COLLABORATION IN PROFESSIONAL LEARNING COMMUNITIES

AND DEVELOPMENT OF TEACHER EFFICACY

AND TRUST IN ALABAMA SCHOOLS

by

DATIE I. PRIEST

DAISY ARREDONDO RUCINSKI, COMMITTEE CHAIR
DAVE DAGLEY
BRENDA MENDIOLA
ED NICHOLS
JOHN TARTER

A Dissertation

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Educational Leadership,
Policy, and Technology Studies
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2015
ABSTRACT

Collaboration in Professional Learning Communities and development of teacher efficacy and trust in Alabama schools was studied. The purpose of the study was to examine how Professional Learning Communities are used in North Alabama schools to foster collaboration and to develop teacher efficacy and trust within school settings. The participants in the study were kindergarten through fifth grade educators employed in North Central Alabama schools. The methodology consisted of the *Teachers’ Sense of Efficacy Scale* (TSES), a survey by Tschannen-Moran and Woolfolk Hoy (2001) and researcher-developed interviews. The surveys were used to identify patterns and themes about teachers’ beliefs. Purposeful interviews were conducted to assess the perceived levels of trust and effectiveness gained as a result of participating in collaborative activities. Data from the *Teachers Sense of Efficacy Scale*, a survey used to assess teacher efficacy in student engagement, teacher efficacy in instructional strategies, and teacher efficacy in classroom management, were analyzed and paired with themes that emerged from interviews surrounding the establishment of trust. Interviewees viewed these emerging themes as being a result of their participation in collaborative activities in professional development settings. Results indicated that teachers who were involved in ongoing, job-embedded professional development centered on dialogue and collaboration reported a higher sense of efficacy and were more willing participants in dialogue on teaching and learning in perceived risky environments.
DEDICATION

This research is dedicated to my mom, Edna Dawson Priest. Without her, I truly don’t know where I would be. Throughout the years, my mom has shielded me from the harsh realities life can sometimes present, yet modeled how I should behave, think, and respond, when I do face them. More importantly, she has always encouraged me to run toward the roar of life despite any obstacles that stand in my way!
ACKNOWLEDGMENTS

I would like to thank those who have imparted sound, kind words and thoughts into my journey in education and throughout the research process. First, I am a believer in trusting the Lord to direct my path. My background had me set up to travel a predicted path for those who grew up impoverished. However, He knew the plan for my life and strategically surrounded me with righteous believers who were and are not afraid to intervene for me on His behalf with prayer, action, and redirection.

Next, I am grateful to Dr. Daisy Arredondo Rucinski, my dissertation chair, for agreeing to guide me through this process. Words cannot express the gratitude I feel regarding the time and effort she put into molding me as a professional student. The challenges from her to become more resilient, to think outside the box, and to reflect on what the research says as opposed to what I think have been most stimulating. Next, I want to thank my committee members for reading the research and providing valuable feedback to make the study worth defending.

Also, I would like to thank the many professors who have abided by a culture of excellence and passed it on to the students at The University of Alabama. The participants in the study were also an integral part of completing the process. Without them, there would be no study. Finally, I am eternally grateful to the long list of friends and family who continue to make noteworthy investments in my life. The prayers, words of encouragement, phone calls, text messages, emails, and girl times are what kept me going. I believed I could become a leader and operate in excellence because my friends and family spoke life into my endeavors, stood in the
gap when I was not so sure of myself, and lived life above-board as beacons of light so I could see where I was going. Thank you!
Collaboration and Professional Learning Experiences ......................................................11
Teacher Efficacy ................................................................................................................14
Trust in Schools .................................................................................................................17
School Reform ...................................................................................................................23
Summary ............................................................................................................................24

