

THE PERCEPTIONS OF RELATIONSHIPS BETWEEN DISTRICT  
CLIMATE AND THE DEVELOPMENT OF PROFESSIONAL  
LEARNING COMMUNITIES IN SCHOOLS

by

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## ABSTRACT

The purpose of this study was to explore the perceptions of relationships between district climate and the development of professional learning communities in schools. District climate describes the collective effort, within the organization of a school district, to foster accomplishments that help the organization to effectively set and reach goals. Integrated superintendent leadership, enabling organizational structures, and the teamwork of individuals for student success are subscales of district climate. Professional learning communities incorporate groups of people interrogating their practice in a consistent, reflective manner, with collaborative efforts to improve instructional practices; thereby, influencing student success. Two surveys were administered in the spring of 2012 to the teachers and administrators in 98 schools in west Alabama. Research questions were: (1) Is the perception of integrated superintendent leadership positively related to the development of professional learning communities in schools? (2) Is the perception of enabling district structure related to the development of professional learning communities in schools? (3) Is the perception of district teamwork for student success related to the development of professional learning communities in schools? (4) Do administrators demonstrate more positive perceptions toward the development of professional learning communities in schools than do teachers? (5) Do elementary school teachers demonstrate more positive perceptions toward the development of professional learning communities in schools than their counterparts in middle and high school? (6) Do educators with less experience demonstrate more positive perceptions than those with more experience toward the development of professional learning communities in schools?

The District Climate Index (DCI) and the School Professional Staff as Learning Community Questionnaire (SPSLCQ) were used to measure participants' perceptions of their school as a professional learning community. Twelve hundred teachers and administrators from eighty-three different schools participated; data were assessed using correlations, t-test, analysis of variance, and regression analyses.

The results suggest that district climate and professional learning communities are significantly, positively related to one another. Results provide district leaders with an exploratory model for developing trust and moving schools toward reform and students success.

## DEDICATION

*Mind is the Master power that moulds and makes,*

*And Man is Mind, and evermore he takes*

*The tool of Thought, and, shaping what he wills,*

*Brings forth a thousand joys, a thousand ills:*

*He thinks in secret and it comes to pass:*

*Environment is but his looking-glass.*

*James Allen, 1903*

Because of wonderful grandparents that believed in the value of hard work, honesty, and dedication to family, the legacy continued with my Father and Mother. With their caring attitude and actions, they molded my life into one of a strong work ethic, a love for learning, a thankful spirit, unconditional love for others, and a life of service. They taught me that life is not all about me and there will be disappointments, challenges, and triumphs. They instilled in me the value of an education and if you can dream it, you can achieve it. As a daughter, I have been blessed with the love of Christian parents to guide me on my way through my journey of life-long learning. Because of their careful attention to my learning and growth as a child, I believed that I could do the same for my child. There is so much in life that I have learned from the experience of writing a dissertation and I would like to pass that on to my son, Hunter. In October of 2009, I read that “Nothing affects the environment of a child so much as the unlived life of a parent” and I live my dreams every day and you can achieve your dreams; you have purpose and meaning in life which brings with it responsibility for your words and actions; and,

your thoughts have power, all the while consciously creating your future. Remember to drink in all of life's magnificent experiences, maintain a healthy balance between the mental, spiritual, social/emotional, and physical dimensions in your life, and love and serve others with joy and empathy. Thank you, son, for your encouragement, your love, and your support. Always be mindful of the legacy that you will leave behind.

This dissertation is lovingly dedicated to my father, Rev. Jerry A. Croft, my mother, Glenda Driver Croft, and my son, Hunter Scott Boman.

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## CHAPTER I: INTRODUCTION

Cory Booker, a dynamic, mayor of Newark, New Jersey, stated recently, “A superior democracy cannot exist with an inferior education system” (Margolin, 2010). Booker’s efforts were concentrated on the educational system of his city, characterized by failing test scores, marginal facilities, and a lottery for school attendance that determines the difference between jail and a high school education for many children in his city. Booker and the Governor of New Jersey, Chris Christie, joined efforts to revitalize the education system in Booker’s city and across the state as well, because of the needs that they encountered that were not being met by current practices. Booker and Christies had the foresight to bring the business community to the table. Mark Zuckerberg, CEO and founder of Facebook, awarded a challenge grant to Newark in an effort to restructure the abhorrent conditions of the education system in the area. According to DiPaola and Smith (2008), public education was defined as “the only legitimate, universal opportunity available to the poor” (p. 121). Booker’s forward thinking, his actions, and his search for resources to facilitate change for the children in his city was applauded; however, many cities, districts or schools suffer from the same fate and there is often no one there to be an advocate. Some have argued that the time has come for us to lay aside our partisan views and do what is best for the future of our country and our children.

According to Kantor (1991), The Elementary and Secondary Education Act (ESEA) in 1965 facilitated federal involvement in education to promote equal educational opportunity for students in elementary and secondary schools. The amended version of ESEA was reauthorized

as No Child Left Behind (NCLB), originally passed by Congress in 2001 and signed into law by President George W. Bush in January, 2002. NCLB was the legislative push to ramp up the accountability of individual teachers while maintaining the importance of whole-school change. Legislative efforts ebb and flow on the partisan tidal wave and reports published, such as *A Nation at Risk* (National Commission on Excellence in Education, 1983), *A Nation Prepared* (Carnegie Forum on Education and the Economy, 1986), the Secretary's Commission on Achieving Necessary Skills (1991), and, *Rising Above a Gathering Storm: Energizing and Employing America for a Brighter Economic Future* (National Academy of Sciences, National Academy of Engineering and the Institute of Medicine, 2005), that influenced the national mood and strategies for successful reform efforts in education. However, according to the National Academy of Sciences, National Academy of Engineering and the Institute of Medicine (2005), little has provided dramatic impact on current structure, practices, and philosophies governing educational reform.

The National Academies of Science and Engineering and the Institute of Medicine commissioned the Committee on Prospering in the 21st Century: An Agenda for American Science and Technology, and in 2007 the committee published a report that documented science and technology as indicators of prosperity for America in the 21st century and are critical to the economic well-being of our society. However, the report provided valuable data that reflect a dismal picture of the progress with science and technology in our current education structure where only an indicated one-third of the nation's eighth grade students show proficiency in mathematics; in 2000, 93% of students in Grades 5-8 were instructed by a teacher lacking a major or certification in the physical sciences (chemistry, geology, general science, or physics) (National Academy of Sciences, National Academy of Engineering and the Institute of Medicine,

2005). On the 2003 administration of the Program for International Student Assessment (PISA), U.S. fifth graders ranked 27 out of 39 countries on their ability to apply mathematical concepts to real world situations. Friedman (2005) contended that globalization has leveled the playing field and cities separated by great distances become neighbors. This increased the candidate pool for many jobs allowing them to be a mouse-click away. He argued that there is a strong reliance on schools to prepare today's children for a society and jobs that currently do not exist.

Additionally, given current funding measures and the economic status of the country, many districts and schools were forced to do more with limited financial resources.

The thought remains, how to improve or reform education in an era when there is decreased funding, yet higher expectations of graduates. The keys to reform some argue are evidenced with schooling (Rosenthal, 1991) and with the teachers (Brophy & Good, 1986). Districts hold a piece of the accountability pie because schooling does not occur in isolation. Districts are charged with enabling and empowering school administrators and teachers in a powerful way. This study investigated ways in which districts can make a difference in the outcome of schooling through the components of district climate and professional learning community.

### **Conceptual Framework**

With the increased accountability pressure of NCLB for both schools and districts, advocates have claimed credible districts need to assume more of an active role in developing a climate conducive to school improvement according Shannon and Bylsma, (2007). School climate studies research were characterized as “clearly the stepchild of organizational climate research and school effects research” (Anderson, 1982, p. 368) and focused on the individual school. “Personality is to the individual what ‘climate’ is to the organization” (Halpin & Croft,

1963, p. 1). Although school climate has a varied history dating back to the early 1960s, inadequate research has been conducted on district climate. District climate was described by DiPaola and Smith (2008) as “the barometer of the actions required in a successful reform effort: dynamic leadership of the superintendent, enabling organizational structures, and teamwork that supports student success” (p. 120). Integrated leadership of the superintendent referred to the ability to integrate conceptual, technical, and interpersonal approaches to maximize the potential of others so clearly that they were inspired to see it themselves. An enabling organizational structure, as described by Hoy and Miskel (2008), “is a hierarchy that helps rather than hinders and a system of rules and regulations that guides problem solving rather than punishes failure” (p. 110). This type of structure was believed to develop an environment with high expectations; consistent monitoring of processes; accountability for improved practice; appropriate allocation of resources to specifically attack problem areas; and, an open, sufficient dialogue (DiPaola & Smith, 2008). Teamwork for student success suggested that there is a crucial focus on teaching and learning, creating an environment of trust, steeped in collegiality, respect, and a dedication to the success of all students. District climate was a new construct to the field of educational research therefore it called for more in-depth exploration.

McLaughlin and Talbert (2003) characterized reforming districts as districts with “a system-approach to reform, a learning community at the central office level, coherent focus on teaching and learning, a stance of supporting professional development and instructional improvement, and a data-based inquiry and accountability” (p. 10). The professional “learning community at the central office level,” as described by McLaughlin and Talbert (2003), exemplified a community where the “learning agenda is a substantial and continuous one,”

(p. 13); there is persistent support for change; open dialogue pertaining to student data that supports instruction; district integrity; open and direct repetitive communication; and, finally, “explicitly model the learning and risk-taking that are essential to effect change as they reform their own practice” (p. 13). The learning community at the central office served as a model for principals and fosters coherence in district and school relationships via “learning focused partnerships with school principals to deepen principals’ instructional leadership practice” (p. v) through modeling specific strategies over an extended period of time, expanding the knowledge base and tools available to principals for instructional leadership, and executing resource allocation to allow principals to professionally develop and cultivate robust skills as an instructional leader (Honig, Copland, Rainey, Lorton, & Newton, 2010).

An integral part of any cohesive plan to implement district goals or standards included effective professional development (David & Shields, 2001; Firestone, 1989; Marsh, 2001; Massell, 2000; McLaughlin & Talbert, 2003; Snipes, Doolittle, & Herlihy, 2002; Togneri & Anderson, 2003). According to Joyce and Showers (2002), the effectiveness of training increased when the following components were present in the professional development: theory, demonstration, practice with feedback, and peer coaching with follow-up as can be determined by examining the data in Table 1 (Joyce & Showers, 2002). The numbers indicated the percent of participants likely to attain the components when combined.

Table 1

*Effectiveness of Training Components*

Components	Knowledge	Skill	Transfer
Study of Theory	10%	5%	0%
Demonstration	30%	20%	0%
Practice	60%	60%	5%
Peer Coaching	95%	95%	95%

Note: Percent of participants likely to attain components when combined.

According to Joyce and Showers (2002), teachers were more likely to implement new skills and transfer the learning if peer coaching serves as a follow-up to the initial learning; this holds true for administrators as well (Joyce & Showers, 2002) (see Appendix A). Peer coaching can occur in a variety of ways, each effective for a different reason; this included executive coaching, team coaching, cognitive coaching, and peer coaching study teams. Study teams, professional learning teams, professional learning groups, critical friends groups, education community, teacher learning communities, problem-based learning groups, teacher community, vertical learning teams, highly reliable organizations, online learning communities, and community were used as synonyms for professional learning communities; however, for the purpose of this study, the term professional learning community was used. Although a universal definition for professional learning communities has not emerged through the literature, research conducted by Stoll, Bolam, McMahon, Wallace and Thomas (2006) defined professional learning communities as “a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way; operating as a collective enterprise” (p. 223) and “the goal of their actions is to enhance their effectiveness as professionals for the students’ benefit” (Hord, 1997, p. 1). The Hord definition of professional learning community and the definition from Stoll, et al. (2006) are closely related

and provide the foundation for the professional learning community variable in the study. Professional learning communities were characterized by supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Professional learning communities, for the most part, were studied as an entity integral to the school; however, according to McLaughlin and Talbert (2003), professional learning communities produced successful results when developed at the district level.

### **Statement of the Problem**

It seems reasonable to assume that principals will not implement professional learning communities in their schools if they have not personally participated or feel supported in a learning group at the district level or elsewhere. The relationship between district climate and the formation of professional learning communities at the school level was the focus of this study. My theory was that principals who encountered the theory, demonstration, practice, and peer coaching components of professional development, within the structure of a professional learning community, will implement a similar type of professional learning community in their schools. In this study, the relationships between integrated leadership of the superintendent, the enabling organizational structure of the district, the teamwork for student success, and professional learning communities will be investigated, individually.

### **Research Questions**

The research questions for this study included the following:

1. Among teachers and administrators, is the perception of integrated superintendent leadership positively related to the development of professional learning communities in schools;

2. Among teachers and administrators, is the perception of enabling district structure positively related to the development of professional learning communities in schools;
3. Among teachers and administrators, is the perception of district teamwork for student success positively related to the development of professional learning communities in schools;
4. Do administrators demonstrate more positive perceptions toward the development of professional learning communities in schools than do teachers;
5. Do elementary school teachers demonstrate more positive perceptions toward the development of professional learning communities in schools than their counterparts in middle and high school; and
6. Do educators with less experience demonstrate more positive perceptions than those with more experience toward the development of professional learning communities in schools?

### **Methods**

This study utilized an exploratory, survey research design by distributing two surveys, the District Climate Index (DCI) developed by DiPaola and Smith (2008) and the School Professional Staff as Learning Community Questionnaire (SPSLCQ) created by Hord, Meehan, Orletsky, and Sattes (1999), to elementary, middle, and high school principals and teachers in 99 west Alabama schools. The DCI was used to determine the leadership of the superintendent, if the organizational structure is enabling, and whether there is teamwork for student success within the district. The SPSLCQ was used to determine whether or not a school has adopted a

professional learning community (PLC) model. The teachers and administrators composed a convenience sample of 101 west Alabama schools that were asked to participate in the study.

Surveys were distributed as follows: 45 elementary schools (K-5, K-6), 19 middle schools (6-8), 5 junior high schools (K-7), 10 unit schools (K-12), and 22 high schools (7-12, 9-12) in a 12 school district region. Surveys were distributed using a traditional pen and paper model in the early spring of 2012 with data collection mid-spring. The surveys were conducted with confidentiality, anonymity, and consent from the participants. Demographic information was included on the survey. Following appropriate research protocols, permission was requested from the district office and from the principal of each school to participate in the DCI and SPSLCQ through traditional means. The surveys were coded with a school code for accurate data analysis and the data collection. See Appendix B and C for permission to use surveys.

### **Definitions of Terms**

The study of the relationships between district climate and the formation of professional learning communities required an understanding of the following definitions.

*District climate (DC)*: exemplifies “the collective effort by all individuals within organizations that foster actions to help the organization efficiently reach its goals” (DiPaola & Smith, 2008, p. 118). Factors relating to district climate included the superintendent leadership, enabling organizational structures, and the teamwork of all individuals needed for student success.

*Superintendent leadership*: Indicators included “providing vision and inspiration; modeling behavior; providing individualized support; providing intellectual stimulation; fostering commitment to group goals; encouraging high performance expectations;

acknowledging good work; and, encouraging individual development” (Leithwood & Aitken, 1995, pp. 87-88).

*Enabling organizational structure:* The hierarchy in an organization providing help through a series of rules and regulations that facilitated problem-solving. “Enabling structures call for two-way communication; viewing problems as learning opportunities; supporting differences; and, encouraging trust, cooperation, openness, joint problem-solving, and innovation” (Hoy & Miskel, 2008, p. 110). Antonym: hindering organizational structure.

*Teamwork for student success:* Administrator and district leaders rely on a strong culture of support steeped in professional respect, trust, a cooperative attitude, confidence, and learning environments conducive to dialogue, networking, and assessing and supporting student learning for success.

*Professional learning communities (PLC):* “A group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way; operating as a collective enterprise” (Stoll et al., 2006, p. 223), “the goal of their actions is to enhance their effectiveness as professionals for the students’ benefit” (Hord, 1997, p. 1).

*Supportive/shared leadership:* The administrators shared power and authority; facilitated and protected the collegial work of the staff; believed in collective decision-making; and, encourages continuous learning (Carmichael, 1982).

*Shared values and vision:* Commonly held beliefs and a mental picture undeviatingly focused on student learning.

*Collective creativity:* “Where people continually expand their capacity to create results that they truly desire; where new and expansive patterns of thinking are nurtured; where

collective aspiration is set free; and, where people are continually learning how to learn together” (Senge, 1990, p. 3). These processes are steeped in reflective dialogue and address the individual and collective needs’ of the student (Hord, 1997).

*Supportive conditions:* The physical and structural arrangement allowing individuals to come together as a unit to do the learning and the qualities or capacities of each individual to accept feedback, solve problems, and make decisions to foster creative work (Hord, 1997).

*Shared personal practice:* A continuous feedback cycle, where teachers give and receive non-evaluative feedback on a regular basis, that creates an environment conducive to individual and organizational improvement.

### **Sample**

This study incorporated a convenience sample of 101 schools in the 12 school districts composing the west Alabama in-service region. These districts included two suburban districts, Tuscaloosa City and Tuscaloosa County; two districts in rural settings, Lamar and Fayette; and, eight districts in the Black Belt area, Choctaw County, Greene County, Hale County, Marengo County, Pickens County, Sumter County, Demopolis City, and Linden City. The school level consisted of elementary, middle, and high schools.

### **Limitations, Delimitations, and Assumptions**

Constraints that the researcher has no mechanism for regulating are called limitations (Rudestam & Newton, 2007). The research conclusions in this study may be limited within the following parameters:

1. Because this study focuses only on schools in the state of Alabama, the results may not be generalized to other states;

2. Because this study is a cross-sectional data study, the findings are limited to the current timeframe;
3. Because the variables in this study have specific constitutive and operational definitions, the findings may be limited; and
4. Because of the voluntary nature of the data collections in this study, teachers' and principals' perception of the variables involved are considered in the light of the reliability and validity of the instruments used in the data collection.

Delimitations referred to the researcher's intentional limitations in the research design. A convenience sample of 12 districts and 101 schools was surveyed to relate district climate to the development of professional learning communities at the school level, which may limit the generalizability of the results in the study. All grade levels were represented in several school configurations: kindergarten thru fifth grade, kindergarten thru sixth grade, kindergarten thru seventh grade, sixth grade thru eighth grade, seventh grade thru twelfth grade, and ninth thru twelfth grade.

The assumptions made by the researcher prior to performing the data collection and analysis were as follows:

1. The sample was representative of the population of school teachers and administrators and their relationship with their districts;
2. The teachers and administrators had a pool of knowledge of the topics and had a desire to provide valuable feedback in a survey format to the researcher;
3. The researcher had a depth of knowledge and skills required to perform accurate and valuable data analysis; and

4. The fiscal and human resources were in place to effectively execute data collection.

### **Summary**

The study investigated the relationship between district climate and the development of professional learning communities at the school level. Chapter I presented an introduction and the conceptual framework to provide valuable information qualifying the statement of the problem, research questions, and hypotheses. The essential terms utilized throughout the study are defined and the research method and sample are discussed in detail. Limitations, delimitations, and assumptions are considered and moderated throughout the study. In Chapter II, a review of the literature provides awareness of the importance of the evolution of a district; the connections between district climate and school climate; and, district climate as a construct of superintendent leadership, enabling school structure, and teamwork for student success. A review of professional development and the emergence of the professional learning community was presented, complete with elements such as supportive/shared leadership, shared values and vision, collective creativity, supportive conditions (structural and relational), and, finally, shared personal practice. The developmental stages of a professional learning community along with a close examination of the operational processes and outcomes leading to student improvement were scrutinized. A theoretical model relating district climate to the development of professional learning communities at the school level was revealed. Chapter III provided a description of the methodology designed for the study, including an in-depth discussion of the sample, research design, participants, setting, and the procedural mechanisms for data collection and data analysis. In Chapter IV, tables, graphs, and descriptive statistics will present the correlational analyses providing a clear picture of the results. Finally, Chapter V provided discussion of the study

findings by linking the data analyses to the theoretical framework. The implications for theory and practice and additional research were described and recommendations considered for further study.

