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Understanding the Cultivation of Teacher Leadership in Professional Learning Communities

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Understanding the Cultivation of Teacher Leadership in Professional Learning
Communities

by

Adrienne G. Wilson

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education
Department of Educational Leadership and Policy Studies
College of Education
University of South Florida

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Dedication

I dedicate this dissertation to my loving husband, Ovett Oniel Wilson for encouraging and supporting me through this long process. Thank you for your continued commitment, unconditional love, understanding, and sacrifice. I also dedicate this dissertation to my son Jadon Oniel Wilson who also sacrificed many evenings and weekends without me because I was working on the completion of this project. I would also like to dedicate this work to my newborn son, Josiah Oniel Wilson, who unknowingly encouraged me to complete my dissertation with an unwavering and tenacious spirit.

Additionally, I would like to thank my parents, Jimmy and Gloria Hall, for laying the foundation and for paving the way so that I may experience the fruits of your labor. Thank you for your love, guidance, and support throughout the years. Thank you for believing in me.

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Abstract

The purpose of study was twofold. The primary purpose was to describe and explain the perceptions and lived experiences of high school teachers through their involvement in a Professional Learning Community, as defined by Hord (1997). Teachers' experiences within a Professional Learning Community were examined for patterns of cultivated leadership and social capital. The second purpose of the study was to identify the influencing variables connected with how the participants viewed themselves as leaders as a result of their participation in a professional learning community. One influencing variable in particular that was examined was the influence of social capital in professional learning communities. Hord's explanation of a professional learning community was the conceptual framework for this study, which states that such communities are made up of five essential dimensions: (1) Shared and supportive leadership, (2) Shared values and vision, (3) Collective learning and its application, (4) Shared personal practice, and (5) Supportive conditions. Online survey research method was used in order to investigate teacher leadership in Professional Learning Communities and the underlying variables associated with participation in such communities. The findings of this study indicated that teachers have varying perceptions of their work with professional learning communities. Overall, the data suggested that teachers' experiences and perceptions negatively correlated with their development as a teacher leader. Although most teachers in this study did not experience empowerment as a

teacher leader, most gained some sense of social capital through their collaborative efforts within their learning communities. The data reflected that most teachers felt connected to the colleagues within their communities. School leadership is vital to the sustainability of professional learning communities and towards the professional growth of teacher leaders. Consequently, this study suggests that future research is conducted to examine the influence of school leaders on teacher leadership development and the impact that professional learning communities have on such development for teachers.

Chapter One:
Introduction to the Study

Accountability as a measure for improving student achievement has become one of several cornerstones in educational reform. As a result, schools are held to immeasurable standards thus leaving a clear achievement gap among students within schools throughout the United States. Historically, such a gap has plagued education in the United States. According to the National Assessment of Educational Progress (NAEP), a survey which assesses trends in student achievement, the Black-White achievement gap steadily increased during the 1990's despite its narrowing in preceding decades (as cited in Lee, 2002). Furthermore, in the publication, *A Nation at Risk*, our schools were declared to be in need of serious reform (as cited in Katzenmeyer & Moller, 2001). The historical foundation embedded within education in the U.S. has divulged numerous reform movements. With this in mind, schools continue to rethink and restructure the ways in which "good education" is manifested within their buildings. Unfortunately, educational reforms have become cyclical in nature rather than successfully executed (Cuban, 1990; Cuban & Tyack, 1995). It is clear that "educational policy is easier to change than schools are" (Katzenmeyer & Moller, 2001, p. 23). This is clearly indicated by the highly scrutinized No Child Left Behind Act (NCLB), which many have argued, has limited academic achievement to high stakes testing. The long

lasting effects of high stakes testing have inflicted unsatisfactory results on the overall quality of education leading to higher grade retention, restricted curriculum, teaching to the test and failure in school improvement strategies (Hargreaves, 2003; Neill, 2006).

Although NCLB has been associated with high stakes testing, the act calls for far more than accountability through performance on assessments. Title II of the NCLB act includes a provision for funding of professional development opportunities for educators and school administrators. The purpose of this Title is to increase student achievement through improving teacher and administrator quality. According to this provision of the act, professional learning communities are one method that can improve student achievement while also providing the needed professional growth for educators and school leaders (NCLB Action Briefs, 2009).

Student achievement relies upon multiple variables, which cannot be single-handedly measured by a test. Research indicates that teachers are a strong factor in student success or failure and that student learning heavily depends on the quality of teachers (Ingersoll, 2007; Katzenmeyer & Moller, 2001). Professional learning communities are the platform in which professional growth and student achievement are fostered simultaneously. It is difficult to create good schools without good teachers and the impact of good teachers is supported in the literature. As noted by the National Commission on Teaching and America's Future (1996), "teacher quality, teacher professionalism, and the conditions in which our nation's teachers are asked to teach are what matter most to students' learning" (as cited in Katzenmeyer & Moller, 2001, p. 22). This idea is also supported by Newmann and Wehlage (1995), who conducted a large-scale national study on school restructuring. Their research indicates that "student achievement increases in

schools where collaborative work cultures foster a professional learning community among teachers and others” (p. 34).

The literature supports the notion that professional learning communities are proven to be successful in improving student achievement and enhancing professional growth within teachers (Dufour et al., 2008; Lieberman and Miller, 2004; Newmann and Wehlage, 1995; Senge, 1990). Furthermore, professional learning community models such as the one established by Shirley Hord (1997), provide a structure that promotes collaboration, leadership, and shared decision making. Hord’s study of professional learning communities allows for the illumination of lived experiences within such communities of practice. In relation to Hord’s research, this study will contribute to the body of knowledge by also examining the lived experiences of those participating in a learning community at eight high schools within a large school district in central Florida including rural, urban, and suburban populations.

The importance of collaborative structures for teachers within schools was identified the selected school district for this study and was implemented within eight high schools during the 2007-2008 school year as a result of funding provisions provided by the Smaller Learning Communities (SLC) federal grant. The purpose of the grant is to support the implementation of SLCs and related SLC activities to improve student academic achievement. Smaller learning communities include structures such as freshman academies, multi-grade academies organized around career interests or other themes, “houses” in which small groups of students remain together throughout high school, and autonomous schools-within-a-school (<http://www.ed.gov/programs/slcp/index.html>). The eight high schools were selected

because each met the following criteria: (1) failure to achieve adequate yearly progress (AYP); (2) substantial populations of lower performing subgroups; and (3) large student subgroups underrepresented in rigorous coursework. Under the guidelines of the grant, teachers must also work collaboratively in structured learning communities to monitor the academic progression of their students within their smaller learning community.

Statement of the Problem

This research examined the role of teachers who engaged in professional learning communities by illuminating their lived experiences and perceptions. In addition to the important role of teachers in relation to student achievement, recent school reform emphasizes the role of teachers as leaders within schools. According to Lieberman and Miller (2004), the teaching profession must be refashioned into the new realities of today, where transformative shifts include: professional community rather than individualism; learning-centered instruction rather than teacher-centered instruction; and inquiry and leadership rather than technical and managed work (p. 11). Although infrequently visible in many public schools, the idea of teachers as leaders is not a new concept. The Carnegie Corporation called more attention to the idea of teachers as transformative agents when it released, *A Nation Prepared: Teachers for the Twenty-First Century* in 1986. This report argued that simply imposing mandates and standardized testing was not enough to transform schools. Instead, the report insisted that true transformation is directly correlated with the restructuring of the teaching profession. Furthermore, it calls for teacher leaders in the areas of curriculum, instruction, school design, and professional development (Carnegie Corporation of New York, 1986).

Despite the impact of teachers as leaders within schools, this function is not always prominent within public education. Instead, research suggests that teaching in isolation is the norm and that feedback on teacher performance is based on student performance on achievement tests, which little emphasis on teacher professional development (Lieberman & Miller, 2004). Professional learning communities are one measure in which teachers may become empowered to spark change within their schools.

Purpose of the Research

According to Astuto (as cited in Hord, 1997, p. 3) a professional community of learners is defined as “a place in which the teachers and administrators of a school continuously seek and share learning, and act on that learning.” Research suggests that school reform occurs when teachers engage in authentic professional learning communities resulting in an increase in student learning. (Hord, 1997; Louis & Kruase, 1996). A fundamental change in the ways in which educators relate to one another professionally must occur in order for such reform to manifest. The learning community model should be fully understood and promoted among all stakeholders within the education community. Educators must not only be convinced of the effectiveness of professional learning communities, but must also embrace the transformation. As a result, this shift involves major cultural changes within schools in order to operate as a professional learning community (Eaker et al., 2002; Hord, 1997).

Professional learning communities involve shared and supportive leadership, collective creativity, appropriate physical conditions, individuals’ capacities, and shared personal practice (Hord, 1997). In addition to the positive effects on student achievement, professional learning communities also provide lasting benefits for teachers. Such

benefits result in higher human and social capital. Reduction in isolation among teachers, increased commitment to the mission and goals of the school, and shared responsibility are a few among many benefits for teachers. It is through participation in professional learning communities, that teachers become well informed, professionally renewed, and inspired to inspire their students (Hord, 1997; Lieberman & Miller, 2004).

As such, this study contributed to the body of knowledge and educational literature by examining teacher leadership through professional learning communities. The purpose of the study was twofold. The first purpose was to describe and explain the perceptions and lived experiences of high school teachers through their involvement in a professional learning community, as defined by Hord (1997). The researcher examined the teachers' experiences for patterns of cultivated leadership and increased social capital. The second purpose of this study was to identify the influencing variables connected with how the participants view themselves as leaders as a result of their participation in a professional learning community.

Research Questions

The research examined the perceptions and experiences of teachers within a professional learning community in order to better understand how leadership is cultivated through teacher involvement in such a community. Additionally, the study explored the interactions that took place amongst PLC participants and how such interactions contributed to the growth of social capital. The following questions guided the research:

1. How do teachers define their role as a teacher-leader as a result of engaging in a professional learning community?

2. What activities do teachers engage in as a result of their participation in a professional learning community?
3. What variables within a professional learning community do teachers identify as barriers to teacher leadership?
4. Is social capital cultivated in teachers that participate in professional learning communities?

Conceptual Framework

The conceptual framework for this study was guided by the work of Shirley Hord (1997), who conducted extensive research on professional learning communities. Most of Hord's research on PLCs has been done in recent years in conjunction with Southwest Educational Development Laboratory (SEDL). The SEDL staff and Hord spent four years studying a school in the SEDL region that possessed many of the qualities of a successful professional learning community. Upon review, Hord concluded that there are five interrelated dimensions prominent in successful professional learning communities within schools. According to Hord (1997), schools that describe themselves as a professional learning community should exhibit the following characteristics: (1) Supportive and shared leadership, (2) Shared values and vision, (3) Collective learning and the application of learning, (4) Supportive conditions, and (5) Shared practice (p. 7). Each of the five interrelated dimensions, outlined in Table 1, provides the conceptual framework for this study. Additionally, each dimension will be discussed further in chapter two.

Table 1

Dimensions of a Professional Learning Community (Hord, 1997)

Professional Learning Community Dimension	Brief Description
Shared and Supportive Leadership	School administration and teachers both lead the school through shared decision - making and collegial support. Professional growth is reciprocal between administration and teachers.
Shared Values and Vision	An undeviating focus on student learning that is used to guide teachers' practice. The values and vision should be embraced by all stakeholders and collaboratively developed by the school organization
Collective Learning and its Application	The school community continuously and collaboratively engage in the inquiry process in order to apply new knowledge and carry out the vision of the school
Shared Practice	Teachers' behavior and practice is reviewed by colleagues in a non-evaluative manner. The process is typically conducted through classroom visits. The purpose is to allow teachers to collaborate in order to share their expertise and knowledge with one another.
Supportive Conditions	The physical conditions of the school and the human capital of those involved enables the function of a PLC to operate in a manner that is most beneficial. Additionally, both factors enhance student learning through the facilitation of PLC's.

Methodology

Online survey research methods were used in this study using Hord's survey, School Professional Staff as Learning Community Questionnaire (SPSLCQ). The questionnaire was used to understand the dynamics of PLCs at each of the eight participating high schools. Additionally, open-ended questions were used to understand teachers' perceptions and lived experiences as a member of a PLC. Semi-structured

interviews were initially apart of the study design, however none of the participants volunteered for an interview.

Significance of the Research

Extensive research has been conducted in the area of professional learning communities and the perceptions of school administrators (Dougherty, 2005) however, the body of literature on perceptions of teachers within a PLC is limited (Fellows, 2005). The researcher drew upon teachers' perceptions of PLC's in particular because it is within such communities that teacher leadership should be fostered. Additionally, Smylie and Denny (1990) suggests that there are limited studies documenting how teachers themselves experience teacher leadership and how an organization's culture and structure impact the work of teacher leaders. This study illuminated the potential power of teacher leadership as a transformational agent in leading schools towards reform efforts. Katzenmeyer and Moller (2001) use the analogy, "sleeping giant" to describe the impact of teacher leadership on student achievement and school advancement. Furthermore, Katzenmeyer and Moller (2001) use this analogy to emphasize the need to examine the untapped potential within teacher leaders as a powerful asset for moving schools forward.

In addition to the "sleeping giant" that resides within prospective teacher leaders, there is also a strong stock in social capital possessed by teachers. Social capital, although limited in educational literature, is prevalent within successful learning communities and is one of several factors that enhance collaboration and collegial support. Professional learning communities are a collective pool of knowledge, skills, and expertise, which

provides a rich source for networks and resources. Although social capital is an influencing factor in student achievement, the literature on this topic is sparse.

Assumptions

The literature supports the notion of teachers as leaders and that the role of a classroom teacher is inclusive of multiple leadership tasks (Katzenmeyer & Miller, 2001; Lieberman & Miller, 2004). Furthermore, teacher leaders are viewed as “groups of teachers intentionally working together to transform the very cultures in which they work and lead” (Lieberman & Miller, 2004, p. 27). With this in mind, one assumption of this study was that all teachers who participated in professional learning communities were leaders to some degree. An additional assumption of this study was that teachers who engaged professional learning communities also experienced social capital through their professional interactions with their colleagues. Social capital involves interactions through mutual trust, norms, and relationships (Bourdieu, 1992; Coleman, 1966; Putnam, 2000). Social capital relates to professional learning communities because of the correlation with the types of interactions that exist within both. The last assumption of this study was that all of the PLC’s would have experienced success and sustainability due to the financial resources provided by the Smaller Learning Communities federal grant that was awarded to the eight schools selected for this study.

Delimitations of the Study

The study consisted of a purposive sample, which was comprised of PLC teachers at each of the selected school sites. The eight selected schools for this study were recipients of the Smaller Learning Communities federal grant. The grant, written by the school district in conjunction with a research center at the University of South Florida,

was specifically awarded to eight high schools within the school district that met the following criteria: (1) failure to achieve adequate yearly progress (AYP); (2) substantial populations of lower performing subgroups; and (3) large student subgroups underrepresented in rigorous coursework. The purpose of the grant was to provide financial resources to assist the selected schools in improving student achievement through a “small school” approach. In doing such, the grant provided funding and additional personnel to create and sustain small learning communities (SLC) within large schools who have had limitations in making sustainable academic growth. As a result of the targeted population, this study did not explore non-grant funded professional learning communities.

Limitations of the Study

The limitations of this study were primarily centered on its design. Most online surveys are challenged with recruiting an appropriate target audience. The population sample was not randomized, which potentially reduced variation of the data. Due to the survey instruments, the pool of participants was limited to those teachers already involved in a PLC in conjunction with the Smaller Learning Communities grant at each school site for this study. Distribution methods also created a limitation because some participants may have been reluctant to open the email invitation soliciting their participation. Due to the general increase in unsolicited emails, some participants may have deleted the invitation prior to reading it. A second email invitation was sent to all non-respondents in order to reduce the likelihood of this problem. The unavailability of volunteers for semi-structured interviews was also a design limitation of this study. Survey respondents were asked to indicate their interest in participating in an interview,

which resulted in no volunteers. Lack of volunteerism may have been due to the timing of the school year. Data collection for this study took place during the last two months of the school year. Survey respondents may have had limited time constraints associated with the demands of ending the school year. Lastly, teachers may have been reluctant to volunteer to interviews due to the lack of anonymity. Participants were asked to provide their email address on the online survey if interested in participating in an interview. Providing such information would have disclosed their identity, thus reducing the likelihood of their survey results remaining anonymous.

Requesting teachers to self-report their perceptions of their schools PLC's was subject to participant bias. Participants may have been susceptible to responding in ways that were socially acceptable rather than honest. Asking participants to remain anonymous was intended to eliminate this limitation.

Researcher bias was a limitation in this study. At the time of this research, the researcher was a classroom teacher and held a leadership position in managing several PLC's within one of the schools selected for this study. Although the researcher's background knowledge about the history of the grant informed the study and data analysis, reflexivity helped to reduce researcher bias. The researcher considered how different elements of the study could have affected the findings of this study. For example, conducting a similar study in a different school district may have eliminated this particular researcher bias. Attempts were made to reduce researcher bias through a thorough analysis of the literature and analysis of the data against the dimensions of the professional learning community as identified by Hord (1997). Lastly, triangulation of the data reduced researcher bias because the researcher analyzed the data from all three

survey instruments in order to identify themes as well as answer the research questions for this study. Triangulation established validity of the data by allowing the researcher to confirm the findings from the instruments through a synthesis of perspectives in relation to the research questions.

Significant Terminology

For purposes of clarifying language throughout this paper, the following definitions are provided:

Smaller Learning Community (SLC). A high school model that serves a primary vehicle for achieving personalized, responsive, and successful educational experiences for students. Smaller learning communities serve small populations of students within a larger school setting (Connell, Legters, Klem & West, 2005).

Professional Learning Community (PLC). Educators who are committed to collaborating continuously through processes of inquiry and action research in order to improve the achievement of the students in which they serve (Dufour, Defour, & Eaker, 2008).

Teacher Leadership. Leadership that enables classroom teachers to extend within and beyond the classroom in a manner that influences other educators towards improved educational practices (Katzenmeyer & Moller, 2001).

Social Capital. The value of social networks bonding similar individuals and bridging between diverse peoples with norms of reciprocity and mutual benefits (Bourdieu, 1992; Coleman, 1998; Fukuyama 1999; Putnam, 2000).

School Capacity. “The collective power of the full staff to improve student achievement school-wide” (Newmann, King, & Youngs, 2000).

Shared Decision Making. “The process of extending the base of decision making through a governance structure to include groups traditionally omitted from the decision making process” (Johnson & Pajares, 1996).

Chapter Two:

Review of the Literature

This chapter is a review the literature as it relates to professional learning communities, teacher leadership and social capital. Additionally, this chapter will formally define Hord's professional learning community model, which will be used as the undergirding framework for this study. Lastly, this chapter will explore the role of social capital in education and how such capital translates professional development and student achievement.

The purpose of this study was to examine high school teachers' perceptions of their schools as professional learning communities, as defined by Hord (1997), to determine whether or not leadership and social capital are cultivated amongst teachers who actively participate in such communities. The literature base provides extensive support for this examination. More specifically, the review of the literature provides the foundational framework for: a clear and concise definition of professional learning communities, justification of the need for professional learning communities, the dimensions of a professional learning community, an extensive review of teacher leadership, and a formalized definition of social capital. This chapter will present an in-depth overview of professional learning communities, teacher leadership, and social capital based on a synthesis of literature from various experts in the field of education.

This chapter is organized into four distinct sections: Development of Teacher Leadership, Defining Teacher Leadership, Defining Professional Learning Communities, and Understanding Social Capital. Each section includes a relevant discussion of the related literature and is directly correlated with the purpose of the study and conceptual framework presented in chapter one.

Development of Teacher Leadership

The concept of teacher leadership has increasingly become embedded within the language of education. Extensive research and literature suggests that teacher leaders are critical in reforming schools. This emerging notion has begun to change the face of leadership among schools. Although teacher leadership is not a new concept, many schools still resemble the traditional conception of leadership, which is that control resides within the hands of school administrators and non-instructional professionals. Historically, teacher leadership has existed within several informal contexts within schools (Smylie & Denny, 1990; Wasley, 1989). Despite the fact that teacher leadership as always existed, new opportunities for such leadership have surmounted through “increased recognition of teacher leadership, visions of expanded teacher leadership roles, and new hope for the contributions these expanded roles might make in improving schools” (Smylie & Denny, 1990).

Current educational reform calls for more distributed leadership among school stakeholders (Fullan, 1994; Spillane & Diamond, 2007). For example, opportunities for distributed leadership, also referred to, shared leadership, have come from shared decision making between teachers and administrators, teacher instructional groups, staff development, and curriculum development. Additionally, redesign initiatives such as,

career ladder and lead teacher programs have created more growth opportunities for teacher leadership (Smylie & Denny, 1990). Such opportunities have changed the face of teacher leadership. Educational reform has experienced an evolution in terms of how teacher leadership is defined and what it encompasses. Silva, Gimbert, and Nolan (2000) offer that this evolution has occurred in three distinct waves over time: formal roles, instructional expertise, and reculturing based on collaboration and continuous learning.

The first wave of teachers as leaders involved placement of teachers in formal roles, such as department head, master teacher, union representative, etc. Essentially such roles consisted of managerial tasks with the primary purpose of efficiency on school operations rather than on instructional leadership. According to Wasley (1991), teachers as managers served as an extension to administration, “designed not to change practice but to ensure the efficiency and effectiveness of the existing system” (as cited in York-Barr and Duke, 2004). This limited view on teacher leadership is described by Frymier (1987) as a “bureaucratic routinization of teaching and learning [caused by] administrative attempts to control schools as places with teachers as deskilled workers and students as uniform products” (as cited in Silva et al. 2000).

Recognizing these limitations, the second wave of teacher leadership emerged into teachers as instructional leaders, which emphasized the instructional expertise of teachers. The second wave brought about such roles as team leader, curriculum developer, and staff development positions for teachers.