3 METHODOLOGY ............................................................................................................27
Research Design .................................................................................................................27
Research Questions ..........................................................................................................29
Hypotheses .......................................................................................................................29
Population and Sample .....................................................................................................31
Quantitative and Qualitative Data Collection ...................................................................31
Interview and Survey Instrument ......................................................................................33
Validity and Reliability .....................................................................................................34
Data Analysis .....................................................................................................................37
Variables ..........................................................................................................................38
Researcher’s Positionality and Skills ..............................................................................38
Timeline for Completing Study .........................................................................................41
Ethical Considerations .....................................................................................................42

4 RESULTS .......................................................................................................................43
Survey Results ....................................................................................................................45
Principals’ Survey .............................................................................................................45
Research Survey ..............................................................................................................45
Demographic Data ..........................................................................................................45
E  PERMISSION LETTER TO USE TEACHERS’ SENSE OF EFFICACY SCALE ............99

F  TEACHERS’ SENSE OF EFFICACY SCALE/DEMOGRAPHIC INFORMATION.......101

G  OPEN-ENDED QUESTIONS AND PROMPTS .............................................................105

H  IRB APPROVAL ..............................................................................................................107
# LIST OF TABLES

1. Description of Study ................................................................. 30
2. Demographic Data of Survey Participants .................................. 47
3. Demographic Data of Interview Participants .............................. 49
4. Professional Learning Community Meetings in North Central Alabama Schools .......................... 51
5. Teacher Self-Efficacy in Student Engagement, Instructional Strategies, and Classroom Management ......................................................... 53
6. Themes for Interview Question 1 .................................................. 59
7. Themes from Interview Question 2 .............................................. 60
8. Themes from Interview Question 3 .............................................. 62
9. Themes from Interview Question 4 .............................................. 63
10. Themes from Interview Question 5 ............................................. 65
11. Themes from Interview Question 6 ............................................. 66
12. Themes from Interview Question 7 ............................................. 68
CHAPTER 1

INTRODUCTION

Background

The outcry from the general public and education professionals demanding new programs and practices in education have led to changes in how successful programs are implemented and the promises of innovative site based school practices realized (Hord, 1997). The recent interest in Professional Learning Communities (PLCs) may have been initiated by the belief that improved student learning is a collateral benefit of strengthened adult learning. According to DuFour, DuFour, Eaker, and Many (2006, p. 3), collaboration in a PLC represents a systematic process in which teachers work together to impact their instructional practices in order to experience improved learning outcomes for students. Thus, those who actively engage in collaborative team activities learn from one another while creating a platform for sustainable improvement (DuFour, DuFour, Eaker, & Karhanek, 2004, p. 3).

Statement of the Problem

Teamwork has been identified as a significant indicator of teacher team commitment (Park, Henkin, & Egley, 2005). Among the greater community of schools, educators have found it difficult to solve problems by teaching and learning in isolation. Thus, policy makers have been asked to implement processes that involve all stakeholders in decision making, and to improve student outcomes via the quality collaborative professional development opportunities.
North Central Alabama is a unique collection of schools and cultures. One of the fastest growing regions in the state, the area has experienced several challenges in recent years. For example, the families affected by Base Realignment and Closure (BRAC) have relocated there with clear expectations from schools that reflect the standard of operation their children received at former schools. In addition, the influx of immigrant families to North Central Alabama to areas previously serving historically majority populations and the increased financial weight of impoverished families on schools continue to present challenges. This is evident in how these districts have maneuvered to accommodate English Language Learners in settings that, previously, did not serve that population of students. Subsequently, teachers must be trained to provide appropriate whole and small group instruction that focuses on language acquisition. In hopes of alleviating the chasms of access and equity that contribute to the demise of a promising education, schools have engaged in collaborative professional development opportunities. For instance, during the implementation of the Alabama Reading Initiative in 2000 and the decade following, schools were provided a script to use within data meetings in hopes of improving reading scores. Currently, schools tend to be more focused on the collaborative aspect of professional development that lends itself to conversation, bonding, and hopefully to high quality teaching and learning. Evidenced by more opportunities to collaborate within and among schools, this paradigm shift may have impacted the dynamics of conversations and expectations in a positive manner. Professional Learning Communities were settings within these schools in which shifts have occurred.
Purpose of the Study

The purpose of this study was to examine how Professional Learning Communities are used in North Alabama schools to foster collaboration and to develop teacher efficacy and trust within school settings.