CHAPTER II:  
REVIEW OF THE LITERATURE

**Introduction**

The literature reviewed the evolution of the school district and the progression of district climate including the components of the integrated leadership of the superintendent, enabling organizational structure, and how districts work as a team to advance student success. An examination of the history of professional development provided a picture of the professional growth and learning of teachers and administrators within districts focusing on the development of professional learning communities. Chapter II presented a general review of professional learning communities and how this type of professional development may transform schools through supportive and shared leadership, shared vision and values, collective creativity, supportive conditions, and shared personal practice.

**Conceptual Framework**

According to Dietrich Bonhoeffer, “the test of the morality of a society is what it does for its children,” and the decision early in our existence as a country was to educate young minds to place them on the proper path to success. Some argued that our educational system is consistently reinventing itself to the political ebb and flow of partisan beliefs of those who are leaders of our country, and thus creating an evident dilemma in educational leaders to either adopt current policies for bureaucratic or opportunistic reasons (Anderson, 2003), or to genuinely improve the education of our children through the deliberative implementation of reform strategies. According to Childress, Elmore, Grossman, and Johnson (2007), such improvement

can be achieved by utilizing the organizational design to support the strategies; developing human capital to carry out the strategies; allocating resources to align with the strategies; and, using performance data to facilitate decision-making, organizational learning, and accountability.

With the No Child Left Behind Act in 2001, the external accountability for educational leaders became more results oriented, specifically, related to standardized test scores, thus creating a new dynamic of educational change pervasively affecting school leadership, teaching, and learning (Childress et al., 2007). Leaders do not work in isolation; the important work of the district is accomplished in the classroom (Childress et al., 2007). The classroom is nested in a school and the school was nested in the district. The district has the responsibility to ensure equity, provide vision, offer professional learning opportunities, and assure education for all involved. According to Childress et al. (2007), educators must learn to work together to impact student learning in a profound way in a nested system. Practitioners reported that while the No Child Left Behind Act holds schools and districts accountable for student results, some are moving from one innovation, initiative, model, or program to the next, with no apparent intentional motive or strategic approach to school improvement. Pockets of excellence existed within school districts across America; however, in international comparisons the United States consistently fell short of meeting the academic needs of all students, and the process of schooling results in academic success or failure, which influences children down a certain life path (National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2005).

### **The Evolution of the School District**

The traditional definition of a school district can “refer to the superintendent, school board, and/or midlevel/central administration as well as the district as an organizational unit” (Rorrer, Skria, & Scheurich, 2008). In the early 1950s, Cushman (1952) suggested that district

reorganization was the top priority for education as well as governance. States have relegated to the local citizenry the responsibility of reorganizing, and the number of school districts had decreased from 84,468 districts in 1950 to 72, 637 school districts in 1951. Two-thirds of districts were still operating elementary schools while a 12<sup>th</sup>-grade education represented the end of common schooling. The slow reduction in one-room schools from 200,000 to 70,000 in a span of 30 years allowed for over 1,500,000 children being educated in a one-room school.

Approximately 4,000 high schools had fewer than 50 pupils and 9,000 had fewer than 100 pupils. A great concern during this time period in education in our country was the sacrifice of “neighborhood and community values in the attempt to get districts large enough to be efficient” (Cushman, 1952, p. 358). Cushman (1952) described some of the same problems concerning redistricting in rapidly growing suburban and urban areas, uneven district improvement, with some districts progressing and others not, a lack of governance, financial equalization across districts within a state, resource availability, and identifying legislation as “either a facilitating or impeding factor” (p. 358). The picture painted by Cushman (1952) of districts in the late 1940s and early 1950s seems familiar, because he suggested “school districts had developed by accident and not by design” (p. 358). In the concluding paragraph of Cushman’s research he stated, “it ought not to take the American people, if properly led by the education profession, another 50 years to do a job that should have been completed 30 years ago” (p. 362).

During the 1970s and 1980s, the research focus moved to what was defined by Fullan (1985) as “innovation implementation” and the district became the vehicle of dissemination and support for certain government and district adopted programs. The districts largely adopted programs for bureaucratic and opportunistic purposes, rather than implementing changes to fidelity and fostering instructional change (Anderson, 2003). Little research had been

accomplished on how districts and schools managed multiple innovations and monitored for continuous improvement. The effective schools movement, as a result of research, attempted to enhance implementation of innovation (Edmonds, 1979). The effective schools paradigm resulted from research conducted in the mid-1970s concentrating on exemplar schools that were achieving regardless of fiscal resources, composition of the school, geography, and socioeconomic status. Edmond's (1979) report found that effective schools exhibited

strong leadership; a climate of expectation, an orderly but not rigid atmosphere; communication to students of the school's priority on learning the basics, diversion of school energy and resources when necessary for maintaining priorities; and, means of monitoring student (and teacher) achievement. (p. 38)

According to Anderson (2003), during this time period, an effort was made to expand and extrapolate the effective schools research to "scale up" implementation to gain district effects.

In a seminal effort on systemic reform, Smith and O'Day (1991) characterized the first true wave of reform as occurring between 1983 and 1986 just as the effective schools movement was gearing up. Along with other programs, validated top-down reforms were attempted in an effort to identify effective educational inputs, and increase basic skills proficiency. In the second wave of reform beginning in the latter 1980s, there was a distinct decentralization of management, growth, and development on the part of the teacher and administrators (professionalization). This was labeled a "bottom-up" change to clarify processes and impact stakeholders most closely involved with instruction and student learning (Smith & O'Day, 1991). During this second wave, effective schools research produced new studies using innovative methods of research design and statistical analyses to better clarify and reinforce the earlier research. According to Austin and Reynolds (1990), the new studies provided a comprehensive list of effective schools characteristics:

site management, leadership, staff stability, curriculum and instruction articulation and organization, staff development, maximize learning time, widespread recognition of academic success, parental involvement and support, collaborative planning and collegial relationships, sense of community, clear goals and expectations commonly shared, and order and discipline. (pp. 168-174)

Research focused on individual schools was prominent; however, district relationships were undoubtedly associated with these findings (Anderson, 2003).

In the third wave of systemic reform as identified by Smith and O'Day (1991, p. 234), there appeared to be “a coherent systematic strategy” emphasizing standards-based reform and testing still in existence today (Rorrer et al., 2008). According to Rorrer et al. (2008), districts were deemphasized during the systemic reform era and further study indicated in some atypical districts there was a semblance of goals and accountability within the district congruent with the leadership and commitment of the superintendent (Murphy & Hallinger, 1988; La Roque & Coleman 1990).

According to Rorrer et al., the era of school improvement ultimately began with a push toward national standards and standardized testing coinciding with a resurgence of research fundamentally descriptive and case study in nature on districts since the mid-1990s. A conceptually different definition of district has emerged since then. This district is described as “an organized collective constituted by the superintendent; the board; the central office-level administration; and principals, who collectively serve as critical links between the district and the school for developing and implementing solutions to identified problems” (Rorrer et al., 2008, p. 311). This newly conceptualized role played by the district results in greater need for investigation and study.

An earlier study conducted by Shannon and Bylsma (2004) on district effectiveness, 13 themes emerged for 80 research articles examining the characteristics of improved school

districts. These 13 themes could be organized into four categories: effective leadership, quality teaching and learning, support for statewide improvement, and clear and collaborative relationships. Ten studies were utilized to provide a cross-section of the themes and five of the thirteen themes were explicit or strongly implied across the ten studies: dynamic or distributive leadership, sustained improvement efforts, coordinated or embedded professional development, strategic resource allocation, and school and district roles/ relationships. Among the districts in these studies, dynamic and distributive leadership held the responsibility and accountability for reaching district goals, vision of the district, teaching and learning, and a long-term commitment to continuous improvement (Calweli & Protheroe, 2001; Firestone, 1989; Marsh, 2001; Massell, 2000). In improved districts, leadership responsibilities were extended beyond traditional roles (i.e., superintendent and central office staff) and particular stakeholders may be responsible for specific reform efforts (Togneri & Anderson, 2003).

At the forefront of progress in the field of education stands change:

The meaning of change will always be new because it is a human endeavor that is perpetually dynamic. Educational change has meaning because it pursues moral purpose and does so by bringing best knowledge to bear on critical issues of the day. Above all when it works, it does so because it motivates a million change agents to find meaning in collective action to improve humankind. (Fullan, 2007, p. xiii)

According to Elmore (2009), change was at the heart of progress and “systemic improvement is possible only when the major features of the system are aligned around a common set of goals, and actors at each level have the knowledge, skill, and competence to execute their part of the strategy” (p. 229). Hargreaves and Fink (2006) explained, “change in education is easy to propose, hard to implement, and extraordinarily difficult to sustain” (p. 1). Perhaps for this reason, in many respects change has become an elusive quality.

Studies have unveiled the importance of the district's role in improving teaching and learning as well as student performance (Cawelti & Protheroe, 2001; Honig et al., 2010; Leithwood, 2008; Massell, 2000; Shannon & Blyma, 2004). DiPaola and Smith (2008) argued the importance of district climate in the process of school improvement and defined "district climate as the collective efforts by all individuals within the organization that foster actions to help the organization efficiently reach its goals" (p. 118). District climate "is a barometer of the actions required in a successful reform effort: dynamic leadership of the superintendent, enabling organizational structures, and teamwork that supports student success" (DiPaola & Smith, 2008, p. 120). This focus on district climate was a newer construct to the field of educational research.

### **District Climate**

District climate had its early origin in school climate research. School climate was considered by Anderson (1982) as the "stepchild of both organizational climate research and school effects research" (p. 368). Halpin and Croft (1963) used the analogy of "personality is to the individual what 'climate' is to the organization" (p. 1). They argued that climate influenced all aspects of the organization by affecting performance and attitudes determined by the collective perceptions of the members and the common organizational practices that provide functionality to the organization. Organizational climate referred to the inherent characteristics of an organization that differentiate it from other organizations and those characteristics that impact the behavior of the organization (Hoy, Hannum, & Tschannen-Moran, 1998; Hoy & Tarter, 1992; Tschannen-Moran, Parish, & DiPaola, 2006).

School climate encompassed two schools of thought: 1) as a symbol of personality or 2) as a symbol of health. The personality metaphor defines the climate on a continuum as open or closed (Anderson, 1982; Halpin & Croft, 1963; Thomas, 1976). For these authors, an open

school climate characterized authenticity, genuineness, and leadership based on the reality. There was no need to institute rules and regulations, diligently supervise, or require arduous paperwork because there was an atmosphere of professionalism and trust that encourages risk-taking, support, and consideration. The social needs of the group members were recognized and met which provided behavioral control on members (Thomas, 1976). An open climate effectively promoted and cooperatively inspired the emergence of leadership spontaneously from the principal, teachers, and students. On the other end of the continuum was closed climate, and this type of atmosphere required unnecessary rules and regulations, a plethora of paperwork, and more authoritative leadership. The latter engendered a leadership style that endorses an aloof, detached, and micromanagement personality among the principals increasing teachers' indifference and irritation. The social needs of the community were not being addressed, contributing to inauthenticity, a high degree of apathy, and low morale (Thomas, 1976). The closed environment was not genuine, and deception and pretense typified a lack of satisfaction among the stakeholders.

School climate as a symbol of organizational health portrayed the school as either healthy or unhealthy. Hoy and Tarter (1992) suggested that all organizations must resolve four basic challenges in order to progress: navigate efficaciously their environments, achieve their goals, sustain high morale and harmony among the stakeholders in the school, and, finally, cultivate shared values on three levels of organization: board level, administrative level, and teacher level. The board or district protected the school from the outside interference of special interest groups that could provide pressure to adopt certain policies influencing the everyday operation of the school. The principal here (administrative level) was a dynamic leader and leads with high standards and expectations for performance, consistently managing relationships and tasks, and

mitigating influence with the superintendent and board members to institutionalize the effective operation of the school as a community of learners. The teachers (teacher level) were happy and develop trusting relationships with the principals, their colleagues, and the students. In theory, and when this works in real practice, they worked effortlessly with high commitment to teaching with confidence and a high level of knowledge and skills relating to content and pedagogical understanding. They were constant learners and take advantage of professional learning opportunities that lend themselves to maintaining a high standard for student performance. There was a distinct positivity and enthusiasm about their work. They felt efficacious, provided consistency, and there was a level of seriousness to their learning environment. This then resulted in highly motivated students who have a healthy respect for one another. The overall school setting was characterized by high resource support, collegiality, and community in all areas, especially instruction. “An unhealthy school is marked by conflict and turmoil” (Hoy, Gage, & Tarter, 2006), and there was a high level of suspicion, a lack of harmony, low expectations for learning and achievement, and an overall lack of respect. In this negative environment, principals closely supervised and controlled; therefore, students received the same treatment from teachers. Students were unruly, did not see the purpose in schooling, and their environment suggested that they were neither respected nor appreciated (Hoy, Gage & Tarter, 2006).

In order to assess school climate and thus, inform the design of working conditions and environments in which the principals, teachers, and students worked effectively, an overall analysis of the two measures was completed by Hoy, Hannum, and Tschannen-Moran (1998). Four major factors were found to represent 71% of the variance: collegial leadership, teacher professionalism, academic press, and environmental press. Collegial leadership referred to the

principal's relationship with the teachers and conduct that is open and reassuring, not commanding or controlling. Teacher professionalism referred to "teacher behavior characterized by commitment to students, respect for the competence of colleagues, warmth and friendliness, and engagement in the teaching task" (Hoy et al., 2006, p. 343). A third dimension describing school climate was called academic press and was internally motivated. Academic press depicted the teacher's ability to raise the bar for students to increase goal attainment, students, in turn, responded favorably to expectations, and the principal provided needed resources and created the opportunity to attain additional resources by persuading superiors and motivating them to fulfill needs. Finally, the fourth dimension, environmental press, was externally motivated and prompted the community and parents to affect the operation of the school through the manipulation of school policy (Hoy et al., 2006). The four dimensions, collegial leadership, teacher professionalism, academic press, and environmental press, were found to justify a significant variance when correlated with student achievement. Researchers Hoy et al. (2006) discovered that student achievement and school climate have "an interdependent and reciprocal relationship" (p. 343). These researchers asserted that the study of school climate can inform and foundationally improve our understanding of the district climate construct. District climate was a construct of the integrated leadership of the superintendent, an enabling organizational structure, and teamwork of district leaders, principals, and teachers for student success (DiPaola & Smith, 2008).

### **Integrated Leadership of the Superintendent**

In 2001, with the institutionalization of No Child Left Behind, accountability moved from schools to schools and districts for student success. The district was considered a viable source of accountability therefore establishing a need for a coordinated effort to maximize teaching and

learning among students, teachers, and district leaders. The first factor found in operationalizing district climate was the integrated leadership of the superintendent. The superintendent must retain nine qualities as identified by Shannon and Bylsma (2007) for effective leadership: “lead by example, focus first on students and their learning, support and empower their colleagues, are learners [themselves], understand change processes, recognize and reward the achievement and struggles of others, invite participation and share responsibility, use expectations to change attitudes and behavior, and create safe learning environments where others can take risk to improve” (p. 48,49). An exemplar superintendent remained focused on equitable and excellent learning for students, teachers, and district leaders (Skrla, Scheurich, & Johnson, 2000) and a willingness to be held accountable for district goals was found to be necessary (Snipes et al., 2002). Several authors have argued that superintendents focus on the main thing, which remains the main thing. District goal setting allowed them to develop and nurture shared beliefs and begin to utilize district resources such as policies, structures, and human assets to influence instruction, focus on results, and support continuous improvement (Cawelti & Protheroe, 2001; McLaughlin, Talbert, Gilbert, Hightower, Husbands, Marsh, & Young, 2004; Togneri & Anderson, 2003). Marsh (2001) identified “setting goals and selecting professional development activities, supervising and evaluating staff, and monitoring schools’ activities” (p. 2) as valued superintendent actions that support comprehensive school reform. According to Shannon and Bylsma (2004), “the focus of the superintendent’s attention communicates commitment and signals the level of its importance. Superintendents who focus on instruction send a significant message to the central office staff and schools. The superintendent’s theory of action tends to influence and provide a foundation for a shared central office theory of action” (p. 16). Therefore, it seemed apparent that if a superintendent understands and values the importance of

professionalism and learning communities to move a district forward, then he/she offered opportunities for district leaders and principals to continuously learn in a community setting (McLaughlin & Talbert, 2003).

Marzano and Waters (2009) described the implications of effective leadership from the district level by establishing a relationship between district leadership and student achievement. Their meta-analysis examined and synthesized several research inquiries on the topic. Their meta-analysis was limited to research in the United States and included 14 empirical studies completed between 1970 and 2005 on district leadership and student achievement. A positive effect size of .24 was found, which showed an expected increase of approximately 10 percentile points. These effects were associated with “responsibilities” or “initiatives” within the district, providing a list of definite functions that districts can employ: “ensuring collaborative goal setting, establishing nonnegotiable goals for achievement and instruction, creating board alignment with and support of district goals, monitoring achievement and instruction goals, and, finally, allocating resources to support the goals of achievement and instruction” (Marzano & Waters, 2009, p. 6). An unexpected finding in the Marzano and Waters (2009) study, was that superintendent tenure was positively linked to an increase in student academic achievement. According to these authors, the integrated leadership of the superintendent provided continuity to the district and facilitated an enabling organizational structure that expeditiously empowered the district stakeholders; district leaders, school liaisons, principals, teachers, and students.

### **Enabling Organizational Structure**

Organizational structure had theoretical underpinnings in the commonly known work of Max Weber. Weber’s model was based on a division of labor or specialization that maximizes professional competence, processes effectiveness, and the proficient productivity of workers; an

impersonal orientation in which decisions are based on fact, not emotions, ensuring equity and enabling realistic deliberation; a hierarchy of authority or centralization fostering a subordinate system to ensure discipline compliance in regimented order of authority; rules and regulations. Weber (1947, p. 330), asserted “every bureaucracy has a system of rules and regulations, a ‘consistent system of abstract rules which have normally been intentionally established. Furthermore, administration of law was held to consist in the application of these rules to particular cases’” (Hoy & Miskel, 2008); and, a career orientation focused on improvement and advancement due to achievement or seniority (Hoy & Miskel, 2008). The Weberian model provided a basis on which other organizational structures could be constructed. Of course, Weber’s views existed ideally and may not be necessarily found in actual bureaucratic worlds. Gouldner (1950) utilized the Weberian model to delineate the level of bureaucratization in formal organizations (Hoy & Miskel, 2008) and several theorists have described models based on the degree of bureaucratization; however, for this study, the Hoy and Sweetland (2000) research was utilized to closely examine enabling organizational structure.