These capacities migrated away from the managerial tasks and towards pedagogical expertise, such leadership responsibilities appeared to be “apart from”, rather than “a part of” teachers’ daily work (Silva et. al 2000). The third wave, which is

considered as currently emerging within education, involves the reculturing of schools through teacher leadership. This particular transformation has not completely dissolved the established roles of the second wave. Instead, it recognizes the intentional good that was established throughout the second wave in terms of empowering teachers as a method of school reform. However, one of the major distinctions between the second and third wave of teacher leadership are the increased opportunities for leadership to be a part of teacher's daily work as a classroom teacher. The third wave involves the establishment of opportunities for teachers to participate in schools as organizations. Shifts within this phrase involve moving away from bureaucratic "red tape" within teacher leadership to an "anti-hierarchical" approach based on professionalism and collegiality. An additional distinction lies between the second and third wave due to intentional efforts to formalize and institutionalize teacher leadership roles, rather than maintain loose responsibilities with no designated title or clearly defined leadership capacity (Smylie & Denny, 1990). The third wave of teacher leadership is defined by Wasley (1991) as "those who enable their colleagues to improve professional practice by doing things they would not ordinarily do on their own...and are those who help redesign schools, mentor their colleagues, engage in problem solving at the school level, and provide professional growth activities for colleagues" (as cited in Silva et. al 2000).

The development of teacher leadership reflects an increased understanding that promoting instructional improvement requires an organizational culture that supports collaboration and continuous learning and that recognizes teachers as primary creators and re-creators of school culture. Ultimately, the reculturing of schools involves this understanding and should not be void of teacher involvement (Darling-Hammond, 1988;

Silva et al., 2000, York-Barr & Duke, 2004). With this notion in mind, much of teacher leadership development is related to organizational structure and school capacity.

Defining Teacher Leadership

There is a profound difference between being “just a teacher” and being a “teacher leader.” Despite the notion that classroom teachers possess the most influential role in student success, many teachers do not perceive themselves in a leadership capacity within their schools. Beyond this perception, is the reality that many teachers actually do not possess leadership capacities within their school. According to a four year study conducted by Robert Hampel, teacher leaders never constituted more than 25% of the faculty. Hampel’s study explored 10 schools within the Coalition of Essential Schools and found that there are four distinct factions of teachers that emerge within schools: cynics, the sleepy people, the yes-but people, and the teacher leaders (as cited in Barth, 2001).

Definitions of teacher leadership vary. For example, Katzenmeyer and Moller (2001) define teacher leadership as, “leading within and beyond the classroom, identifying with and contributing to a community of teacher learners and leaders, and influencing others toward improved educational practice” (p. 5). Fullan and Hargreaves (1996) stated that teacher leadership is the “capacity and commitment to contribute beyond one's classroom” (p.13). Additionally, Crowther and Olsen (1996) capture the essence of teacher leadership by defining it as, “an ethical stance that is based upon the views of a better world and the power of teaching to shape meaningful systems. It manifests itself in actions that involve the wider school community and leads to the creation of ideas that will enhance the quality of life of the community in the long term”

(p. 32). Literature places a heavy emphasis on the role and actions encompassed within the scope of teacher leadership, leaving limited clarity on its actual definition.

Despite the variance among definitions of teacher leadership, there remains a common notion that such leadership is an expansion of actions beyond the classroom. As cited by Barth (2001), one study suggests that there are ten areas in which teacher leadership is critical to the growth and stability of a school: (1) choosing textbooks and instructional materials; (2) shaping the curriculum; (3) setting standards for student behavior; (4) deciding whether students are tracked into special classes; (5) designing staff development and in-service programs; (6) setting promotion and retention policies; (7) deciding school budgets; (8) evaluating teacher performance; (9) selecting new teachers; and (10) selecting new administrators. In addition to taking on more responsibilities outside the classroom, teacher leaders also tend to assist in reforms that impact the organizational processes within schools, as well as collaborate closely with school administration (Evans, 1996).

Although early research on teacher leadership is skewed more towards the individual roles of teachers, current literature now expounds on the strong correlation between teacher leadership and organizational capacity within schools. Wasley's (1991) study of three teacher leaders from varying backgrounds revealed common dilemmas in terms of teacher leadership: "difficulty working within bureaucratic systems, lack of incentives for teachers who assume new roles, and teachers' resistance to becoming involved in reform efforts" (as cited in Lieberman & Miller, 2004, pg. 55). A revelation of such challenges concluded that a strong organizational capacity within schools is needed in order to cultivate and sustain teacher leaders.

Additionally, Wasley (1991) suggested that the school culture must be altered in some way in order to accommodate new teacher leadership roles. Despite efforts to move schools forward using various reform methods, schools often remain unprogressive due to organizational structures based on hierarchy and protocols. The resistance to school change is well documented as literature highlights the tenacious strongholds within schools to maintain the status quo and traditional norms (Fullan, 1991; Lieberman & Miller, 2004; Wasley, 1991). Furthermore, seminal research by Waller (1932) explains that many schools are structured around the authority principle - a basic system of domination and subordination that permeates educational organizations from the classroom to the highest levels of school governance (p. 32).

As Wasley, explored the context of school culture in relation to teacher leadership, other researchers later began to expound on this idea by examining organizational elements within schools. It is noted that teachers perform within leadership capacities based on the context of their schools and the organizational capacity provides the platform in which work is accomplished (Leithwood & Duke, 1999; Lieberman & Miller, 2004; York-Barr & Duke, 2004). Ogawa and Bossert (1995), conceptualize leadership as an organizational quality, as opposed to an individual quality. They explain that “if leadership affects the survival of organizations, then it is a phenomenon of nothing less than organizational proportions. This is hardly a startling revelation, but one that is missed by many conceptualizations of leadership, particularly those that treat it as a quality that individuals possess apart from social context....The leadership must affect more than individuals' actions; it must influence the system in which actions occur” (as cited in York-Barr & Duke, 2004). Furthermore, Ogawa and Bossert (1995) describe

leadership as nonrestrictive to roles within an organization, but rather, is a collective network of roles among key individuals and are “based on the deployment of resources that are distributed throughout the network of roles, with different roles having access to different levels and types of resources” (as cited in York-Barr & Duke, 2004).

Smylie and Denny (1990) examined the experiences of thirteen teacher leaders in a school district to gain a better understanding of teacher leadership and organizational capacity. Their findings suggested that although the teachers were supported and knowledgeable about their classroom roles, there was a certain level of uncertainty about their roles within the organization. Such uncertainty surmounted due to (1) unclear expectations from the principal regarding their role as a leader, (2) time constraints between classroom and leadership responsibilities, (3) unclear understanding of how their role related to that of the principal, and lastly, (4) role conflict and ambiguity of role. Smylie and Denny concluded that organizational factors, such as those stated above created tensions for teacher leaders. The difficulties for the teachers in this particular study resided in the fact that they were trying to evoke change through collaborative relationships, but were also faced with the bureaucratic norms of their schools (Lieberman & Miller, 2004).

Katzenmeyer and Moller (2001) go on to explain that the stagnant growth of teacher leadership within schools contributes to “professional distance”. Such distance is often created by isolationism due lack of collaboration and professional community. The organizational structure of schools can either hinder leadership growth or cultivate it. Challenges in promoting teacher leadership include: traditional top-down leadership instead of shared leadership, lack of teacher access to one another, and insufficient time

for leadership work (Katzenmeyer & Moller, 2001; Smylie & Denny, 1990; York-Barr & Duke, 2004). For instance, Ovando's (1996) work on the effects of teacher leadership on teacher practice indicate that planning and conferencing time is frequently used on leadership work, little support is provided for clerical duties associated with leadership activities, and there is limited opportunities for growth in leadership skills.

Structural changes are needed in order to address the noted challenges that schools often face with teacher leaders (Katzenmeyer & Moller, 2001; York-Barr & Duke, 2004). Structural transformations may include ways in which teaching and learning is organized, the way time and resources are utilized, the physical structures of the school buildings, the ways in which decisions are made, how information is shared, and the types of incentives offered (Katzenmeyer & Moller, 2001). The literature points to several emerging alternatives that schools have begun to embrace as a measure of modifying organizational structures. For example, houses within larger schools, where students are grouped with a cohort of teachers who collaborate regularly, is one approach that schools have begun to transition towards. Staffing patterns such as fuse classes, where staff members enter classrooms to assist students with special accommodations is another structural shift in schools today. Other structural changes such as professional learning communities have become more visible in schools.

Professional learning communities facilitate teacher leadership by allowing teachers to collaborate on their professional work, analyze student data, and assess student learning. Additionally, providing common planning time, arranging the school schedule to facilitate collaboration, and allowing teachers to work geographically close to

one another within the school building are methods to promoting teacher leadership (Katzenmeyer & Moller, 2001).

One additional perspective that addresses the challenges faced by teacher leaders in terms of cultivating teacher leadership is distributed leadership. The distributed leadership perspective dissolves the notion of the school principal as the sole leader. Instead, this conception is embedded in examining the collection of leaders who influence “school based instructional practices” (Spillane & Diamond, 2007). Distributed leadership involves the actions of several key players: school administrators, teacher leaders, and classroom teachers. This type of leadership model is essential to the cultivation of teacher leadership and school reform because it allows principals to extend their own capacity by allowing teachers to lead (Barth, 2001). Although the distributed perspective involves leadership that is stretched over the work of multiple leaders, it is also imperative to understand how individual actions by leaders are interdependent of one another (Gronn, 2003; Spillane & Diamond, 2007). Emerging work in recent literature explains that leadership

is not vested in one person who is high up in the hierarchy and assigned to a formal position of power and authority. Instead, leadership is viewed within an organizational context as involving a social influence process whereby intentional influence is exerted by one person [or group] over other people [or groups] to structure the activities and relationships in a group or organization (Yukl, 1994 as cited in York-Barr & Duke, 2004, p. 27).

Additionally, Fullan (1994) affirms this notion of distributed or shared leadership by stating that “teacher leadership is not for a few; it is for all” (p. 246).

Themes within literature suggest that teacher leadership is a vital contribution to the renewal of schools (Beauchum & Dentith, 2004; Katzenmeyer & Moller, 2001;

Lieberman & Miller, 2004). As school leadership responsibilities widen, leaders should simultaneously engage in deeper interactions with larger groups of stakeholders within their schools. Such interactions should include practices of leadership that involve collaboration within a democratic structure (Fullan & Hargreaves, 1996). The organizational structure, culture of a school, and administrative support are all contributing factors to the development and presence of teacher leadership within schools. Findings from a study by Beachum and Dentith (2004), which explored definitions of teacher leadership from the perspective of various teachers who possessed leadership roles in their schools, found that: specific types of school structures and organizational patterns, shared processes and identities, deliberate use of outside resources, and consistent, strong community relationships were emergent characteristics that facilitated teacher leadership in schools.

School Capacity and Teacher Leadership

Previous educational research has explored capacity from various perspectives however; the comprehensive model for school capacity presented by Newmann, King, and Youngs (2000) offers an ideological perspective inclusive of several dynamics of previous work. Newmann and colleagues argue that true school reform can occur by reworking the organizational capacity of schools. Such capacity is made up of the five components: principal leadership, teachers' knowledge, skills, and dispositions, professional community, program coherence, and technical resources. Strong school capacity is a collaborative effort that involves the collective pull of all school staff in moving schools forward (Newmann et al. 2000). Building a schools capacity cannot be

done in isolation and student achievement tends to be higher in schools where teachers work collaboratively.

The school capacity model presented by Newmann (2000) and his colleagues is described as, “a synthesis of a variety of research in which student achievement is most directly affected by quality of instruction. Instruction in turn is affected by school capacity and capacity is affected by actors who sponsor policy or programs on a variety of issues” (p. 43). School capacity is not the one solution to improving schools and cultivating teacher leadership however; it is noted that sustainable school capacity provides a multitude of variables that impact the growth of schools and empower teachers (Newmann et al. 2000). Capacity, as defined by Random House Unabridged Dictionary, is the actual or potential ability to perform yield or withstand (<http://dictionary.reference.com/browse/capacity>). This definition is applicable to school capacity, which identifies certain factors that serve as a function to obtaining desired outcomes. In terms of schooling, the desired outcome is student achievement and the five aforementioned factors of school capacity are intended to function in a manner that is conducive in producing that particular outcome.

Principal Leadership

There is a strong correlation between student achievement and the strength of the leadership of school principals. However, the success of schools does not solely reside with the principal. Much of the school culture is shaped by the principal’s ability to empower teachers (Katzenmeyer & Moller, 2001; Lambert, 2003). Empowering teachers as leaders can potentially increase retention of good teachers, attract new teachers, and nurture teachers’ professional identity as curriculum makers and change agents, which

can inevitably lead to school improvement. Hallinger and Heck (1998) strongly support the notion that “schools that make a difference in students’ learning are led by principals who make a significant and measurable contribution to the effectiveness of staff and in the learning of pupils in their charge” (p. 17).

The role of a school principal is a powerful one that entails being actively involved in what happens inside as well as outside of the classroom (Beauchum & Dentith, 2004). As expressed by Newmann et al. (2000), the school principal has the legal authority to govern their school. Such authority places each school principal in a position of great influence. The principalship is so influential in relation to school improvement that it is said to influence the other four aspects of school capacity as described by Newmann, King, and Youngs (2000). In essence, school principals have the capacity to influence true reform within their school buildings.

Most importantly, principals have the capacity to influence through their relationships with other key school stakeholders. Their responsibilities extend far beyond their legal authority to govern and are inclusive of creating relational trust among their staff. This notion is set forth by Bryk and Schneider (2002) who state that relational trust is made up of three main components: (1) discernment of others, (2) consideration for institutional role relations, and (3) culmination in important consequences at the organizational level. Their examination of school relationships conclude that “relationships are maintained by understanding one’s role responsibility and expectations in relation to the obligations of others” (as cited in Yukl, 1994, p. 62). As a result, schools may exhibit higher levels of academic performance when relational trust is embedded within the relational networks of principals and their teachers. Furthermore, this ideology

is supported by Coleman who maintains that social trust gives group members the confidence that its members will fulfill their obligations in a competent manner and those engaged in trustworthy relational networks are more likely to participate in open exchanges of information (as cited in Goddard, 2003).

Teachers with high levels of trust for their principals are more likely to also have trust for other individuals in their schools such as parents, students, and their colleagues. Essentially, trust is important in accomplishing the main goals of schools because a collaborative partnership between school leadership and teachers is essential (Hoy & Tschannen-Moran, 2003). The power and importance of trust is reflected in a study conducted by Hoy and Tschannen-Moran (2003) which concluded that teachers tend to trust each other when there is a heightened sense of trust for their principal. Borko, Wolf, Simone, and Uchiyama (2003) also concluded that principal leadership and distributed leadership are key contributing factors in success of school reform efforts after examining the five dimensions of school capacity in two elementary schools.

School principals can build capacity and relational trust through shared responsibility and decision making with teachers. As stated previously, teacher empowerment can significantly transform schools. In light of transformational leadership, principals are now more inclined to include teachers in performing certain administrative task. The creation of quasi-administrative roles such as resource teachers and coaches is a clear indicator of the increase in shared decision making. The creation of new roles and inclusion of teachers in handling more responsibilities outside the classroom may be partly in response to the demands of accountability mandates. However, given these perspectives and pressures, it is critical that principals create school cultures that are

welcoming of teacher leadership (Bolin, 1995; Terry, 2000). For principals, teacher empowerment is a methodology for management. Although empowering teachers can be highly beneficial for the academic success of students, principals must still decide which decisions and responsibilities will be shared and which will remain purely administrative. School leaders can set the stage for empowerment by “creating an environment conducive to empowerment, demonstrating empowerment ideals, encouraging all endeavors towards empowerment, and applauding all empowerment successes” (Terry, 2000, p. 35). Although teachers can aggressively seek leadership opportunities, the degree of shared decision making depends on school administrators. Ultimately, principals must establish strong working relationships with their teachers in order to build a sense of empowerment amongst their staff as well as encourage professional development (Sherrill, 1999).

As it has been discussed, school principals have the capacity to improve student achievement through creating opportunities for teacher empowerment, relational networks, trust, and other best practices. Although greatly influential, building school capacity does not solely rest on the effectiveness of the principal. School capacity is a systemic approach to school reform as discussed by Newmann and colleagues (2000).

Teachers’ Knowledge, Skills, and Dispositions

Much of what happens in schools has to do with what teachers do in the classroom. Student achievement or lack thereof is primarily influenced by instructional delivery and teacher competence (Newmann et al. 2000). Teacher influence matters a great deal in the overall organizational capacity of schools. According to Youngs (2001), teacher influence is composed of two dimensions – “the degree in which teachers are

involved in making meaningful decisions about the operations of their schools (teacher leadership, as discussed previously) and the degree to which their schools have autonomy from their districts with regard to decisions about curriculum, assessment, and professional development” (p. 19). Thus, school capacity involves the knowledge, skills, and dispositions of individual teachers. Teachers must be professionally capable to deliver instruction as well as be versed in curriculum (Newmann et al. 2000).

What makes a capable and competent teacher? Although a loaded question, it is one that has driven much of educational literature and research. Characterizing capably competent teachers is a multifaceted challenge that is quite often dependent upon certain variables such as the schooling environment. When examining effective teachers, much of the literature points towards characteristics (friendly, stern, punctual) and processes (lecturer, cooperative learning, labs, etc.) (Connelly, et al. 1997). However, Connelly, Clandinin, and He (1997) state that, “the most important area is what teachers know and how their knowing is expressed in teaching” (p. 665). This concept is imperative because it is directly related to student learning. Furthermore, Connelly and his team (1997) have found that what teachers know and how they express their knowledge in the classroom affects a multitude of other variables such as: “teachers’ relationships with students, teachers’ interpretations of subject matter and its importance in students’ lives, teachers’ treatment of ideas, and teachers’ curriculum planning and evaluation of student progress” (p. 667).

Byham and Cox (1992) and Fullan (2001) suggest that teachers who have a personal stake in an organization are more likely to commit to improving its performance. Teacher commitment coupled with teachers knowledge has the capacity to transform

schools when the two are used to enhance student learning through collaboration with other professionals and best practices in the classroom. Research points to three different types of teachers' knowledge: pedagogical knowledge, subject-matter knowledge, and pedagogical content knowledge. As explained by Garrahy, Cothran, and Kulinna (2005), pedagogical knowledge is generic best practices that are applicable to a wide variety of educational settings. On the other hand, subject-matter knowledge refers to content and curriculum. Lastly, pedagogical content knowledge is an integration of both – pedagogical and subject-matter knowledge. In terms of building school capacity, individual teacher competence lies at the heart of student achievement. However, moving schools forward requires teachers to “exercise their individual knowledge, skills, and dispositions in an integrated way to advance the collective work of the school...the collective power of the full staff to improve student achievement school wide can be summarized as school capacity” (Newmann et al. 2000). The collective work expressed in this statement refers to the professional community within schools.

Professional Community

Building school capacity involves teacher collaboration and is void of departmentalization (DuFour & Eaker, 1998; York, et al. 2004). Professional community is defined as the ways in which teachers interact outside of the classroom and consist of the following: “(a) sharing clear goals for student learning, (b) collaboration and collective responsibility among staff to achieve the goals, (c) professional inquiry by the staff to address the challenges they face, and (d) opportunities for staff to influence the school's activities and policies” (Newmann et al. 2000, p. 266). Much of educational reform points towards professional collaboration and school improvement. Kruse, Louis,

and Bryk (1995) identify five essential elements of professional communities: shared values, focus on student learning, collaboration, deprivatized practice, and reflective dialogue (as cited in Louis, Marks, & Kruse, 1996). Professional communities within schools serve as a platform for social networking, thus building social capital, professional growth, and teacher empowerment (DeFour & Eaker, 1998; Shellard, 2002).

The purpose of a professional learning community is to “ensure that all students learn through the collaborative, interdependent practice of teachers” (Peel 2006, as cited in Reichstetter, 2006), by way of mutual obligations and trust (Newmann & Wehlage, 1995). Strong professional communities have the capacity to improve student achievement as a result of the professional growth that is fostered through collaboration. Multiple studies point towards correlations in improvements in student achievement and professional communities (Lee & Smith, 1996; Louis et al. 1996; NELS, 1988). However, in order for this practice to be both beneficial and effective, teachers must be willing to move from behind the veil of teaching in isolation. Engaging in meaningful collaborative practices requires not only a momentous plan of action, but also a change in mindset. As a result, a positive work culture will manifest in schools where a proactive approach is taken towards building and maintaining professional communities.

Professional communities involve a tight organizational structure with an intellectual directed culture embedded within it (Louis & Marks, 1998). Professional communities are supported by strong inclinations towards professional development (Louis et al. 1996; Newmann et al., 2000; Youngs, 2001). Much of the discussion on school capacity involves extensive dialogue about professional development, which will also serve as the catalyst for this study in exploring the cultivation of teacher leadership.

In essence, professional development assists in providing the capacity for professional communities to make lasting and beneficial impressions on the academic performance of students. Simply stated, good teaching involves engaging in routine professional development. Furthermore, professional communities are grounded on cultivating best practices in the classroom with a commitment to continuous improvement (DuFour & Eaker, 1998; Louis et al. 1996). Such commitment involves “a collective synergy, imagination, spirit, inspiration, and continuous learning and leaning towards improving teaching skills” (Calderon, as cited in Huffman, Hipp, Pankake, & Moller, 2001). Furthermore, Senge describes such commitment as “one where people constantly expand their competence to produce their desired outcomes” (as cited in Bierema, 1999, p. 52).