Significance of the Study

The importance of this study was that the survey data and themes from interviews provided by the participants regarding collaboration and its perceived impact on teacher efficacy and trust within PLCs allowed school leaders to reflect on the outcomes of the study relative to the action plans they have adopted for organizational growth. The aim of the researcher was to equip school leaders with data that promoted dialogue on how to foster growth as a result of participation PLCs. The adult reflections may have led to increased student learning. Participation in collaborative dialogue focused on teaching and learning may have resulted in an increase in trust and collegiality through reflection.

Theoretical Framework

The notion of Professional Learning Communities (PLCs) has gained attention as part of both practitioners’ and scholars’ work to foster improvement in instruction and student learning (Bryk, Camburn, & Louis, 1999). According to Hord (1997), Professional Learning Communities are comprised of continuous collaborative activities between teachers and between teachers and administrators which incorporate shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. The collaborations have usually happened during job embedded professional activities such as data meetings, grade level
meetings, or cross-grade level meetings. Brookhart (2009, p. 2) defined a PLC as a group in which teachers work collaboratively to reflect on their practice while examining evidence about the relationships between teacher practices and student outcomes.

Brooks, Adams, and Morita-Mullaney (2010) argued that teachers do not automatically appreciate demands inherent in the collaborative process. For example, these authors argued that educators need time and opportunity to participate in difficult discussions about barriers to student learning and how they can overcome them. Tschannen-Moran and Johnson (2011) contended that teachers willingly accept the challenges of collaboration and improvement when they see the immediate benefits that apply to them.

According to Tschannen-Moran (2010), school leaders are essential to the establishment of norms and structures that allow schools to develop and thrive as professional learning communities. Principals should expect and be prepared to address the problems that may surface during conversations about the learning community (Roberts & Pruitt, 2003, p. 36). Roberts and Pruitt (2003, p. 25) purported that school leadership should harness the commitment to and ensure collaboration among the stakeholders who support learning opportunities within schools.

According to Smith and Hoy (2007), teachers who have a high degree of efficacy are more apt to have noteworthy student learning outcomes. Goddard, Hoy, and Hoy (2004) maintained that efficacy judgments are beliefs about an individual or group capability. They contended that over- or under-estimates of actual abilities influences the execution of skills possessed. These authors argued that while such judgments do not accurately depict assessments of those capabilities, it is important to note that people use such thought processes relative to efficacy to determine different courses of action. Brookhart (2009, p. 9) argued that individual teacher efficacy is predicated upon the beliefs that teachers can make a difference and teaching
can make a difference. According to Sweetland and Hoy (2000), there exists a consensus that effective schools promote student learning and higher levels of achievement.

Trust was defined by Tschannen-Moran and Hoy (1998) as a general confidence and overall optimism in occurring events. Tschannen-Moran and Hoy (1998) argued that trust, in the school setting, can be viewed in relation to a variety of reference groups, inclusive of teachers and administrators. They maintained that one trusts others to be consistent and to act in one’s best interest, particularly in relationships between principals and teachers. According to Sweetland and Hoy (2000), principals who trust and respect teachers are more likely to collaborate with them regarding decision-making.