Hoy and Sweetland (2000) described “two of the pivotal characteristics of bureaucratic organizations are formalization (formal rules and procedures) and centralization (hierarchy of authority)” (p. 526). Formalization does not ensure that the work of the organization will be guaranteed to be productive and built into the culture of the organization. The organization fostered an element of professional judgment to aid in problem-solving and creating less rigidity among stakeholders (Hoy & Sweetland, 2000). Formalization was classified as enabling or coercive. Hoy and Sweetland (2000) advised that “procedures invite two-way communication, seeing problems as opportunities, encouraging differences, trusting, adjusting easily to mistakes, learning from mistakes, and delighting in the unexpected” (p. 527). The authors, in comparison,

provided characteristics of “coercive procedures, however, are characterized by one-way communication (top-down), viewing problems as constraints, mistrusting, forcing consensus, suspecting differences, punishing mistakes, and fearing the unexpected” (p. 527). Centralization referred to the extent to which stakeholders in the organization are involved in decision-making. If centralization was enabling, then involvement was flexible, cooperative and collaborative, and if centralization was hindering, then there was an obsession with control resulting in dissatisfaction, isolation, and an environment of antagonism, anger, and opposition (Hoy & Sweetland, 2000). Hoy and Sweetland (2000) used a typology to explain the relationship between enabling organizational structures and hindering organizational structures.

When formalization and centralization were enabling in an organizational structure, the qualities work in concert to create an enabling bureaucracy characterized by adaptive problem solving, consistent collaboration, and rules and procedures lending support to facilitate processes in the organization. When formalization was enabling and centralization was hindering, then the result was a hierarchical composition within the organization where the rules and procedures tended to hinder stakeholders from completing productive and innovative work. When centralization was enabling and formalization was coercive, then rules principally drove the work of the organization. In the final type of bureaucracy, rule bound, both formalization and centralization were dysfunctional, and the organization was characterized by an autocratic structure that tended to represses subordinates and hinders the work of the organization (Hoy & Sweetland, 2000). There was limited research applying the theory of enabling organizational structure directly to districts; however, it seemed reasonable to assume that districts would operate in a similar manner as schools with regard to enabling organization structure. Research conducted by Sinden, Hoy, and Sweetland (2004) indicated the qualities of an enabling

bureaucracy evident in schools participating in their study and these qualities distinguished them from the qualities of a hindering bureaucracy.

According to these researchers, the relationship of enabling organizational structures and mindful structures must be addressed. They described mindfulness as having both an individual quality and a collective quality. Individual mindfulness had rudimentary origins in the work of Langer (1989) and focused on the processes rather than outcomes, qualifying processes as conditional; Langer believed that understanding multiple perspectives allowed for innovation with new ideas. Langer's work (1989) exposed the paradigm through which we could examine and understand the behavior of others, and when the actual motives behind the behavior differ from the perceived motives then "context confusion" occurs. Hoy et al. (2006) proposed that individual mindfulness requires a continuous analysis of every situation to provide order and simplify experiences, to note the immediate paradigm differences, and to be able to reflect, refine, and process understanding in order to make insightful improvements (Hoy et al., 2006).

Weick and Sutcliffe (2006) described the processes associated with highly reliable organizations and found that mindful organizations exhibit the following: a preoccupation with failure, reluctance to simplify, sensitivity to operation, commitment to resilience, and deference to expertise. A preoccupation with failure meant the organizational group, either leaders or subordinates, consistently looked for and identified challenges that could preclude the organization from reaching its goals. No problem was too small and careful consideration was given to the small issues so they do not become larger issues. Reluctance to simplify was the organization's willingness to understand complexities rather than focus on ways to simplify thus leading to embracing the differences and enjoying the diverse environment where all stakeholders are valued. Sensitivity to operation involved the organizational leaders to

persistently examine the big picture and keep the main focus the main focus; for schools and districts the focus is teaching and learning. Sensitivity to this focus enabled effectiveness and allowed organizations to move toward their goals. Commitment to resilience involved understanding, coping, and resolving problems that may arise with perseverance and consistency. Hoy et al argued that organizational leaders and participants must exhibit courage and consideration in order to create a win-win atmosphere for all stakeholders. Finally, deference to expertise allowed the organization to match issues that arise with expertise regardless of position and status. In such organizations, decision-making was effortless and adaptable where each stakeholders' opinions and expertise was essential to the problem-solving. Deference to expertise replaced a hindering structure with an enabling structure. Hoy et al. (2006) found a high correlation between trust and mindfulness developing commitment and authenticity by stakeholders which resulted in positive outcomes. Thus, one could argue, organizational mindfulness warranted enabling structures.

### **Teamwork for Student Success**

Integrated leadership of the superintendent and an enabling organizational structure facilitated key processes leading to increased district climate; however, the third characteristic of district climate was maximizing the capacity of stakeholders to foster student achievement. Spillane and Thompson (1997) utilized data from a five-year Michigan study correlating state policies and school districts with regard to math and science education. Consistent with the theory for this study, researchers Spillane and Thompson found that the capacity to move a district forward relied on the transference of knowledge, skills, commitment, and disposition from a district level to the classroom (human capital) creating a need for professional networks,

trust and collaboration (social capital), and the fiscal resources to effectively support the professional networks and collaboration that was believed necessary for school improvement.

Human capital of a district relied heavily on the knowledge, commitment, and disposition of all stakeholders. The stakeholders know the shared vision and values of the district and were collectively working toward creating vibrant, rational strategies in order to pursue that vision. There was a moral imperative fostering district interdependence and responsibility for changing the entire district for the better. According to Shannon and Bylsma (2004), “This ‘lateral capacity building’ will extend, deepen, and help sustain system change” (p. 47). According to researchers Fullan, Bertani, and Quinn (2004), “Teams working together develop a clear, operational understanding of their goals and strategies, fostering new ideas, skills, and a shared commitment to district-wide development” (p. 44). Commitment was inspired from the acquisition of knowledge and skills as well as the observation of student achievement to validate the work and the beliefs of the stakeholders (Guskey, 2000; Shannon & Bylsma, 2004), sustain change, and develop a disposition of continual learning to increase the opportunities for improvement. Capacity to support ambitious goals focused centrally on instructional practices must be prevalent within the district to encourage equilibrium of shared learning from the district level to the classroom and from the classroom to the district level. The district leaders in central offices then became mobilized and retained a role of support rather than a role of compliance monitoring, ensuring a focus on serving and supporting the school, and creating a culture of responsibility for improvement (Shannon & Bylsma, 2004; Snipes et al., 2002).

According to this theory, because of the increased role of district leaders in the schools, newly established professional networks begin to form and extend beyond the traditional school professional learning communities to academies and professional learning groups at the district

level, learning groups dedicated to a particular instructional focus, vertical and horizontal teaming become prevalent, and “leadership also is extended beyond the traditional positions of superintendent and principal to include teacher leaders, assistant principals, central office administrators, union leaders, and school board members” (Shannon & Bylsma, 2004, p. 16). “No single group would be expected to tackle instructional reform alone. Instead, leadership would be shared, and members of each stakeholder group would take on roles they were best suited to lead” (Togneri & Anderson, 2003, p. 32). Elmore (2000) described this phenomenon as the theory of comparative advantage which built on the distributive leadership of the group and positioned groups with knowledge, skills, and experience to lead improvement efforts regardless of their position. He said this action alone creates strong trust and confidence within the district to meet the challenge of teacher and student learning. These professional interactions created networks of collaboration energizing and empowering the social capital of the school district. Trust and collaboration was commonplace. Trust as defined by Hoy and Tschannen-Moran (2003) included characteristics such as benevolence, reliability, competence, honesty, and openness creating an environment of interdependence where stakeholders are willing to take risks and be vulnerable to one another to enable the process of learning.

Finally, financial resources of the district provided evidence for building capacity toward improvement. The financial resources were allocated strategically to support the learning process for all stakeholders by providing time for collaboration, staffing to include instructional coaches enriching the learning of teachers, and materials to enhance the learning environment. Time was essential for collaboration and partnering among district stakeholders to examine district data and improve student performance across the district as a whole and focus on avenues for improvement at individual schools (McLaughlin & Talbert, 2003). Looking at data to inform

decision-making, provide resolution and feedback, enforce curriculum alignment, and for mapping the professional development needs of the district cultivated a data-rich environment and a comfort level with data that makes their use “safe” (Togneri & Anderson, 2003). Staffing may include, but certainly was not limited to, providing instructional coaching using a master teacher who demonstrates, observes, peer teaches, and provides feedback on instructional improvements in the classroom; staffing before-school and after-school programs for intervention and remediation (Calwelti & Protheroe 2001); and coordinating and embedding professional development based on the needs and goals of the district. Researchers David and Shields (2001) suggested “the greatest strides occur where the adults also have opportunities to learn” (p. v). A less traditional format for the embedded professional learning included school, leader, or teacher networks; academies; peer mentoring; instructional support through coaching; school-based networks or district-based networks providing firm connections between district goals and school-wide practices (Togneri & Anderson, 2003). Fiscal resources followed the areas of greatest need to facilitate a cultural transformation leading to better learning outcomes and more effective support and services from the district level (Kronley & Handley, 2003).

The key to teamwork for student success rested with the districts. “District must have the courage to acknowledge poor performance and the will to seek solutions” (Togneri & Anderson, 2003, p. 5); they realized reform and change takes time, but they could make a viable difference in charting the direction for the future, and they understood that “working together takes work” (Togneri & Anderson, 2003, p. 50).

## Professional Development

Although research on professional development has existed for over 30 years ago, the field remains in its infancy, and the slow growth may be attributed to the lack of programmatic researchers--“those who pick up a model and conduct a series of studies to generate precise information about its effects and how to reshape it for greater effect” (Joyce & Calhoun, 2010, p. 2). Another plausible explanation for lack of field growth could be that a list of precise qualities that govern exemplary professional development does not exist. If such a list existed, systematically evaluating professional development according to the list might allow the field to progress (Desimone, 2009; Guskey 2003).

Research conducted by Yoon, Duncan, Lee, Scarloss, and Shapley (2007), provided discouraging news that after analyzing more than 1,343 research studies on professional development from the time period of 1986 to 2003, only nine studies met the *What Works Clearinghouse Evidence Standards* (six were published in peer-reviewed journals, and three were doctoral dissertations). However, the results of these nine studies indicated

that average control group students would have increased their achievement by 21 percentile points if their teacher had received substantial professional development, [indicating] that providing professional development to teachers had a moderate effect on student achievement across the nine studies. The effect size was fairly consistent across three content areas reviewed. (Yoon et al., 2007, p. iii)

This gain in student achievement, although significant, posed a remarkable challenge regardless of the logical and instinctive link. Desimone (2009) had written that as research on professional development moved from case study to more quantitative studies, the empirical evidence generated from surveys, interview protocols, and structured observations needed to provide a firmer foundation for the effectiveness of professional development. According to Guskey and

Yoon (2009), researchers and practitioners should pursue increased rigor in the study of professional development.

At the fundamental core of effective professional development remained a well-developed image of teaching and learning (Garet, Porter, Desimone, Birman, & Yoon, 2001; Loucks-Horsley, Love, Stiles, Mundry, & Hewson, 2003; Yoon et al., 2007). In creating a vivid picture of teaching and learning, the National Board for Professional Teaching Standards (NBPTS) published standards in response to *A Nation Prepared: Teachers for the 21st Century--The Report of the Task Force on Teaching as a Profession* released by the Carnegie Forum on Education and the Economy (1986). The NBPTS were organized around five core prepositions: 1) teachers are committed to students and their learning; 2) teachers know the subject they teach and how to teach those subjects to students; 3) teachers are responsible for managing and monitoring students' learning; 4) teachers think systematically about their practice and learn from experience; and 5) teachers are members of learning communities (National Board for Professional Teaching Standards, 2011).

The renewed focus on Prepositions 4 and 5 provided a catalyst for reflection and assessment of practice promoting true change as well as a robust focus on ongoing, job embedded professional development. Intrinsically motivated teachers engaged in learning activities to address content knowledge, needs, pedagogical skill deficits, challenges to classroom management, and gaps in student-centered knowledge (Scribner, Cockrell, Cockrell, & Valentine, 1999). The growing participation in NBPTS certification by all 50 states, with 30 providing some financial incentive, established the framework for fostering change. In many districts, NBPTS certification was required for a teacher to mentor or serve as a teacher leader.

The professional organization advocating increased standards in professional development, Learning Forward (formerly known as the National Staff Development Council), has recently published their new *Standards for Professional Learning* (2011) for teachers that improved the learning for all students. These standards were paramount in moving schools toward continuous learning for improvement and are as follows:

Professional learning that increased educator effectiveness and results for all students

1. occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment;
2. requires skillful leaders who develop capacity, advocate, and create support systems for professional learning;
3. requires prioritizing, monitoring, and coordinating resources for educator learning;
4. uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning;
5. integrates theories, research, and models of human learning to achieve its intended outcomes;
6. applies research on change and sustains support for implementation of professional learning for long term change; and
7. aligns its outcomes with educator performance and student curriculum standards.

(Learning Forward, 2011, p. 23)

Learning communities were increasingly recommended and/or required by state departments of education, state legislators, and other agencies for professional learning for long-term change and sustained improvement (Arredondo Rucinski & Hazi, 2009). The literature

indicated that the district and school administrators act as “gatekeepers” leading to change in instructional practices (Desimone, Smith, & Ueno, 2006; Honig et al., 2010). Fullan (2007) argued that professional development is vastly different from professional learning. Professional development constituted attending workshops, courses, state and national conferences and meetings focused on particular standards, instructional strategies, programs, and collective or individual development in the profession. Professional learning “concerns whether teachers are learning every day, continuously improving their craft collectively. The development of habits of learning can occur only if they present themselves day after day” (Fullan, 2007, p. 283).

Teacher change was advocated as an essential component of the effectiveness of professional development. Guskey (2000) created a model for teacher change that begins with the professional development of a teacher. This development occurred through individual inquiry, expert coaching, supervisory methods, action research, professional learning communities, curriculum and instructional initiatives, workshops, or a series of trainings taking place over an extended period of time (Joyce & Calhoun, 2010, p. 11, 12). According to this model, a teacher attended professional development and made a change in classroom practice resulting in student learning and only after student achievement occurred was there a change in the teacher’s beliefs and attitude. “Deep change occurs only when beliefs are restructured through new understanding and experimentation with new behaviors” (Loucks-Horsley et al., 2003, p. 49). Implementing change in the classroom can sometimes go against what students, teachers, parents, and members of the community consider as traditional schooling (Fogleman, Fishman, & Krajcik, 2006). However, “creating school cultures that value professional learning will require school leaders to initiate changes that place professional development at the core of

teacher work to instill the value of continuous professional learning throughout a teachers' career" (Scribner, 1991, p. 261).

Seminal research conducted by Coleman, Campbell, Hobson, McPartland, Mood, Weinfield, and York (1966) concluded that only 10% of the variance in student achievement was due to the quality of schooling that the student received; however, following further examination of the Coleman report by Rosenthal (1991) and researchers Hunter and Schmidt (1990), found that this 10% translates into a percentile gain of approximately 23 points. Therefore, if a below average student attended a good school he is likely to score 23 percentile points higher than if he attended a poor school. School made a difference in student achievement, but more importantly Brophy and Good (1986) concluded that teachers make a difference in student achievement. Marzano, Pickering, and Pollock (2001) quantified the contribution to learning that the unique instructional strategies of a teacher and the implementation of that specific strategy to student achievement. It seemed reasonable to assume that the best resources for our schools are the adult educators in a persistent high state of growth that strengthens confidence, competence, morale, professionalism, and creativity facilitating improvement.

### **Professional Learning Communities**

Because schools were social systems, they were "characterized by an interdependence of parts, a clearly defined population, differentiation from its environment, a complex network of social relationships, and its own unique culture" (Hoy & Miskel, 2008, p. 22). Social systems, according to Hoy and Miskel (2008), were open systems, contained interdependent parts, were peopled, were goal oriented, were structural, were normative, were sanction bearing, were political, had distinctive cultures, and were conceptual and relative. The internal elements of the

social system provided the framework for collaboration essential to professional learning communities.

Collective teacher efficacy is an important school property from an organizational perspective because it helps explain the differential effect that schools have on student achievement. At the collective level, a culture of efficacy is a set of beliefs or social perceptions that are strengthened rather than depleted through their use and that give the school a distinctive identity. (Hoy & Miskel, 2008, p. 188)

Bandura's social cognitive theory suggested that the central function to "the mechanism of agency" was that of self-efficacy and provides ideas of how to build collective efficacy in schools via the components. Self-efficacy was defined as a "person's judgment about his or her capability to organize and execute a course of action that is required to attain a certain level of performance" (Hoy & Miskel, 2008, p. 157). The efficacious views of each individual within a social system provided an impetus for behavior contributing to motivation, goal-setting, expended effort, and resilience in the face of failure (Hoy & Miskel, 2008).

Self-efficacy was developed through a number of occurrences: mastery experience, modeling or vicarious experience, verbal persuasion, and affective states. In mastery experience, levels of efficacy are believed to increase following performance accomplishments and failures regarding certain tasks. According to Bandura, the actual experience increased knowledge and skills, coping ability, and, when performed repetitively, success. Modeling and vicarious experience allowed others to gain from observing an expert, internalizing, and relegating similar tasks in different situations promoting self-efficacy through social comparison. For teachers this has been shown to occur through professional development or within the confines of a professional learning community (Rhyne, 2011). Verbal persuasion, as an integral component of Bandura's theory, instilled the self-confidence that teachers can be talked into believing that they have the capacity to attain what they want to accomplish. The professional learning group

environment allowed for safe, confidential conversations where teachers can express their concerns, encourage one another, and celebrate successes, further promoting collective efficacy. These authors have shown that student achievement positively related to collective efficacy and collective efficacy has a greater effect on student achievement than socioeconomic status (Bandura, 1993; Goddard, Hoy, & Woolfolk Hoy, 2000). Finally, the affective state of a person's emotional response to the expected performance had either a positive or negative influence on judgment regarding the anticipated task. The emotional response of enthusiasm and excitement generated by professional growth opportunities, celebrated successes, and student achievement can positively boost one's self-confidence, analytical thinking, and performance improvement (Bandura, 1993; Hoy & Woolfolk Hoy, 2009; Hoy & Miskel, 2008). Teacher collective efficacy was believed to be a valuable resource provided that the school is a learning organization (Rhyne, 2011). As Senge wrote,

Learning organizations [are] organizations where people continually expand their capacity to create the results that they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together. (Senge, 2006, p. 3)

Senge (2006) explained that we have lost our “big picture” ability to see the world due to an instilled, learned value of disaggregating complex tasks in order to manage them more effectively, when, in actuality, this forces us to “lose our intrinsic sense of connection to a larger whole.” Senge hypothesized five disciplines (developmental pathways for obtaining skills and proficiency): systems thinking, personal mastery, mental models, building shared vision, and team learning. Upon closer examination, and in order to better understand the five disciplines of learning organizations in comparison to the five characteristics of professional learning communities (Hord, 1997), a table was created by the researcher identifying the similarities. To view the Senge-Hord Comparison, see Table 2.