Professional communities must be supported by a number of factors in order to thrive within schools. According to Louis (1996) and her colleagues structural conditions (school size, staffing, planning time, teacher empowerment, etc.) and human and social resources (supportive leadership, openness to innovation, respect, professional development, etc.) provide the foundational support for professional communities. Hord’s (1997) PLC model, which is the conceptual framework for this study, explains that there are five key dimensions of successful communities; (1) supportive and shared leadership, (2) shared values and vision (3) collective learning and its application, (4) shared personal practice, and (5) supportive conditions. An in-depth discussion on each component of Hord’s model will be discussed later in this paper. What is clear about professional communities of practice is that the organizational structure of schools matter a great deal. Additionally, classroom instruction must coincide with the overall mission

of a school. In return, schools must also create opportunities and possess necessary resources to meet the needs of students, while fostering professional growth (DuFour & Eaker, 1998; Louis et al. 1996; Newmann et al. 2000).

Program Coherence

All too often school leaders take on a piecemeal approach to implementing new programs into their schools. The demands of producing favorable student outcomes have left many schools inundated with overlapping, redundant, and ineffective programs. As a result, countless school dollars are spent on resources and personnel and fall short of reaching intended goals. Despite new school wide initiatives and programs, schools continue to miss the mark. Such shortcomings are not as a result of faulty programs. Instead, lack of program coherence is at the root of the problem. The problem: too many unrelated, unsustained improvement programs are what have left many schools lacking in their capacity to effectively perform (Newmann, Smith, Allensworth, & Bryk, 2001).

Program coherence is defined as “a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate that are pursued over a sustained period of time” (Newmann et al. 2001, p. 231). According to research conducted by Newmann and his colleagues (2001), strong program coherence is identified according to the three following conditions: (1) a common instructional framework that guides curriculum, teaching, assessment, and the learning climate of the school, (2) sustainable working conditions for staff that allow for the implementation of the framework and (3) school allocated resources (time, material, funding) that advance the school’s common instructional framework in a coherent manner. Program coherence is a reflection of the school faculty working together and

making decisions about its programs and processes (Carmichael, 1982). Additionally, there are certain factors within schools that must be tackled in order to effectively implement school wide improvement plans. A clear established focus on the program implementation and desired outcomes must be present and coupled with a favorable acceptance amongst school staff (Newmann & Wehlege, 1995). Quite often the negative mindsets of school staff create huge roadblocks in program implementation and succession. Additionally, limited knowledge base and unreliable results often lead to “a trial-and-error approach rather than a common, coordinated approach to instruction” in implementing new programs in schools (Newmann et al. 2001).

Program coherence is extremely relevant in building a schools capacity as it closely relates to school reform efforts. In fact, students are more likely to learn when their learning experiences “connect and build upon one another” (Newmann et al. 2001). In addition, it relates to teacher leadership because teacher input and collaboration is needed in most phases of the implementation process. A study conducted by Newmann (2001) and his partners found a strong positive correlation between program coherence and student achievement. Their study sought to examine whether improved program coherence showed improvements in student achievement over a succession of time. Because their research proved a positive link between student performance and program connectedness, they call for school leaders to give more attention to improving program coherence within their schools. Doing such will improve schools capacity to meet their desired goals while also meeting the needs of their students and staff.

Technical Resources

The last dimension of the school capacity model involves the efficient use of technical resources within schools. According to Newmann, King, and Youngs (2000), technical resources refers to quality curriculum, books, instructional materials, assessment instruments, computers, and adequate work space. A common pattern continues to manifest when examining the use of school resources. Educational expenditures continue to rise however the desired outcomes in school performance remain obscure (Coleman et al. 1966; Firestone, Goertz, Nagle & Smelkinson, 1994; Knoepfel, Verstegen & Rinehart, 2007). In addition to funding resources, educational literature also points towards tangible and technical resources. Greene, Huerta, and Richards (2007) support the notion that technical resources significantly impact student achievement. Their findings indicate that the ability to predict college aspirations of high school students increased by 14% after including technical resources. Recommendations to improve such resources are provided in multiple sources of literature (Corcoran & Goertz, 1995; Goertz et al. 2007; Newmann et al. 2000). Corcoran and Goertz (1995) suggests improving the quality and quantity of resources by “increasing instructional time, reducing class sizes, expanding the use of technology, or improving new and improved instructional materials.” Additionally, Newmann and colleagues (2001) provide insight into improvement of resources by offering that better technology is provided, a higher quality literature and systemic curricular programs are implemented, and remodeling of outdated facilities.

The importance of technical resources is often neglected. Resources are purchased just for the sake of meeting policy however is not successfully implemented for the sake

of improving student achievement. Instructional resources in particular tend to lose its effectiveness due to being misaligned with state standards and benchmarks (Corcoran & Goertz, 1995). Proper use of resources can serve to build capacity and teacher leadership as well. However, the issue not only rest in the quantity of resources but also in the quality of resources as well.

Professional Learning Communities

Professional learning communities in schools tend to flourish due to its nature in democratic leadership and ongoing professional development (Hord, 2004). Much of the literature on school change recognizes the importance of teacher leadership. For instance, Fullan (1995) expresses the necessity for extending teacher leadership by “moving away from a narrow view of single individuals trying to make a dent in a bureaucratic system toward a more complex perspective that involves multiple levels of leadership, all engaged in reshaping the culture of the school” (p. 46). In addition to the cultivating perspectives of the role and function of school leaders, a stronger emphasis on teacher leadership has emerged through recent reform movements where teachers are now provided with more opportunities to move beyond their role as a classroom teacher.

Despite the traditional views on school leadership, which are more inclined to focus on leadership traits, characteristics, and behaviors, evidence points to the efforts of classroom teachers as a major catalyst in progressing schools (Gurr, Drysdale, & Mulford, 2006; Katzenmeyer & Moller, 2001; Lieberman & Miller, 2004). Many teachers do not directly identify themselves as leaders, thus perpetuating the traditional perspectives on school leadership. Cultivating teacher leadership is a shift that must occur at all levels within schools. Both school administrators and classroom teachers must

stretch themselves beyond their normal comfort zones. Working together as a cohort rather than as individuals will allow for the reculturing of schools. This is a transitional process that enhances the growth of leadership capacity within teachers as well as achievement within students (Katzenmeyer & Moller, 2001).

Literature highlights the benefits of professional learning communities in schools and it is noted that successful, sustainable communities improve student achievement and perpetuate ongoing professional development. Hord (1997) concluded the following in a study on the effects of PLC's: teachers tended to teach less in isolation, teachers experienced a professional renewal, a higher sense of commitment to the work and mission of their school, and a heightened knowledge about subject matter. Teacher involvement in PLC activities on school campuses correlates with student achievement. Proponents of PLC's suggest that "if a school isn't a great professional place for its staff, it's never going to be a great place for kids" (Hank Levin, as cited in SEDL publication on Professional Learning Communities)". Moreover, "such factors, indicators, or variables that are supportive of the growth, development, and self-esteem of students are exactly those that are critical to gaining the same outcomes for a school's staff" (Sarason, 1990, p. 41).

Studies, such as those conducted and/or referenced by Newmann and Wehlage (1995) and Louis and Krause (1995) inform of the positive effects of professional learning communities. Four large studies referenced by Newman and Wehlage (1995): National Educational Longitudinal Study of 1988 (NELS, 1988), Study of Chicago School Reform, School Restructuring Survey, and Longitudinal Study of School Restructuring indicate that schools that engage in professional learning communities tend

to reflect higher student achievement as well as a smaller achievement gap amongst socioeconomic groups (p. 37). Furthermore, Louis and Krause's (1995) study on teacher interaction and student achievement indicates a positive correlation between teacher involvement in PLCs and increased student achievement.

Many perspectives regarding successful elements of such professional communities have been offered and literature has given considerable attention to identifying key characteristics of PLC's. Hord's (1997) work incorporates the defining characteristics as well as the interactions that exist within such communities. According to Hord (1997), the defining characteristics of a PLC, as stated previously, are: supportive and shared leadership, shared values, and vision, collective learning and the application of that learning, shared practice, and supportive conditions. Stoll, Bolam, McMahon, Wallace, and Thomas (2006) have identified three other significant characteristics in addition to the ones identified by Hord: mutual trust, inclusive school-wide membership, and networks and partnerships that look beyond the school for sources of learning. Additional themes within literature include the following identifiable characteristics of PLC's: reflective dialogue, de-privatization of practice, professional growth, mutual support, and mutual obligation (Little, 1993; Kruse, Louis, & Bryk, 1995). Additionally, DuFour and Eaker (1998) suggest that successful PLCs possess the dimensions of shared mission, vision and values, collaborative teams, collective inquiry, action orientation and experimentation, and continuous improvement. Table 2 provides a comprehensive summary of the five dimensions of PLCs as identified by Hord and other leading researchers.

Table 2

Comparison of Dimensions of a Professional Learning Community

Shared and Supportive Leadership	Shared Values and Vision	Collective Learning and Application	Shared Practice	Supportive Conditions
Professional development, shared leadership (Hord, 1997)	Synergy of efforts (DeFour & Eaker, 1998)	Collectively problem solve (Hord, 1997)	Collective goal-oriented learning process (Peel, 2006)	Students receive additional support (DeFour et al. 2006)
Formal and informal leadership (Philips, 2003)	Agreed upon for all students (Langston, 2006)	Analyze practice in relation to student learning (Huffman et al. 2001)	Shared responsibility (Haar, 2003)	Reduced staff isolation and increased staff capacity (Hord, 1997)
Opportunities for staff to influence (Newmann & King, 2000)	Transparency exists concerning student learning (DeFour et al. 2006)	Work collectively to question, search, and analyze new skills, strategies, beliefs, and attitudes (DeFour et al. 1998)	Organization of teacher teams (Langston, 2006)	Physical conditions that promote collaboration (Kruse et al. 2003)

For purposes of this research, the literature review was grounded on the conceptual model offered by Hord (1997), which identifies professional learning communities according to the five dimensions identified in Table 2.

Shared and Supportive Leadership

It is noted that the most effective organizations “have the ability to reduce all the challenges and dilemmas to simple ideas by focusing on what is essential and using the simple ideas as a frame of reference for all their decisions (Collins, 2001, p. 91). The most effective leaders respond to the complex dilemmas of their jobs by “identifying the few crucial things that matter most right now and relentlessly communicating about those

few things (Pfeffer & Sutton, as cited in DuFour, DuFour, & Eaker, 2008, p. 156).” In short, successful schools are those that are able to keep priorities, critical needs, and goals at the forefront of what they do.

Shared and supportive leadership encompasses leaders who define and clarify essential tasks while empowering others. Shared leadership hasn’t always been about defining characteristics of the principalship. Just as teacher leadership has evolved over time, so has the role of school principals. According to Philip Hallinger (2007), views on the principalship have evolved over past three decades, from instructional leader to transformational leadership to what is now shared leadership. Shared leadership is based on the idea that “expertise is widely distributed throughout a school rather than vested in an individual person or position” (DuFour, et al. 2008, p. 198). The shared leadership approach allows principals to cultivate the capacity of others throughout the school building to assume leadership roles and responsibilities.

Much of the success of a PLC is heavily predicated on the school leadership’s ability to foster a sense of shared responsibility and vision in the overall process. The studies of Leithwood (1997) clearly indicate that leadership contributes “significantly to school conditions fostering organizational learning processes” (p. 24). Schools that engage in continuous renewal of professional development through PLCs must have a school administration that can let go of power thus sharing the leadership of the school. According to Sergiovanni (1994b), “the sources of authority for leadership are embedded in shared ideas” (p. 214). Moreover, it is vital that teachers have the capacity to respond to the needs of students. Such capacity is established by the principal’s ability to create an environment where teachers can learn continuously (DeFour, et al. 1998; Newmann &

Eaker, 1995; Senge, 1990). In essence, “leaders plant the seeds of community, nurture fledgling community, and protect the community once it emerges. They lead by following. They lead by serving. They lead by inviting others to share in the burdens of leadership” (Hord, 1997).

Shared Values and Vision

Shared values and vision is the foundational framework that sustains professional learning communities. Sharing vision extends far beyond simply agreeing to a good idea; it is the undeviating focus on student learning (Louis & Kruse, 1995). Additionally, shared values and visions lead to established norms of behavior among PLC participants. The shared vision sets the path and purpose for PLCs. According to DuFour et al. (2008), “the very essence of a learning community is a focus on and a commitment to the learning of each student” (p. 15). Shared values and vision within PLCs is further described as “a synergy of efforts in which staff members are committed to principles each believes in and works toward implementing” (DuFour & Eaker, 1998). There is a positive correlation between the degree in which teachers engage in learning communities and student achievement. According to Newmann (as cited in Brandt, 1995), the level of commitment amongst all individuals who are willing to “push for learning of high intellectual quality” is a leading factor to student success.

Collective Learning and Its Application and Shared Personal Practice

These two dimensions of a professional learning community are discussed simultaneously in the literature because both involve a continual practice of collaboration and inquiry. Shared values and vision is the foundation of a PLC, whereas collaboration is the foundation function of such communities of practice. A PLC is “composed of

collaborative teams whose members work interdependently to achieve common goals – goals linked to the purpose of learning for all –for which members are held mutually accountable” (DeFour et al. 2008, p. 22). Collective learning in PLCs occur when there is a goal-directed learning process evident in which teachers and administrators work together to “analyze and impact professional practice in order to improve individual and collective results for students” (Peel, 2006). Although an essential piece, collaboration does not lead to improved results in school reform and student achievement if the focus is not on the essential issues. “Collaboration is a means to an end, not the end itself” (DeFour et al. 2008, p. 34). In essence, the collective inquiry that occurs within PLC discussions must also transcend within the classroom. Shared personal practice is more highly reflected when teachers examine one another’s practices within the classroom. This is not meant as an evaluative process, but rather is a part of the “peer helping peer” process involved in PLC’s (Hord, 1997).

According to DeFour (2008), educators in a PLC engage in collective learning, also known as collective inquiry, by examining best practices and teaching and learning, candidly clarifying their current practice, and by honestly assessing their students’ current levels of learning (p. 16). A sense of trust and openness must reside within groups in order to engage in such courageous conversations. As expressed by Eaker et al. (2002),

If schools are to improve, schools must learn to function as a PLC; if schools are to function as PLCs, they must develop a collaborative culture; if schools are to develop a collaborative culture, they must overcome a tradition of teacher isolation; and if schools are to overcome their tradition of teacher isolation, teachers must work together in effective, high performing teams (p. 11).

Supportive Conditions

Much of the work accomplished through PLCs requires adequate supportive conditions. The supportive conditions mentioned by Hord (1997) “determine when, where, and how the staff come together regularly as a unit to do the learning, decision making, problem solving, and creative work that characterize a professional learning community”. Literature points out that there are two distinct types of conditions: physical setup and human capacities (Boyd, 1992; Louis & Kruse, 1995). Additionally, Hord (1997) purports that required supportive conditions include (a) time, (b) reduced staff isolation, (c) increased staff capacity, (d) a caring, productive environment, and (e) improved quality of student programs. Much of Hord’s discussion on supportive conditions correlates with the school capacity model mentioned previously.

Provisions for supportive physical conditions are highly evident in successful PLCs. According to Louis and Kruse (1995), such conditions include: established time to collaborate, close proximity of the staff to one another, teacher empowerment, interdependent teaching roles, communication structures, and school autonomy. Boyd (1992) adds that the following conditions are necessary in order to invoke positive school change: “availability of resources, schedules and structures that reduce isolation, policies that provide clear autonomy, foster collaboration, provide effective communication, and provide for staff development” (p. 28). Above all, literature notes that time to collaborate is the most needed factor in providing sustainable support for PLCs (Donahoe, 1993; Hord, 1997; Watts & Castle, 1993).

Ideally, those engaging in learning communities must possess a degree of human capacities in order to engage in the high level of collaboration associated with PLCs.

According to Louis and Kruse (1995), “a productive learning community is a willingness to accept feedback and work toward improvement.” Needed human capacities or characteristics include: mutual trust, openness, respect, an appropriate cognitive and skill base, supportive administration, and an intensive socialization process. Furthermore, learning communities tend to thrive in schools where there is are “positive attitudes towards schooling, students and change; a heightened student interest and engagement in learning; norms of continuous inquiry and improvement, widely shared vision or sense of purpose, involvement in decision making, collegial relationships among teachers, caring student-teacher-administrator relationships; and a sense of community within the school” (Boyd, 1992; Louis & Kruse, 1995). Attention to these areas removes the barriers most often associated with professional learning communities. Supportive PLCs must be sustained by supportive relationships within a positive school culture and supportive physical and human conditions.

Social Capital in Professional Learning Communities

Social capital, a known concept in the discipline of sociology is becoming an ever growing concept in educational research (Penuel & Riel, 2007). Schools are social environments that foster various types of relationships, thus creating social networks that either promote or hinder the established goals of schools. Social networks created through strong positive relationships among school leaders and teachers is one medium in securing favorable educational outcomes. Social capital relates to professional learning communities because of the direct correlation with relationship building and mutual trust that must exist within such learning communities.

Educational literature provides substantial evidence supporting the benefits of strong social networking among educators. Empirical research posits the positive returns associated with social capital, or the social resources assessable through this form of capital (Lin, 2000). Additionally, literature in the field of sociology not only emphasizes the importance of social capital in education, but also serves as a significant source in detailing the frameworks of social capital theory.

It is difficult to pinpoint exactly when social capital became evident in literature. However, it is noted that scholars began to discuss the term more frequently in the late 1960's and early 1970's (Baron, Field, & Schuller, 2000). Historical literature documents John Dewey as taking the "most authoritative philosophy for the movements of civic education in the context of social capital" (as cited in Farr, 2004) when he presented *The School as Social Center* to the National Education Association (NEA) in 1902. Dewey's proactive approach in addressing the social dynamics of society became the foundation for social capital. Most recently, social capital has gained most of its recognition due to the correlation between satisfactory outcomes and access to social resources such as educational and economic attainment (Coleman, 1988; Putnam, 1995). Social capital is mostly identified as a resource to those individuals who reside within particular social networks. In the context of this literature review for this study, professional learning communities are a network within schools.

Recognizing the importance of social dynamics has been highly investigated by leading thinkers such as Pierre Bourdieu, James S. Coleman, and Robert Putnam. Seminal research conducted by Bourdieu and Coleman has contributed significantly to

the body of knowledge in regards to social capital theory. Additionally, Putnam's more recent contributions have helped to modernize social capital.

Bourdieu, whose work is grounded in the ideological perspectives of Karl Marx, began his plight in investigating social capital by analyzing other forms of capital such as human and economic capital. Bourdieu's interpretation of capital was based on the notion that collectively, human, economic, and social capital, account for the different layers of stratification within society. In essence, access to different forms of capital shapes the economic and social well-being of individuals (Foley & Edwards, 1999). Bourdieu (1983) defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintances and recognition" (as cited in Smith, 2007). Social capital is also defined as social obligations or connections that can ultimately develop economic capital (Bourdieu as cited in Lin, 2000). Bourdieu differs in his perspectives on social capital in comparison to other leading sociologist because he argued that the amount of social capital possessed by an individual is dependent upon the amount of networks or connections he or she has successfully mobilized within their circle. According to Bourdieu, this social framework perpetuates a classist society in which the best resources and opportunities are reserved for the elite (Foley & Edwards, 1999).

Perhaps the most influential contributions to the study of social capital were that of sociologist James Coleman, who defined social capital by its function. Coleman defined this form of capital not as "a single entity, but as a variety of different entities, having two characteristics in common: they all consist of some aspect of a social structure and they facilitate certain actions of individuals who are within the structure"

(Coleman, 1988, p. 34). In comparison to Bourdieu, Coleman's perspectives on social capital were driven by contrasting theoretical perspectives. Coleman believed that the development of social capital is an unintentional process that is cultivated by certain activities not necessarily related to building social capital. In essence, social capital is established by happenstance rather than through intentional networking where "the powerful remain powerful by virtue of their contacts with other powerful people" (Baron, Field, & Schuller, 2000). According to Coleman, he identifies forms of social capital as, "obligations and expectations, informal potential, norms and effective sanctions, authority relations, appropriable social organization, and intentional organization" (as cited in Foley & Edwards, 1999). Despite his notable contributions to the study of social capital, Coleman has been criticized for his disjointed concepts in defining social capital as a functional concept (Foley & Edwards, 1999). Unlike Bourdieu, Coleman is relatively known for his research on social capital in the educational context. Coleman has widely published literature concerning equality in education, family dynamics in relation to education, and social capital in schools.

Most research on the ties between social capital and educational outcomes can be found in Coleman's work which became an influential contribution in such literature as *Equality of Educational Opportunity*, simply known as *The Coleman Report*. The report became one of the largest social science research projects, consisting of thousands of school children, teachers, and school administrators across the nation. Coleman's extensive research on this particular project revealed that peer relationships matter in terms of student achievement. *The Coleman Report* argued that attending school with students from a higher socioeconomic status was more advantageous in comparison to

schooling with students from lower socioeconomic backgrounds (Coleman, Campbell, Hobson, McPartland, Mood, & Weinfield, 1966). This extensive report, consisting of over 700 pages, was Coleman's initial attempt at examining the social implications in schools; however, he did not specifically address social capital in school literature until the publishing of *High School Achievement: Public and Private* (1982), which he co-authored with Thomas Hoffer and Sally Kilgore. Coleman and his co-authors identified that Catholic schools in particular tended to produce greater academic outcomes in comparison to public schools. Coleman and Hoffer argued that social capital offered a strong sense of community and a shared mission, thus cultivating student success and a reduced likelihood of high-school dropout as one key factor in successful private schools. It was on this premise that Coleman further studied Social Theory, which influenced his work *Foundations of Social Theory* and the development of social capital (<http://findarticles.com>).

Putnam, most widely known for his literary work, *Bowling Alone: The collapse and revival of American community* (2000), has modernized social capital by succinctly identifying its function, role, and necessity within our democratic society. The title *Bowling Alone* serves as an example of the activity bowling, which used to be "highly associational with bowling clubs serving not just as recreational channels but as sustainers of the wider social fabric" (Baron, Field, & Schuller, 2000). Putnam argues that it is through the act of social activities such as bowling (which is only one of several activities mentioned in his book), that social capital is built.