According to Penuel, Riel, Joshi, Pearlman, Min Kim, and Frank (2010), the dynamics among and within teacher cliques, or subgroups, in a school can affect the effectiveness of school reform implementation. These authors argued the schools that enact successful reform efforts have the following attributes: positive relationships among the teacher groups, a principal who supports in-house reform efforts versus those from the district, and a central dissemination of advice or information from a trusted source. School reform is purported to be as much an integral part of education as the evolution of its history (Alok, 2012). According to Alok (2012), a significant portion of the education reform initiatives are based upon belief systems, or ideologies, as opposed to theoretical contexts. Alok (2012) purported that these ideologies may be better suited for policy-making and goal setting but may not help construct the data points used to make sound choices. On the other hand, the author argues the conceptual framework route provides understanding about how processes work and should be the method used to study school reform. Alok (2012) further contended that the anchors of school reform efforts (educational policy, educational reforms, curriculum, assessment, pedagogy, and teacher
evaluation) are an integral part of the process because the inherent and specific focus on them, typically, lead to or inform success of the reform.

Overview of Study Methods

The research design was mixed methods. Data were collected with the Teachers Sense of Efficacy Scale, developed by Tschannen-Moran and Hoy (2001), and by purposeful interviews designed to ascertain teachers’ perceptions of their experiences with pedagogy and trust levels with colleagues as a result of participation in the strategic professional development activities.

Research Questions

1. To what extent are professional learning communities established in North Central Alabama schools?

2. In schools that use Professional Learning Communities, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative professional development activities acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings.

3. In schools that use Professional Learning Communities, to what extent is trust perceived to be established among faculty as a result of collaborative activities?

4. In schools that use Professional Learning Communities, what are perceptions of the effectiveness of PLCs by the professional educators in these North Central Alabama Schools?
Assumptions of the Study

The researcher made the following assumptions regarding this study:

1. Each participant was an active team member of an ongoing professional learning community.
2. Participants were truthful in responding to the survey questions.
3. Participants were honest about their perceptions when participating in the interviews.

Limitations of the Study

This study was limited to elementary schools in central North Alabama school districts. Data were collected from willing participants in Pre-K-12 settings within those districts.

Delimitations of the Study

Delimitations narrow the span of the study. The following are delimitations of this study:

1. The study included only teachers who teach within the general education area of elementary education.
2. Participants were required to participate in job embedded professional development by virtue of their job assignments.
3. Participation in this study was voluntary.

Definition of Key Terms

Efficacy--conviction that one can successfully execute the behavior required to elicit a desired outcome (Bandura, 1977)
Professional development--formal courses and programs in professional education and the formal and informal development of professional skill that occurs in the workplace (Dall’Alba & Sandberg, 2006).

Professional learning communities--decision-making process by which a community learns to adapt and develop a common vision toward its growth (Kilbane, 2009)

Trust--Involves taking risks and making oneself vulnerable to another in the confidence that the other will act in ways that are not detrimental to the trusting party (Hoy et al., 2006).

Organization of the Study

Chapter 1 includes the introduction, background, statement of the problem, purpose of the study, significance of the study, theoretical framework, research questions, assumptions of the study, and definition of key terms.

Chapter 2 includes a review of relevant literature related to Professional Learning Communities, collaboration, teacher efficacy, trust, and school reform.

Chapter 3 includes a description of the methodology utilized for this study.

Chapter 4 includes a summary of the methodology used in this study, a presentation of the results, and data analysis.

Chapter 5 includes a results summary, study conclusions, implications for future research, and for practice.

Summary

In this chapter background information relative to Professional Learning Communities and an introduction to PLCs relative to collaboration, teacher efficacy, and trust within school
settings were presented. Rhyne (2011) argued that when groups of people collaborate within the culture of a learning environment and become interested in another’s belief about teaching and learning, true learning happens. The researcher used the Teachers’ Sense of Efficacy Scale to measure teachers’ self-efficacy in classroom management, instruction, and student engagement and conducted researcher interviews that collected data about patterns of trust within collaborative settings.
CHAPTER 2
REVIEW OF LITERATURE

Introduction to Literature

This review of literature included the research reported by others who examined how schools have evolved from teaching in isolation to engaging in professional development within Professional Learning Communities (PLCs). Studied were how schools have engaged in collaborative activities that, in turn, were perceived to promote bonding, and conversations that allowed educators to speak in risk free environments. The collaborative activities supported by professional development were frequently described as being essential to the effective functioning of schools (Marzano, Waters, & McNulty, 2005, p. 59). This chapter includes reviews of the literature surrounding collaborative activities in Professional Learning Communities, teachers’ efficacy in school settings, and trust development in organizational settings, and the use of PLCs in school reform.