Table 2

*Senge-Hord Comparison*

Senge's Five Disciplines	Hord's PLC Characteristics
<p>Shared Vision – “involves the skills of unearthing shared ‘pictures of the future’ foster genuine commitment and enrollment rather than compliance” (Senge, 2006).</p>	<p>Shared Values and Vision: Common held beliefs and a mental picture undeviating focused on student learning.</p>
<p>Personal Mastery – “the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively” (Senge, 2006).</p>	<p>Shared Personal Practice: A continuous feedback cycle where teachers give and receive non- evaluative feedback on a regular basis to foster individual and organizational improvement as well as increase human capacity.</p>
<p>Team Learning – learning that produces extraordinary results where individual learners are interdependent and growing more as a team than they would individually through dialogue and recognizing destructive patterns that undermine progress.</p>	<p>Collective Creativity: “Where people are continually expand their capacity to create results that they truly desire; where new and expansive patterns of thinking are nurtured; where collective aspiration is set free; and, where people are continually learning how to learn together.” (Senge, 1990, p. 3) steeped in reflective dialogue (Hord, 1997).</p>
<p>Systems Thinking – a conceptual framework providing tools and wisdom to allow patterns to emerge and the facility to empower us to change them.</p>	<p>Supportive/Shared Leadership: The administrators shares power and authority; facilitates and protects the collegial work of the staff; believes in collective decision-making; and, encourages continuous learning.</p>
<p>Mental Models – “deeply ingrained assumptions, generalizations, or even pictures or images that influences how we understand the world and how we take action” (Senge, 2006)</p>	<p>Supportive Conditions: The physical structural arrangement allowing individuals to come together as a unit to do the learning and the qualities or capacities of each individual to problem solve and make decisions to foster creative work (Hord, 1997).</p>

Senge's (2006) description of the impetus for building learning-oriented cultures within organizations paralleled the reasons for creating professional learning communities within a school.

Some seek a better model for how to manage and lead change. Some are trying to build an organization's overall capacity for continual adaptation to change. All seem to believe there is a way of managing and organizing work that is superior in both pragmatic and human terms, that significantly improves performance and creates the types of workplaces in which most of us would truly like to work. (Senge, 2006, p. 272)

The strategies provided by Senge to promote learning organizations: integrating learning and working, starting where you are and with whoever is there, becoming bicultural, creating practice fields, connecting with the core of the business, building learning communities, working with "the other" [embracing diversity], and developing learning infrastructures seem worthy of consideration. As observed by Senge (2006) "when our deep questions and aspirations connect with an organization's essence, community develops" (p. 307).

Sergiovanni argued that typically, too much emphasis is placed on the individualistic qualities of decision-making and rational choice, ignoring the emotional self with values, preferences, and belief systems. The decisions made are a product of norms, and consistently focus on the responses of others. "It often appears that we are individual decision makers who independently calculate the costs and benefits as we seek to maximize our personal gain and minimize our personal losses" (Sergiovanni, 1994, p. 54); however, Sergiovanni argued that we are capable of selflessness.

Selflessness leads to our need for community. Further, he said schools transformed into many variations of community (e.g., learning communities, inquiring communities, collegial communities, professional communities, inclusive communities, and caring communities). Hoy and Woolfolk Hoy (2009) explained that the culture of a school provides the impetus for

community. “Culture is the social glue that binds the organization together” (p. 324) and culture gave the organization a deep sense of identity; a stability in the social system; defines beliefs and boundaries, but most importantly allowed members to develop a significant commitment to the community (Hoy & Woolfolk Hoy, 2009; Hoy & Miskel, 2008).

The culture of a school arises from network of shared ideologies, coherent sets of beliefs that tie people together and that explain their work to them in terms of cause and effect relationships. Ideologies are the means by which we make sense of our lives, find direction, and commit ourselves to action. In communities, ideologies shape what principals and teachers believe and how they practice. (Sergiovanni, 1994, p. 72)

Sergiovanni (1994) recounted the convolution of true change through the words of a superintendent of Newton, Massachusetts, Irwin Blumer. Blumer believed that what constitutes school reform is shallow and forsakes the true issue, which is institutional change. In order for true reform to occur it must involve the total school community and be attributed to the deeply held shared values of all of the stakeholders. True change can only occur when there was acceptance of responsibility and follow-thru (Sergiovanni, 1994).

Researchers Newmann, King, and Youngs (2000) provided a clear picture of effectiveness through building school capacity. School capacity was attributed to the “1) teacher’s knowledge, skills, and dispositions; 2) professional community; 3) program coherence; 4) technical resources; and 5) principal leadership” (p. 64) therefore emphasizing the importance of professional community to the effectiveness of a school. Hord (1997, 2004) derived the following dimensions of professional learning communities after extensive reviews of research involving literature related to schools, businesses, and other organizations: supportive and shared leadership, shared values and vision, collective creativity, supportive conceptions, and shared personal practice.

## **Supportive/Shared Leadership**

Shared leadership, according to Gill (2006), was characterized by

the quality of interactions among people rather than positions in hierarchy; the effectiveness with which people work together in solving a problem rather than a solo performance by one leader; conversations rather than instructions; shared values and beliefs; and, honesty and a desire for the common good rather than self-interest, secrecy, and spin. (p. 30)

Copland (2003) suggested that distributive leadership, synonymous with shared leadership, remains a cooperative activity with communal goals involving the dissemination of duties, reciprocal accountability, and empowerment to many individuals resting on the bases of expert rather than hierarchical authority, all within the confines of a professional learning community of practice. Important to the maintenance of the learning community was the principal's role in staffing by keeping the right people with the shared values and vision on board; serving "as a buffer between district and school, protecting the work initiated at the school site" (p. 391); engaging in inquiry, analyzing data, encouraging other faculty members as well as community leaders to reflect and ask critical questions that professionally developed the faculty and created a community of practice within the school (Copland, 2003).

Collins (2001), from business, accredited getting "the right people on the bus (the wrong people off the bus)" as a necessary business practice before one decides where to drive the bus (p. 41), as making the credible difference between good organizations and great organizations. According to him, this practice proved essential for several reasons: rather than directions, the sheer relationships of who was on the bus was more important, especially, regarding flexibility; when the "right people" were in your organization, individual motivation and management become less of a problem; and, if you have the wrong people in your organization and discover a viable direction or vision, the organization will not move forward because "great vision without

great people is irrelevant” (Collins, 2001, p. 42). Unfortunately, it seemed that due to tenure laws, and because in some local schools principals inherit challenging environments at times peopled with less than stellar performers, getting the right people in place may be a long tedious process.

Successful shared leadership was believed to rest on the principal’s ability to strategically develop teacher leaders, and distinguish strengths in order to place them in key roles, instituting whole school change rather than classroom change (Stoll & Seashore Louis, 2007). In this type of teacher leadership environment, rather than the traditional “power over,” there was a transformational network to strategically divert “power to” others within the community of practice (Sergiovanni, 1994). According to Scribner et al. (1999), the principal’s philosophy of leadership, leadership style, values, and the ability to empower others by deliberately changing beliefs into practices directly impacted the creation, implementation, and sustainability of professional learning communities. The key element in the equation of forming and sustaining these communities of learners was believed to occur when the principal engenders trust and enables or inspires teachers to take ownership, to provide direction, and understands the moral purpose of continuous improvement coupled with innovation to develop the school. According to Tschannen-Moran (2004), “because of the hierarchical nature of the relationships within schools, it is the responsibility of the person with greater power to take the initiative to build and sustain trusting relationships” (p. 35); therefore, the idea of “continuous improvement in schools is directly related to the breadth and depth of leadership in the school” (Hipp, Huffman, Pankake, & Olivier, 2008). This leadership consistently prevailed among all stakeholders (principals, teachers, support staff, parents, and students) at the school by preserving and developing deep, lasting learning. According to Hargreaves and Fink (2006), this leadership “acts urgently, learns

from the past and from diversity, is resilient under pressure, waits patiently for results, and does not burn out people” (p. 20).

Hord, Roussin, and Sommers (2010) explained that culture “is the engine that drives community”, while “shared values are the fuel.” Research conducted by Hord et al. (2010) stated that cultural norms can be supported where they already exist and built where they do not. They were dependent not only on shared leadership but on the commitment and will of the teachers involved. Norms were found in the beliefs, values, and actions of the administrators and teachers in the school. The norms of school culture were collegiality, experimentation, high expectations, trust and confidence, tangible support, reaching out to the knowledge base, appreciation and recognition, caring, celebration, and humor, involvement in decision-making, protection of what’s important, traditions, and honest, open communication (Hord et al., 2010). The cultural norm philosophy was rooted in Sergiovanni’s (1984) theory about leadership forces that build good schools including cultural, symbolic, educational, human, and technical. “Cultures are built through the everyday business of school life” (Hord et al., 2010, p. 81) and exemplar leaders know and understand this principle of progressive organizations, and build their daily practices upon such norms. Scribner et al. (1999) called this consistent ability to build and develop norms double-loop learning (a term first introduced by Christopher Argyris, 1992), “a process that examines the underlying assumptions and leads, not only to the acquisition and integration of new knowledge, but to the effective use and dissemination of professional knowledge” (p. 155). They argued that this process alone can become the motivation for professional learning communities.

Finally, it is believed that shared leadership can play a critical role in priority setting for the allocation of resources such as time, funding, and personnel. In order for professional

learning communities to thrive and improve the culture of the school, adequate time must be allocated for teachers to team, strategize, and synergize (Bullough, 2007; Hipp et al., 2008; Hord et al., 2010; Sargent & Hannum, 2009; Wells, 2008). Sargent and Hannum (2009) conducted research on professional learning communities in rural China and have presented insight into how to maximize time by utilizing the practice of collective lesson planning. Time and physical space allocations to allow for building capacity for professional learning communities were priority in the Chinese school culture, whereas in the United States “the educational literature has been filled with discussion of the institutional and logistical barriers to regular and ongoing teacher professional interaction” (Sargent & Hannum, 2009, p. 274). Some political leaders, professional educational organizations, and innovative school leaders were making steps to change the practice of isolation that prevails in our schools. Provisions from President Barack Obama’s education plan included incentives for new mentoring programs focusing on the fledglings in the education community to combat teacher attrition and provide incentives for teacher collaboration through common planning times to share best practices (Obama & Biden, 2008).

### **Shared Values and Vision**

According to Fullan (2001), moral purpose was the compass for our direction in life and provides us with both means and ends. He said that values were a very important part of the journey, because he asked, how can you know your direction (vision) if you do not understand, value, or know who you are? “Values influence every aspect of our lives: our moral judgments, our responses to others, our commitments to personal and organizational goals. Values set the parameter for hundreds of decisions we all make every day” (Kouzes & Posner, 2007, p. 52), and these decisions are deeply embedded in our belief system. The belief system of each individual

was defined as a construct of values framed by experiences thus provide empowerment, guidance, motivation, and drive commitment (Kouzes & Posner, 2007). For this reason, it is essential that we were clear about our personal values. In a study conducted by Kouzes and Posner (2007) on the impact of values clarity on commitment, participants were asked to rate on a scale of 1 (*low*) to 7 (*high*) their degree of commitment to their organization and degree of clarity (*high or low*) involving their personal values and their organizational values. They determined that the people with the highest clarity of organization and personal values have the greatest degree of commitment to the organization (6.26). The lowest degree of commitment (4.87) was located where there is a high degree of organizational values clarity; however, there was lower personal values clarity. This indicated that employees in an organization can be very clear about the values of an organization but not committed to those values. The second highest level of commitment (4.90) indicated that if a person is clear on personal values that he or she will be more committed to the organization even though he or she may not be clear on the organizational values. This validated the statement that “personal values drive commitment” (Kouzes & Posner, 2007, p. 56). These values bound a group together and create an environment supporting the expression of opinions and open, effective communication (Huffman, 2003). According to Huffman, in order to express these values and further incorporate them into the school culture, a defined vision for the school must be constructed.

According to Jones (1996), “the purpose of our life on earth is to learn that our thoughts have power” (p. 80), and when we invest in this belief, then we “consciously create” destiny. Conscious creating, forward thinking, big picture thinking, or visionary thinking enabled us to focus and change the paradigms held in order to meet the expectations of the future. She argued that this vision, whether three words or a full statement, can act as a sifting or filtering device

when decision-making is necessary for the organization. Two valuable components of vision are mutual engagement and interdependence. Mutual engagement referred to the shared responsibility of all the stakeholders in the school for student learning, a supportive environment, sweeping communication, sufficient collective and individual motivation, and building capacity through initiating and nurturing relationships (Olivier, 2003). While mutual engagement provided the means, interdependence was believed to provide the relational quality needed to move the stakeholders in the direction of the vision. Interdependence, as defined by Covey (1989), “opens up worlds of possibilities for deep, rich, meaningful association, for geometrically increased productivity, for serving, for contributing, for learning, for growing” (p. 187). According to these writers, the concept heavily depended on the collaborative nature of the relationships of those involved in the professional learning community and the collective accountability for student learning that quantifies their approach for student success.

In-depth studies on vision, conducted by Huffman (2003), clarified that schools with mature professional learning communities adopt and facilitate their work based upon shared values and on their vision for the students in their school. The organizational framework created by Huffman (2003), provided clarity of how shared values and vision are a part of the school culture. She defined the what (interpersonal skills such as trust building, communication, and collaboration, and content knowledge including reading, technology and academic programs), the who (teachers, administrators, campus leadership team, district leaders, and community leaders), the how (strategic planning, staff development, consideration of values, and elimination of barriers), and the why (student focus, raise test scores, change issues, demographic concerns, and lifelong learning) that contribute to the shared vision and values of a school. These qualities provided direction and ultimately a mental map for teacher engagement and student success.

## **Collective Creativity**

Senge (1990) said collective creativity occurred as “people continually expand their capacity to create results that they truly desire; where new and expansive patterns of thinking are nurtured; where collective aspiration is set free; and, where people are continually learning how to learn together” (p. 3). The collective creativity of a professional learning community group was believed to reside in the ability to focus the learning on staff and student performance and successes. Adhering to the mission, vision, and strategic framework of the district; examining and reinforcing school improvement goals or plans; and, creating viable goals for the professional learning community was hypothesized to translate into effective activation energy for the group. Collective creativity required a mindset of collaboration, a plan of action, and various skills to center the work of the group and accomplish intended outcomes. As previously determined, Hipp et al. (2008) reported, “Culture represents the shared assumptions, beliefs, values, and habits that constitute the norms for the school that share how professionals think, feel, and act” (p. 176). Teacher change was believed by many to be inherent to the successful collective creativity of a professional learning community. Teachers must put aside their old habits and develop new skills and a staunch commitment to “democracy as a way of life” (Bullough, 2007, p. 170). According to Bullough, in these communities, there was a role reversal that leaves many teachers off guard and emotionally vulnerable due to the decentralization of power, ultimately, resulting in the influence and expertise residing within the group.

Glickman, Gordon, and Ross-Gordon (2006) described three levels of supervision that they have found to be correlated to the culture existing in schools. The conventional school was characterized by isolation, undue stress and psychological dilemma, routine, and a lack of induction for new teachers propagating a “sink or swim” mentality. In this culture, there was a

lack of dialogue concerning the instruction or curriculum, a lack of shared personal practice, and a lack of current technological shared practice. The environment was typified by dependency and a hierarchical structure of leadership. Secondly, Glickman and colleagues (2006) described the congenial school as “friendly social interactions and professional isolation” (p. 6). Finally, the collegial school was “driven by (1) a covenant of learning – mission, vision, and goals; (2) a charter for school-wide, democratic decision-making; and (3) a critical study process for informing decisions and conducting action research” (p. 6).

Wells and Feun (2007) studied the implementation practices of professional learning communities in six high schools, and found that a collegial culture was rare in the schools engaged in the study and “collaboration did not equate with improvement of teacher practice, teacher learning, or focus on student learning” for some of these schools (p. 29). Fullan (2007) stated that “collaboration is powerful, which means that people can do powerfully wrong things together” (p. 285). A focus must be on student performance, particularly with students who are disengaged and at risk of failure, for the collaboration to be collegial and productive (Hord, 2004).

In professional learning communities, formative assessment and reflective practice were believed to move teachers toward growth and eventually experimentation. These two qualities were essential with connecting the learning of adults with the performance of students. Action research has been used as teachers evaluate their change efforts and tend to rely less on standardized tests and district testing departments to lead the way to improved student learning. The leadership efforts of the district and principal may then become less formalized and more focused on teacher development. The prevailing atmosphere in schools may exclude the adventure that enabled teachers to take risks and pushed the boundaries of their knowledge and

skills, which, in turn, may benefit interdisciplinary work and connections across disciplines (Bullough, 2007). In the current environment, conversations lead to inquiry, inquiry leads to practice, and practice promotes collective creativity producing “possibilities with real consequences” (Bullough, 2007, p. 177).

### **Skills of Collective Creativity**

According to Hord (1997), the processes of collective creativity were steeped in reflective dialogue. The tone for reflective dialogue found foundational origins in the principles of engagement described by Mitchell and Sackney (2007): the deepest respect honoring ideas, thought and roles in the learning community; collective responsibility in assuming accountability for all children within the school; an appreciation of diversity where difference is a core value; a problem-solving orientation allowing flexibility and patience in dealing with “the ambiguity and uncertainty that accompany active experimentation and ongoing change, both of which are essential aspects of learning community” (p. 33); and, finally, positive role modeling to create a culture of learners and teachers among all stakeholders supporting “the development of distributed leadership, where individuals from all stakeholder groups seek out opportunities both to learn and lead” (p. 34). Fullan argued that when each member of the learning community values and practices effectively the principles of engagement, then change becomes easily accommodated and community is built on shared understanding.

In professional learning communities constructive conflict occurred in school setting. If dealt with effectively new learning can occur through values clarification, developing shared norms, and providing a common focus of effort toward student learning utilizing channels of reflective dialogue and collaboration (Scribner et al., 1999). Hord et al. (2010) described a true professional learning community as one in which there was an open dialogue, rigorous

discussion, and disagreement occurring on a regular basis in order to cultivate intentional growth and development among community members. “Conflicting views (attended by conflict resolution strategies) give variety and richness to the interactions of the community” (Hord et al., 2010, p. 121); thereby, justifying a need for conflict. In a culture of change, deeper reflective dialogue drove teachers through dissent and resistance to meet innovation, advances, and fresh ideas (Fullan, 2001; Wells, 2008). Conflict management became a necessary skill for collective creativity.

For communities of practice to achieve growth and development and insights to community, communication skills must be taught to the adult learners, students, and practiced actively in professional learning communities. According to Hord et al. (2010), norms of collaboration provided a means for developing communication skills within a group and practices within a successful community evolve into norms. Hord et al. (2010) explained that “norms signal expected behavior. Two payoffs occur when a practice becomes a norm: Because members are conscious of the behavior, they monitor both themselves individually and the group; and norms inform and shape the behaviors of new members.” (p. 135). Collaborative communication began by understanding, monitoring, and developing self-awareness of the different listening styles that are used within the context of conversation. Hord et al. (2010) specified seven styles of listening that provided filters for understanding; appreciative, learning, empathic, autobiographical, analyzing, advising, and judging. Professional learning communities were purposed for collaborative communication to foster inquiry and change among administrators, teachers, students, and the larger community (Clickman et al., 2010).