Putnam's approach to theorizing social capital aims at civic participation and the need for a revitalization in community unity. Putnam's research in *Bowling Alone*

involved extensive surveys, interviews, and data collection of various social conditions around cities in the U.S. Upon extensive evaluation of the social conditions of the U.S., Putnam concluded that social capital was on a massive decline, thus calling for fundamental shifts in social relations and interactions amongst American citizens. In his book *Bowling Alone*, Putnam claims that social capital is on a massive decline due to the movement of women into the workforce, mobility, demographic transformations (such as fewer marriages, more divorces, less children, etc.), and technological transformations of leisure. Despite his diminishing findings, Putnam popularized social capital by discussing it as the norms of reciprocity and trustworthiness that arise from social networks. Additionally, Putnam explains that “civic virtue is most powerful when embedded in reciprocal social relations” (Putnam, 2000).

Presumably, it is the trust factor that creates viable social capital within groups which inevitably creates spillover to other individuals outside certain social networks. It is apparent that social capital involves some type of ties or mutual connections between individuals. Trust, in theory, seems to be the one reoccurring component that is evident in socially bond groups.

Trust is defined by Bernard Barber (1983) as “socially learned and socially confirmed expectations that people have of each other, of the organizations and institutions in which they live, and of the natural and moral social orders, that set the fundamental understandings for their lives” (as cited in Paxton, 1999, p. 92). Based on this definition, trust must exist in order to build stock in social capital. Without it, social decay is inevitable, thus cultivating a plethora of problems in formal and informal groups and institutions. Trust and social capital is best described by Beem (1999):

Trust between individuals thus becomes trust between strangers and trust of a broad fabric of social institutions; ultimately, it becomes a shared set of values, virtues, and expectations within society as a whole. Without this interaction, on the other hand, trust decays; at a certain point, this decay begins to manifest itself in serious social problems... the concept of social capital contends that building or rebuilding community and trust requires face-to-face encounters (p. 55).

Trust is only one of several components of social capital; however, it is one of the most critical when establishing and sustaining social networks. The big idea here is that mutual trust is a big sustainer of social interactions and is highly beneficial in cultivating intertwining relationships and strong evidences of social capital. Additionally, Putnam supports this argument in *Bowling Alone* (2000) by providing evidence that suggests that there is a positive correlation between relational networks and trust. Social capital is the glue that holds the social infrastructure of a community together.

Social networks exist at every level, whether they are formal or informal. This form of capital is so embedded in the social fibers of society, that many might dispute its existence or question the authenticity of the research backing it. The fact that relationships matter a great deal in society is quite evident. Relating to other individuals is a natural desire for most. Relationships matter is the central idea behind social capital theory according to John Field (2003) who attest that interaction and a sense of belonging produces positive outcomes such as building community and a commitment to others.

Just as community, commitment, and trust are essential in various networks and communities, these components of social capital are also imperative in educational institutions. Thus far, the discussion of social capital has been focused on explaining and defining social capital. As previously discussed, social capital is mostly evident in

economics and sociology literature. However, its theoretical premise is broadly applicable to a variety of disciplines. Discourse on social capital in schools has grown exponentially as a result of research conducted by pioneer social theorists. Schools are microcosms of their surrounding communities therefore serving as havens for cultivating social capital.

Social Capital among Teachers

Building social capital in schools is not done in isolation. Such networks exist amongst school leaders, teachers, parents, and students. Although each group may have their own set of objectives, it is the collective goal of all individuals that makes social capital an important aspect. This is the community aspect of social capital expressed so heavily by Putnam (Putnam, 2000; Sergiovanni, 2004). Unfortunately, teaching has all too long been regarded as an individual practice, rather than one that is based on foundational principles of collaboration. The collective intelligence within schools is a powerful resource in improving student achievement. However, the lack of social capital among teachers and school leaders serves as a hindrance in allowing schools to maximize its potential in school improvement efforts. According to Sergiovanni (2004) organizational competence is what makes schools smarter and such competence is typically found in the relationships, norms, memories, habits, and collective skills of a network of people. In essence, organizational competence is the collective sum of knowledge possessed by everyone within the network that leads to increased learning. “This competence is measured not only by what we know but also by how much we know of it, how widely of what we know is distributed, how broad its source is, how much of it is applied in a collective manner, and how much of it is generated by

cooperation with others” (Sergiovanni, 2004). In fact, research suggests that student achievement is more socially equitable in schools where teachers take on a collective responsibility for learning. Studies such as NELS:88 not only highlight the social distribution of academic gains, but also examine the organization of teachers’ work, more specifically, their collective responsibility for students’ academic success. Repeatedly, the results from this particular study revealed that student academic gains were higher in schools with teachers that collaborated more with one another (as cited in Lee & Smith, 1996).

Teachers are valuable resources in building stock in social capital not only for themselves, but also for their students. Teachers serve as “institutional agents”, a term used by Stanton-Salazar (1997). He defines institutional agents as those individuals who have the capacity and commitment to transmit directly, or negotiate the transmission of, institutional resources and opportunities. For students with limited resources, whether it be tangible (wealth) or intangible (knowledge of formal social norms), teachers can serve as their advocate by bridging the gap between those who have and those who lack educational opportunities. “Through resources with institutional agents, a segment of society gains the resources, privileges, and support necessary to advance and maintain their economic and political position in society” (Stanton-Salazar, 1997).

Students’ social spheres extend beyond their families and are inclusive of their community, school, and peers. Their lives are embedded in various social networks, “which extend into various social worlds where a wide variety of socialization actors and spheres are found” (Stanton-Salazar, 1997). For this reason, the role of teachers is imperative in impacting and empowering the academic potential of students. The power

and influence of key actors or institutional agents can greatly impact the academic potential and educational experiences for students. The greater the social connections and knowledge possessed by such individuals the more likely they are to assist in creating meaningful social bridges, opportunities, and advancements for others (Stanton-Salazar, 1997).

As with schooling, teachers can better assist and/or influence the paths of their students when they are better connected themselves. How then do teachers establish connected relationships to assist in their ability to serve as an asset in creating social capital for their students? The answer may lie partly in allowing teachers to develop and serve as leaders. Promoting teachers as educational leaders is a phenomenal concept that remains on the cusp of being widely embraced by educational research. According to Beachum and Dentith in their article, *Teacher Leaders Creating Cultures of School Renewal and Transformation* (2004), there is a limited research base regarding teacher leadership. According to Crowther (1996) “teacher leadership remains conceptually underdeveloped”. Despite the limitations of this concept and as stated previously, the roles of classroom educators and school leaders are transforming.

Fullen and Hargreaves describe teacher leadership as the “capacity and commitment to contribute beyond one’s classroom” (as cited in Beachum & Dentith, 2004). Perhaps such involvement may serve as an outlet for establishing well connected relationships with other stakeholders, thus creating social capital. Additionally, leadership allows classroom teachers to tap into valuable resources. A study conducted by Beachum and Dentith (2004) validates this by concluding that teachers who were given leadership

responsibilities in their schools were more involved in the governance of their schools as well as highly involved in all aspects of their schools.

Lastly, social capital in schools has a great deal to do with the strength of principal leadership. Social capital is imperative in the construction and effectiveness of school leadership because it allows for the capacity of building trust and shared decision making amongst principals and their staff. In addition to trust and relationships, school principals are responsible for ensuring that the school's goals are met in an adequate manner. A shared mission and vision should initially be inspired by its leader. Because school principals serve in the capacity of empowering others, it is imperative that they establish a positive rapport with key individuals (teachers) in reaching desired outcomes. Principal leadership involves a large scope in terms of building social capital in schools. Providing opportunities for social capital through professional development is one of many measures in which school principals can encourage social capital among their staff (Newmann et al. 2000).

Summary

An extensive review of the literature indicates that professional learning communities are important in moving schools forward. Additionally, the literature supports a correlation between teacher engagement in PLC's and teacher empowerment. As expressed throughout this chapter, each dimension is essential, however, a combination of all five yields ultimate success. In addition to the dimensions as described by Hord, a paradigm shift is also necessary among all stakeholders. Teachers must shift the ways in which they define their roles leaders within schools and administrators must embrace shared leadership. Many believe that "the only legitimate use of teacher's time is

standing in front of the class, working directly with students” (Hord, 1997), however the PLC model suggest otherwise. Changing the perspectives of those that hold this view will require focused efforts on working towards school improvement.

Chapter Three:

Methodology

The purpose of this study was to describe and explain the perceptions and lived experiences of high school teachers through their involvement in a professional learning community. Additionally, this study sought to identify the influencing variables connected with how the participants viewed themselves as leaders as a result of their participation in a professional learning community. One influencing variable in particular that was examined was the existence of social capital within each PLC. Four essential research questions guided the inquiry:

1. How do teachers define their role as a teacher-leader as a result of engaging in a professional learning community?
2. What activities do teachers engage in as a result of their participation in a professional learning community?
3. What variables within a professional learning community do teachers identify as barriers to teacher leadership?
4. Is social capital cultivated in teacher professional learning communities?

This chapter will explain the survey research methodology that was used in this study. This chapter includes the population, sample, research design, instrumentation, data collection, data analysis, validity, reliability, and limitations of this study.

Sampling Procedures

A large school district in central Florida including rural, urban, and suburban populations received the Smaller Learning Communities (SLC) federal grant in 2008 as part of its initiative to improve high schools that were lacking in reaching academic standards. The purpose of the SLC grant supported the implementation of SLCs and related SLC activities to improve student academic achievement. SLCs included structures such as freshman academies, multi-grade academies organized around career interests or other themes, and “houses” in which small groups of students remained together throughout high school. Related SLC activities included, but were not limited to personalization strategies; such as student advisories, family advocate systems, and mentoring programs. Eligible schools must have a student enrollment greater than 1000 (<http://www.ed.gov/programs/slcp/index.html>). Eight high schools within the selected school district were chosen to participate in the Smaller Learning Communities program, which was funded by the U.S. Department of Education. The eight high schools were selected because each met the following criteria: (1) failure to achieve adequate yearly progress (AYP); (2) substantial populations of lower performing subgroups; and (3) large student subgroups underrepresented in rigorous coursework.

The SLC grant is a five year project that requires regular monitoring and evaluation of the eight schools. In accordance with the SLC guidelines, the school district designed the project to include the following for all eight high schools: (1) implementation of rigorous academic programs that would prepare students for postsecondary success; (2) extensive and ongoing professional development for teachers, guidance counselors, and administrators; (3) extensive use of data to inform teaching,

learning, and assessments; (4) postsecondary planning and preparation; (5) intensive interventions for students, comprehensive guidance, and academic advising; (6) developmental and instructional supports to create a personalized learning experience for all students; (7) ongoing leadership training for all stakeholders; and (8) e-services to enhance the interactive nature of SLCs. Additionally, involved teachers received collaborative planning time and integrated professional development (School District Grants Department, 2009). Data is provided in Table 3 that compares demographics of each participating school. Program coordinators at the eligible schools were contacted by the researcher to identify participants for this study. Letters to participate were sent to 65 SLC teachers via email and 39 successfully completed the electronic surveys on Survey Monkey.

Table 3

Eight Participating High Schools with Smaller Learning Communities Grant

Targeted High Schools	Enrollment (2009-2010)	Adequate Yearly Progress	School Grade	% of Minority Students*	Eligible for Free & Reduced Lunch (N)
School A	1957	N	D	47.01	52.58 (1029)
School B	2384	N	C	47.73	39.97 (953)
School C	2487	N	B	36.75	34.50 (858)
School D	1990	N	C	73.37	61.81 (1230)
School E	1748	N	C	86.84	68.54 (1198)
School F	1862	N	D	72.99	49.09 (914)
School G	2154	N	B	46.80	33.94 (731)
School H	1303	N	B	50.04	41.06 (535)

Source: School District Website, Retrieved July 16, 2009

*Minority = non-white students

Design of the Study

The initial design of the study included online survey research methods and semi-structured interviews in order to investigate teachers perceptions of teacher leadership in PLCs and the underlying variables associated with participation in such communities. Distributing surveys online was used for this study because of the advantages associated with this particular type of method. The internet service, Survey Monkey was utilized to construct and administer the surveys to participants for this study. Utilizing an online survey method was selected for this study because of its ability to “include multiple choice answers from qualitative exploratory interview data and eliminate question bias through proper, unambiguous, concise wording” (Andrews, Nonnecke, & Preece, 2003,

p. 5). Online web-based surveys are advantageous in data collection because they provide seamless error in transcription. Additionally, online surveys are proven to be cost effective and can be quickly distributed (Andrews, Preece, & Nonnecke, 2003; Smith, 1997).

The research design also included semi-structured interviews, however conducting interviews was eliminated from the study due to lack of volunteer participation. Participants were asked to indicate their interest in participating in an interview at the end of the web-based surveys; however none of the survey respondents indicated interest. Although interviews were not conducted, the interview protocol is included further in this chapter.

Instrumentation

Three instruments were used to collect data for this study. Each of the instruments were either selected from a previously constructed survey or created by the research in order to answer the four research questions in a meaningful and thorough manner. The three instruments included the School Professional Staff as Learning Community Questionnaire (SPSLCQ) which was developed by Shirley Hord (1997), an open-ended survey, and a “select all that apply” questionnaire, which were both created by the researcher. The design of the instruments for this study was two-fold. The SPSLCQ instrument allowed respondents to rate their experiences and perceptions of PLC’s within their schools in a clear and precise manner. The open-ended response questions and the “select all that apply” questionnaire allowed respondents to elaborate on their experiences, thus providing a thorough understanding of the relationship between PLCs, teacher leadership, and social capital.

School Professional Staff as Learning Community Questionnaire

The School Professional Staff as Learning Community Questionnaire (SPSLCQ), developed by Hord (1997), contains 17 Likert-type questions to assess the perceptions of professional learning communities. The SPSLCQ survey was originally developed by Shirley Hord as an instrument to assess “the extent to which teachers believe their school is a positive learning environment and is supportive as a learning community” (Cowley, 1999, p. 50). This instrument is based on the five foundational dimensions of a PLC, as identified by Hord: shared leadership, shared values and vision, collective learning and application of learning, shared practice, and supportive conditions (Hord, 1996). The 17 Likert-type questions each corresponded with the five dimensions of a PLC as identified by Hord. Each dimension contained a response scale that ranged from 5 (high) to 1 (low). The response scale had anchor statements at each end and at the mid-point to distinguish the high, mid, and low ratings for each dimension. Each dimension had a varying number of questions; therefore the scale was different from the familiar Agree – Disagree response range that is usually associated with Likert instruments. Table 4 provides a description of the five dimensions in relation to each survey question.

Table 4

School Professional Staff as Learning Community: Dimensions in Relation to Survey Items

Dimension	Survey Items
Shared and Supportive Leadership	1a, 1b: School administrators participate democratically with teachers sharing power, authority, and decision making
Shared Values and Vision	2a, 2b, 2c: Staff shares visions for school improvement that have an undeviating focus on student learning, and are consistently referenced for the staff's work
Collective Learning and Application	3a, 3b, 3c, 3d, 3e: Staff's collective learning and application of the learning create high intellectual learning tasks and solutions to address student needs
Shared Practice	4a, 4b: Peers review and give feedback based on observing each others' classroom behaviors in order to increase individual and organizational capacity
Supportive Conditions	5a, 5b, 5c, 5d, 5e: School conditions and capacities support the staff's arrangement as a professional learning organization

Table adapted from dissertation: An Investigation of Teachers' Perceptions of their Schools as Professional Learning Communities

Open-Ended Survey

A survey with four open-ended questions was also distributed online along with the SPSLCQ survey as a way to illuminate each respondent's experiences and perceptions about PLC's. Additionally, this survey was distributed as a method to elicit more information from participants regarding their feelings, perceptions, and experiences through their involvement in a PLC. Gathering this needed information was essential in answering the four research questions for this study. Additionally, the researcher included

open-ended questions in the research design because such types of questions are advantageous at reducing the amount of response error. Respondents are more likely to remember their answers when given an opportunity to respond freely, resulting in a tendency for respondents to read questions thoroughly as a result of having to write a response (Salant & Dillman, 1994). The following four open-ended questions were included on the questionnaire:

1. Describe your role as a teacher leader within your school.
2. Explain any current or past barriers that you have experienced in your professional development as a teacher leader within your school.
3. Describe the types of activities you have engaged in professionally as a result of being a member of a Professional Learning Community.
4. Describe how you have connected with other teachers within your school as a result of being a member of a Professional Learning Community.

“Select all that apply” Questionnaire

A “select all that apply” questionnaire was also distributed simultaneously with the SPSLCQ and the open-ended surveys. The “select all that apply” questionnaire consisted of eleven statements relating to the social dynamics of professional learning communities. Participants were prompted to check all statements that applied to their experiences as a member of a professional learning community for the 2009 – 2010 academic school year. The purpose of this questionnaire was to understand the dynamics and presence of social capital within such communities of practice. The questionnaire related to research question four, how is social capital among teachers identified in professional learning communities.

The statements on the questionnaire were created based on indicators of social capital from the literature. According to literature, social capital is identified as resources available to those individuals who reside within particular social networks (Bourdieu, 1983; Foley & Edwards, 1999; Putnam, 2000). Each descriptor was based on elements of social capital as discussed in chapter two.

Semi-Structured Interviews

The data collection procedures included semi-structured interviews with participants who expressed an interest on their web-based survey in being interviewed. None of the survey respondents indicated interest in participating in a face to face interview, which resulted in the researcher sending several emails to solicit interview participation. Lack of participation may have been due to the timing of the school year. Data collection for this study took place during the last two months of the school year. Lack of volunteer participation may have been due to time constraints placed on teachers during end of year exams and procedures.

The researcher anticipated conducting two interviews per school if more than twenty respondents indicated an interest. For data collection purposes, an external interviewer would have conducted interviews for this study in order to eliminate researcher bias and to ensure full participation from respondents. The selected interviewer would not have been a participating member of a PLC or a faculty member of the selected schools for this study. The interviewer would have been trained on the interview protocol by the researcher in two phases. Phase one would have consisted of the trainee studying the interview protocol and becoming familiar with the interview conditions. Familiarity would have ensured that the interviewer was able to conduct the

interview in a “conversational manner without hesitating, backtracking, or needing to reread or study the guide” (Gall et al. 2007, p. 12). Phase two of the training process would have involved the trainee conducting practice interviews with the researcher.

Interview data would have been recorded using two voice recorders. Two recorders would have been used to eliminate the possibility of lost data due to technical difficulties. While researchers such as Lincoln and Guba (1985) suggest that recorders should only be used for unusual circumstances, others suggest that recorders are “indispensable” because it allows the interviewer to capture the data while also actively engaging in the interview (cited in Hoepfl, 1997).

Although interviews were not conducted for this study due to lack volunteer participation, an interview protocol was created in order to allow respondents to describe their experiences within a PLC at their current school. The interview protocol, as outlined in Table 5, is a direct correlation to the five foundational dimensions of the SPSLCQ survey and conceptual framework for this study.

As described by Merriam (1998), an interview is an appropriate design that allows the researcher to investigate how people interpret their world without having to directly observe their behaviors and feelings. Unlike informal conversational interviews, semi-structured interviews require a prepared interview guide with a detailed list of questions to be asked during the interview (Gall, Gall, & Borg, 2007). The primary purpose of interview questions for this study was to probe for teachers’ experiences and perceptions of their involvement within their PLC.

Table 5

Interview Protocol

Dimension	Interview Questions
Shared and Supportive Leadership	<ol style="list-style-type: none"> 1. Talk about decision making within your school. <ul style="list-style-type: none"> • Probe for teacher decision making • Probe for curriculum decision making • Probe for decision making within PLC 2. Explain your involvement in making decision within your school within the past two years. 3. Talk about your school's vision, values, and goals.
Shared Values and Vision	<ol style="list-style-type: none"> 4. Talk about how the vision, values, and goals are manifested within your school. <ul style="list-style-type: none"> • Probe for vision, values, and goals within PLC and within instruction 5. Talk about professional development within your school. <ul style="list-style-type: none"> • Probe for types of professional activities within PLC • Probe for use of data within PLC
Collective Learning and Application	<ol style="list-style-type: none"> 6. Talk about how teachers collaborate within your school. <ul style="list-style-type: none"> • Probe for sharing professional expertise in PLC • Probe for sharing professional expertise through classroom observations
Shared Practice	<ol style="list-style-type: none"> 7. Tell me about the conversations that you engage in with your colleagues about your teaching. 8. Describe the opportunities provided for you and your colleagues to discuss instruction, assessment, and student learning. <ul style="list-style-type: none"> • Is such discussion supported by your administration? If so, how? 9. Describe the relationships among teachers in your school. <ul style="list-style-type: none"> • Probe for trust 10. How often do you work with your colleagues within your PLC to improve student learning?

Interview Protocol adapted from dissertation: *An Investigation of Teachers' Perceptions of their Schools as Professional Learning Communities* (Fellows, 2005)

Reliability and Validity of SPSLCQ Instrument

The School Professional Staff as Learning Community Questionnaire (SPSLCQ) was initially developed by Hord in 1997 as a method for identifying schools as professional learning communities through the use of screening, filtering, and assessing the maturity of staffs as learning communities. Upon its development, additional uses of the instrument included collecting baseline data and serving as a diagnostic tool in creating communities of professional learners (Hord et al., 1999).

A pilot test consisting of 28 participants was conducted by Hord to test the reliability of the instrument. Two types of reliability were assessed: (a) internal consistency and (b) stability. The internal consistency was measured using the Cronbach's alpha, which reported 0.92. The test-retest procedure was used to measure the stability, which was 0.94. The results of the pilot test indicated that the instrument could be applied to a spectrum of people involved in PLC's (Hord et al., 1999).