The notion of professional communities has gained attention on the part of both practitioners and scholars in recent years. To foster improvement in instruction and student learning, Professional Learning Communities have been advocated as strategies to promote collaboration (Bryk et al., 1999). According to Hord (1997), Professional Learning Communities are comprised of continuous collaborative activities between teachers and administrators which incorporate supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. These collaborations usually occur during job embedded professional development activities such as data meetings,
grade-level meetings, or cross grade-level meetings. According to Tshannen-Moran (2001), higher quality decisions are the result of collaboration between principals and teachers with shared decision making as the focus. Influence to be able to have valued input is seen as impacting the outcomes of joint decision making. According to Tschannen-Moran (2001), teachers are less likely to be involved when they feel their input is not valued.

In order to build trust and develop collaborative learning environments or cultures to combat issues associated with student learning, organizational resources, and school wide reform, school capacity was examined (Cosner, 2009). Forsyth, Barnes, and Adams (2005) maintained that schools are especially dependent on cooperation for success. According to Wells and Feun (2007), schools face many challenges when seeking to operate like learning communities, and they argued that educators should examine the process used in order to sustain and function as a PLC. According to Dooner et al. (2007), in collaborative school settings, the process begins by reflecting on needs that would satisfy the necessity to meet. Dooner et al (2007) argued that Professional Learning Communities offer collaborative activities that allow teachers to share and discuss, and to reflect on and draw from each other’s strong qualities.

Collaboration and Professional Learning Experiences

According to Park et al. (2005), the topic of collaboration has increased significantly over the past couple of decades. Collaboration has been lauded as an important feature in the management of excellent schools (Tschannen-Moran, 2001). Recent requests for collaboration from teachers and parents seem to be calling for a genuine sharing of decision-making authority. Tschannen-Moran (2001) argued that effective school leaders need to become adept in constructing processes in which important decisions are made via collaboration. According to
Tschannen-Moran (2001), collaborative decision making is more beneficial to principals when the process is carefully structured to include teachers in decisions that matter to them, and involved when teacher expertise leads to real changes in the outcome. Tschannen-Moran (2001) maintained that investment in an atmosphere of trust pays noteworthy dividends for schools. Examples of remarkable outcomes cited in the literature have included improved effectiveness, communication, organizational citizenship and student achievement.

According to Barnes, Camburn, Sanders, and Sebastian (2010), multiple lenses on the complex issue of improving professional practitioners’ ability to perform in multifaceted domains converge on several principles for developing expertise in practitioners through planned modifications. The authors studied the interplay of learning, knowledge use, and change among a cohort of principals in an urban district. The goal of the study was to reduce the time and effort principals in the district put into non-essential matters. The participants in the study were principals from primary, middle, and secondary schools. Barnes et al. (2010) collected data from daily logs and case studies. They found there were few significant changes to daily practice, and they suggested that an expectation of incremental change versus a dramatic transformation in principals’ leadership was occurring through PLC program interventions.

According to Shields (2010), notions of promise, liberation, empowerment, risk, justice, courage, or revolution do not routinely evoke images of administrators who lead schools and systems. Yet, Shields (2010) argued that these concepts are at the core of transformative leadership. The purpose of the Shield’s study was to connect transformative leadership directly to the work of school leaders--assessing its potential in practice. The participants were selected from the data base for leaders whose schools had shown significant improvement in the state of Illinois on the State Report Card by making Annual Yearly Progress, or AYP.
The data for the study came from interviews with the principals and other educators who worked with them. In addition to interviews, site visits were made to confirm findings from the interviews that described the principals’ approaches to leadership. Shields concluded that transformative educational leaders possess the courage and conviction to bring about the promise of education (Shields, 2010).

