.	0	0	0	0
17.	School goals focus on student learning beyond test scores and grades.	0	0	0	0
18.	Policies and programs are aligned to the school's vision.	0	0	0	0
19.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
20.	Data are used to prioritize actions to reach a shared vision.	0	0	0	0

STATEMENTS		SCALE			
	Shared Personal Practice	SD	D	A	SA
31.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
32.	Staff members provide feedback to peers related to instructional practices.	0	0	0	0
33.	Staff members informally share ideas and suggestions for improving student learning.	0	0	0	0
34.	Staff members collaboratively review student work to share and improve instructional practices.	0	0	0	0
35.	Opportunities exist for coaching and mentoring.	0	0	0	0
36.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
37.	Staff members regularly share student work to guide overall school improvement.	0	0	0	0
	Supportive Conditions - Relationships	SD	D	A	SA
38.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
39.	A culture of trust and respect exists for taking risks.	0	0	0	0
40.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
41.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
42.	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	0	0
	Supportive Conditions - Structures	SD	D	A	SA
43.	Time is provided to facilitate collaborative work.	0	0	0	0
44.	The school schedule promotes collective learning and shared practice.	0	0	0	0
45.	Fiscal resources are available for professional development.	0	0	0	0
46.	Appropriate technology and instructional materials are available to staff.	0	0	0	0
47.	Resource people provide expertise and support for continuous learning.	0	0	0	0
48.	The school facility is clean, attractive and inviting.	0	0	0	0
49.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
50.	Communication systems promote a flow of information among staff members.	0	0	0	0
51.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0
52.	Data are organized and made available to provide easy access to staff members.	0	0	0	0

APPENDIX E

Enabling School Structures Instrument – Hoy (2003)

## Form ESS

**Directions:** The following statements are descriptions of the way your school is structured. Please indicate the extent to which each statement characterizes behavior in your school from **never** to **always**.

	Never	Once in a while	Sometimes	Fairly Often	Always
1. Administrative rules in this school enable authentic communication between teachers and administrators.	①	②	③	④	⑤
2. In this school red tape is problem.	①	②	③	④	⑤
3. The administrative hierarchy of this school enables teachers to do their job.	①	②	③	④	⑤
4. The administrative hierarchy obstructs student achievement.	①	②	③	④	⑤
5. Administrative rules help rather than hinder.	①	②	③	④	⑤
6. The administrative hierarchy of this school facilitates the mission of this school.	①	②	③	④	⑤
7. Administrative rules in this school are used to punish teachers.	①	②	③	④	⑤
8. The administrative hierarchy of this school obstructs innovation.	①	②	③	④	⑤
9. Administrative rules in this school are substitutes for professional judgment.	①	②	③	④	⑤
10. Administrative rules in this school are guides to solutions rather than rigid procedures.	①	②	③	④	⑤
11. In this school the authority of the principal is used to undermine teachers.	①	②	③	④	⑤
12. The administrators in this school use their authority to enable teachers to do their job.	①	②	③	④	⑤

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APPENDIX F

Omnibus T (Trust) Instrument – Hoy & Tschannen-Moran (2003)

# Omnibus T-Scale

**DIRECTIONS:**

The following are statements about your school. Please indicate the extent to which you agree with each statement along a scale from strongly disagree (1) to strongly agree (6).

	Strongly Disagree						Strongly Agree
1. Teachers in this school trust the principal .....	1	2	3	4	5	6	
2. Teachers in this school trust each other.....	1	2	3	4	5	6	
3. Teachers in this school trust their students.....	1	2	3	4	5	6	
4. The teachers in this school are suspicious of most of the principal's actions.....	1	2	3	4	5	6	
5. Teachers in this school typically look out for each other .....	1	2	3	4	5	6	
6. Teachers in this school trust the parents .....	1	2	3	4	5	6	
7. The teachers in this school have faith in the integrity of the principal.....	1	2	3	4	5	6	
8. Teachers in this school are suspicious of each other .....	1	2	3	4	5	6	
9. The principal in this school typically acts in the best interests of teachers .....	1	2	3	4	5	6	
10. Students in this school care about each other .....	1	2	3	4	5	6	
11. The principal of this school does not show concern for the teachers.....	1	2	3	4	5	6	
12. Even in difficult situations, teachers in this school can depend on each other.. ..	1	2	3	4	5	6	
13. Teachers in this school do their jobs well .....	1	2	3	4	5	6	
14. Parents in this school are reliable in their commitments .....	1	2	3	4	5	6	
15. Teachers in this school can rely on the principal.....	1	2	3	4	5	6	
16. Teachers in this school have faith in the integrity of their colleagues .....	1	2	3	4	5	6	
17. Students in this school can be counted on to do their work .....	1	2	3	4	5	6	
18. The principal in this school is competent in doing his or her job.....	1	2	3	4	5	6	
19. The teachers in this school are open with each other.....	1	2	3	4	5	6	
20. Teachers can count on parental support. ....	1	2	3	4	5	6	
21. When teachers in this school tell you something, you can believe it.....	1	2	3	4	5	6	
22. Teachers here believe students are competent learners.....	1	2	3	4	5	6	
23. The principal doesn't tell teachers what is really going on.....	1	2	3	4	5	6	
24. Teachers think that most of the parents do a good job.....	1	2	3	4	5	6	
25. Teachers can believe what parents tell them.....	1	2	3	4	5	6	
26. Students here are secretive.....	1	2	3	4	5	6	

## APPENDIX G

Qualtrics Research Suite Software description – Qualtrics (2011)

## Qualtrics Research Suite

Qualtrics is the easiest and most sophisticated online survey software in the world. The Qualtrics Research Suite is the tool we provide to customers to bring the research process in-house.

When we set out to create an online research suite, we could not have imagined the route that would lead us to where we are now. In the old days, paper surveys were tedious and limited. Online solutions were complicated, cumbersome and equally limited.

Our goal from the very beginning was to create a tool that had the capacity to create the most complex survey but was simple enough that anyone with a mouse, a keyboard, an imagination and at least one index finger could build it.

And so we started - trying to expand and simplify the existing tools. Over the years these tools have been used by thousands of customers, each suggesting new features and improvements. The result was an extremely elegant tool that makes survey creation easy enough for an intern while at the same time sophisticated enough for the most demanding academic or corporate researcher.

The Qualtrics Research Suite was built for researchers by researchers.

### Survey Design

- Qualtrics offers the easiest user interface of all online survey solutions. The entire survey software system is based on a point-and-click edit system that rivals the simplicity of drawing on a white board. If you want the best online survey software, there is no better tool than Qualtrics.

### Distribution

- Qualtrics offers several modes of delivery to get online surveys to your audience. It also offers the ability to track panels so that you can record who answered your surveys, when, and how often.

### Analysis & Reporting

- Qualtrics does more than just create surveys. It is an entire research suite, with the ability to generate custom reports of your data. Complete with graphs, tables, statistics, cross tabulations and more, all of your reports dynamically update themselves to include new data.

Information retrieved from: <http://www.qualtrics.com/survey-software/>