## **Supportive Conditions**

Schools were confined to particular structures as delineated by practices. Although first tackled as one entity, supportive conditions, two types of conditions emerged over time to prevail as current thinking: structural conditions and relational conditions. Structural conditions referred to the time, space, location, communication procedures, resources development, and scheduling involved in schooling that diminish teacher isolation and create collaborative efforts. Mitchell and Sackney (2007) defined the relational conditions of a professional learning community as deep respect, collective responsibility, appreciation for diversity, a problem-solving orientation, and, finally, positive role modeling. The conditions were believed to provide impetus, structure, and basis for community, and that they do not operate in isolation of one another, rather they work together to bring a sense of authenticity and responsibility for results.

Time was a resource needed to implement professional learning communities. In fact it may be the most critical factor allocated to professionals to ensure the development, implementation, and sustainability of professional learning communities (Hord, 2004). Time to talk, plan, restructure, discuss student needs and learning, change behaviors, examine data, perfect strategies and skills, and learn collaboratively moved organizations toward a common vision (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Hipp et al., 2008; Hord, 2004). Sargent and Hannum (2009) found that garnering and allocating time for professional learning may include but are certainly not limited to common planning times, early release time, late school arrival times, effective scheduling, protected work times as a discipline or grade level team, vertical and horizontal meetings, and the practice of joint lesson planning.

Fullan (2007) suggested that workplace learning and reflective practice promote an intentional use of professional reading coupled with collecting valuable student evidence thereby

encouraging productive and efficacious decision-making that leads to increased knowledge and confidence in professional judgment (Bolam et al., 2005; Stoll et al., 2006). According to Fullan (2007), if we are to transform the professional learning of educators, we cannot ignore the working conditions of teachers that contribute to a dysfunctional culture.

Only about one-third of teachers in the system engage in regular dialogue about instruction. One quarter work in schools where teacher and administrators disagree about school goals and norms of practice. Half fail to see any real coherence and continuity across programs in their schools. (p. 284)

There must be time and space arrangements to allow for experimentation and the unearthing of new ideas through social connection. Space needed to be allocated for teachers in collaborating groups to work in vicinity of each other, for professional discussions over coffee, for lunch time together to increase physical proximity for professional exchange, and these schools structures are in place in learning-focused schools (Bolam et al., 2005).

### **Shared Personal Practice**

In professional learning communities, shared personal practice was found to be the last to develop and rare to the existence of a professional learning community. The development of shared personal practice depended on the maturity of the professional learning community. Researchers, Bolam et al. (2005), suggested three stages of a professional learning community along a continuum of progression: starter, developer, and mature. In a mature professional learning community colleagues assisted each other to fine-tune instructional practices (Bullough, 2007; Hord et al., 2010). When shared personal practice was evident at a school, teachers gave and received non-evaluative feedback on a consistent basis to improve individually and collectively. This continuous feedback mechanism seemed to foster a collegial environment open to change and growth. Peers are supporting, sharing, and modeling effective instructional

practice “by creating an environment that supports learning through innovation and experimentation” (Bolam et al., 2005, p. 10).

Joyce and Showers (2002) focused on peer coaching as the environment leading to transfer, collegiality, and experimentation. They described peer coaching as the critical link for shared personal practice. In peer-coaching teams, the teachers observed one another and the coach was considered to be the one teaching while the observer is the one being coached (Joyce & Showers, 2002). The coaching facilitated a professional atmosphere of collegial learning, shared language, mastery, problem-solving capability, experimentation, and continuous study for improvement. The results of coaching allowed teachers to build instructional strategies with differentiation of technique because of the shared learning, ultimately, leading to increased self-efficacy. According to Joyce and Showers (2002), coached teachers practice new strategies more frequently, use new strategies more appropriately, have a greater long-term retention concerning the knowledge or skill, give purposeful explanations of the new strategy to their students, and, finally, coached teachers exhibit a great degree of cognition “as revealed through interviews, lesson plans, and classroom performance” (p. 87).

“A ‘learning-enriched’ teachers’ workplace appeared to be linked to better student academic progress (Rosenholtz 1989) and Louis and Marks (1998) found that in schools with positive professional communities students achieve at higher levels” (Bolam et al., 2005, p. 10). Schools operating as mature professional learning communities tended to retain teachers that focus on critical thinking skills through quality questioning, cultivate meaningful conversations, utilize inquiry-based learning that fosters real world connections for students, and take collective responsibility for the success of their students (Bolam et al., 2005).

## Summary

As the literature review has indicated, district climate was a reasonably new construct related to overall school climate; however, involving the integrated leadership of the superintendent, the enabling structure of the district, and the teamwork of all stakeholders for student success. This study explored the relationship between district climate and the development of professional learning communities in schools with respect to role (administrator or teacher), school level (elementary, middle, or high), and experience level (0-5 years, 6-10 years, 11-15 years, 16-20 years, or 21 or more years) of the educator. District climate was measured by the District Climate Index (DCI) survey and the development of professional learning communities was measured by the School Professional Staff as Learning Communities Questionnaire (SSLCQ). The demographic data was collected on the DCI. Chapter III discussed the design of the study. Chapter IV presented the results of the data analysis, and Chapter V included the results, responses to research questions, discussion of findings, and the recommendations and implications of research.

CHAPTER III:  
DESIGN OF THE STUDY

**Introduction**

The purpose of the study was to determine whether a relationship exists between district climate and professional learning communities. Chapter III included an overview of the research design, sample selection, information about the two instruments to be employed to investigate the variables, methods of data collection, methods of data analysis, and a summary. The research questions posed in this study were as follows:

1. Among teachers and administrators, is the perception of integrated superintendent leadership positively related to the development of professional learning communities in schools;
2. Among teachers and administrators, is the perception of enabling district structure positively related to the development of professional learning communities in schools;
3. Among teachers and administrators, is the perception of district teamwork for student success positively related to the development of professional learning communities in schools;
4. Do administrators demonstrate more positive perceptions toward the development of professional learning communities in schools than do teachers;

5. Do elementary school teachers demonstrate more positive perceptions toward the development of professional learning communities in schools than their counterparts in middle and high school; and
6. Do educators with less experience demonstrate more positive perceptions than those with more experience toward the development of professional learning communities in schools?

### **Hypotheses**

The research questions posed in the study led to the following hypotheses that were tested in their null form:

- H1: The greater the integrated superintendent leadership, the greater the degree of professional learning community.
- H2: The greater the enabling organizational structure, the greater the degree of professional learning community.
- H3: The greater the teamwork for student success, the greater the degree of professional learning community.
- H4: Integrated superintendent leadership, enabling organizational structure, and teamwork for student success will make an individual and joint contribution to the explanation of professional learning community.
- H5: There is no difference between how administrators and teachers perceive the development of professional learning communities in schools.
- H6: There is no difference in the level (elementary, middle, or high school) of the school and how an educator perceives the development of professional learning communities in schools.

H7: There is no difference in the experience (0-5 years, 6-10 years, 11-15 years, 16-20 years, or 21 and above) of educator and how the educator perceives the development of professional learning communities in schools.

### **Design**

The quantitative research design examined the relationship between the independent variable, professional learning communities, with the dependent variable, district climate, using two surveys. According to Fink and Kosecoff (1998), survey research is logical, deterministic, general/specific, and parsimonious so to address the researcher's quandary. The advantages to utilizing survey research included the following: economical, anonymous, standard questioning and uniform procedures, easy to score, and, finally, provides subjects time to reflect on their responses (McMillan & Schumacher, 2006). The survey research instrument, District Climate Index (DCI) was utilized to operationalize the general dimensions of district climate (DC), defined as integrated superintendent leadership (ISL), enabling organization structure (EOS), and teamwork for student success (TEAM) (DiPaola & Smith, 2008). The development and extent of implementation of professional learning communities (PLC) was operationalized by the School Professional Staff as Learning Community Questionnaire (SPSLCQ). The components of professional learning community at the organization level were determined by analyzing the internal relationship of the supportive/shared leadership, the shared vision and values of the organization, the collective learning and application of learning (collective creativity), the supportive conditions of the organization, and, shared personal practice of the members of the organization (Hord, et al. 1999). Surveys were used to collect data about these concepts. The statistical methods used for data analysis for the research were descriptive and correlational. The research variables were represented in Table 3.

Table 3

*Research Variables*

Variable	Instrument	Type of Variable
ISL*	DCI	Dependent
EOS*	DCI	Dependent
TEAM*	DCI	Dependent
DC*	DCI	Dependent
PLC*	DCI	Independent

\* ISL, integrated superintendent leadership; EOS, enabling organizational structure; TEAM, teamwork for student success; DC, district climate; and, PLC, professional learning community.

**Sample Selection**

The population in this study was composed of districts (see Appendix D) in the west Alabama in-service region. These districts included two suburban districts, Tuscaloosa City and Tuscaloosa County; two districts in rural settings, Lamar and Fayette; and, eight districts in the Black Belt area, Choctaw County, Greene County, Hale County, Marengo County, Pickens County, Sumter County, Demopolis City, and Linden City. The Black Belt region of Alabama included 12-21 counties and was named in representation of the dark, rich soils found in the region. The Alabama Black Belt region was a portion of the greater Southern Black Belt which extends from Maryland to Texas. Demographically, “Alabama's modern Black Belt region, and the Southern Black Belt in general, continue to be defined by the legacy of slavery and the plantation agriculture system. Its characteristics include low taxes on property, high rates of poverty and unemployment, low-achieving schools, and high rates of out-migration” (Winemiller, 2009). The school levels consisted of elementary, middle, and high schools. The sample will consist of 22 high schools (Grades 7-12 or 9-12), 19 middle schools (Grades 6-8), 5 junior high schools (Grades K-8), 45 elementary schools (Grades K-5 or K-6), and 10 unit

schools (Grades K-12). In 2011-2012, there were 47,036 students attending the 101 sample schools in the region and the school populations ranged from 93 to 1,509. The 12-district region represented 8.95% of the district population in the state and 6.39% of the state student population. Sixty-six schools have 60% or more of their students eligible for free and reduced lunch; 30 schools have between 31% and 59% of their students eligible for free and reduced lunch; and, five schools have 30% or fewer of their students eligible for free and reduced lunch. The 2011-2012 free and reduced lunch percentage for the region was 64.16% and for the state was 58.14%. The free and reduced lunch rate served as a poverty indicator with 60% or above indicating high poverty. Statistical data for schools in the region was accessed from the Alabama State Department of Education, Free Reduced Percentages Report, 2011-2012. This sample was chosen due to convenience and accessibility of districts/schools in the west Alabama in-service region. The principals and teachers from each participating district were administered the District Climate Index (DCI) (DiPaola & Smith, 2008) and the School Professional Staff as Learning Community Questionnaire (SPSLCQ) (Hord et al., 1999).

Because of the interdependent nature of professional learning communities, it is believed that all stakeholders involved in teaching and learning must participate to promote a ubiquitous, approach allowing everyone the opportunity to voice their perceptions. The participants in this study were principals, guidance counselors, librarians, and teachers. The settings were elementary schools, middle schools, and high schools comprising the districts. The participants have similar demographic composition and SES composition.

## **Instruments**

### **District Climate**

The measurement tool used to operationalize district climate in this research study was the District Climate Instrument (DCI) a Likert-type scale assessment with choices ranging from *Never* to *Very Frequently Occurs* created and piloted by DiPaola and Smith (2008). The pilot exploratory study for the DCI achieved a response rate of 54% and included district administrators, principals, and teachers from elementary, middle, and high school from 42 school districts. After a principal component analysis, a 39-item and five-factor solution was determined, accounting for 69.5% of the total variance. The factors on this instrument have a reliability coefficient using Cronbach's Alpha between .83 and .95. The five factors for the tentative DCI were enabling organizational structure, dynamic leadership, district accountability, administrative professionalism, and progress monitoring. Following a complete analysis using the district as the unit of analysis with the principal components, a 30-item DCI instrument emerged with three strong factors explaining 85.98% of the variance. The components established reliabilities for each factor present: superintendent leadership ( $\alpha = .99$ ), enabling structure ( $\alpha = .98$ ), and teamwork for student success ( $\alpha = .93$ ) (DiPaola & Smith, 2008). For a detailed preview of the DCI instrument, see Appendix E. For the purposes of this study, the reliability of the DCI was reestablished pertinent to this population.

### **Professional Learning Communities**

The instrument utilized to operationalize professional learning communities was the School Professional Staff as Learning Communities Questionnaire (SPSLCQ) created by Hord and colleagues in 1999. The SPSLCQ, a 17-item instrument, was piloted with a small heterogeneous group of teachers during a summer conference and attained a Cronbach Alpha of

.92. After further analysis in a field test with 690 respondents, the Cronbach Alpha for the group was .94. Content validity was determined in three stages: 1) from a review of the literature; 2) reviewed by three Appalachian Educational Laboratory (AEL) staffers; and, 3) author determined reformatting of the instrument consistent with the original purpose of the measurement. The factor analysis confirmed that the SPSLCQ is composed of a uniform construct of a mature professional learning community (Hord et al., 1999). For a detailed preview of the SPSLCQ instrument see Appendix F. The reliability for the SPSLCQ was determined based on the population in this study as .94.

### **Data Collection**

The surveys were distributed and data collected via traditional means (pen and paper surveys) upon IRB approval (see Appendix G). The surveys were conducted with confidentiality and anonymity and consent from the participants (see Appendix H). Demographic information was included on the survey, indicating role in the school (teacher or administrator), level (elementary, middle or high), and the experience of the educator in years. Following appropriate research protocols, permission was sought from the district office (see Appendix I) and from the principal (see Appendix J) of each school to participate in traditional survey. The data collection occurred in the spring semester of 2012 and surveys were distributed to 3365 certified faculty and school administrators in a 12-district region. Since the unit of analysis was the school, returned surveys were expected from a minimum of 70 schools.

### **Data Analysis**

To investigate the relationship between district climate and professional learning communities, the unit of analysis was the school. Research questions and data analysis explanations used are as follows:

- H1: The greater the integrated superintendent leadership, the greater the degree of professional learning community;
- H2: The greater the enabling organizational structure, the greater the degree of professional learning community; and
- H3: The greater the teamwork for student success, the greater the degree of professional learning community.

For Hypothesis 1, 2 and 3, these hypotheses were tested in their null form and the statistical data analysis included a bivariate correlation linear regression with the predictors of integrated superintendent leadership, enabling structure, and teamwork for student success as the dependent variable and the independent variable was professional learning community.

- H4: The three factors of district climate will make a positive collective contribution that will be significantly related to the development of professional learning communities in schools.

For Hypothesis 4, the statistical data analysis included a multiple regression with the predictors of integrated superintendent leadership, enabling structure, and teamwork for student success as the dependent variable and the independent variable was professional learning communities. SES was utilized as a control variable in this phase of the study.

- H5: There is no difference between how administrators and teachers perceive the development of professional learning communities in schools.

For Hypothesis 5, the independent variable was the role (administrator or teacher) and the dependent variable was district climate and professional learning community. The data analysis was performed using an independent samples *t* test for Research Question 2.

H6: There is no difference in the level (elementary, middle, or high school) of the school and how educator perceives the development of professional learning communities in schools.

In regard to Hypothesis 6, the independent variable was represented by grade level of schools (elementary, middle, or high school) and the dependent variable was professional learning community.

H7: There is no difference in the experience (0-5 years, 6-10 years, 11-15 years, 16-20 years, or 21 and above) of educator and how the educator perceives the development of professional learning communities in schools.

With regard to Hypothesis 7, the independent variable was the experience of the educator and the dependent variable was district climate and professional learning community. The statistical analysis for Hypothesis 6 and 7 was an ANOVA. The *Statistical Package for the Social Sciences* (SPSS) software 19.0 ® was utilized to conduct the data analysis in this study.

### **Summary**

This study explored the relationship between district climate (integrated superintendent leadership, enabling school structure, and teamwork for student success) and the development of professional learning communities at the school level. The role (administrator or teacher) of the educator, the level (elementary, middle, or high) of the school, and the educational experience (0-5 years, 6-10 years, 11-15 years, 16-20 years, and 21 plus years) of the educator were all be examined with respect to district climate and professional learning communities. Data were collected and analyzed using quantitative techniques.

CHAPTER IV:  
ANALYSIS OF DATA

**Introduction**

Chapter IV presents a summary of the findings on the perceptions of the relationships among teachers and administrators between the components of district climate and the development of professional learning communities in a convenience sample of west Alabama schools. The study methodology utilized quantitative data and the unit of analysis was the school. The timeframe for data collection was during the spring semester of 2012. This chapter is organized into five sections presenting descriptive statistics, reliability of the instruments and subscales, a principal component analysis, a descriptive summary, with the results for each hypothesis, and a brief summary of the data findings.

The construct of district climate (DC) was operationalized using a 30-item District Climate Index (DCI) developed by DiPaola and Smith (2008) consisting of Likert items varying from (1) never to (5) very frequently. The DCI contained three subscales each identifying a component of district climate: integrated superintendent leadership (ISL), enabling organizational structure (EOS), and teamwork of the district leaders for student success (TEAM). Professional learning community (PLC) was operationalized by the School Professional Staff as Learning Communities Questionnaire (SPSLCQ) created in 1999 by Hord and colleagues. The SPSLCQ consisted of a 17 – item Likert scale varying from (1) indicating no professional learning community present to (5) professional learning community present.

The original sample consisted of 101 schools in 12 school districts. Permission was granted from 11 superintendents to contact principals in 98 schools to enlist the participation of

the principal and the teachers in the study. Of the 98 schools allowed to participate by the superintendent, 83 schools returned survey data for a rate of 85%. The total number of respondents submitting surveys was 1200 from schools with a variety of grade configurations. However, the unit of analysis was the school for a sample size of 83.

### **Descriptive Statistics**

The descriptive statistics for the research variables and the demographics variables are presented in this section. The research variables consisted of integrated superintendent leadership (ISL), enabling organizational structure (EOS), teamwork of district leaders for student success (TEAM), district climate (DC), and professional learning community (PLC). The descriptive statistical data for the research variables are provided in Table 4 and include the number of schools (N), minimum (Min) and maximum scores (Max), mean (M), standard deviation (SD), and variance (V). Aggregated school data were used to determine the descriptive statistics for each variable and the socioeconomic status (SES) variable was defined by using the formula (1 - free and reduced lunch rate).

The demographic variables consisted of role (ROLE), level (LEV), and years of educator experience (EXP). Of the 1200 total respondents, 1118 (93%) responded to the demographic question indicating their role as a teacher 1071 (96% of respondents) and as an administrator 47 (4% of respondents). Of the 1200 total respondents, 906 (76%) identified the grade level of education at which they worked as elementary (61%), middle (13%), and high (26%). The demographic variable of educator experience was presented to respondents in a range and the results are as follows: 0 – 5 years (20%), 6 – 10 years (20%), 11 – 15 years (18%), 16 – 20 years (15%), and 21 and above (26%). The descriptive statistics for the demographic variables are displayed in Table 4.