According to Lavie (2006), a community of professional learners suggests teachers share pedagogy about teaching and learning, develop a sense of ownership for student learning outcomes, and commit to versus comply with meeting the diverse needs of all learners. Lavie (2006) maintained that a true professional learning community emphasizes teacher development as a tenet of school reform efforts. These school-based collaborative activities promote discourse between and among teacher groups and grade levels in a school setting.

According to Weaver Hart (1993), reflection among teachers in collaborative settings is a platform whereby job-embedded professional learning within Professional Learning Communities is improved. She argued that reflection on learning outcomes heightens awareness and instills a sense of mindfulness that improves intra-reflection and critical thinking around events or problem solving issues. Where feelings of insecurities exist, Desimone, Smith, and Ueno (2006) contended that scaffolding professional development activities helped target teachers’ own instructional needs as it relates to pedagogy. This is especially helpful for content area teachers. Desimone et al. (2006) further maintained that making professional learning opportunities non-negotiable for teachers will help schools ensure that teacher needs are being met and reflectional dialogue supported and promoted.
Teacher Efficacy

Efficacy beliefs encompass various types of capabilities, such as management of thought, affect, action, and motivation (Bandura, 1977, p. 45). According to Bandura (1977, p. 240), teachers’ beliefs in their instructional efficacy dictate how they set up academic activities for their classrooms. According to Bandura, teachers with a positive sense of efficacy operate on the premise they can reach difficult students through extra effort and strategic but appropriate teaching techniques. Bandura (1977, p. 241) contended teachers’ dispositions toward the educational process and specific instructional activities they employ were impacted by their beliefs in efficacy. According to Tschannen-Moran and McMaster (2009), individuals do not readily take on situations or pursue activities where they feel their energies will not yield positive results.

With the supposition that self-efficacy is a future-oriented behavior, Tschannen-Moran and McMaster (2009) explored the relationship between teachers’ self-efficacy and professional development designs. The authors (2009) purported that verbal persuasion, vicarious experience, mastery experiences, and physiological and affective states, can inform thought processes in the formation of teachers’ self-efficacy. Verbal persuasion encompasses oral feedback, or reassurance, from peers and supervisors to teachers who help build resilience to foster positive beliefs that they can, indeed, accomplish a feat with a great degree of measurable success (Tschannen-Moran & McMaster, 2009). This verbal input can be formal or informal but always in support of approaching a new task with a positive outcome. While not a major source of self-efficacy, verbal persuasion equips teachers with the stamina to set and pursue attainable goals that serve to improve their teaching skills (Tschannen-Moran & McMaster, 2009).
According to Tschannen-Moran and McMaster (2009), vicarious experiences are another source of developing self-efficacy. Vicarious experiences involve watching another person being effective in executing an action one is envisioning. Modeling is how the bulk of the information gets conveyed to the teacher. When watching someone else model, teachers have a chance to reflect on their proficiencies because they see the standard that is expected and can create an action plan to improve their own skill sets (Tschannen-Moran & McMaster, 2009). The belief that one can effectively perform a pending task is contingent upon the similarities between the teacher and model (Tschannen-Moran & McMaster, 2009). Seeing the modeling of the desired task helps the observer connect to his or her learning style. The delivery of the information by the model is not relegated to merely watching. The vicarious experiences can also include videos of the skill or strategy in action.