Validity for the use of this instrument was assessed through Hord's pilot test. Hord tested for three types of validity: (a) content validity, (b) concurrent validity, and (c) construct validity. Scores on this instrument were correlated with scores on a valid and similar secondary instrument during the pilot test. The correlation coefficient of 0.82 indicated the validity of this instrument. A field test was later conducted to test the content validity, concurrent validity, and construct validity. Content validation was conducted by a thorough review of the literature and consultation from AEL (Appalachian Educational Laboratory) researchers. Concurrent validation was assessed using school climate surveys from the population sample. Lastly, construct validation was assessed using the known-group methodology and factor analysis (Hord et al. 1999).

Pilot Study of Current Research

A pilot study was conducted by the researcher of this study in September of 2009. Seven participants were selected to participate in the pilot study due to their role as smaller learning community coordinators at one of the eight schools selected for this study. The researcher is also a learning community coordinator and did not participate in the pilot study; resulting in seven participants rather than eight. A web link to the pilot instrument was sent to seven participants through an email invitation. A verbal and email reminder was also extended to each participant to ensure that surveys were completed within a timely manner. After extending invitations, four out of the seven individuals completed the online survey. The pilot study revealed some limitations. For example, some participants may have been reluctant to respond due to their lack of comfort or familiarity with online surveys. Additionally, the pilot study revealed technological problems when accessing the survey link. Teachers were sent an email invitation via their school email addresses; however the link to the survey could not be accessed due to a server block. As a result, the survey was re-created using Survey Monkey. This modification allowed participants to access the survey without technical difficulties.

Data Collection

Data were collected using an electronic survey method. The electronic distribution included three instruments: the SPSLCQ survey; the open-ended survey, and the “select all that apply” questionnaire. An invitation letter to participate in this study was emailed to sixty-five high school teachers participating in a professional learning community as specified for this study at eight selected high schools. For the purposes of this research and based on definitions in literature, the collaborative work of the teachers

within a Smaller Learning Community at their school site constituted as a Professional Learning Community. A total of sixty-five names of teachers who participated in a PLC as a result of the SLC structure at their schools were retrieved from the SLC program coordinator at each school. An email invitation was sent directly to teachers at the school where the researcher was employed. The email invite clarified that all participating teachers must be currently involved in a PLC in conjunction with a SLC at their school site.

The email invitation included a link directly to the surveys via Survey Monkey. The letter instructed participants to select the link if interested in participating in the study. Additionally, the letter indicated that teachers could opt-out of the survey by responding back to the email with the statement “opt-out”. This ensured that the researcher did not send additional email correspondents to those teachers who were not interested in participating. Each school received a coded survey as a method for the researcher to verify participation for all eight schools. However, there were no identifiers to link individual teachers to their survey responses.

Teachers were also provided with a two-week deadline to complete the survey. Prior to completing the survey, participants were prompted to answer “yes” if interested in participating in a face-to-face interview. A follow-up email was sent to non-respondents one week after the survey deadline.

Data Analysis

Data analysis, as described by Bogdan and Biklen (1998),

is like a funnel; things are open at the beginning (or top) and more directed and specific at the bottom. The qualitative researcher plans to use part of the study to learn what the important questions are. He or she does not assume that enough is known to recognize important concerns before undertaking the research (p. 39).

Furthermore, data analysis is considered “working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what will be told to others” (Bogdan & Biklen as cited in Hoepfl, 1997, p. 17). The analysis process occurred in four stages for this body of research: a quantitative analysis of the data from SPSLCQ survey (Hord, 1996), a qualitative analysis of the open-ended survey questions, a qualitative analysis of the “select all that apply” questionnaire, and a comparative analysis of the data from all three instruments in order to identify patterns and themes within the data. The data analysis process correlated with the conceptual framework as discussed in chapter one. Additionally, the review of the related literature discussed in chapter two guided the analysis.

Data from the SPSLCQ instrument were analyzed using the Excel Toolkit for Windows. Ratings from this instrument were inputted into four excel spreadsheets to retrieve descriptive statistics for each dimension (shared and supportive leadership, shared values and vision, collective learning and its application, shared personal practice, and supportive conditions). Descriptive statistics informed the researcher about the degree of the respondents’ perceptions regarding each dimension of a PLC as identified by Hord on the SPSLCQ instrument.

Qualitative analysis of the open-ended questions and “select all that apply” questionnaire responses included a non-numerical organization of the data to identify trends and patterns from responses. Thematic analysis included transcribing all of the data from these two instruments in a concise format. While transcribing the data, the researcher also made memos pertaining to noteworthy comments from the instruments. The researcher identified emerging themes from the data in order to analyze participants’ perceptions and lived experiences as a member of a PLC. A review of the literature was also conducted in order to explain emerging themes from the data. Analysis to identify emerging themes was conducted repeatedly until the researcher was assured that all themes had been identified. Lastly, triangulation using all three instruments was used in order to allow the researcher to analyze the data in relation to the research questions for this study. Triangulation included indentifying themes from all three instruments in order to answer the four research questions. As a result, triangulation enhanced the research findings for this study.

Quantitative Data

School Professional Staff as Learning Community Questionnaire

Quantitative data were obtained from the SPSLCQ survey (Hord, 1996) using the 17 Likert items to measure teachers perceptions and experiences of the five dimensions of a PLC in their current school. Each item correlated with one of the five dimensions identified by the conceptual framework: (1) shared and supportive leadership; (2) shared values and vision; (3) collective learning and its application; (4) shared personal practice; and (5) supportive conditions. The number of items for each dimension varied (i.e. dimension 1 = two items, dimension 2 = three items, dimension 3 = five items, dimension

4 = two items, and dimension 5 = five items). The 17 Likert items were categorized in one of five dimensions, as stated previously. Each dimension contained an umbrella statement preceded by three statements at varying degrees ranging from one to five. The thirty-nine respondents were prompted to indicate their response based on one of the three statements. Survey responses were recorded on the web-based survey program, Survey Monkey for further analysis and then exported onto an excel spreadsheet.

Descriptive statistics were reported showing the distribution of responses. Additionally, Cronbach's alpha was used to establish reliability of the instrument for the study's sample, as well as reliability for each of the five dimensions as identified by Hord. Lastly, the mean and standard deviation for each dimension was recorded. The mean scores were used to determine which PLC dimensions were perceived as being either strong or weak among the participants.

“Select all that apply” Questionnaire

A “select all that apply” questionnaire was also distributed online simultaneously with the SPSLCQ and the open-ended questions. This questionnaire consisted of eleven statements relating to the social dynamics of professional learning communities. Participants were prompted to check all statements that applied to their experiences as a member of a professional learning community for the 2009 – 2010 academic school year. The purpose of the questionnaire was to understand the dynamics and presence of social capital within such communities of practice. Additionally, the questionnaire related to research question four, “How is social capital among teachers identified in professional learning communities.”

Social capital is identified as resources available to those individuals who reside within particular social networks. The statements for the questionnaire were created based on indicators of social capital from literature. In the context of this study, professional learning communities are a network within schools in which teachers can gain social capital to enhance their professional practice.

Data from this instrument were analyzed using descriptive statistics. The researcher used the percentages in order to identify themes from the open-ended responses and to support data reported in the SPSLCQ. Additionally, data from this survey allowed the researcher to identify patterns and themes that related to data from the SPSLCQ and open-ended instruments as well as determine the nature of social capital in PLCs at the school sites.

Qualitative Data

Qualitative data was obtained from open-ended responses using the web-based survey method on Survey Monkey. The open-ended questions provided substantial qualitative data used for qualitative analysis. Analytic procedures for analyzing the data involved: (a) an interim analysis of the data; (b) writing memos; and (c) coding the data.

Open-Ended Response Questions

In addition to the SPSLCQ, four open ended response questions were online survey in order to get a deeper understanding of the participants lived experiences through their involvement in a PLC at their school sites, as well as grasp the perceptions associated with teacher leadership as a result of participating in a PLC. The four open-ended questions were as follows:

1. Describe your role as a teacher leader within your school.

2. Describe how you have connected with other teachers within your school as a result of being involved in a Professional Learning Community.
3. Explain any current or past barriers that you have experienced in your professional development as a teacher leader within your school.
4. Describe the types of activities you have engaged in professionally as a result of being a member of a Professional Learning Community.

Interim analysis, which is the cyclical process used to collect and analyze data, was used continuously throughout the data analysis process for this study. Interim analysis was used until the results of the data were fully understood. The researcher also wrote memos on a continual basis throughout the qualitative analysis process. Memos included reflective notes regarding themes, new discoveries, and discussions.

Coding qualitative data is a data reduction method used to identify themes or patterns from the data. The coding methods for this study included a detailed description for each code, a set of inclusion and exclusion criteria for each code, and examples of real text for each theme (McQueen, McLellan, Kay, & Milstein, 1998).

Open-ended responses were transcribed from Survey Monkey to Microsoft Word. Analysis procedures were established prior to data analysis. The procedures included: (1) carefully reading the transcribed data line by line; (2) segmenting the data by dividing it into analytical units; (3) coding meaningful segments of data that were highly identifiable; and (4) enumeration. A master list of themes was maintained to identify connections between the four open-ended questions. Enumeration, which is the process of quantifying data, was used to count the number of times certain words or phrases were used in participant responses.

Summary

The purpose of this study was to describe and explain the perceptions and lived experiences of high school teachers through their involvement in a professional learning community. Additionally, this study sought to identify the influencing variables connected with how participants view themselves as teacher leaders as a result of their participation in a professional learning community.

The SPSLCQ Likert survey was used to understand the structure, leadership characteristics, and social dynamics of PLC's at the selected schools. The Likert survey was also used to understand the perceptions associated with each of these factors. Four open-ended questions were included in order to obtain a deeper understanding of the experiences and perceptions of participants. Additionally, the open-ended questions were also used to understand the cultivation and/or existence of teacher leadership in professional learning communities. Lastly, a multiple choice questionnaire was used in this study to identify elements of social capital in the selected PLC's. Identifying social capital in such learning communities helped strengthen the data analysis relating to the stability and effectiveness of these communities of practice.

This chapter described the design of the study, methodology for collecting data, and data analysis methods for this study as it relates to teachers' perceptions and experiences in their professional learning communities. The following chapter will discuss the results of the study.

Chapter Four:

Findings

The purpose of this chapter is to report the findings of the research, which was based on the four following research questions: 1) How do teachers define their role as a teacher-leader as a result of engaging in a professional learning community; 2) What activities do teachers engage in as a result of their participation in a professional learning community; 3) What variables within a professional learning community do teachers identify as contributing to teacher leadership; and 4) Is social capital cultivated in teachers that participate in a professional learning community?

In an effort to understand the cultivation of leadership and the existence of social capital in professional learning communities, the researcher examined the experiences and perceptions of teachers at eight high schools, which were selected because of their participation in a professional learning community in conjunction with the smaller learning communities grant at their school sites. This chapter will present: 1) a description of the population sample; 2) data collection procedures; and 3) findings from data analysis used to address each research question.

Description of Population

Teachers at eight high schools within a large school district in central Florida were surveyed in order to understand teacher leadership and social capital in professional learning communities. The eight high schools were chosen due to their selection to

service students under the smaller learning communities (SLC) federal grant from the U.S. Department of Education. According to federal grant requirements, schools eligible for the grant must have a student enrollment greater than 1000. The eight high schools were selected to participate in this grant because each met the following criteria: 1) failure to achieve adequate yearly progress (AYP); 2) substantial populations of lower performing subgroups; and 3) large student subgroups underrepresented in rigorous coursework. The purpose of the grant was to provide financial resources to assist schools in improving student achievement through a “small school” approach. In doing such, the grant provided funding and additional personnel to create and sustain small learning communities (SLC) within large schools who have had limitations in making sustainable academic growth.

The structure of the smaller learning communities within the eight schools encompassed groups of 9th and 10th grade students who were placed in learning communities or teams based on variables such as grade level and the master schedule of classes. Their collaborative work involved meeting regularly to discuss and implement the following: interventions for students; community-building activities; incentives for students’ successes; and curriculum alignment. For the purposes of this research and based on definitions in literature, the collaborative work of teachers within a SLC constituted as a professional learning community (PLC). In other words, SLC’s were the student learning communities and PLC’s were the collaborative professional learning communities for teachers who worked with students in their assigned SLC groups. Working as a SLC teacher was not voluntary for all teachers at the eight school sites.

Varying factors, such as teaching schedules and teacher preferences dictated which teachers were assigned to a SLC.

The populations of the selected schools ranged from 1305 to 2487, with an average size of approximately 2000 students. The percentage of minority students ranged from 37% to 87%, with three of the eight schools having a minority rate of 73% to 87%. The eligibility percentage for free and reduced lunch ranged from 34% to 67%, with three of the eight schools having over 50% of students eligible for free and reduced lunch. In terms of performance data, none of the schools met adequate yearly progress for the 2008-2009 academic school year. Additionally, three schools received a school grade of a B, while the five other schools received either a C or D for the 2008-2009 school year. High school grades for the 2008-2009 school year were determined based on several components. The scoring criteria included: the percentage of students who met high standards in reading, math, writing and science on the Florida Comprehensive Assessment Test (FCAT), the percentage of students who made learning gains as demonstrated on the FCAT, the percentage of adequate progress amongst students in the lowest quartile in reading and math as demonstrated on the FCAT, and percentage of students tested. The FCAT is the primary measure of achievement for school grades. School grades are classified based on students who score high and/or make learning grades on the FCAT. Demographics for the participating schools are offered in Table 6.

Table 6

Demographics for Participating Schools

Targeted High Schools	Enrollment (2009-2010)	Adequate Yearly Progress	School Grade	% of Minority Students*	Eligible for Free & Reduced Lunch (N)
School A	1957	N	D	47.01	52.58 (1029)
School B	2384	N	C	47.73	39.97 (953)
School C	2487	N	B	36.75	34.50 (858)
School D	1990	N	C	73.37	61.81 (1230)
School E	1748	N	C	86.84	68.54 (1198)
School F	1862	N	D	72.99	49.09 (914)
School G	2154	N	B	46.80	33.94 (731)
School H	1303	N	B	50.04	41.06 (535)

Source: School District Website, Retrieved July 16, 2009

*Minority = non-white students

The population included sixty-five teachers who were all involved in a PLC under the SLC structure as described previously. All sixty-five teachers were emailed an invitation to complete the survey and participate in an interview. The population sample included thirty-nine teachers who voluntarily completed the online survey, which resulted in a 60% response rate. Nearly 75% of the participants were female and the years of teaching experience ranged from 1 year to 21+ years of experience. More than a third of the participants (34%) had between one and five years of experience, while only 11% had 21 or more years of experience. The original design of this study included semi-structured interviews in addition to the online surveys; however none of the respondents

expressed interest in participating in an interview. Table 7 displays the information for the sample of teachers who participated in this study.

Table 7

Population Sample Demographics

Demographics	*N	Percent
Male	10	27.8%
Female	26	72.2%
1-5 years teaching	12	34.3%
6-10 years teaching	10	28.6%
11-20 years teaching	9	25.7%
21+ years teaching	4	11.4%

*Note. Three respondents skipped gender question, four respondents did not indicate years of professional teaching.

Data Collection Procedures

Data collection involved online surveys, which included the School Professional Staff as Learning Community Questionnaire (SPSLCQ) instrument, a “select all that apply” survey, and four open-ended questions. Data collection procedures also included obtaining the proper approvals from the university research compliance office and the school district. Names of teachers who participated in PLCs as a result of the SLC structure at their schools were retrieved from the SLC coordinator at each of the eight schools.

Survey participant letters were sent electronically via email to sixty-five teachers who met the criteria for the population sample. Each letter included a direct link to the survey via the online service, Survey Monkey. The survey letter informed participants of the two-week completion deadline. An email reminder was sent each week leading up to the deadline date. The deadline was extended for two additional weeks in order to ensure a sufficient response rate. Participants were given the alternative to opt-out of

participation by responding back to the email invitation indicating that they were not interested in participating. The opt-out response ensured that teachers would not receive subsequent invitations or reminders in the future.

The direct link to Survey Monkey allowed participants to complete the three survey instruments (SPSLCQ, select all that apply, and open ended questions) simultaneously. Upon completion of the surveys, respondents were prompted to express interest in participating in a face-to-face interview by providing their email address on the designated space on the survey. The survey informed participants that they would be contacted via email by the researcher if interested in an interview.

Reliability

This section contains summaries of reliability analyses conducted by the researcher for the modified School Professional Staff as Learning Community Questionnaire (SPSLCQ) instrument for this study. The analysis consisted of 17 Likert-type questions across the five dimensions of a PLC as noted by Shirley Hord (1997). The Cronbach coefficient was 0.91 for this sample, indicating strong internal consistency. The scale mean was 41.38 with a standard deviation of 13.69. The five dimensions of the SPSLCQ related to the five dimensions of a PLC as identified by Hord (1997). When checking for reliability, George and Mallery (2003) provide the following criteria: “ $\alpha > .9$ – Excellent, $\alpha > .8$ – Good, $\alpha > .7$ – Acceptable, $\alpha > .6$ – Questionable, $\alpha > .5$ – Poor, and $\alpha < .5$ – Unacceptable” (p. 231). For this sample, the dimensions had acceptable alphas that ranged from .619 to .795 (Table 8).

Findings of SPSLCQ Responses

Each of the 17 Likert items was categorized in one of five dimensions: shared and supportive leadership; shared values and vision; collective learning and application; shared practice; and supportive conditions. Each dimension contained umbrella statements with individual Likert-type response scales of 5 (high) to 1 (low). The response scales used in the SPSLCQ varied by item and are, therefore, different from the more familiar Agree – Disagree response range. The response scales on the SPSLCQ include statements at both end-points and at the mid-point to differentiate the high (5), middle (3), and low (1) points on the scale. The higher the total score the more positively the school is viewed as a PLC.

Dimension one (shared and supportive leadership) of the survey stated, “School administrators participate democratically with teachers sharing power, authority, and decision making.” Dimension one included two survey questions, which involved how the sample population believes their administrators participate in shared power and decision making. A mean of 3.17 and a standard deviation of .57 were reported for this dimension. The statements below relate to a score of 5 on the 5-point scale:

- “Although there are some legal and fiscal decisions required of the principal, school administrators consistently involve the staff in discussing and making decisions about school choices” (31% = the percentage of respondents that chose this statement on the SPSLCQ survey, N = 12).
- “Administrators involve the entire staff” (21%, N= 8).

A mean of 3.95 and a standard deviation of .37 were reported for dimension two

(shared values and vision). The survey items associated with dimension two dealt with the population samples perception of a shared vision on student learning and common practice towards such learning. The statements relating to a score of 5 on the 5-point scale score were:

- “Visions for improvement are discussed by the entire staff such that consensus and a shared vision result” (31%, N=12).
- “Visions for improvement target high-quality learning experiences for all students” (51%, N = 20).
- “Visions for improvements are always focused on students, teaching and learning” (51%, N = 20).

For dimension three (collective learning and its application), “The staff’s collective learning and application of the learning create high intellectual learning tasks and solutions to address student needs” resulted in a mean of 3.34 and a standard deviation of .30. The survey items for dimension three related to perceived actions taken to address the needs of students. The statements relating to a score of 5 on a 5-point scale score were:

- “The entire staff meets to discuss issues, share information, and learn with and from one another” (15%, N = 6).
- “The staff meets regularly and frequently on substantive student-centered educational issues” (44%, N = 17).
- “The staff discusses the quality of its teaching and students’ learning” (64%, N=25).

- “The staff, based on its learnings, makes and implements plans that address students’ needs, more effective teaching, and more successful student learning” (46%, N=18).
- “The staff debriefs and assesses the impact of its actions and makes revisions” (54%, N = 21).

Dimension four’s (shared practice) umbrella statement was, “Peers review and give feedback based on observing one another’s classroom behaviors in order to increase individual and organizational capacity” (M = 3.18, SD = .49). Logistical barriers could have affected the reporting of the data for this set of questions, such as scheduling which often impedes teachers’ ability to observe one another in a high school setting. The statements relating to a score of 5 on a 5-point scale were:

- “Staff members regularly and frequently visit and observe one another’s classroom teaching” (15%, N=6).
- “Staff members provide feedback to one another about teaching and learning based on their classroom observations” (39%, N = 15).

Lastly, the umbrella statement for dimension five (supportive conditions), “School conditions and capacities support the staff’s arrangement as a professional learning organization”, reflected a mean of 3.98 and a standard deviation of .33. The items for this dimension related to the logistical and social dynamics necessary to support a professional learning community. The indicator word “all” in the fourth and fifth statements may have influenced participants to rate lower as opposed to higher on the scale. The statements relating to a score of 5 on a 5-point rating scale were:

- “Time is arranged and committed for whole staff interactions” (74%, N = 29).

- “The size, structure, and arrangements of the school facilitate staff proximity and interaction” (33%, N = 13).
- “A variety of processes and procedures are used to encourage staff communication” (67%, N = 26).
- “Trust and openness characterize all of the staff members” (28%, N = 11).
- “Caring, collaborative, and productive relationships exists among all staff members” (31%, N = 12).

Based on reported data on the SPSLCQ, the means and the standard deviations for the SPSLCQ reflected that teachers perceive shared values and vision ($M = 3.95$) and supportive conditions ($M = 3.98$) as strongest in their schools. This data suggested that PLC teachers collectively possessed a shared vision regarding the impact of their professional practice on student learning. The data also reflected that supportive conditions, such as scheduled meetings, processes, and procedures, were established within the learning communities. Conversely, PLC teachers perceived shared and supportive leadership as limited amongst their administration ($M = 3.17$). The data indicated that shared decision making was reserved to a few staff members and did not regularly include the entire staff. In addition to a weak perception of shared leadership, the survey also indicated infrequent shared practice amongst PLC teachers ($M = 3.18$). Although more than half reported that meetings occurred to discuss the quality of teacher and student learning, observing one another’s teaching was not a common practice within the learning communities (Table 8).