Table 4

*Descriptive Statistics for Research and Demographic Variables*

	Variable	N	M	SD	V	Min	Max
<b>Subscale</b>	ISL	83	3.80	.47	.22	2.22	4.94
	EOS	83	3.92	.36	.13	3.17	4.90
	TEAM	83	4.21	.32	.10	3.31	4.95
<b>Instrument</b>	DCI (DC)	83	3.95	.32	.10	3.30	4.88
	SPSLCQ (PLC)	83	3.95	.37	.14	2.73	4.88
<b>Control Variable</b>	SES	83	.33	.23	.05	.02	.94
<b>Demographic Variables</b>	ROLE	1118	1.04	.20	.04	1	2
	LEV	906	1.65	.87	.75	1	3
	EXP	1111	3.06	1.5	2.22	1	5

**Reliability of Instruments and Subscales**

A Cronbach alpha coefficient of reliability was determined for each instrument and for the three components of the DCI to establish the internal consistency for each scale. Reliabilities based on the individual as the unit of analysis for the subscales of the DCI were  $\alpha = .93$  for integrated superintendent leadership,  $\alpha = .95$  for enabling organizational structure, and  $\alpha = .84$  for teamwork for student success and were .98, .97, and .93, respectively, for aggregated data by school. In comparison to the Cronbach alpha originally calculated for the DCI of .99 for integrated superintendent leadership, .98 for enabling organizational structure, and .93 for teamwork for student success (DiPaola & Smith, 2008), these demonstrated a strong internal consistency. The DCI instrument reliability was identified as  $\alpha = .96$  for individual data and  $\alpha = .97$  for the aggregated school data. The SPSLCQ instrument reliability was determined as  $\alpha = .94$  with the individual as the unit of analysis and  $\alpha = .97$  with the school as the unit of analysis. The Cronbach alpha for the original instrument based on the work of Hord and colleagues (1999)

indicated a strong internal consistency ( $r = .94$ ). A reliability coefficient of .70 and above was determined acceptable (George & Mallery, 2003). The reliabilities based on the individual data are presented in Table 5 and the aggregated school data are displayed in Table 6.

Table 5

*Alpha Coefficients of Reliability (Unit of Analysis = Individual)*

Variable	Instrument	Number of Items	Cronbach's Alpha	N
ISL	DCI	9	.93	1200
EOS	DCI	14	.95	1200
TEAM	DCI	7	.84	1200
DC	DCI	30	.96	1200
PLC	SPSLCQ	17	.94	1200

Table 6

*Alpha Coefficients of Reliability (Unit of Analysis = School)*

Variable	Instrument	Number of items	Cronbach's Alpha	N
ISL	DCI	9	.98	83
EOS	DCI	14	.97	83
TEAM	DCI	7	.93	83
DCI	DCI	30	.97	83
PLC	SPSLCQ	17	.97	83

### **Principal Component Analysis**

The three foundational factors of district climate are integrated superintendent leadership (ISL), enabling organizational structure (EOS), and teamwork for student success (TEAM) and were described in an earlier study (DiPaola & Smith, 2008). In view of the previous research, the data were factors analyzed and following a principal component analysis with a varimax,

orthogonal rotation, three factors emerged. The same analyses were performed with the current data and again, three factors emerged, the same as for the original instrument. The first factor to load was enabling organizational structure (EOS) on nine survey items (questions 3, 4, 5, 8, 9, 12, 13, 14, 15). The second factor to load was integrated superintendent leadership (ISL) on 14 survey items (questions 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30). The final factor to load was teamwork for student success (TEAM) on 7 survey items (questions 1, 2, 6, 7, 10, 11, 17). Three factors were based on the number of eigenvalues greater than 1. The factor analysis accounted for 67% of the variance, the Kaiser-Meyer-Okin measure of sample adequacy was .97 at a  $p$  value of less than .005 indicating that the factor analysis was appropriate. The construct validity was supported in that the three factors extracted and loaded above .467 (Carmines & Zeller, 1979). In the cross validation of the sample factors with the original DCI instrument, the results supported the meaningfulness of the factors as the items loaded on each factor as in the original research. This study represented a gross comparison confirmed by an exploratory factor analysis; however, more rigorous analysis could be performed for specific factor score validation. The results could have also been determined by a confirmatory factor analysis; but this would have required a larger sample size and the use of the individual survey data. The preference for the exploratory factor analysis was necessary to replicate the approach from the original research (DiPaola & Smith, 2008). The three factors retained were (I) enabling organizational structure, (II) superintendent leadership, and (III) teamwork for student success. The results of the principal component analysis are presented in Table 7.

Table 7

*Factor Solution for the District Climate Index*

Items	Enabling Structure	Superintendent Leadership	Teamwork for Student Success
The superintendent explores all sides of topics and admits that other opinions exist. (8)	.250	.845	.205
The superintendent is willing to make changes. (12)	.233	.835	.155
The superintendent is responsive to the needs and concerns of community members. (3)	.231	.822	.179
The superintendent is responsive to the needs and concerns expressed by administrators. (15)	.317	.815	.189
The superintendent treats all administrators as his or her equal. (9)	.216	.814	.194
The superintendent is friendly and approachable. (4)	.191	.813	.140
The superintendent puts suggestions made by administrators into operation. (5)	.284	.806	.179
The superintendent maintains definite standards of performance. (14)	.382	.717	.220
The superintendent lets administrators know what is expected of them. (13)	.328	.671	.293
Results of our district monitoring process stimulate significant improvements in the district. (28)	.786	.284	.190
Our district has implemented an effective process for monitoring progress in achieving goals. (20)	.785	.191	.193
Our district incorporates student assessment data in to all appropriate decisions. (29)	.752	.236	.199
District supervision/evaluation criteria include measures of staff accountability. (21)	.751	.210	.221
Members of district departments have a detailed understanding of how their work relates to that of other departments. (22)	.729	.309	.185
The organizational structures of the districts facilitate the day-to-day work of all staff groups. (24)	.723	.381	.184

*Table 7 (continued)*  
*Factor Solution for the District Climate Index*

Items	Enabling Structure	Superintendent Leadership	Teamwork for Student Success
District leaders assist staff members in finding resources to accomplish their goals. (23)	.723	.320	.176
Our district systematically monitors the progress of school improvement. (27)	.716	.248	.235
District policies and procedures recognize that student learning supersedes administrative convenience. (30)	.707	.356	.211
Results of our district monitoring process lead me to review my own practice. (19)	.687	.169	.208
District support to my school reflects the school's unique needs. (26)	.686	.405	.147
Data on district operations are reviewed regularly to determine progress in achieving goals. (18)	.635	.157	.330
Staff members are aware of our district mission and goals. (16)	.563	.093	.354
I can communicate with most other members of the district. (25)	.563	.301	.244
Administrators respect the professional competence of their colleagues. (2)	.203	.215	.824
The interactions between and among administrators are cooperative. (1)	.170	.259	.789
Administrators are committed to helping students. (7)	.245	.203	.759
Administrators help and support each other. (6)	.277	.330	.713
Administrators provide strong social support for colleagues. (10)	.364	.258	.678
Principals created learning environments that are orderly and serious. (11)	.449	.077	.634
I have confidence in the integrity of my colleagues. (17)	.520	.098	.467

*Parentheses denote item number on DCI. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.*

## **Test of the Research Hypotheses**

The following section provides statistical analysis for each hypothesis tested. Each of the following research hypotheses was tested in its null form.

H1: The greater the integrated superintendent leadership, the greater the degree of professional learning community.

To identify the relationship between the district climate components of integrated superintendent leadership (ISL) and professional learning community (PLC), a Pearson correlation coefficient was calculated to test the null form of the hypothesis ( $r = .38, p < .01$ ). A significant, positive correlation was confirmed between ISL and PLC. Therefore, based on evidence in the correlation data the hypothesis was supported in the null form and as integrated superintendent leadership increased, professional learning communities increased (see Table 8). However, it should be noted that the practical significance was low in that the relationship explained only about 14% of the variance between integrated superintendent leadership and the degree of professional learning community.

H2: The greater the enabling organizational structure, the greater the degree of professional learning community.

A Pearson correlation coefficient was determined to test the hypothesis in the null form and distinguish the relationship between the subscale of the DCI enabling organizational structure and professional learning community,  $r = .80, p < .01$  (see Table 8). Enabling organizational structure exhibited the strongest correlation to professional learning community. The hypothesis was supported by the correlational data and as enabling organizational structure increased, professional learning community increased. This relationship was also practically significant in that it explained 64% of the variance.

H3: The greater the teamwork for student success, the greater the degree of professional learning community.

The null form of the hypothesis was tested and a Pearson correlation coefficient was determined to ascertain the relationship between the subscale of teamwork for student success and professional learning community,  $r = .74, p < .01$  (see Table 8). A significant, positive correlation between teamwork for student success and professional learning community was determined. Because of the evidence presented in the correlation data as the teamwork for student success in the district increased, professional learning community increased. H3 was supported by the correlational data. Again, it was also practically significant in that approximately 55% of the variance was explained in the relationship.

Hypotheses 1, 2, and 3 were substantiated by the correlational data. Another important aspect of the correlational data represented in Table 8 was the correlations between the components of district climate (DC). Integrated superintendent leadership and enabling organizational structure had a significant relationship ( $r = .502, p < .01$ ). Enabling organizational structure and teamwork for student success confirmed the strongest correlation among all of the subscale components of DC ( $r = .718, p < .01$ ). Enabling organizational structure exhibited a robust correlation with DC ( $r = .907, p < .01$ ). District climate and professional learning community shared an overall, conclusive correlation ( $r = .758, p < .01$ ). The three subscale research variables of integrated superintendent leadership (ISL), enabling organizational structure (EOS), and teamwork for student success (TEAM), the cumulative variables of district climate (DC) and professional learning community (PLC), and their relationships were examined in Table 8. Socioeconomic status (SES) was the control variable.

Table 8

*Intercorrelational Matrix of Research Variables*

	2	3	4	5
ISL	.502**	.404**	.792**	.384**
EOS		.718**	.907**	.802**
TEAM			.782**	.743**
DC				.758**
PLC				.003
SES				-

*Note.* \*\* $p < .01$

H4: Integrated superintendent leadership, enabling organizational structure, and teamwork for student success will provide an individual and joint contribution to the explanation of professional learning community.

Individually, integrated superintendent leadership ( $r = .38$ ), enabling organizational structure ( $r = .80$ ), and teamwork for student success ( $r = .74$ ) made a significant, positive correlation to the dependent variable professional learning community as determined by bivariate correlational data. This hypothesis was tested in the null form and the joint contribution was studied by a regression of the dependent variable of professional learning community on the independent variables of integrated superintendent leadership (ISL), enabling organizational structure (EOS), and teamwork for student success (see Table 9). EOS was the strongest predictor of professional learning community, as measured by the DCI ( $\beta = .56, p < .01$ ) see Table 9. Teamwork for student success made a contribution to professional learning community ( $\beta = .36, p < .01$ ) when controlling for SES in Table 10.

Integrated superintendent leadership and SES had no effect on professional learning community,  $\beta = -.05$  and  $\beta = -.03$ , respectively. The combined relationship of the three variables

explained 70% ( $R^2 = .704$ ) of the variance for professional learning community, as measured by the District Climate Index and the School Professional Staff as Learning Community Questionnaire, thus supporting a joint contribution to the explanation of professional learning community.

Table 9

*Multiple Regression PLC on Predictors ISL, ESS and TEAM (n = 82)*

PLC	B	B	Sig.
Predictor variables			
ISL	-.035	-.045	.527
EOS	.587	.575*	≤.001
TEAM	.401	.349*	≤.001

Note: \* $p < .01$ ,  $R^2 = .703^*$ , Adjusted  $R^2 = .692^*$

Table 10

*Summary of Regression Analysis for Predictor Variables Controlling for SES (N = 82)*

PLC	r	B	$\beta$	Sig.
Variable				
ISL	.384	-.041	-.053	.475
EOS	.802*	.578	.567*	≤.001
TEAM	.743*	.417	.363*	≤.001
SES	.003	-.049	-.030	.652

Note: \* $p < .01$ ,  $R^2 = .704^*$ , Adjusted  $R^2 = .689^*$

H5: There is no difference between how administrators and teachers perceive the development of professional learning communities in schools.

An independent samples  $t$  test was used to evaluate the PLC perceptions of teachers and administrators in the sample schools. The test was significant,  $t(54) = 2.94$ ,  $p = .005$ , the

administrators had a higher perception of professional learning community ( $M = 4.14, SD = .468$ ) than did the teachers ( $M = 3.94, SD = .643$ ); therefore, the null hypothesis is rejected. The effect size for the t-test groups was determined to be large ( $ES = .43$ ) indicating that the groups are relative to one another in position, but the medium effect size indicated the increasing lack of overlap between the two groups as defined by Cohen’s work (Salkind, 2008). See Table 11 for the results of the independent samples *t*-test.

Table 11

*Independent Samples t – Test Analysis of Professional Learning Community and Role*

Group	N	M	SD	ES	t	p
1 (Teacher)	1071	3.94	.643			
				.43	2.94	.005
2 (Admin)	47	4.14	.468			

H6: There is no difference in the level (elementary, middle, or high school) of the school and how an educator perceives the development of professional learning communities in schools.

A one-way ANOVA was conducted to test the null hypothesis for the PLC perceptions among the three school levels. The perception for PLC differed significantly across the three levels ( $F(2,903) = 14.125, p < .005$ ). Tukey post-hoc comparisons of each of the school levels indicated a significant relationship between the elementary school group ( $M = 4.01, 95\% CI [3.96, 4.06]$ ) and the high school group ( $M = 3.75, 95\% CI [3.66, 3.84]$ ). Comparisons between the middle school group ( $M = 3.88, 95\% CI [3.75, 4.02]$ ) and the other two groups (elementary and high) were not significant ( $p < .05$ ). The eta-squared ( $\eta^2 = .030$ ) or 3% of the variability in the PLC variable can be explained by school level.

Table 12

*Analysis of Variance between Professional Learning Community and School Level*

Level	Group	N	M	SD	$\eta^2$	F	p
1	Elementary	552	4.01	.601			
2	Middle	117	3.88	.747			
3	High	237	3.75	.674			
					.030	14.125	<.001

Table 13

*Post Hoc Test Comparisons between Professional Learning Community and School Level*

Level	Group	Mean Differences	
		2	3
1	Elementary	.130	.261*
2	Middle		.132
3	High		

\* $p < .05$

H7: There is no difference in the experience (0-5 years, 6-10 years, 11-15 years, 16-20 years, or 21 and above) of educator and how the educator perceives the development of professional learning communities in schools.

A one-way ANOVA was used to test for preferences of PLC with varying educator years of experience in grades kindergarten through twelfth grade. Preferences for PLC did not differ significantly across the five ranges of years of educator experience,  $F(4,1106) = 0.262$ ,  $p = .90$ . Based on these findings, the null hypothesis was not rejected.

**Summary of Findings**

Chapter IV presented the analysis of the data collected in the study through displayed descriptive statistics, examined reliability of the instruments and subscales, an authenticated

principal component analysis of the District Climate Index (DCI) from the original instrument, and provided a complete and descriptive summary of the results for each hypothesis. The purpose of this study was to examine the perception of the relationships between district climate and the formation of professional learning communities at the school level. The three components of district climate, integrated superintendent leadership, enabling school structure, and the teamwork of the district and the schools for student success were investigated, individually and jointly.

Correlational research data supported hypotheses 1, 2 and 3 indicating as integrated superintendent leadership, enabling school structure, and teamwork for student success increased, professional learning community increased. While enabling school structure individually made the strongest contribution of the variance for professional learning community teamwork for student success provided a significant contribution to the definition of PLC, integrated superintendent leadership and SES had no effect on PLC. Jointly, the contribution of the three variable had a combined effect that explained 70% of the variance ( $R^2 = .704$ ). Administrators had a higher perception of professional learning community than teachers; however, they are relative in position with a small effect size of less than .20. The perception of professional learning community differed significantly across school levels ( $F(2,903) = 14.125$ ,  $p < .005$ ) and post-hoc comparison data indicated that there were significant relationships between the elementary and high school levels. The preference of PLC with varying educator years of experience did not differ significantly across the five ranges of experience.

The next chapter will discuss the findings, implications for theory and practice, and recommendations for further study.

CHAPTER V:  
DISCUSSION AND CONCLUSIONS

**Statement of Findings**

The purpose of this study was to investigate whether principals who encountered the theory, demonstration, practice, and peer coaching components of professional development, within the structure of a professional learning community at the district level, will implement a similar type of professional learning in their schools. In examining this relationship, the focus became the construct of district climate and how the perception of each component enabled the development of professional learning communities at the school level thus allowing for the translation of learning and expectations from district to school. District climate was a new construct with little supporting research. An earlier study of district climate investigated the relationships between district climate, school climate and student achievement; however, the connection to professional learning community warranted a deeper look. The three components of district climate, integrated superintendent leadership, enabling organizational structure, and the teamwork of the district including the principals, and the schools for student success were investigated, individually and jointly.

The study was a quantitative study targeting teachers and administrators in 101 west Alabama schools in a variety of grade levels. The District Climate Index (DCI) and the School Professional Staff Learning Community Questionnaire (SPSLCQ) as well as an informed consent letter were included in each survey packet for the number of certified staff and administrators at the school. Surveys were distributed in early spring of 2012 using a traditional pencil and paper method and data were collected. The unit of analysis was the school and

demographic information including roles, school level, and educator's years of experience was requested. The surveys were coded with an assigned school code to ensure confidentiality.

The original sample consisted of 101 schools in 12 school districts. Superintendents from 11 districts representing 98 schools granted permission for schools in the district to participate in the study. Of the 98 schools allowed to participate, 83 schools returned survey data for a rate of 85%. The total respondents submitting surveys were 1200 from schools representing a variety of grade levels. The high response rate can be attributed to personal visits and relationship building with the superintendents and principals in the region.

Of the three subcomponents of the district climate index (DCI) correlational data validated that the first component integrated superintendent leadership, the greater the degree of integrated superintendent leadership, the greater the degree of professional learning community; however, the correlation coefficient indicated a weak relationship between the two variables. The second subcomponent, enabling organizational structure substantiated by the correlation coefficient revealed the strongest relationship of the three components of district climate to PLCs. The greater the teamwork for student success in the district, the greater the degree of professional learning community at the school level. Multiple regression analyses of the three variables had a combined effect that explained 70% of the variance ( $R^2 = .704$ ) of the definition of professional learning community. Socioeconomic status had no effect on PLC.

In examining the classification variable, administrators had a higher perception of professional learning community than teachers as determined by an independent samples t-test determining a large effect size ( $ES = .64, p < .01$ ) indicating an increasing lack of overlap in the two groups (Salikind, 2008). The perception of professional learning community differed significantly across school levels (elementary, middle and high) and post - hoc comparison data

indicated that there were significant relationships between the elementary and high school levels. In other words, the variable of educator experience had no significant variance with perceptions of professional learning community. The relationship between school level and professional learning community and educator experience and professional learning community were determined by a one-way analysis of variance. The hypothesized findings were as follows:

1. Integrated superintendent leadership constituted a weak, significant relationship to the development of professional learning community;
2. Enabling organizational structure was significantly and strongly correlated to professional learning community;
3. Teamwork for student success was significantly and positively related;
4. Integrated superintendent leadership, enabling organizational structure, and teamwork for student success when regressed on professional learning community made significant and positive contributions. In other words, enabling organizational structure was the strongest contributor to the relationship. Socioeconomic status had no effect on professional learning community;
5. Administrators demonstrated higher perceptions of professional learning community than teachers;
6. School level differed significantly across the levels with the elementary and high school group exhibiting a positive, significant relationship, and none was found for middle school; and
7. Educator experience showed no finding in the statistical analysis. In other words, teachers become disillusioned with the ideas of professional learning community as longevity at the school increases. They have a need to feel connected to the

history of journey of the school and if they are new to the school, then this also impacts their feelings of trust, efficacy, and respect for others (Hipp et al., 2008)

The first research finding in this study examined the relationship between integrated superintendent leadership and professional learning community and found that this relationship was a weak, significant relationship. Marzano and Waters (2009) examined the implication of district leadership on student achievement and found a weak, significant correlation and that the positive correlations between superintendent length of service and student achievement confirmed the value of the stability of the superintendent. One can infer that there is a similar, parallel relationship between superintendent integrated leadership and professional learning community as between superintendent longevity and student achievement (Marzano & Waters, 2009). Enabling organization structure and teamwork for student success was positively, significantly correlated to professional learning community indicating the importance of Leithwood and Jantzi (2008) work in explaining that district leadership and conditions strongly influencing the efficacy of leadership in the district.