Tshannnen-Moran and McMaster (2009) concluded the most dominant source of evidence of efficacy attainment is personal ownership and execution of experiences. When there is little or no outside influence in acquiring a skill, self-efficacy beliefs are more prevalent. When professional learning is seen as valuable, the authors argued teachers were more likely to use the knowledge gained from the experiences and, subsequently, experience a paradigm shift. When examining affective states relative to self-efficacy, thought processes impact whether or not experiences are viewed as positive or negative (Tschannen-Moran & McMaster, 2009). In professional learning settings, teachers’ feelings may be rooted in interest or piqued curiosities. The authors contended that if a new learning setting takes place, the teacher may display nervousness. On the other hand, if there is feedback provided when a new strategy is learned in a hands-on setting, teachers are more apt to feel successful about the experience (Tschannen-Moran & McMaster, 2009). As teachers got feedback about their performance, watched
someone else in action to learn a new skill, and experienced ownership of learning, the resilience gained served to strengthen their self-efficacy. According to Leithwood and Jantzi (2008), self-efficacy beliefs have an impact on coping efforts when teachers participate in professional development activities. Moreover, Leithwood and Jantzi (2008), argued that those who allow themselves to be subject to correction in the face of arduous tasks gain depth to their sense of efficacy.

According to Gill and Hoffman (2009), teacher beliefs are instrumental in pedagogical decisions. The authors assessed teacher talk during common planning time to explore the rationale behind teachers’ decision making. Shared planning time was considered to be an effective opportunity for identifying beliefs because it does not happen inside a classroom environment. In addition, shared planning time fostered teacher autonomy, and was an ideal context to control for the impact of social desirability and self-presentation bias. Gill and Hoffman (2009) argued that teachers’ planning time provided a forum for teachers to display a rationale that undergirded their decision making.

According to Bryk et al. (1999), the essence of work in urban settings yielded focus on short term and frequent external redirection. Further, the authors suggested that not many teachers and administrators were inclined to reflect more on their day to day practices or were active seekers of new and innovative strategies and information to improve their work. The authors examined the impact of structural, human, and social factors on the prevalence of school-based professional community and the extent to which the aforementioned factors turned into greater instructional fortitude and experimentation on the part of the teachers. Their study used data from a survey designed to gather information on teachers’ views of the following: school setting, classroom learning, school-community relations with parents, governance, and the
professional work life of teachers. There were a total of 5,690 participant teachers from 248 elementary schools in the Midwestern United States. The results underscored the significance for small school size as a key component of professional learning communities. The authors contended that in small school environments, teachers have more opportunities for face-to-face interactions, yielding a broader base of social trust among the faculty.

Trust in Schools

Trust has been described as involving taking risks and making oneself transparent to another in the confidence that the other will act in ways that are not detrimental to the trusting party (Hoy et al., 2006). Tschannen-Moran (2009) argued that trust contributes to organizational effectiveness in several ways. According to Tschannen-Moran (2009), overreliance on bureaucratic structures such as hierarchy and authority, specialty labor areas, and written rules and policies can cause schools to be counterproductive on goals and may lead to an absence of organizational dexterity. Tschannen-Moran (2009) studied the relationship between leadership orientation and trust. She explored the notion that teachers demonstrate greater professionalism in their behavior where (a) leaders demonstrate a more professional orientation in their management of work processes, and (b) greater trust is evident throughout the organization (Tschannen-Moran, 2009).

In the Tshannen-Moran (2009) study, schools were selected based on their willingness to allow time for teachers to complete surveys during a faculty meeting. The school was the unit of analysis for her study. Moreover, the following were assessed: teachers’ perceptions of their colleagues’ behavior, professional orientation of principals, and faculty trust. The findings suggested that schools managed with a high degree of professional orientation functioned better
as PLCs. Tschannen-Moran’s findings (2009) supported her previous findings that teachers in schools that operated with a bureaucratic, rule-bound disposition were less likely to conduct themselves as professionals and to go beyond minimum expectations with regard to student learning.