Table 8

Scale Means, Alphas, and Standard Deviations for SPSLCQ

Dimensions	Number of Survey Items	Mean	Standard Deviation	Alpha
Shared and supportive leadership	2	3.17	.57	.623
Shared values and vision	3	3.95	.37	.719
Collective learning and application	5	3.34	.30	.795
Shared practice	2	3.18	.49	.653
Supportive conditions	5	3.98	.33	.726

Findings of Research Questions

Research Question 1: How do teachers define their role as a teacher-leader as a result of engaging in a professional learning community? Teacher leader, as discussed in chapter two, is defined in multiple ways. For example, Katzenmeyer and Moller (2001) define teacher leadership as “leading within and beyond the classroom, identifying with and contributing to a community of teacher learners and leaders, and influencing others toward improved educational practice” (p. 5). Furthermore, Crowther and Olsen (1996) define teacher leadership as, “an ethical stance that is based upon the views of a better world and the power of teaching to shape meaningful systems” (p. 32). Just as

definitions of teacher leader vary within literature, the data for this study also reflects teachers' varying perceptions of teacher leadership.

Responses to open-ended question one provided data that showed how participants identify themselves as teacher leaders. Based on data from this instrument, participants identified teacher leaders based on designated titles, roles, effectiveness as a classroom teacher, and collaborative efforts within their PLC's. Respondents described their role as a teacher leader in various ways, which provided an expansive reflection of how teacher leadership is defined and perceived amongst classroom teachers. With the exception of eight participants that did not view themselves as teacher leaders, a fraction (18%) of the sample viewed themselves as teacher leaders through their role as a classroom teacher. Comments such as: "My role is to lead and develop students academically" and "I feel I am a leader because I am very open to new ways of doing things to constantly improve the education my students are receiving," indicate that participants viewed classroom teaching as leading. This perception of teachers as leaders from within the classroom is synonymous to literature which suggests that teacher leaders are "classroom-centered and focused on teaching and learning rather than organizational nuts and bolts (Lashway, 1998, p. 2)." The majority of respondents (82%) viewed themselves as teacher leaders based on assigned duties and tasks. For example, one teacher commented, "I am a team leader, member of the reading leadership team, and I participate in a PLC for one of the courses I teach." Another teacher offered, "I serve as a lead teacher of a PLC, as well as coordinate a selective admissions program for all grade levels." It was also noted that although 82% connected teacher leadership with defined duties and tasks, only 25% directly associated their involvement in a PLC to teacher

leadership through their responses to question one. Additionally, participants viewed teacher leadership as a task orientated role. When asked about their role as a teacher leader, several respondents connected leadership with a list of duties and tasks such as: (a) attending PLC/SLC meetings; (b) mentoring; (c) membership on committees; (d) club sponsor; and (e) role model.

This data suggested that teachers have a strong perception of themselves as leaders in their schools, through their actions and contributions. Furthermore the data reflected that such perceptions were not necessarily based on prescribed leadership titles. A small portion of the sample (18%) specifically identified themselves as teacher leaders based on their role as a classroom teacher, which indicates that leadership is primarily viewed as a function outside of the classroom, rather than based on what occurs inside the classroom.

Research Question 2: What activities do teachers engage in as a result of their participation in a professional learning community? Participation within a PLC involves teacher collaboration and is void of departmentalization (DuFour & Eaker, 1998; York, et al. 2004). Moreover, professional community is defined as the ways in which teachers interact outside of the classroom (Newmann et al. 2000). Teacher connectedness, which is often tied to professional growth and development, is essential in understanding teacher leadership. Traditional views of teacher leadership tend to focus on leadership traits, characteristics, and behaviors. However, evidence points to efforts of classroom teachers as a major catalyst in progressing schools (Gurr, Drysdale & Mulford, 2006; Katzenmeyer & Moller, 2001; Lieberman & Miller, 2004).

Analysis of the data for research question two examined teachers' engagement in PLCs in order to gain a deeper perspective regarding the types of actions associated with teacher leadership in such communities of practice. Data from the SPSLCQ and open-ended survey questions informed the researcher about research question two. More specifically, dimension three (collective learning and application) and dimension four (shared practice) on the SPSLCQ instrument addressed research question two. Additionally, responses to the open-ended survey questions were analyzed for descriptions of the types of activities teachers engaged in professionally as a result of their involvement in a professional learning community.

Respondents suggested that collaboration through structured and routine meetings was the most prominent type of engagement amongst PLC groups. Data from the open ended questions indicated that most (89%) respondents perceived their PLC involvement as dominated by attending meetings. Several participants provided comments similar to the following: "Several times a month I meet with my group to discuss students' academics and behaviors as well as review the interventions that some students may need."

Based on data from dimension three (collective learning and application) of the SPSLCQ survey, 44% responded that their school staff met regularly and frequently on substantive student-centered educational issues. Additionally, 51% offered that staff met occasionally; while 5% indicated that their school staff never met to consider substantive educational issues. A low (15%) number of respondents reported that meeting as an entire staff to discuss issues, share information, and learn with and from one another occurred at

their school site. However, most (72%) indicated that subgroups met frequently to discuss and share information as well as learn with and from one another.

Dimension four (shared practice) of the SPSLCQ instrument surveyed participants about their experiences relating to peer review and providing feedback to their PLC colleagues as a measure of increasing individual and organizational capacity. A little more than half (51%) reported that visiting and observing one another's teaching occurred occasionally. However, 15% indicated that visiting and observing occurred regularly, while 33% offered that such interactions never occurred within their PLC's. Although half of the teachers in this study reported that observing their colleagues occurred occasionally, SPSLCQ data indicated that providing feedback about observations was less frequent. The data reflected that 39% provided feedback to one another about their teaching based on classroom observations. Conversely, 39% also reported that staff members did not interact with one another nor provided feedback about teaching after classroom observations.

SPSLCQ data indicated that shared decision making was limited and reserved to only a select few. Survey data revealed that, only 31% perceived their administration as consistently involving the staff in making decisions about school issues. Furthermore, 56% indicated that their administration invited counsel from staff members, but ultimately made decisions themselves. A vast majority (74%) of respondents indicated that their administration only involved a small committee, council, or team in decision making. Limited shared leadership was also supported by remarks on open-ended questions. For example, one teacher offered, "We give our opinions in our PLC meetings, but administrators do not attend the meetings." Another teacher stated, "I think our

administrators share information, but we are never involved in the decision making.” Lastly, one teacher commented, “Our APC (Assistant Principal of Curriculum) designates what information to provide to certain teachers.” Contrary to literature, which suggests that collegial support through professional communities and shared decision making cultivates teacher leadership, data from this research suggested that PLC teachers did not gain a heightened sense of empowerment. Opportunities for teacher leadership were limited as a result of excluding PLC teachers in sharing of information and decision making, which resulted in a lack of shared leadership and weak communication regarding decision making within the school sites.

Data from the SPSLCQ showed that teachers tended to engage in PLC meetings focused on substantive student-centered educational issues. However, information from open-ended questions provided that such educational issues addressed within PLC meetings tended to deal with student interventions, rather than on quality of teaching. The data also revealed that although teachers met with their PLC’s to discuss educational issues; classroom visits to observe one another’s teaching were infrequent, which may have contributed to limitations in collaborating on teaching methods, pedagogy, and curriculum during PLC meetings. Although teachers indicated that their meetings were structured and occurred regularly, the data did not suggest that such meetings were directly tied to leadership for the teachers.

Research Question 3: What variables within a professional learning community do teachers identify as barriers to teacher leadership? The organizational capacity of a school contributes largely to the sustainability and success of PLCs. Newmann, King, and Young (2000) suggested that school capacity encompasses five distinct components:

principal leadership, teachers' knowledge, skills, and dispositions, professional community, program coherence, and technical resources. All five components are interdependent and involve the collective pull of the school staff in building strong capacity within schools. (Newmann et al. 2000). Schools with strong capacity cultivate empowerment for teachers as a result of the shared decision making and professional community that exist within the schools' culture (DuFour et al, 2008; Muhammad, 2009; Newmann et al. 2000).

Based on data from the SPSLCQ survey and open ended question three, which asked participants to explain any barriers in their development as a teacher leader as a result of participating in a PLC, limited time was reported as the biggest challenge for teachers who participated in a PLC at their school site. A large number (83%) of respondents mentioned time as a barrier. For example, one respondent expressed that "everyone is too busy to have one more thing on their plate...one more meeting, more data analysis, more talk, more theories...teachers are disillusioned and frustrated with the amount of responsibilities." Simply stated in one comment, "Teachers are already dealing with too much to do and too little time to do it." Another comment relating to time stated, "There are too many programs going on and not enough time to do anything well." Requiring teachers to attend designated PLC meetings may explain why time was the biggest barrier. According to data from open-ended questions, 89% described their PLC experience as inundated with PLC meetings. Furthermore, a slim 31% indicated that participating in a PLC was voluntary, which indicated that the majority of participants were required to attend the required PLC meetings despite feeling overworked and

overwhelmed. As a result, teachers felt that attending PLC meetings created time constraints in allowing them to effectively do their jobs.

The data suggested that teachers did not regard their PLC participation as a benefit in making their jobs more efficient. Although the data reflected that teachers collaborated with one another regarding student-centered issues, attending PLC meetings increased their responsibilities rather than reduce their workload. As a result, PLC meetings added more to their already full plates. For example, one teacher stated in an open-ended question,

Limited time. Added responsibility and/or tasks with little time for planning/execution. No compensation. I also felt there was too little communication about the specific goals associated with the SLCs. What exactly did the grant money pay for? Team leaders? Coordinators? How did the rest of the team teachers benefit? How did it impact student achievement? It should be equitable for all teachers involved.

Another teacher commented,

The structure of compensation within the SLC has led to stress. Many of the members are expected to participate but are not compensated for sacrificing their planning time or non-paid time. This is an issue because some teachers are not a part of the SLC/PLC. Some teachers are expected to participate while others are not.

Lived experiences and perceptions in this study are synonymous with literature, which indicates that teacher leadership is often compromised due to added responsibilities and conflicts between the role of being a teacher and the role of a leader. Literature further explains that such compromises tend to create more work for teachers,

thus ultimately creating negative perceptions towards leadership responsibilities (Zinn, 1997).

In addition to time, a lack of teacher buy-in was the second highest expressed barrier. One teacher acknowledged barriers regarding buy-in by stating, “I have found that what I personally think is in the best interest of our students may not be taken seriously because of what is stipulated by the grant or plan for the county.” Statements from open-ended questions suggested a lack of buy-in such as, “not being fully committed to the PLC’s and not being focused on student achievement and professional development” were expressed by participants. Additional comments such as the following also suggested a lack of buy-in from participants, “There is hardly any buy-in from teachers. Everyone is too busy to have one more thing on their plate” and “Teachers are frustrated with the amount of responsibilities and lack of respect all around.” Gaining a shared sense of purpose or buy-in is paramount to the success of professional learning communities. As expressed by DuFour, DuFour, and Eaker (2008), PLC members must make “collective commitments that clarify what each member will do to contribute to the community (p. 15).” In doing such, all members are mutually accountable in working towards the shared vision of the school. As with this study, the data reflected that some PLC members lacked buy-in due to time constraints, unequal distribution of responsibilities, lack of compensation, and added duties associated the their PLC.

A lack of shared leadership is significant to the study and may explain why teachers experienced barriers in their own development as a teacher leader. The data reflected that teachers (64%) met frequently and regularly to discuss the quality of their teaching and students’ learning. However, such meetings were not paramount in

influencing the overall decisions made within the schools due to a lack of shared leadership. SPSLCQ data indicated that only 31% perceived their administration as sharing in the decision-making within their schools. Furthermore, 74% reported that shared decision-making was exclusive to only a select few staff members. Based on this data, perhaps teachers experienced barriers as a result of the perceived lack of significance towards PLCs, the limited acknowledgment of PLC efforts, and the minimal levels of shared decision-making demonstrated by school leaders.

In conclusion, data related to research question three revealed that time is the biggest barrier in cultivating leadership for PLC teachers in this study. The SPSLCQ reflected that supportive conditions, such as arranged and committed time for staff interactions, were highly evident in PLCs at the eight schools. Literature (DuFour et al. 2008; Hord, 1997; Zinn, 1997) posits supportive conditions (time, supportive administration, trainings, etc.) as necessary for professional collaboration in PLCs and suggest that committed time is vital in sustaining such communities of practice. However teachers in this study considered time to be the biggest barrier in their professional practice. It is also evident, based on data from open ended questions that supportive conditions, such as meeting frequently, contributed to frustrations associated with time constraints. Contentions with attending meetings may have been because teachers viewed such meetings as an added responsibility rather than a source of support in reducing their workload. Overall, teachers in this study experienced barriers in their leadership growth due to time constraints, lack of teacher buy-in, and a lack of shared leadership.

Research Question 4: How is social capital identified in professional learning communities? Successful PLCs possess a strong sense of organizational competence.

Such competence is what makes schools smarter and is typically found in relationships, norms, habits, memories, and collective skills of a network of people (Sergiovanni, 2004). In essence, social capital cultivates the relational networks established by a group with similar interest and common motives. Social capital, which focuses heavily on relationship building, is transformative in reculturing schools. As stated by Michael Fullan (1998), “Any reform effort that seeks to improve relationships has a chance to succeed; any that does not is doomed to fail” (p. 14). Social capital was examined in this study because it is closely connected with the attributes and functions of professional learning communities. Literature posits the positive impact of social capital in cultivating shared leadership in schools, which can result in teacher empowerment (Bryk & Schneider, 2000; Coleman, 1988).

Research question four was examined with data from the “select all that apply” survey and from open-ended questions. The “select all that apply” survey consisted of eleven statements relating to social capital in professional learning communities. The purpose of this survey was to identify elements of social capital within such communities of practice. Additionally, the survey related to open-ended question four, which asked participants to explain how they had connected with their colleagues as a result of participating in a PLC.

Open-ended questions and the SPSLCQ provided significant data to indicate that relationship building occurred between PLC teachers. Comments from an open-ended question such as, “I have connected with teachers that I normally do not talk to” and “I enjoy collaborating with my PLC” indicated that teachers experienced relationship building within their communities of practice. Data from the “check all that apply”

survey reflected that 56% experienced mutual trust within their PLC's. However, SPSLCQ data indicated that only 31% perceived there to be caring, collaborative, and productive relationships amongst "all" staff members. Also, 56% indicated that "some" of the staff members are trusting and open. Conversely, only four respondents (10%) indicated little to no connection with their PLC group by offering responses such as, "Working with my PLC has not been beneficial. I have had several disagreements with teachers in my group and would prefer to just work with teachers exclusively in my department." One teacher explicitly commented, "I have not connected with anyone in my PLC." When asked how teachers have connected with one another as a result of being involved in a PLC, most participants described their interactions in a positive manner. The data reflected that although some teachers did not consider there to be trusting and collaborative relationships amongst "all" staff members (as reflected on the SPSLCQ), most PLC teachers felt a connection with their own PLC colleagues.

Responses to open-ended questions reflected evidences of social capital through comments such as, "We have bonded"; "I grew closer with those who collaborated and more distant from those who didn't"; and "We exchanged ideas" were obvious evidences of social capital within the PLC's. Several comments reflected additional indicators of social capital such as, "I love my colleagues. We create a support system for one another to increase our morale and motivation to come to work." Another teacher offered, "In my current role, I have reached out much more to teachers outside of my daily scope. I try hard to involve myself and my colleagues in a holistic approach to our students' academic and character development." One teacher explained:

I have connected with teachers in ways I had not in previous years. For example, I have connected with our ESOL (English for Speakers of Other Languages) teacher this year and my ESOL endorsement has become so much more than what I learned in the classes. I now have a colleague that shares so many challenges in his ESOL classroom and way to address those challenges that I never would have thought of on my own. Luckily, we share some of the same students. By having a PLC I am able to mimic some of the successful strategies he has implemented in the ESOL classroom.

Data from the “select all that apply” survey provided insight regarding the presence of social capital in professional learning communities. The directions for this survey stated, “Select all statements that apply to your experience as a member of a professional learning community for the 2009 – 2010 academic school year”. Based on the responses, most teachers (75%) reported that they had experienced sharing of information within the learning communities. The sharing of information was related to student-centered issues, as identified on the SPSLCQ survey. Other statements frequently selected on the “select all that apply” survey included: PLCs promote the goals of the school (63%); there are norms and expectations within PLCs (56%); and there is mutual trust amongst teachers who share the same PLC (56%). Statements receiving the lowest response rates were: trust and being goal oriented outweigh rules and sanctions within PLC (19%); participation in a PLC is voluntary (31%); and teachers are willing and interested in participating in a PLC (38%).

Social capital involves a mutual sense of trust and relationship building; brought about by the collective resources, knowledge, and skills that exist amongst the members within the community. In response to research question four, which sought to identify social capital in professional learning communities, the data from the “select all that

apply” survey and open-ended question four indicated that social capital does exist in various ways within the PLC’s. Data from all three instruments reflected that teachers experienced the effects of social capital through sharing information, by being goal-oriented, and through mutual trust within professional learning communities.

Summary

The purpose of this chapter was to report the perceptions and lived experiences of teachers within a PLC in order to identify evidences of teacher leadership. Data analysis was guided by Hord’s framework for effective PLCs. According to Hord, the framework is inclusive of five dimensions of a Professional Learning Community: 1) Shared and Supportive Leadership; 2) Shared Values and Visions; 3) Collective Learning and Application of Learning; 4) Shared Personal Practice; and 5) Supportive Conditions.

According to the data, several dimensions of a PLC are either non-existent or are very limited in the targeted schools for this study. As a result, teachers have experienced limitations in their professional growth and professional practice. Although most teachers perceive themselves as teacher leaders, shared and supportive leadership was reported as a barrier. As a result, teachers believed that shared decision making is reserved to selective individuals or groups of teachers within their schools. Such perceptions have presented barriers in terms of establishing trusting and collaborative professional relationships amongst PLC groups. In relation to dimensions two, three and four, as identified by Hord, less than half of survey participants reported that visions for improvement are discussed by the entire staff such that consensus and a shared vision result. Additionally, the data revealed that most PLC teachers met regularly to discuss student-centered issues, such as interventions and academic concerns, however PLC

meetings did not enhance professional development for teachers. The data suggested that participants offered limited insight during their meetings regarding teaching and gave little feedback to one another. Moreover, teachers did not visit one another's classrooms frequently, which limited the authenticity of collaboration and refinement of teaching. Perhaps, time was the biggest obstacle for teachers in this study and provided constraints for meeting the demands of the SLC grant, additional administrative/district requirements, and opportunities for teacher leadership. Each school was selected due to one or several factors such as: 1) failure to achieve adequate yearly progress (AYP); 2) substantial populations of lower performing subgroups; and 3) large student subgroups underrepresented in rigorous coursework. The demands of working towards improving in one of the three areas was reflected in the experiences and perceptions that teachers offered in the data. The collected data is relative to the overall effectiveness of PLC's the SLC grant, and provides substantial insight regarding the cultivation of teacher leadership. Lastly, the data offered considerable implications for professional practice and future research, which will be discussed in chapter five.

Chapter Five:

Discussion

The purpose of this study was two-fold: to describe and explain the perceptions and lived experiences of high school teachers through their involvement in a professional learning community and to identify influencing variables connected with how participants view themselves as teacher leaders. The research questions that guided this study were:

1. How do teachers define their role as a teacher leader as a result of engaging in a professional learning community?
2. What activities do teachers engage in as a result of their participation in a professional learning community?
3. What variables within a professional learning community do teachers identify as barriers to teacher leadership?
4. How is social capital among teachers identified in professional learning communities?

While chapter four reported the data from three sources: the SPSLCQ survey that allowed teachers to rate their experiences and perceptions of their PLC's based on Hord's five dimensions; an open-ended survey that allowed teachers to explain their experiences in a PLC based on the four research questions; and a "select all that

apply” questionnaire that allowed teachers to identify interactions within their PLC’s based on social capital descriptors.

This chapter presents a discussion of the study’s major themes through the lens of the four research questions. In order to achieve this goal, this chapter will include: a summary of the findings, where the findings are correlated with each research question and literature presented in chapter two; a discussion of the major conclusions and implications, which are related to current research and literature presented in chapter two; the limitations and recommendations for future research, where suggestions for extending this research and alternate explanations will be explored; recommendations for school leaders, where the researcher will present insight regarding the research topic as it relates to school leadership; and the conclusion, where the researcher will discuss final thoughts and summarize the study.

Summary of Major Findings

Professional learning communities are good for schools. If implemented properly and sustained over time, such communities can evoke academic progress for students and enhance professional development for teachers (DuFour & Eaker, 1998; Hord, 1997). Literature suggests that schools must be a great professional place for teachers in order to be a great place for students (SEDL, 1998). With this in mind, the benefits for teachers who engage in professional learning communities include: reduced isolationism, professional renewal, a higher sense of commitment towards the mission of the school, and a heightened knowledge regarding subject matter. In addition to these benefits, an emerging advantage of professional learning communities is the gained sense of

empowerment that teachers possess as a result of the shared leadership that evolves through the work within such communities of practice (Hord, 1997).

In lieu of the many benefits of professional learning communities, this study specifically sought to explore teacher leadership in PLC's through the lens of teachers who participated in a learning community. Data collection from three online survey instruments illuminated the perceptions and experiences of these teachers and provided valuable insight regarding teacher leadership and professional learning communities.

Based on the collected data for this research and supporting literature, the results of this study indicated that a substantial number of teachers did not grow professionally as teacher leaders within their schools as a result of engaging in professional learning communities due to multiple barriers. Reported barriers to teacher leadership were time constraints, added responsibilities, a lack of teacher buy-in, and a lack of shared leadership. The data also suggested that a range of variables dictate the development of teacher leadership and that teachers can experience empowerment through other facets despite the strength of the PLC. Consequently, the data revealed a weak relationship between teacher leadership and professional learning communities.