The three subcomponents of the District Climate Instrument (DCI) jointly explained 70% of the variance of PLC for a strong combined effect indicating that the district climate, the professional development focus, the instructional reinforcement, and monitoring shape what principals and teachers do in schools to impact student outcomes (Elmore & Burney, 1997). The relationship between socioeconomic status and professional learning community was not significant.

Administrators had higher perceptions of professional learning communities than teachers and this can be attributed to their ability to conceptualize and visualize the bigger picture. One can assume that administrators have the unique ability to see the facets of

professional learning community at work in their schools: supportive/shared leadership, shared values and vision, collective creativity, supportive conditions, and shared personal practice (Hord, 1997). The research finding in this study concerning school level found that there was a positive relationship between elementary and high school, but no relationship between elementary and middle, and middle and high. The greatest conceptual difference existed between elementary and high school and this could account for the finding.

Educator experience showed no statistical finding in this research. One could speculate that as a teacher grows in experience, they become more disenchanted with the ideas of community, cynical, and less open to new ways of thinking that are required to navigate and truly understand the process and purpose of community, to promote student outcomes, to maintain a connection with the history of the school, and welcome the change needed to progress the work of the learning organization.

An additional finding, unrelated to the hypotheses and not specifically studied, indicated that the dynamic relationship between the three components of district climate were highly correlated among each other; however, integrated superintendent leadership has a weak relationship to professional learning community, this suggested that enabling organizational structure and teamwork for student success may be intervening or moderating the relationship between integrated superintendent leadership and professional learning community (see Figure 1).

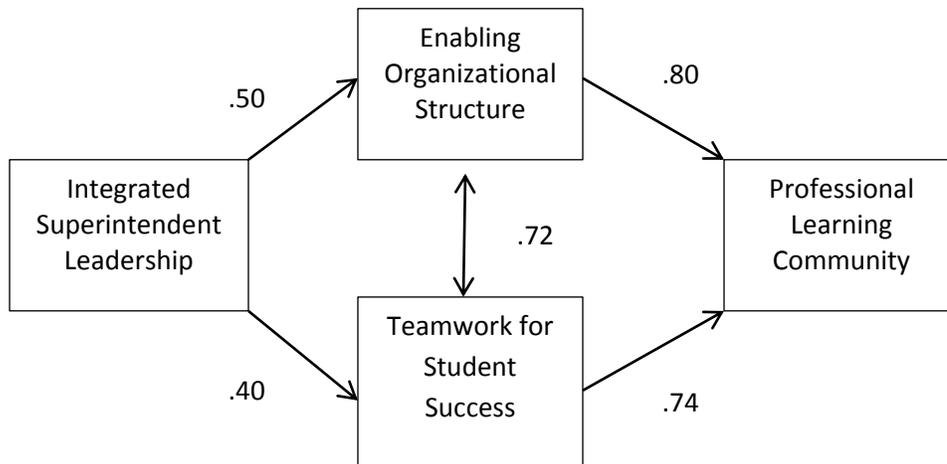


Figure 1. *An Exploratory Model*

### **Theoretical Implications**

“There is no getting around it. For the entire system to be on the move, you need relentless, resolute leadership from the top – leadership that focuses on the right things and that above all promotes collective capacity and ownership” (Fullan, 2010, p. 13). The leadership must be in place for the real work of the district to be effective. The leadership needed to improve districts extends beyond traditional roles (Togneri & Anderson, 2003) and occurs within nested system, leaders do not work in isolation (Childress, et al., 2007). The real work of the system must take place in the classroom and according to study results the most effective means of supporting the work in the classroom was through enabling organization structure. Enabling organizational structure individually made the strongest contribution and explained 64% of the variance of the relationship between district and professional learning community. Formalization and centralization were enabling in an organizational structure and as these qualities work in concert to create an environment indigenous to adaptive problem solving, reliable collaboration, and coherent procedures and policies, one can speculate that there was an ease to process

navigation within the districts empowering leaders to act and bring resolution to organizational issues (Hoy & Sweetland, 2000).

The school district was described as an organizational unit composed of the superintendent, the central office or district leaders, and the principals working collectively to set high expectations, grow and develop exemplary teachers, build and form partnerships in the educational field, with the community, and parents toward a common end of student achievement (Rorrer et al., 2008). Consistent with the theory for this study, researchers Spillane and Thompson (1997) found that the capacity to move a district forward relied on human capital and social capital. Human capital was defined as the transference of knowledge and skills from the district to the classroom, the translation of a commitment to teaching and learning from the district to the classroom, and disposition of vision and values that align with district level goals (Spillane & Thompson, 1997). Social capital grows from the district level to the classroom through constant, transparent communication creating a need for professional networks, trust and collaboration (Spillane & Thompson, 1997). No one group tackles instructional reform alone, there was a collective effort and the roles are individualized to the strengths of what each team member brings to the table (Togneri & Anderson, 2003). The importance of teamwork was indicated by the second strongest predictor of professional learning community explaining 55% of the variance. Teamwork takes work and the district must comprehend and recognize poor performance and pursue practical solutions (Togneri & Anderson, 2003) understanding that change takes tenacity and time. Elmore (2000) noted that the positioning of groups to align with the problems relative to instruction provided a comparative advantage for the districts that were willing to pursue improvement efforts and demystify the law of position. One can infer, there must be an emphasis on teamwork and professional learning community within a district because

these contribute to leader efficacy and help us to explain how district leaders affect administrators at the school level to facilitate student outcomes (Leithwood & Jantzi, 2008).

Integrated superintendent leadership referred to the ability to integrate conceptual and technical knowledge with interpersonal relationship building to maximize the potential of others and transparently communicate that potential that they are inspired to see it in themselves. The superintendent's position became an impetus for partnership. The nature of the relationships within schools was hierarchical and the responsibility of the person with greater power must be to take the initiative to build and sustain trusting relationships (Tschannen-Moran, 2004). "If the issues of real power, control, and choice are not addressed and renegotiated, then our efforts to change organizations becomes an exercise in cosmetics" (Block, 1993, p. 27). According to Fullan (2010), the superintendent needs to develop high expectations coupled with moral purpose empowering ordinary people to do extraordinary things concerning effective practice and each step of the way holding others accountable. Fullan (2010) defined this as intelligent accountability and Hargreaves and Shirley (2009) held this belief concerning accountability "accountability is the remainder that is left when . . . responsibility has been subtracted" (p. 102). Integrated superintendent leadership explained little variance (14%) with professional learning community using the school as the unit of analysis.

District climate was described by DiPaola & Smith, as "the collective effort by all individuals within organizations that foster actions to help the organization efficiently reach its goals" (2008, p.118). The three research variables composing the construct district climate (integrated superintendent leadership, enabling organizational structure, and teamwork of student success), jointly explained 70% of the variance ( $R^2 = .704$ ) with a strong, positive relationship to

professional learning community. The research findings were validated by the regression analyses and district climate strongly correlated with professional learning community ( $r = .76, p < .01$ ).

At the core of professional learning communities radiated an unrelenting attention to student success (Louis & Kruse, 1995). “Creating school cultures that value professional learning will require school leaders to initiate changes that place professional development at the core of teacher work to instill the value of continuous professional learning throughout a teachers’ career” (Scribner, 1991, p. 261). This is believed to be the foundational piece of success for a professional learning community, and drives the effectiveness through relentless, resolute leadership from the student to the superintendent in a district (Fullan, 2010). Leadership was distributed, ubiquitous, and has its roots in the efficacious views of each individual within the organization that leads to behavior contributing to motivation, goal-orientation, and resilienceregardless of obstacles (Hoy & Miskel, 2008). Leadership builds on self-efficacy. A mutual threads existed between Bandura’s mastery experience, Senge’s personal mastery, and Hord’s shared personal practice yields the collective sense of capacity where the whole is greater than the sum of its parts.

Leaders believe change is at the heart of progress (Elmore, 2009). “Deep change occurs only when beliefs are restructured through new understanding and experimentation with new behaviors” (Loucks-Horsley et al., 2003, p. 49), essentially Argyris’ double looped learning described by Scribner, et al. which provides the motivation for professional learning community and changes the views of traditional schooling (Fogleman, Fishman, & Krajcik, 2006). As Sergiovanni (1994) noted, true change can only occur when there is acceptance of responsibility and follow-thru. I believe that much change is stimulated by individual moral purpose and

personal values that drive our commitment to community (Fullan, 2010; Kouzes & Posner, 2007).

It seems reasonable to me that collective creativity pushes people to create the results that they truly desire. The conscious creating allowed for expansive patterns and new ways of thinking; where collective aspiration is freed; and, people become exemplary at learning how to learn together and leads them to reflectively dialogue about their learning (Jones, 1996; Senge, 1990; Hord, 1997). As others have said, the conditions that maximize this learning were supportive and relational, steeped in deep respect, valuing differences, problem-solving orientations, collective responsibility, and modeling was evident in shared personal mastery and practice. It seems that when a professional learning community believed in their efficacy, structures become evident for change, processes are streamlined, and this provides basis and impetus for community, and brings a sense of authenticity and responsibility for results (Mitchell & Sackney, 2007).

As demonstrated by the results in this study, administrators have a higher perception of professional learning community than teachers with a relatively large effect size ( $ES = .64$ ). This finding may be attributed to the ability of administrators to see the bigger picture, initiate forward thinking, and conceptualize the facets of professional learning community for better understanding and the efficacious operation to span the boundaries between school and district. One can use Leithwood and Jantzi's work to explain. The enabling organizational structure of the district and the teamwork by the district for student success were reinforced by district leadership and district conditions, which strongly influence school leader efficacy (2008). "The efficacy of school leaders, it would seem, arises less from direction and inspiration and more

from the aligned and supportive nature of their working conditions” within the district (Leithwood & Jantzi, 2008).

The perception of professional learning community differed significantly across school levels and post-hoc comparison data indicated that there were significant relationships between the elementary and high school levels of perception of PLC. The explanation for this relationship may be found in the fact that elementary and middle are similar in their thoughts concerning the idea of professional learning community as well as middle and high; however, the greatest conceptual difference existed between elementary and high school.

There was no relationship between the varying years of educator’s experience and their perception of professional learning community. One can speculate that teachers need to feel connected to the journey of the school through the process of becoming a professional learning community (Hipp et al., 2008) and maybe closed to the idea or disenchanted with the process with increasing years of experience.

### **Practical Implications**

Several practical implications for educators were found when examining the perception of relationships between district climate and professional learning communities. Professional learning communities showed significant potential as a tool of the district to impact the administrators and teachers at the school level. Within the confines of community was where school level administrators and teachers understand the shared vision and values of the district with an undeviating focus on student learning. Supportive and shared leadership among all of the key stakeholders in the district were not just the responsibility of the administrators, rather a global responsibility that empowers key people; that simplifies and safeguards the collegial work of the staff; believes in cooperative decision-making; and, inspires continuous learning. There

appears to be a sense of collective creativity where people are continually challenged to expand their knowledge with new and expansive patterns of thinking are prevalent. Risk then becomes an option because of the support and inspiration provided by each individual to the group as a whole. There then develops a reciprocity concerning the collective learning of the group and individual learning (Senge, 1990). Supportive conditions, relationally and physically, are believed to provide maintenance through reflective dialogue and are conducive to the collective responsibility for learning, problem solving, and decision-making that leads to the creative work of schooling (Hord, 1997). Finally, there were mechanisms in place for continuous feedback that fosters individual and organizational improvement as well as builds personal mastery and collective capacity.

Enabling organizational structure correlated strongly with professional learning community. The ease of navigating a hierarchy in an organization undoubtedly facilitated problem-solving. “Enabling structures call for two-way communication; viewing problems as learning opportunities; supporting differences; and, encouraging trust, cooperation, openness, joint problem-solving, and innovation” (Hoy & Miskel, 2008, p. 110). In these conditions, administrators and teachers feel valued and supported when the organizational structure empowered them professionally, placed the priority on learning, and instituted process that support rather than hinder.

Administrator and district leaders relied on a culture of strong support steeped in professional respect. The qualities of this culture included: equality, choice, voice, reflection, dialogue, application, and as much learning as there is giving (Knight, 2011). Trust and mindfulness advanced commitment and authenticity resulting in positive effects (Hoy et al., 2006). Organizational mindfulness warranted enabling structures and promotes collaboration

supporting student learning for success. Research presented in this study, demonstrated that collaboration is the basis for teamwork and teamwork for student success by all district leaders, school administrators, teachers, parents and community has an established strong relationship with the perception of professional learning community at the school level.

The final practical implication of this study was the realization that leadership is not positional, rather a collective responsibility by superintendents, district leaders, school administrators, teachers, parents and community leaders. “A key role of learning leaders is to construct the learning of the adults in the school” (Hattie, 2012) and the district. The importance of leadership was confirmed by Hipp and colleagues, who stated “continuous improvement in schools is directly related to the breadth and depth of leadership in the school” (2008). Research conducted by Marzano and Waters (2009) indicated an unexpected finding that superintendent tenure was positively linked to an increase in student academic achievement, signify the importance of continuity. Robinson, Lloyd, and Rowe (2008) performed a meta-analysis on 22 studies involving 2,883 school administrators on the difference in transformational and instructional leadership on student achievement and found a significant difference between the two types of leadership. Transformational leadership focused dramatically on the relationship between teacher and administrator, while instructional leadership focused undeviatingly on the “the quality and impact of teaching in the school, and on building trust and a safe climate in which teachers can seek and discuss this evidence of impact” (Hattie, 2012). I believe that leadership must be ubiquitous, inclusive, instructional, and needs continuity to promote professional learning in community.

## Limitations

There were several limitations in this study. The first limitation discussed the idea of generalizability from the sample to other states. The sample results parallel other national statistics related to teachers and schools. The experience of the educator in study results are 0 – 5 years (20%), 6 – 10 years (20%), 11 – 15 years (18%), 16 – 20 years (15%), and 21 and above (26%) and nationally, 0 – 5 years (16%), 6 – 10 years (19%), 11 – 20 years (26%), and >20 years (39%) indicating generalizability (NEA, March, 2010). Nationally, and according to a status report from the National Education Association (NEA), the percentage of teachers working in the different school levels were as follows: elementary school (50%), middle school/junior high school (25%), and high school (24%). For the purposes of this research study, the percentage of teachers working in elementary schools (61%), middle/junior high schools (13%), and high school (26%). Results of a ranking in 2010 and estimates for 2011 report from NEA placed Alabama 25<sup>th</sup> of 51 states (and the District of Columbia) in the number of total instructional staff in K-12 public schools situating Alabama to be generalizable up the scale or down the scale.

A second limitation indicated the study is a cross-sectional data study and the findings are limited to the current time frame. District climate was a relatively new construct that warrants more investigation; however, the study of districts and the effectiveness of district leadership and conditions were becoming prevalent in the literature, particularly their impact on instruction and student achievement, thereby verifying the importance of research validating district relationships with schools.

The third limitation discussed the variables in the study having specific constitutive and operational definitions and that this may limit the findings. Study results validate the importance of district climate and the component of district climate (integrated superintendent leadership,

enabling organization structure, and teamwork for student success) in relationship to professional learning communities.

The final limitation of the study addressed the voluntary nature of the data collection in the study and although the response rate was reasonable, there was a limitation in that a few schools did not have the number of responses necessary to constitute the school as the unit of analysis. However, the administrators' and teachers perceptions were included because of the reliability and validity of the District Climate Index ( $\alpha = .96$ ) for individual data and ( $\alpha = .97$ ) for the aggregated school data and the School Professional Staff as Learning Community Questionnaire instrument ( $\alpha = .94$ ) with the individual as the unit of analysis and ( $\alpha = .97$ ) with the school as the unit of analysis. The reliabilities for the subscales of the District Climate Index based on the individual as the unit of analysis were  $\alpha = .93$  for integrated superintendent leadership,  $\alpha = .95$  for enabling organizational structure, and  $\alpha = .84$  for teamwork for student success and were .98, .97, and .93, respectively, for aggregated data by school.

### **Recommendations for Further Study**

The correlational results in the study indicated that there are specific relationships between district climate and professional learning communities, and the components of district climate (integrated superintendent leadership, enabling organizational structure, and teamwork for student success) and professional learning communities. A future study could provide confirmatory evidence using the manipulation of variables presented in this study to establish cause and effect.

### **Summary**

Albert Einstein defined insanity as continually doing the same things over and over, but expecting different results. The key to changing the environment at the school level relies on the district's ability to empower the teachers and administrators through enabling organizational

structures and teamwork for student success. Having these structures in place, promotes communication, changes the view of challenges by turning them into learning opportunities, values differences, encourages trust, cooperation, openness, shared decision-making, and the result is innovation for improvement. District climate and professional learning communities are significantly, positively related to one another. Integrated superintendent leadership has a weak relationship to professional learning community suggesting that enabling organizational structure and teamwork for student success moderate the relationship between integrated superintendent leadership and professional learning community. Within the structure of community, innovation, change, efficacy, and reflection become evident creating trust and moving schools toward reform and their students toward success.

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## APPENDIX A

### PERMISSION TO USE JOYCE AND SHOWERS' TABLE EFFECTIVENESS OF TRAINING COMPONENTS

**Boman, Terri**

---

**From:** Bruce R. Joyce <brucejoyce40@gmail.com>  
**Sent:** Monday, May 28, 2012 6:14 PM  
**To:** Boman, Terri  
**Subject:** Re: request

Dear Terri,  
You have our permission. Good luck  
with your dissertation.  
Bruce

On Mon, May 28, 2012 at 5:13 PM, Boman, Terri <[tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu)> wrote:  
Good afternoon, Dr. Joyce,

My name is Terri Boman and I am a doctoral candidate at the University of Alabama in Tuscaloosa, AL. I am working on my dissertation and would like your permission to use the table on page 78 of your book with Beverly Showers cited below. The name of the table is Effectiveness of Training Components.

Joyce, B., & Showers, B. (2002). Student achievement through staff development. Alexandria, VA: Association for Supervision and Curriculum Development.

I am a huge fan of your work and use the model in my work. I would appreciate the opportunity to include this table in my dissertation. The title of my dissertation is The Perceptions of Relationships Between District Climate and the Development of Professional Learning Communities in Schools.