Research Questions

The first research question was integral to this study, as it sought to understand how teachers define themselves as teacher leaders through their work in a professional learning community. The importance of this question was supported by the first identified dimension of Hord's PLC framework: supportive and shared leadership. According to Hord (1997), supportive and shared leadership involves leaders who define and clarify essential tasks while empowering others. Based on data results, shared leadership did not

overwhelmingly contribute to a heightened sense of empowerment for teachers. Although the majority of survey respondents perceived themselves as teacher leaders, less than half believed that their school administration consistently involved the staff in discussing and making decisions about school issues. These findings indicated an inconsistency between teachers' perceptions about shared leadership and the realities of their actual roles. As a result, teachers' perceptions of their role as leaders were not synonymous with how they were actually perceived by their administration.

The disconnection between perceived leadership roles and actual roles may have been due to how teachers actually define teacher leadership. Literature suggests that teacher leadership is "leading within and beyond the classroom, identifying with and contributing to a community of teacher learners and leaders, and influencing others toward improved educational practices" (Katzenmeyer & Moller, 2001, p.13). Most teachers in this study affirmed their role as a teacher leader through various tasks and duties, which is synonymous with traditional views on teacher leadership (Barth, 2001; Fullan, 1991; Waller, 1932; Wasley, 1991). However, teachers cited little to no recognition regarding how they had assisted in moving their schools forward either within or beyond the classroom as a result of their efforts in their learning communities. Emerging literature recognizes that teacher leadership is more than prescribed duties; but instead also involves assisting in reforms that impact the organizational processes within schools while collaborating with school administration (Evans, 1996).

Other factors, such as role conflict and organizational norms, appeared as barriers in defining leadership development for teachers in this study. For example, some teachers identified their leadership roles based on designated titles and committees, whereas others

described themselves as leaders based on their actions as a classroom teacher. Furthermore, none of the teachers identified their leadership as both, within and beyond the classroom. Perhaps this was due to a certain level of ambiguity regarding their roles as leaders within their school organization. Literature denotes role conflict as a barrier for teacher leaders and is often surmounted due to unclear expectations and lack of communication from school administration regarding the role of teacher leaders within their schools (Lieberman & Miller, 2004; Smylie & Denny, 1990). Most teachers in this study perceived their administration as only involving a small committee, council, or team of staff in democratically sharing power and authority with teachers. The overarching dilemma was that the established professional learning communities were not included as an integral component in the decision making processes, which limited the scope of shared leadership drastically. In essence, the organizational norms for decision making created barriers in other areas within the schooling environment, thus creating an unclear understanding of teacher leadership roles and expectations. Research question one was essential because it guided analysis for the remainder of the research questions. Understanding how teachers perceive themselves as leaders within the organization, allowed the researcher to foster a deeper understanding of the core elements of this research.

Research question two delved deeper in understanding professional learning communities by exploring the work teachers engaged in as a result of their involvement in such communities of practice. Identifying teacher involvement in professional learning communities was crucial in understanding teacher leadership because of the intended function that PLC's serve in reforming schools (Hord, 1997; Louis & Krause, 1995;

Newmann & Wehlage, 1995). National studies conducted by Newmann and Wehlage (1995) support the impact of PLC's and cite that schools that engage in such communities tend to reflect higher student achievement and enhanced professional development.

The efforts of classroom teachers can be a major catalyst in progressing schools (Gurr, Drysdale & Mulford, 2006; Katzenmeyer & Moller, 2001; Lieberman & Miller, 2004). Therefore, examining teacher involvement in PLC's was pivotal in understanding how such actions either influenced or hindered teacher leadership. Survey data suggested that collaboration through structured and routine meetings was the most prominent type of engagement amongst PLC groups. A little less than half of respondents reported that their school staff met regularly and frequently on substantive student-centered educational issues. Although staff meetings to discuss student issues were infrequent, survey results indicated that subgroups (PLC's), rather than the entire staff, met to discuss issues, share information, and learn with and from one another.

The work of PLC's is not so much about the frequency of meetings, but rather, the ability to spark change and promote success in schools through a shared vision. For this reason, the work accomplished through PLC's requires adequate and supportive conditions. Such conditions "determine when, where, and how the staff come together regularly as a unit to do the learning, decision making, problem solving, and creative work that characterize a professional learning community" (Hord, 1997, p. 12). In this study, although adequate meeting times were structured for PLC's to meet regularly, teachers in this study reported a lack of "trueness" behind their collaborative efforts and sensed that some of their colleagues lacked a sense of buy-in towards their PLC's. The data also suggested that teachers were accustomed to attending PLC meetings for the

“sake of meeting”, as though they had met their “quota” for the month. Norms and procedures are considered best practices for PLC’s, however a lack of buy-in was problematic in this study and contradicted with the second dimension of Hord’s PLC framework: shared values and vision.

Literature supports the notion of teachers as leaders through professional learning communities (DuFour et al. 2006; Hord, 1997; Lashway; 1998), however the data for this study reflected limited opportunities for teachers to grow as leaders within their learning communities. Data analyzed for research question one coupled with data for research question two suggested that teachers perceived themselves as leaders based on their engagement in several entities within their school and that their leadership was predicated on more than their involvement in a PLC.

Data from research question three provided a clearer perspective about the responses from research question two, as it informed the researcher about the barriers associated with professional learning communities. Although attending meetings were prominent for teachers in this study, they were also described as the most prevalent barrier for participants. The data suggested that the added responsibilities and time commitments associated with PLC’s left teachers feeling overwhelmed, overworked, and resentful towards the required meetings. Such sentiments were communicated on survey instruments as most teachers indicated concerns regarding mandated meetings, grant requirements, and time constraints.

Educational research suggests that certain structures, such as routine meetings, must be established for sustainable PLC’s. However, the literature also indicates time constraints as the biggest barrier to teacher leadership (DuFour et al. 2008; Hord, 1997;

Zinn, 1997). A study conducted by Lynn Zinn (1997), which sought to develop a theoretical framework for factors supporting and impeding teacher leadership, found that insufficient time during the school day and reluctance to take on more work were impediments to developing teacher leadership (p. 2). Another explanation for impeded teacher leadership is the added stress that teachers gain when leadership roles/tasks are added to their workload. As expressed in the data for this study, teachers also experienced frustrations with their PLC's as a result of the added responsibilities.

Synonymous to data in this research, Martha Ovando's study on teacher leadership concluded similar findings, which suggested that teacher leadership may adversely affect some teaching practices, such as planning and preparation. Teachers in Ovando's study reported that their leadership roles demanded additional time, which took away from their instructional responsibilities. Several teachers noted that the two roles (leader and classroom teacher) required two different mindsets and that it was difficult to switch quickly between the two frames of thinking. Ultimately, teachers in Ovando's study felt that their priority was protecting student contact time rather than taking on additional leadership responsibilities (Ovando, 1996).

Whereas possessing shared values and a shared vision is the foundational framework for sustainable PLC's, collaboration or collective inquiry, is the foundational function of a PLC. PLC meetings must transcend beyond "meeting for the sake of meeting" to a collective inquiry amongst teachers, whereby the goals of the school are at the forefront of PLC efforts (DeFour et al. 2008; Hord, 1997). Contrary to this notion, the established goals for the PLC's were overshadowed by barriers as described in the data,

or in some instances, forgotten. For example, a vast majority of teachers reported that rules and sanctions placed upon their PLC's outweighed the goals of their schools.

Guidelines for the PLC's were primarily established at the district level and maintained by school administration at each school site. As discussed in preceding chapters, the eight schools selected for this study were awarded a Smaller Learning Communities grant from the U.S. Department of Education. The intended purpose of the grant was to fund "small school" initiatives, such as teams, houses, or academies, as a means to support students and promote academic performance. The grant also called for teachers to work in professional learning communities as a measure in supporting students.

The school district in this study modeled other successful school districts by taking some successful measures to ensure proper implementation of the Smaller Learning Communities, which was inclusive of the PLC groups; however gaps in maintenance of the program created unforeseen constraints for teachers in the professional learning communities. Frustrations towards grant requirements were a recurring sentiment expressed in the survey results. An overwhelming number of teachers viewed the grant and their work within their PLC's as a mandate, rather than a voluntary effort. In other words, participating in a professional learning community was a requirement for most teachers in this study. According to data results, 30% reported that their participation in a PLC was voluntary. Several teachers reported that their participation in a PLC at their school site was predicated on administrative and scheduling decisions. As a result, there was a lack of buy-in, thus resulting in negative perceptions amongst some teachers towards their professional learning communities and

a misleading perspective regarding the shared values within such communities. DuFour, DuFour and Eaker (2008) offer that stakeholders within PLC's must possess "collective commitments", where conscious and deliberate efforts are made to identify the specific ways in which individuals will act to improve their organization.

The common goals, vision, and values that teachers possess in a learning community ultimately influence the nature of relationship building within the community. Research question four explored this facet of PLC's by examining the presence of social capital within these professional learning communities. Social capital is referred to as social obligations or connections that are linked to possession of a durable network of more or less institutionalized relationships (Bourdieu as cited in Smith, 2007 and Lin, 2000). Social capital was explored in this study because it involves relationships, norms, and trust, which are all critical when establishing a sense community for teachers.

When surveyed about opportunities to connect with others within a PLC, a little less than half reported a gained sense of collegiality as a result of participating in their communities. However, at least half of the teachers experienced mutual trust amongst colleagues within their same PLC. Overall, the data suggested that teachers connected with one another in their learning communities.

Whether for positive or negative reasons, teachers experienced an added level of social capital as a result of their participation in a PLC. Furthermore, just as teachers shared positive insights about their collaborative experiences, discontent may have also fueled the collaborative nature amongst teachers. In essence, PLC's may have provided an outlet for teachers to collectively rally around their frustrations and barriers. This

conclusion is supported by Coleman (1988), who defined social capital by its function, suggesting that it is “not a single entity, but a variety of different entities, having characteristics in common: they all consist of some aspect of a social structure and they are facilitated by certain actions of individuals who are within the structure” (p. 34).

Overall, the data suggested that most teachers did gain social capital through relationship building in their PLCs. Although participants may not have felt an overwhelming connectedness with the entire staff, their PLCs did offer the collegiality and support that is intended to occur within professional learning communities.

Final Conclusions and Implications

Based on this research and emerging themes relating to the four research questions, three distinct conclusions regarding teacher leadership in PLC’s were identified: (1) principal leadership affect the success of PLC’s, (2) a shift in school culture must occur in order to sustain PLC’s, and (3) a lack of program coherence weakens the validity of PLC’s.

Principal Leadership

The role of the principal is intentionally mentioned first because of the significant impact that principals possess in shaping schools. There is a strong relationship between student achievement and the strength of principals. However, success within schools does not solely reside with the principal. According to Tom Donahoe (1993), schools are trapped by a leadership dilemma: they require skilled, effective principals in order to outgrow their utter dependence on those principals” (p. 300). With this in mind, much of the school culture is shaped by the principal’s ability to empower teachers (Katzenmeyer & Moller, 2001; Lambert, 2003). Some studies suggest that schools have become too

dependent on principal leadership and claim that reform is needed on a large scale in order to lessen such dependence. For example, the Carnegie Foundation Forum on Education and the Economy recommended that schools be run by committees. Other educational researchers, such as Michael Fullan contend that there is a lack of teacher leadership and suggests that the role of principal leadership may disappear due to more teacher leaders within schools (as cited in DuFour & Eaker, p. 182).

In recognizing the importance of principal leadership, one dimension of the survey for this study was designed to elicit thoughts and perceptions about school administration in relation to PLCs. When asked about administrative shared decision making, only a very small percentage reported that shared decision making existed amongst the entire staff. Instead, such decision making is evident in small clusters of teachers and for only a select few. This is significant because most participants viewed themselves as teacher leaders despite a lack of shared leadership amongst their administration.

This conclusion triggered the question: Why do teachers perceive themselves as leaders despite the lack of overt empowerment from their school administration? The researched concluded that teachers consider themselves leaders through assigned duties, tasks, and responsibilities as deemed necessary by the principal. In essence, teachers perceived themselves as leaders based upon completed actions rather than on their actual possession of authority to spark change within their schools. The efforts of teachers' work in PLC's may have served as a catalyst for change, but only through the constraints of school administration. This study revealed that based on teachers perceptions, a shift in the leadership styles of their principals had not occurred. Instead, such communities of

practice were not truly led by the participants (teachers), but are in fact, controlled and monitored by their administration. In digging a little deeper, this study also suggested that principals, in some schools, tended to have a hands-off approach in leading these particular communities of practice. In essence, they (principals) led from behind their desks and were not active practitioners within the professional communities that they oversaw. Principals possess a critical role in the development and sustainability of professional learning communities, forging the conditions that give rise to the growth of such communities of practice (Louis, Kruse, & Raywid, 1996). With this in mind, principals should work with staff to create structures to foster distributed leadership within PLC's (DuFour et al., 2008).

Principals should embrace shared leadership as an effective method for empowering teachers. Studies show that empowering teachers is highly beneficial for the academic success of students (Newmann et al. 2000). However principals must still decide which decisions and responsibilities will be shared and which will remain purely administrative. School leaders can set the stage for empowerment by “creating an environment conducive to empowerment, demonstrating empowerment ideals, encouraging all endeavors towards empowerment, and applauding all empowerment successes” (Terry, 2000, p. 36). Based on this study, the cyclical effect was that principals made decisions and teachers carried out tasks that put those decisions into action, thus limiting shared decision making among PLC teachers and administrators.

Additionally, this study divulged the need for joint leadership amongst principals and their staff members because many teachers did not find the work of PLC's meaningful at their schools. Instead, teachers should be engaged in “co-designing and co-

creating to arrive at solutions jointly with their principals” (Rolls, 1995, p. 106). Decrees from leadership were not the missing the element here. Teacher empowerment produces a heightened success, which produces a trickledown effect in student academic performance. However, when schools are governed by an autocratic leadership style rather than by shared decision making, a restricted school culture is cultivated which stifles teacher leadership within schools. Consequently, the principal sets the tone for the school, thus affecting the organizational competence of professional learning communities.

School Culture

The work of PLC’s is a deliberate, yet delicate process of reculturing schools. Profound cultural shifts must occur in order for PLCs to have a positive and lasting impact on the schooling organization. The school culture entails not only how things are done (systems, processes, and procedures), but also the mindset behind why things are done. In essence, the culture of a school is the “assumptions, beliefs, values, expectations, and habits that constitute the norms for an organization” (DuFour, DuFour, & Eaker, 2000). Furthermore, the culture of a school includes the social interactions that occur within the organization. This is referred to as organizational competence, which are the collective sum of knowledge possessed by individuals within a network and encompasses relationships, norms, memories, habits, and collective skills (DuFour et al., 2000; Sergiovanni, 2004).

As with this research, several survey questions addressed school culture in relation to PLCs. While it is apparent that the physical conditions (meeting times, teaching schedules, and common planning) were established to facilitate PLCs, the

culture of the schools had not shifted in such a manner to support viable communities of practice for teachers. The professional learning communities were regarded as a program rather than as an ongoing process of restructuring. As a result, teachers embraced a mindset that “PLCs are what we do”, rather than “PLCs are what we are”. Contrary to the schools in this study, when the culture has truly shifted, every practice within the school is subject to ongoing review and constant evaluation, despite any assumptions or practices of the past (DuFour et al. 2000).

Most teachers experienced positive relationship building with their PLC colleagues. Despite barriers and although meetings often lacked a clear sense of purpose, teachers expressed their satisfaction with the collaborative opportunities provided during their PLC meetings. At first glance, it appeared as if these groups were truly operating as PLCs, however, as defined in literature, such learning communities entail a focus on and a commitment to student learning (DuFour et al. 2000). As suggested in the data, teachers were committed to attending meetings; however a shared vision towards student learning was not always at the forefront of these meetings. Teachers were often distracted by the barriers, which skewed the ultimate purpose of PLCs at their school sites. While exploring relationship building, the researcher considered the lack of trust as another indicator of an unsustainable school culture for PLC’s. Relationships were naturally established as a by-product of regularly scheduled meetings throughout the school year. However, teachers demonstrated a lack of trust towards the PLC initiative at their school sites.

The researcher considered the relationships between school administration and PLC teachers as an element in reculturing schools. Perhaps shared leadership from

administration could have sparked the cultural shifts needed in order to produce strong communities of practice. The data suggested that shared leadership was exclusive to only a select few individuals and subgroups, thus limiting opportunities for PLC teachers to get involved in decision making processes within their schools. According to a study conducted by the Northwest Regional Educational Lab, transforming a schools culture begins with the tone of the relationship between the school leaders and teachers (Muhammad, 2009).

Lastly, the researcher identified technical changes versus cultural changes while exploring school culture. Most teachers in this study easily recognized the technical changes (common planning periods, room locations, structured meetings, teaching schedules) that occurred in order to establish PLCs within their schools. However cultural changes were much more difficult to identify and/or articulate for participants. It was evident that school administrators had created the technical changes needed in order to implement PLCs. However, the cultural changes were less evident or did not occur at all. It may have been that administrators created their PLCs with the assumption that implementing technical changes would naturally foster the cultural changes needed in order to maintain the learning communities. As pointed out by Anthony Muhammad (2009), “cultural changes are necessary to effect an improvement in student performance, but they produce very few positive results when used by people who do not believe in the intended outcome of the change (p. 14).” As opposed to technical changes which are more obvious and easy to control; cultural changes are much more difficult to achieve and entail an ongoing process of reform and renewal within schools.

Program Coherence

Program coherence is defined as “a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate that are pursued over a sustained period of time” (Newmann et al. 2001, p. 23). A lack of program coherence can contribute to a weak organizational competence within professional learning communities. In essence, program coherence is a reflection of the school faculty working together and making decisions about its programs and processes (Carmicheal, 1982). Program coherence is related to this study because much of the work involved in establishing coherent programs involved shared leadership and shared decision making.

The teachers surveyed for this study identified a conflict in the number of implemented programs at their school sites. Many expressed concerns of not having enough time for all the programs and others stated their frustration with grant requirements. As a result, the strength of the PLCs at each school site was diminished by the goals of the Smaller Learning Communities grant. Implementation of PLCs led to “a trial-and-error approach rather than a common, coordinated approach” (Newmann & Wehlage, 1995, p. 61). A lack of shared vision and values regarding the SLC/ PLC initiative for this study contributed to an unstructured program alignment. This was reflected in the data when less than half indicated that such visions for improvement are discussed by the entire staff such that consensus and a shared vision result.

Instead, many expressed that the focus appeared to be on keeping the grant rather than on actual student achievement. Analyzing the data showed that the purpose of the grant, which was to enhance student achievement, was clouded by inadequate program

implementation, lack of buy-in, and failed communication. The grant was a distraction in getting at the trueness of its purpose, resulting in meeting groups for teachers rather than authentic PLC's. DeFour, DuFour, and Eaker (2008) assert that the main purpose of professional learning communities should be centered around student learning, with a collective commitment from all stakeholders to act in such a way that will promote the shared vision and values of the organization.

While it is apparent to some degree that teachers shared a focus on student learning, teachers did not demonstrate a collective understanding of the purpose of the grant. Consequently, the grant served did not necessarily serve as the catalyst for change as it was intended. Schools were dependent on the grant as the vehicle to move their schools forward, without realizing the significance of their own human resources as the dominating factor in the effectiveness of their learning communities. DuFour and Eaker (1998) suggest that PLC's develop a shared mission, vision, values, and goals in such a way that "members of the group are challenged to reflect on the fundamental purpose of the organization and the very reason for its existence" (p. 58).

Recommendations for School Leaders

As noted in chapter two, there is substantial literature supporting the ideal of teacher leadership in reforming schools. Based on literature and the results of the discussed study, this body of research is essential because research suggests that effective professional learning communities move schools forward and promote student achievement. The collective knowledge and collaboration that exist within PLCs are additional factors that contribute to the overall effectiveness of schools. It is when teachers have opportunities for collective inquiry and the learning related to it, that they

are able to develop and share a body of wisdom gleaned from their experiences (McLaughlin & Tolbert, 1993). This research is also essential because of the added value associated with PLCs. According to Hord (1997), professional learning communities lead to a reduction in isolation of teachers, increased commitment to the mission and goals of the school, refinement of effective teaching, a higher likelihood of understanding fundamental systemic change, and a greater tendency to promote a positive school culture. Enhanced leadership is another added value of PLCs. Newmann and his associates (1996) found that in schools with strong PLCs, school leaders paid closer attention to school culture and structure. Lastly, this research recognizes the importance and weaknesses of teacher leadership within the organizational capacity of schools.

Despite the benefits of PLCs and the relevance of this research, the data indicated that teacher leadership was not cultivated through professional learning communities. Furthermore, the research indicated that teacher leadership was not clearly defined and identified by school leaders. With this in mind, there are several recommendations for cultivating teacher leadership in professional learning communities.

Proper program implementation is critical to the overall success and sustainability of professional learning communities. It is imperative that school leaders clearly recognize, communicate, and implement effective dimensions of a PLC. Based on literature and data presented in this study, such dimensions include: shared vision, shared mission, clearly defined goals, a focus on student learning, and a collective buy-in from all stakeholders (DuFour et al, 2000, Hord, 1997). In addition to these identified dimensions, school leaders are to understand that the work of PLCs must also be data-informed, standards-driven, and focused on instruction.

Professional learning communities should include key stakeholders within the school, at the district level, and the outside community, who collectively examine their own professional practice in order to reach a common goal. School leaders must have a clear idea of the purpose of PLCs within their schools and how the work of such communities will be manifested on a continual basis as a means to promote success. In addition to site based perspectives, school site administrators must also be cognizant of the perspectives and decisions being made at various levels throughout the school district. As identified in this current study, lack of knowledge on key decisions can ultimately disrupt program coherence within school-based PLCs.