Thank you for your consideration of my request and I look forward to hearing from you!  
Terri Boman

## APPENDIX B

### PERMISSION TO USE DIPAOLO AND SMITH SURVEY

---

**Boman, Terri**

---

**From:** Dipaola, Michael F <mfdipa@wm.edu>  
**Sent:** Wednesday, March 30, 2011 7:12 AM  
**To:** Boman, Terri  
**Subject:** RE: District Climate  
**Attachments:** DCI Scale.pdf

Hi Terri - Try the attached scale. If you have the factor loadings, you should be all set to determine which items should represent the dimensions of DCI. You have permission to use the DCI scale. Please cite the work as:

DiPaola, M. F. & Smith, K. (2008). Measuring district climate, in W. Hoy & M. DiPaola (Eds.), *Improving Schools: Studies in Leadership and Culture*, 5, pages 117-135. Greenwich, CN: Information Age

---

**From:** Boman, Terri [tboman@bamaed.ua.edu]  
**Sent:** Tuesday, March 29, 2011 10:48 AM  
**To:** Dipaola, Michael F  
**Subject:** FW: District Climate

Good morning, Dr. DiPaola,

When I received the email below, I only received the two attachment (the factor loadings and a copy of my earlier email). I would like to request a copy of the actual instrument, if possible. I am doing a convenience sample of 12 districts that I currently serve in west Alabama. The level of PLC will be determined by the Hord (1996) instrument, the School Professional Staff as Learning Community Questionnaire (SPSLCQ).

Do I request permission to utilize the DCI from you? Can this be accomplished by email?

Thanks for your availability to answer my questions.  
Terri Boman

*Terri C. Boman*  
Interim Director  
UA/UWA In-Service Center  
Office: 205.348.6951  
Cell: 205.792.0077  
Fax: 205.348.0992  
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*When we can no longer change a situation, we are challenged to change ourselves.*  
~Victor Frankl

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APPENDIX C

PERMISSION TO USE HORDS' SCHOOL PROFESSIONAL STAFF AS LEARNING  
COMMUNITY QUESTIONNAIRE



SEDL LICENSE AGREEMENT

To: Terri C. Boman (Licensee)  
1313 Heritage Lane  
Tuscaloosa, AL 35406

From: Nancy Reynolds  
Information Associate  
SEDL  
Information Resource Center—Copyright Permissions  
4700 Mueller Blvd.  
Austin, TX 78723

Subject: License Agreement to reprint and distribute SEDL materials

Date: September 27, 2011

Thank you for your interest in using SEDL's **School Professional Staff as Learning Community Questionnaire** (SPSLCQ) developed by Shirley Hord in 1996. This questionnaire will be referred to as the "work" in this License Agreement.

SEDL is pleased to grant permission to the Licensee to use the work to help determine if a relationship exists between district climate and the development of professional learning communities at the school level by surveying approximately 115 schools in 12 districts in Alabama. The following are the terms, conditions, and limitations governing this limited permission to reproduce the work:

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## APPENDIX D

### DEMOGRAPHICS

The three demographics needed to complete the research analysis and address the research questions that were posed are role, administrator or teacher; level, elementary, middle or high school; and, years of experience, 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 21 and above. The District Climate Index incorporated 3 of the demographics needed to complete the study.

APPENDIX E

DCI INSTRUMENT

**District Climate Index (DCI)**

Please complete the following demographic information by checking the appropriate category.

**Role:** Teacher \_\_\_\_ Administrator \_\_\_\_ **Level:** Elementary \_\_\_\_ Middle \_\_\_\_ High \_\_\_\_

**Experience:** 0-5 years \_\_\_\_ 6-10 years \_\_\_\_ 11-15 years \_\_\_\_ 16-20 years \_\_\_\_ 21 and above \_\_\_\_

<b>Directions:</b> The following are statements about your school. Please indicate the extent to which each occurs, from Never to Very Frequently.	Never	Rarely	Sometimes	Often	Very Frequently
1. The interactions between and among administrators are cooperative.	0	0	0	0	0
2. Administrators respect the professional competence of their colleagues.	0	0	0	0	0
3. The superintendent is responsive to the needs and concerns expressed by community members.	0	0	0	0	0
4. The superintendent is friendly and approachable.	0	0	0	0	0
5. The superintendent puts suggestions made by administrators into operation.	0	0	0	0	0
6. Administrators help and support each other.	0	0	0	0	0
7. Administrators are committed to helping students.	0	0	0	0	0
8. The superintendent explores all sides of topics and admits that other opinions exist.	0	0	0	0	0
9. The Superintendent treats all Administrators as his or her equal.	0	0	0	0	0
10. Administrators provide strong social support for colleagues.	0	0	0	0	0
11. Principals create learning environments that are orderly and serious.	0	0	0	0	0
12. The superintendent is willing to make changes.	0	0	0	0	0
13. The superintendent lets administrators know what is expected of them.	0	0	0	0	0
14. The superintendent maintains definite standards of performance.	0	0	0	0	0
15. The superintendent is responsive to the needs and concerns expressed by administrators.	0	0	0	0	0
16. Staff members are aware of our district mission and goals.	0	0	0	0	0

- |  |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 17. I have confidence in the integrity of my colleagues.   | <input type="radio"/> |
| 18. Data on district operations are reviewed regularly to determine progress in achieving goals. | <input type="radio"/> |

**Directions:** The following are statements about your school. Please indicate the extent to which each occurs, from Never to Very Frequently.

- |   | Never                 | Rarely                | Sometimes             | Often                 | Very<br>Frequently    |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 19. Results of our district monitoring process lead me to review my own practices.  | <input type="radio"/> |
| 20. Our district has implemented an effective process for monitoring progress in achieving goals.                         | <input type="radio"/> |
| 21. District supervision/evaluation criteria include measures of staff accountability.                                    | <input type="radio"/> |
| 22. Members of district departments have a detailed understanding of how their work relates to that of other departments. | <input type="radio"/> |
| 23. District leaders assist staff members in finding resources to accomplish their goals.                                 | <input type="radio"/> |
| 24. The organizational structures of the district facilitate the day-to-day work of all staff groups.                     | <input type="radio"/> |
| 25. I can communicate with most other members of the district.  | <input type="radio"/> |
| 26. District support to my school reflects the school's unique needs.   | <input type="radio"/> |
| 27. Our district systematically monitors the progress of school improvement.  | <input type="radio"/> |
| 28. Results of our district monitoring process stimulate significant improvements in the district.                        | <input type="radio"/> |
| 29. Our district incorporates student assessment data in to all appropriate decisions.                                    | <input type="radio"/> |
| 30. District policies and procedures recognize that student learning supersedes administrative convenience.               | <input type="radio"/> |

DiPaola, M. F. & Smith. K. (2008). Measuring district climate, in W. Hoy & M. DiPaola (Eds.), *Improving Schools: Studies in Leadership and Culture*, 5, pages 117–135. Greenwich, CN: Information Age

APPENDIX F

SPSLCQ INSTRUMENT

School Professional Staff as Learning Community Questionnaire

**Directions:** This questionnaire concerns your perceptions about your school staff as a learning organization. There are no right or wrong responses. Please consider where you believe your school is in its development of each of the five numbered descriptors shown in bold-faced type on the left. Each sub-item has a five-point scale. On each scale, circle the number that best represents the degree to which you feel your school has developed.

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

Name: \_\_\_\_\_

School: \_\_\_\_\_

<p><b>1. School administrators participate democratically with teachers sharing power, authority, and decision making.</b></p>	<p>5 _____ 4 _____ 3 _____ 2 _____ 1</p>	<p>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 issues.</p>	<p>Administrators invite advice and counsel from staff and then make decisions themselves.</p>	<p>Administrators never share information with the staff nor provide opportunities to be involved in decision making.</p>
<p><b>1b.</b></p>	<p>5 _____ 4 _____ 3 _____ 2 _____ 1</p>	<p>Administrators involve the entire staff.</p>	<p>Administrators involve a small committee, council, or team of staff.</p>	<p>Administrators do not involve any staff.</p>
<p><b>2. The staff shares visions for school improvement that have an undeviating focus on student learning, and these visions are consistently referenced in the staff's work.</b></p>	<p>5 _____ 4 _____ 3 _____ 2 _____ 1</p>	<p>Visions for improvement are discussed by the entire staff such that consensus and a shared vision result.</p>	<p>Visions for improvement are not thoroughly explored; some staff members agree and others do not.</p>	<p>Visions for improvement held by the staff members are widely divergent.</p>
<p><b>2b.</b></p>	<p>5 _____ 4 _____ 3 _____ 2 _____ 1</p>	<p>Visions for improvement are always focused on students, teaching, and learning.</p>	<p>Visions for improvement are sometimes focused on students, teaching, and learning.</p>	<p>Visions for improvement do not target students, teaching, and learning.</p>
<p><b>2c.</b></p>	<p>5 _____ 4 _____ 3 _____ 2 _____ 1</p>	<p>Visions for improvement target high-quality learning experiences for all students.</p>	<p>Visions for improvement address quality learning experiences in terms of students' abilities.</p>	<p>Visions for improvement do not include concerns about the quality of learning experiences.</p>

3. The staff's collective learning and application of the learnings (taking action) create high intellectual learning tasks and solutions to address student needs.	3a.	5	4	3	2	1
		The entire staff meet to discuss issues, share information, and learn with and from one another.	Subgroups of the staff meet to discuss issues, share information, and learn with and from one another.	Individuals randomly discuss issues, share information, and learn with and from one another.		
3b.	5	4	3	2	1	
	The staff meet regularly and frequently on substantive student-centered educational issues.	The staff meet occasionally on substantive student-centered educational issues.	The staff never meet to consider substantive educational issues.			
3c.	5	4	3	2	1	
	The staff discuss the quality of their teaching and students' learning.	The staff does not often discuss their instructional practices nor its influence on student learning.	The staff basically discuss non-teaching and non-learning issues.			
3d.	5	4	3	2	1	
	The staff, based on their learnings, make and implement plans that address students' needs, more effective teaching, and more successful student learning.	The staff occasionally act on their learnings and make and implement plans to improve teaching and learning.	The staff do not act on their learnings.			
3e.	5	4	3	2	1	
	The staff debrief and assess the impact of their actions and make revisions.	The staff infrequently assess their actions and seldom make revisions based on the results.	The staff do not assess their work.			
4. Peers review and give feedback based on observing one another's classroom behaviors in order to increase individual and organizational capacity.	4a.	5	4	3	2	1
	Staff members regularly and frequently visit and observe one another's classroom teaching.	Staff members occasionally visit and observe one another's teaching.	Staff members never visit their peers' classrooms.			
4b.	5	4	3	2	1	
	Staff members provide feedback to one another about teaching and learning based on their classroom observations.	Staff members discuss non-teaching issues after classroom observations.	Staff members do not interact after classroom observations.			

5a.	5	4	3	2	1
	Time is arranged and committed for whole staff interactions.	Time is arranged but frequently the staff fail to meet.	Time is arranged but frequently the staff fail to meet.	Staff cannot arrange time for interacting.	
5b.	5	4	3	2	1
	The size, structure, and arrangements of the school facilitate staff proximity and interaction.	Considering the size, structure, and arrangements of the school, the staff are working to maximize interaction.		The staff take no action to manage the facility and personnel for interaction.	
5c.	5	4	3	2	1
	A variety of processes and procedures are used to encourage staff communication.	A single communication method exists and is sometimes used to share information.		Communication devices are not given attention.	
5d.	5	4	3	2	1
	Trust and openness characterize all of the staff members.	Some of the staff members are trusting and open.		Trust and openness do not exist among the staff members.	
5e.	5	4	3	2	1
	Caring, collaborative, and productive relationships exist among all staff members.	Caring and collaboration are inconsistently demonstrated among the staff members.		Staff members are isolated and work alone at their task.	

Hord, S. M. (1996). *School professional staff as learning community questionnaire*. Austin, TX: Southwest Educational Development Laboratory.

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APPENDIX G  
IRB APPROVAL

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

March 9, 2012

Terri C. Boman  
ELPTS  
College of Education  
Box 870231

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**ALABAMA**  
R E S E A R C H

Re: IRB #: EX-12-CM-015, "Perceptions of the Relationships Between District Climate and the Development of Professional Learning Communities in Schools"

Dear Ms. Boman:

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

Your application has been given exempt approval according to 45 CFR part 46.101(b)(2) as outlined below:

*(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.*

This approval expires on March 8, 2013. If the study continues beyond that date, you must complete the appropriate portion of the Continuing Review Form. If you modify the application, please complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the appropriate Closure form.

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

Good luck with your research.

Sincerely,

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



358 Rose Administration Building  
Box 870127  
Tuscaloosa, Alabama 35487-0127  
(205) 348-8461  
FAX (205) 348-7189  
TOLL-FREE (877) 820-3066

## APPENDIX H

### PARTICIPANT INFORMED CONSENT LETTER

Dear Potential Participant:

March 21, 2012

You are invited to participate in a research study conducted by Ms. Terri C. Boman, doctoral student in Educational Leadership, Policy, and Technology Studies at The University of Alabama. I hope to learn how district climate (i.e., the superintendent's leadership, enabling structure, and the teamwork of a district for student success) influences the development of professional learning communities at the school level. You were selected as a possible participant in this study because of your affiliation with an elementary, middle, or high school in the University of Alabama/ University of West Alabama in-service region.

Your participation would be greatly appreciated. To participate, please provide your consent below, complete the two surveys and return them to your administrator. The first survey is the School District Climate survey containing 30 questions (sample item – Administrators are committed to helping students). The answer choices are never, rarely, sometimes, often, and very frequently) and 3 demographic questions (same item – Role: Teacher or Administrator). The second survey is the School Professional Staff a Learning Community Questionnaire containing 17 questions (sample item – The staff shares visions for school improvement that have an undeviating focus on student learning and these visions are consistently referenced in the staff's work) and the answers are specific along a continuum from 5 (Visions for improvement are discussed by the entire staff such that consensus and a shared vision result) to 3 (Visions for improvement are not thoroughly explored; some staff members agree and others do not) to 1 (Visions for improvement held by the staff members are widely divergent). Upon completion the surveys will be collected, analyzed, and stored in a secure location.

There are no known risks or discomforts associated with your participation in this study. The body of research in educational leadership as a whole may benefit from the survey data collected. However, I cannot guarantee that you personally will receive any benefits from this research. The subject will receive no compensation for participating in the perception study.

Subject identities will be kept confidential and the data will be safeguarded under lock and key and only used for further scientific study. Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with your district or your school. Your superintendent has approved your participation in this research and I would greatly appreciate your assistance.

If you have any questions, please feel free to contact Ms. Terri C. Boman (205.348-6951) or [tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu). If you have questions about your rights as a person taking part in a research study, make suggestions or file complaints and concerns, you may call Ms. Tanta Myles, the Research Compliance Officer of the University at (205)-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at <http://osp.ua.edu/site/PRCO>Welcome.html>. You may email us at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

Please indicate your consent by checking the box below and proceeding with the DCI and the SPSLCQ.

- I understand that participation in this study is completely voluntary. I am at least 19 years of age, and I freely consent to be in this study.

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Terri C. Boman, Doctoral Candidate  
Educational Leadership, Policy, and Technology Studies  
College of Education, University of Alabama

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Date

## APPENDIX I

### SUPERINTENDENT CONSENT LETTER

Dear \_\_\_\_\_:

March 21, 2012

My name is Terri Boman and I am a doctoral candidate in Educational Leadership, Policy, and Technology Studies Department in the College of Education at The University of Alabama. I am in the dissertation phase of my work as a graduate student and would greatly appreciate your permission to conduct research in your school district.

The focus of my research is on the perceptions of relationships between district climate and the development of professional learning communities in schools. I hope to learn how district climate (i.e., the superintendent's leadership, enabling structure, and the teamwork of a district for student success) influences the development of professional learning communities at the school level. Your district was selected as a possible participant in this study because of your affiliation with an elementary, middle/junior high, or high schools in the University of Alabama/ University of West Alabama in-service region and I would truly appreciate your consideration in allowing me to complete my research.

For the purposes of my research, professional learning community is defined as a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, all-inclusive, learning-oriented, professional, and growth-promoting way with the goal of their actions to enhance their effectiveness as professionals for the students' benefit. District climate is the collective effort by all stakeholders within a school district that foster actions to help the organization efficiently and effectively reach its goals. This work involves all of the stakeholders in the district; the superintendent, the central office staff, and the principals at each school. The unit of analysis for this study is the school and for this reason, I would like to survey only the principal and the certified staff at each of the elementary, middle and high schools in your district.

Data collection will be completed in the Spring of 2012 and the participants will complete two surveys; the District Climate Instrument (DCI) and the School Professional Staff as Learning Community Questionnaire (SPSLCQ). The total time needed to complete the surveys is approximately 10-15 minutes and can be easily accomplished in a faculty meeting. Each school will receive a packet with a letter providing further instruction to the principal. I will be glad to share the results from my overall findings, which may provide valuable insight to your district and schools concerning their perceptions of district climate and the development of professional learning communities in schools.

I would like to respectfully request your permission to contact the principals of the following schools: [provide school list here]. If you have questions regarding this study or would like to provide your permission, please contact Terri Boman at 205-348-6951 or [tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu) and I will be in contact with the principals in your district. If you have any questions about research practices or policies, you may contact Ms. Tanta Myles, The

University of Alabama Research Compliance Officer, at 205-348-8462 or toll free at 1-877-820-3066.

I look forward to your consideration of my request and your reply.

Sincerely,

Terri C. Boman  
Doctoral Candidate  
Educational Leadership, Policy, and Technology Studies  
College of Education, University of Alabama  
[tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu) or 205-348-6951

Enclosures:    Informed Consent Letter  
                  District Climate Index  
                  School Professional Staff as Learning Community

## APPENDIX J

### PRINCIPAL CONSENT LETTER

Dear Principal:

March 21, 2012

My name is Terri Boman and I am a doctoral candidate in Educational Leadership, Policy, and Technology Studies Department in the College of Education at the University of Alabama. I am in the dissertation phase of my work as a graduate student and have received permission from your superintendent to conduct research in your school.

The focus of my research is on the perceptions of relationships between district climate and the development of professional learning communities in schools. I hope to learn how district climate (i.e., the superintendent's leadership, enabling structure, and the teamwork of a district for student success) influences the development of professional learning communities at the school level.

For the purposes of my research, professional learning community is defined as a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, all-inclusive, learning-oriented, professional, and growth-promoting way with the goal of their actions to enhance their effectiveness as professionals for the students' benefit. District climate is the collective effort by all stakeholders within the school district that foster actions to help the organization efficiently reach its goals. This work involves all of the stakeholders in the district; the superintendent, the central office staff, and the principals at each school.

Data collection will be completed in the Spring of 2012 and the participants will complete two surveys; the District Climate Instrument (DCI) and the School Professional Staff as Learning Community Questionnaire (SPSLCQ). The total time needed to complete the surveys is approximately 15-20 minutes and can be easily accomplished in a faculty meeting.

I have enclosed a survey packet for each certified personnel in your school. Please ask your faculty to complete the survey packet containing the two surveys and return them to the large envelope. Please contact Terri Boman at 205-348-6951 or [tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu) and I will drop by to pick up your school's surveys. If you have any questions about research practices or policies, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at 205-348-8462 or toll free at 1-877-820-3066.

I look forward to your call or email. Thanks so much for allowing your faculty to participate!

Sincerely,

Terri C. Boman  
Doctoral Candidate  
Educational Leadership, Policy, and Technology Studies  
College of Education, University of Alabama  
[tboman@bamaed.ua.edu](mailto:tboman@bamaed.ua.edu) or 205-348-6951