In an effort to strengthen program coherence, the Annenberg Institute for School Reform (AISR) suggests an overlapping approach to establishing communities of practice. Overlapping learning communities are broad-based to include various stakeholders within different capacities. The “overlap” approach allows different PLCs at various levels throughout the district to make decisions regarding the same initiatives or programs. Similarly to traditional PLC’s, each overlapping community shares a common mission, vision, and values.

Proper implementation of PLCs and their effectiveness within schools is highly dependent upon the role of the principal. The supportive leadership of principals is one of many necessary human resources for restructuring staff for professional learning communities. Based on this study, it is recommended that school principals embrace a shared decision making approach with teachers as well as clearly identify teachers as leaders in school reform efforts. Teachers are to be viewed as a resource for school

improvement, which ultimately will increase the leadership capacity of both, teacher leaders and the principal.

As stated by Sergiovanni (1994a), “the sources of authority for leadership are embedded in shared ideas, not in the power of the position” (p. 214). With this in mind, principals must look at leadership from a systemic perspective rather than an individualistic one. Traditionally, leadership has been viewed as individuals in formal positions with responsibilities for daily operations (AISR, 1998). However, the work of PLCs involves distributed leadership, where principals are charged with identifying individuals at all levels of the system to share the accountability of leadership. The traditional role of principals and teachers must be altered to meet the demands of today’s schools. The traditional view where “teachers teach, students learn, and administrators manage” must diminish (Kleine-Kracht, 1993, p. 393). Instead, schools must become learning communities where both, administrators and teachers, are learners within their schooling community. Furthermore, it is the responsibility of principal leaders to create environments of continual learning.

Recommending that school leaders shift their management style and leadership perspective also entails addressing the misconceptions associated with teacher leadership in schools. Just as the traditional roles of administrators must change; so must the role of teacher leaders within schools. As noted previously, teacher leadership is more than a title. This particular role is more than what teachers do, but rather, how such actions spark change within the schooling environment. Based on this research, there is a misconception about the true meaning of teacher leadership. Teachers perceived a false

sense of leadership through their involvement in PLC's, despite the fact that their efforts did not yield any significant impact on the overall growth of their schools.

The role of teacher leaders must shift from being “representatives of change” to “leaders of change”. In an effort to avoid role conflict, it is imperative that school administrators clearly communicate and demonstrate the roles of teacher leaders within their schools. Based on the work of Lieberman, Saxl, and Miles (1988), principals can empower teachers by allowing them to engage in diagnosis of organizational conditions, by increasing teacher involvement in school-based processes, and by increasing shared decision making in managerial tasks. Principals can shift the culture of their schools by establishing a culture for collaboration amongst teachers and administrators, by providing support and encouragement for teachers, by ensuring that teacher leadership and PLC involvement will lighten the workload rather than create added demands, and by establishing clear communication and reflection amongst their staff.

Recommendations for Future Research

Recommendations for future research were identified by the researcher. Although teachers engaged in professional learning communities, such involvement did not elicit teacher empowerment among participants. Instead, most teachers intrinsically felt empowered, despite a lack of shared leadership from their administrators. As a result, further research is needed in order to investigate factors that promote teacher leadership in PLCs. Additionally, examining factors that intrinsically empower teachers is another area worth exploring.

This study collectively investigated PLCs at eight high schools within a school district. The researcher did not categorize the data based on school site; therefore further

research is warranted in order to analyze each school independently. Doing such would examine the nature of PLCs within varying environments in order to capture deeper explanations regarding the impact of school culture on teacher leadership. The eight selected schools had different demographics, such as inner city versus rural, however this was not considered as part of the data analysis. Perhaps capturing this data would have added deeper explanations regarding the different barriers teachers experienced in their PLC's. Additional factors such as the age of the schools and school grades could have also been explored to further understand the experiences and perceptions of teachers in this study.

Another recommendation for future research would be to examine grant funded schools in comparison to non grant funded schools in order to understand the impact of grant funding on PLCs and teacher leadership. As identified in this study, the grant was paramount in shaping the PLCs, thus creating unexpected challenges for teachers. The data reflected major concerns regarding grant stipulations, however the researcher did not analyze non grant funded PLCs in order to offer an opposing perspective.

Lastly, a consideration for future research is methodology. Interviews can offer an in depth insight into the perspectives and experiences of teacher leaders in professional learning communities. The survey methodology, which included Likert-style and open-ended questions were effective in gathering needed data for the research questions, however interviews could have deepened the researchers understanding of the researched topic. As it relates to leadership, including school principals in the population sample would have also added a much needed perspective relating to the role of teacher leaders within their schools.

Final Thoughts from the Researcher

Sustaining effective professional learning communities in schools is a delicate balance between the organizational structure, school culture, and leadership style of principals. The principal's role is critical in the overall success of schools. Principal leaders must provide needed support despite the added demands of being a school leader. With this in mind, shared leadership is a transformative process that must be embraced by leaders. Principals must be willing to let go of the old paradigm of leadership by empowering teachers to take on new leadership roles within their schools. Although the data from this research suggested that PLCs did not cultivate a true sense of empowerment for teachers, the literature and research support the effectiveness of PLCs for teachers and students. However, effective PLCs do not exist in schools that are not willing to shift towards a collaborative culture where learning exists for all. Collaboration amongst all stakeholders, shared leadership, and a strong network focused on student learning are essential in moving schools forward. The "network" or social capital that principals and teachers possess is the foundation of shifting the culture of schools. As principal leaders adjust to the changes brought about by current educational reform, teachers will also be empowered to lead from within and outside of the classroom.

References Cited

- Andrews, D., Nonnecke, B., Preece, J. (2003) Electronic survey methodology: A case study in reaching hard to involve Internet Users. *International Journal of Human-Computer Interaction*. 16, 2, 185-210.
- Annenberg Institute for School Reform. (1998). *Critical Friends Groups in Action: Facilitator's Guide*. Providence, RI: Brown University.
- Barber, Bernard. 1983. *The Logic and Limits of Trust*. New Brunswick, NJ: Rutgers University Press.
- Barth , R.S. (2001). Teacher Leader. *Phi Delta Kappan*, 82(6), 443-449.
- Beachum & Dentith (2004). Teacher Leaders Creating Cultures of School Renewal & Transformation. *The Educational Forum*, 68(3).
- Beem, C. (1999) *The Necessity of Politics. Reclaiming American public life*, Chicago: University of Chicago Press.
- Bierema, L.L. (1999, February). The process of the learning organization: Making sense of change. *NASSP Bulletin*, 83 (563), 46-56.
- Bolin, F. 1989. Empowering leadership. *Teachers College Record* 91, no. 1: 81–96.
- Borko, H., Wolf, S. A., Simone, G., & Uchiyama, K. (2003). Schools in transition: Reform efforts and school capacity in Washington state. *Educational Evaluation and Policy Analysis*, 25(2), 171-201.
- Bourdieu, P., & Wacquant, L. (1992). *An Invitation to reflexive sociology*. Chicago: University of Chicago Press.
- Bryk, A.S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Byham, W.C., & Cox, J. (1992). *Zapp in education*. New York: Fawcett Columbine.
- Carmichael, L. (1982, October). Leaders as learners: A possible dream. *Educational Leadership*, 40(1), 58-59.

- Carnegie Corporation of New York. (1986). *A nation prepared. Teachers for the twenty-first century*. New York.
- Childs-Bowen, D., Moller, G. & Scrivner, J. (2000, May). Principals: Leaders of leaders. *National Association of Secondary School Principals (NAASP) Bulletin*, 84 (616), 27 – 34.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*. 94, S95-S120.
- Coleman, J.S., Campbell, E.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfield, F.D., and York, R.L. (1966). *Equality of Educational Opportunity*. Washington DC: US Department of Health, Education, and Welfare.
- Coleman, J. S., Hoffer, T., & Kilgore, S. (1982). *High School achievement: Public, Catholic, and private schools compared*. New York: Basic Books.
- Collins, J. (2001). *Good to great: Why some companies make the leap...and others don't*. New York: Harper Business.
- Connell, James, P.; Klem, Adena J.; Legters, Nettie; West, Thomas, C. (2006). *Getting Ready Willing and Able: Critical Steps Toward Successful Implementation of Small Learning Communities in Large High Schools*. Retrieved on July 24, 2009 at http://www.irre.org/publications/pdfs/getting_ready.pdf.
- Connelly, M, Clandinin, J., He. F. (1997) Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13(7), 665-674.
- Corcoran, T. & Goertz, M. (1995). Instructional capacity and high performance schools. *Educational Researcher*, 24 (9), 27-31.
- Cotton, K. (2001). *New small learning communities: Findings from recent literature*. Portland, OR: Northwest Regional Educational Laboratory.
- Cowley, K. (1999). A Study of Teacher Efficacy and Professional Learning Community in Quest Schools. Charleston, WV: Appalachia Educational Lab. Retrieved July 13, 2009 from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/17/a0/25.pdf.
- Crowther, F. 1996. Teacher Leadership: Exploration in theory & practice. *Leading and Managing* 2(4): 304-21.

- Cuban, L. 1990. Reforming Again, Again, and Again. *Educational Researcher*. 19(1), 3-13.
- Cuban, L & Tyack, D. (1995). *Tinkering toward utopia: a century of public school reform*. USA: Fellows of Harvard University.
- Darling-Hammond, L. (1988). Policy and professionalism. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 55-77). New York: Teachers College Press.
- Dillman, D. & Salant, P. (1994). *How to Conduct Your Own Survey*. New York: John Wiley & Son Inc.
- Donahoe, T. (1993). Finding the way: Structure, time and culture in school improvement. *Phi Delta Kappan*, 75, 298-305.
- DuFour, R. and Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.
- DuFour R., DuFour, R. & Eaker, R. (2008). *Revisiting Professional Learning Communities at Work*. Bloomington, IN: Solution Tree.
- Evans, R. 1996. *The human side of school change: Reform, resistance, and the real-life problems of innovation*. San Francisco: Jossey-Boss.
- Farr, J. (2004). Social capital. A conceptual history. *Political Theory*. 32(1), 6-33.
- Fawcett, G. (1996, Winter). Moving another big desk. *Journal of Staff Development*, 17(1), 34-36.
- Fellows, S. (2005). *An Investigation of Teachers' Perceptions of their Schools as Professional Learning Communities*. University of Hartford. Doctoral Program in Educational Leadership.
- Field, J. (2003) *Social Capital*, Routledge, London.
- Fine, M., & Somerville, J. (1998). *Small schools, big imaginations: A creative look at urban public schools*. Chicago: Cross City Campaign for Urban School Reform.

- Florida Association of School District Superintendents. *Task Force on High School Reform Position Paper*. Retrieved on February 11, 2010.
http://www.fldoe.org/hsreform/FADSS_PositionPaper.asp.
- Foley, M.W., Edwards, B. (1999), Is It Time to Disinvest in Social Capital, *Journal of Public Policy* 19, 2, 199-231.
- Fullen, M.G. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.
- Fullen, M.G. (1994). Teacher Leadership: A Failure to Conceptualize. In D.R. Walling (Ed.), *Teachers as leaders* (pp. 241 – 253). Bloomington, IN: Phi Delta Kappa Educational Foundation.
- Fullan, M. G., and A. Hargreaves. 1996. *What's worth fighting for in your school?* New York: Teachers College Press.
- Garrahy, D. A., Cothran, D.J., & Kulinna, P.H. (2005). Voices from the trenches: An exploration of teachers' management knowledge. *Journal of Educational Research*, 99(1), 56-63.
- Greene, G. K., Huerta, L. A. & Richards, C. E. (2007). Getting real: A different perspective on the relationship between school resources and student outcomes. *Journal of Education Finance*, 33(1), 49-68.
- Gronn, P. (2002). Distributed leadership as a unit of analysis. *The Leadership Quarterly*, 13(4). 423 – 451.
- Gurr, D., Drysdale, L. & Mulford, B. (2006) Models of Successful Principal Leadership, *School Leadership and Management*, 26(4), pp. 371-395.
- Hallinger, P., & Bridges, E. (2007). *Problem-based management education: Developing "managers for action."* Dordrecht, Netherlands: Springer.
- Hargreaves, A. (2003). *Teaching in the Knowledge Society: Education in the age of insecurity*. New York: Teachers College Press.
- Hord, S. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Austin, TX: Southwest Educational Development Laboratory. Retrieved August 1, 2009 from <http://www.sedl.org/pubs/change34/2.html>
- Hoepfl, M. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education* 9(1).

- Hoy, W. K. & Tschannen-Moran, M. (2003). The conceptualization and measurement of faculty trust in schools: The omnibus T-Scale. In W.K. Hoy & C.G. Miskel, *Studies in Leading and Organizing Schools* (pp. 181-208). Information Age Publishing: Greenwich: CT
- Huffman, J.B., Hipp, K.A., Pankake, A.M., & Moller, G. (2001, September). Professional learning communities: Leadership, purposeful decision making, and job embedded staff development. *Journal of School Leadership*, 11, 448-463.
- Ingersoll, Richard (2007). Short on Power, Long on Responsibility. *Educational Leadership*. 65(1).
- Katzenmayer, M. & Moller, G. (2001). *Awakening the Sleeping Giant, Helping Teachers Develop as Leaders*. Thousand Oaks, CA.: Corwin.
- King, M.B. & Newmann, F.M. (2000, April). Will teacher learning advance school goals? *Phi Delta Kappan*, 81 (8), 576-580.
- Kleine-Kracht, P. A. (1993). The principal in a community of learning. *Journal of School Leadership*, 3(4), 391–399.
- Knoepfel, R.C., Verstegen, D.A., & Rinehart, J.S. (2007). What is the relationship between resources and student achievement? A canonical analysis. *Journal of Education Finance*.
- Kruse, S.D., Louis, K.S., & Bryk, A.S. (1995). An emerging framework for analyzing school-based professional community. In K.S. Louis, S. Kruse (Eds.) *Professionalism and community: Perspectives on reforming urban schools*. Long Oaks, CA: Corwin Press.
- Lambert, L. 2003. *Leadership capacity for lasting school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Langston, V. (2006). What is a professional learning community? Unpublished manuscript.
- Lashway, Larry (1988, January). Visionary Leadership. Eric Digest, No ED402543.
- Lee, V. E., & Smith, J. B. (1996). Collective responsibility for learning and its effects on gains in achievement for early secondary school students. *American Journal of Education*. 104, 103-147.
- Leithwood, K., & Duke, D. L. (1999). A century's quest to understand school leadership. In K. S. Louis & J. Murphy (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 45-72). San Francisco: Jossey-Bass.

- Leithwood, K., Leonard, L. & Sharratt, L. (1997). Conditions fostering organizational learning in schools. Paper presented at the annual meeting of the International Congress on School Effectiveness and Improvement, Memphis, Tennessee.
- Lezotte, L. (1997). *Learning for all*. Okemos, MI: Effective School Products.
- Lieberman, A. & Miller, L. (2004). *Teacher Leadership*. San Francisco, CA: Wiley & Sons.
- Lieberman, A., Saxl, E. R., & Miles, M. B. (1988). Teacher leadership: Ideology and practice. In A. Lieberman (Ed.), *Building a professional culture in schools*. New York: Teachers College Press.
- Lin. N. (2000). Inequality in Social Capital. *Contemporary Sociology*. 29(6), 785-791.
- Lincoln, Yvonne S. and Guba, Egon G. 1985. *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Little, J.W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record* 91, 509-536.
- Louis, K.S., Marks, H.M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*. 33, 757-798.
- MacQueen, K.M., McLellan, E. Kay, K. and Milstein, B. (1998). Codebook development for team-based qualitative research. *Cultural Anthropology Methods Journal* 10(2), 31-36.
- Marshall, C., & Rossman, G. (1999). *Designing Qualitative Research, 3rd ed.* Thousand Oaks, CA: Sage Publications.
- McLaughlin, M.W., & Talbert, J.E. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.
- Meeham, M.L., & Cowley, K.S. (2003, January). *A Study of low-performing schools, higher performing schools, and high performing learning communities*. Paper presented at the Hawaii International Conference on Education, Waikiki, HI.
- Muhammad, A. (2009). *Transforming School Culture. How to Overcome Staff Division*. Bloomington, IN., Solution Tree.
- National Education Longitudinal Study of 1988. Retrieved February 12, 2008, From National Center for Educational Statistics Website:
<http://nces.ed.gov/surveys/NELS88/>

- NCLB Action Briefs. Retrieved on June 1, 2009. [www.publiceducation.org/portals/nclb/TitleII_Teacher and PrincipalPrepar](http://www.publiceducation.org/portals/nclb/TitleII_Teacher_and_PrincipalPrepar).
- Neill, M. (2006). The case against high stakes testing. *Principal*, 85, 28-30, 32.
- Newmann, F.M., Gary Wehlage (1995). Successful School Restructuring: A Report on the Public and Educators, by the Center for Organization and Restructuring of Schools, Madison, WI: Wisconsin Center for Education Research.
- Newmann, F.M. and Associates. (1996). *Authentic Achievement: Restructuring Schools for Intellectual Quality*. San Francisco: Jossey-Bass.
- Newmann, F.M., King, M.B., & Youngs, P. (2000). Professional development that addresses school capacity: lessons from urban elementary schools. *American Journal of Education*, 108, 259-299.
- Newmann, F.M., Smith, B., Allensworth, E., & Bryk, A.S. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis*, 23, 297-321.
- Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. *Educational Administration Quarterly*, 31(2), 224-243.
- Ovando, M. N. (1996). Teacher leadership: Opportunities and Challenges.: *Planning and Changing*, 27,30-44.
- Paxton, P. (1999). Is Social Capital Declining in the United States? A Multiple Indicator Assessment. *American Journal of Sociology*, 105, 88-127
- Penuel, W.R., & Riel, M. (2007). The new science of networks and the challenge of school change. *Phi Delta Kappan*, 88(8), 611-615.
- Phillips, J. (2003, Spring). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision*, 18(3), 240-258.
- Putnam, R.D. (1995). Bowling Alone: America's declining social capital. *Journal of Democracy*, 6, 65-78.
- Putnam, R.D. (2000). *Bowling Alone. The collapse and revival of American community*. New York: Simon and Schuster.
- Qualitative Research – Instrument Design. Retrieved on July 26, 2009, from <http://writing.colostate.edu>.
- Random House Unabridged Dictionary. Capacity. Retrieved March 10, 2008, from Dictionary.com Web site: <http://dictionary.reference.com/browse/capacity>

- Raywid, M. (1996). *Taking stock: The movement to create mini-schools, schools-within-schools, and separate small schools*. New York: Columbia University, Teachers College, ERIC Clearinghouse on Urban Education.
- Reichstetter, R. (2006). Defining a professional learning community: A literature review. *E&R Research Alert*, #06.05. Retrieved August 8, 2008, from http://www.wcpss.net/evaluation-research/reports/2006/0605plc_lit_review.pdf
- Rolls, J. (1995). The transformational leader: The wellspring of the learning organization. In C. Sarita & J. Renesch, *Learning organizations: Developing cultures for tomorrow's workplace* (pp. 101 – 110). Portland, OR: Productivity Press.
- Sarason, S.B. (1990). *The predictable failure of educational reform*. San Francisco: Jossey-Bass.
- School District of Hillsborough County. Retrieved on June 25, 2009, www.tampachamber.com.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Currency Doubleday.
- Sergiovanni, T.J. (1994a). *Building community in schools*. San Francisco: Jossey-Bass.
- Sergiovanni, T.J. (2004). Balance individual autonomy and collaboration to center on students. *Principal Leadership*, 70, 17-22.
- Shellard, E. (2002). *High-achieving schools: What do they look like? The Informed Educator Series*. Arlington, VA: Educational Research Service.
- Sherrill, J. (1999). Preparing teachers for leadership roles in the 21st century. *Theory into Practice*, 38(1), 56-61.
- Silva, D.Y., Gimbert, B., & Nolan, J. (2000). Sliding the door: Locking and unlocking possibilities for teacher leadership. *Teachers College Record*, 102, 779 – 804.
- Smylie, M., & Denny, J. (1990). Teacher leadership: Tensions and ambiguities in organizational perspective. *Educational Administration Quarterly*, 26(3), 235-239.
- Spillane, J., & Diamond, J. (2007). *Distributed Leadership in Practice*. Teachers College Press, New York.
- Silva, D. Y., Gimbert, B., & Nolan, J. (2000). Sliding the doors: Locking and unlocking possibilities for teacher leadership. *Teachers College Record*, 102, 779-804.

- Smaller Learning Communities. Retrieved on June 25, 2009, from www.ed.gov/programs
- Smith, C.D, (1997). Casting the Net: Surveying on Internet Population. *Journal of Computer Mediated Communication*, 3(1).
- Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review*, 67(1), 1-40.
- Stoll, L., Bolam,R., McMahon, A., Wallace,M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Terry, P. (2000). Teachers as leaders. *National Forum Journals*.
<http://www.nationalforum.com/Electronic%20Journal%20Volumes/Terry,%20paul%20M.%20Empowering%20Teachers%20As%20Leaders.pdf>
- Using Likert-Scales. Retrieved from http://www.icbl.hw.ac.uk/ltidi/cookbook/info_likert_scale/ on August 2, 2009.
- Waller, W. (1932). *The sociology of teaching*. London: Wiley.
- Wasley, P. (1989, April). Lead teachers and teachers who lead: reform rhetoric and real practice. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Wasley, P. (1991). *Teachers who lead: The rhetoric of reform and the realities of practice*. New York: Teachers College Press.
- Watts, G.D., & Castle, S. (1993). The time dilemma in school restructuring. *Phi Delta Kappan*, 75, 306-310.
- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255-316.
- Yukl, G. (1994). *Leadership in Organizations* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall
- Zinn, L. (1997). Supports and Barriers to Teacher Leadership: Reports of Teacher Leaders. Paper presented at AERA annual conference.