As the instructional leader in the building, the principal is expected to understand what quality instruction looks like and to be well versed in pedagogy (Wahlstrom & Seashore, 2008). These authors examined the nature of relationships among adults in schools. Further, the authors investigated how conditions such as shared leadership and trust were affected by teachers’ perceptions of the effects of principal leadership. Survey data were collected from 4,165 participants who were teachers in Grades K-12 across the United States. The authors concluded that the effects of teachers’ trust in the principal became less important when shared leadership and professional community were present.

Cosner (2009) found that trust was essential to the culture of an organization. She maintained that school capacity can be thought of as the organizational resource that supports local reform work. Cosner investigated the perspectives and reported practices of 11 high school principals nominated by key stakeholders for their skill sets and knowledge base of the development of school capacity. Data were collected via interviews focused on leadership practices. The study findings identified trust as a key feature of capacity building. Cosner (2009) noted that trust facilitated the development of teacher knowledge, skills, and abilities vital to reform enactment. In short, the conversations about instruction were predicated upon trust between colleagues.

Forsyth et al. (2005) explored the relationship between the school’s trust environment and school outcomes by collecting data from parents and teachers in a random sample of 79
schools. Forsyth et al. (2005) used the tenets of relational trust in this study. They investigated whether the trust environment has consequences for school structure. Reasoning that high levels of hindering structures are preceded by low levels of trust, the authors (2005) concluded that relational trust is essential to school effectiveness.

According to Tschannen-Moran and Hoy (1998), researchers are beginning to notice trust more often. The authors contended that the study of trust is impaired by no definitive explanation of what it is and a lack of understanding of the process that developing trust entails. Tschannen-Moran and Hoy (1998) indicated that the propensity for gossip and the speed with which information spreads throughout the organization make it difficult to establish trust. These authors argued that trust encompasses placing something of value in the care or control of another with a comfortable level of assurance their trust will not be violated. Tschannen-Moran and Hoy (1998) contended that trust between two parties is greatly prejudiced by the social context in which it is embedded. Contexts that influenced trust between parties in school settings were teaching on the same grade level or same subject(s) taught, teacher philosophies, years of experience teaching, relationships with or those formed in opposition to the principal. In addition, these authors argued that race, gender, location of classrooms, and common lunch or planning times all influenced the forming of bonds and friendships within school settings. The authors alleged (1998) that trust allows individuals to sharpen their focus working and learning more effectively.

Tschannen-Moran and Hoy (1998) examined the relationships between school climate and faculty trust in addition to authenticity and trust. The unit of analysis was the school. Only middle schools with 15 or more faculty participated. Authentic behavior was defined as having three basic aspects: accountability, non-manipulation, and the salience of self over role
Accountability was the willingness to accept organizational and personal responsibility for mistakes and undesirable outcomes. In non-manipulative authentic relationships, individuals treated others as people first, versus movable human pawns. Whereas salience of self over role referred to the ability to act consistently with whom one truly is, not a prescribed role. Trust required a direct connection between all the players involved. Specifically, principal behavior influenced only trust in the principal, and the conduct of teachers was the primary influence on trust in colleagues. Thus, trust was related to a climate of openness, collegiality, professionalism, and authenticity (Tschannen-Moran & Hoy, 1998).

Teacher teams function to reinvigorate schools and function as organizational subsystems. Park et al. (2005) explored associations between teamwork, trust, and teacher team commitment. The success of a team depends, largely, on the effectiveness of skill-dependent component processes of teamwork. The authors asserted that team skills are comprised of communication (exchange of information), team orientation (attitudes of the team toward each other) and the task, team leadership (providing direction, structure, and support for other team members—not just from a single person), monitoring (observation and awareness of activities and performance), feedback (giving, seeking, and receiving of information), backup behavior (willingness to provide and seek assistance as needed), and coordination (executing activities in a timely manner).

According to these authors, trust is a requisite in the composition of an effective school team (Park et al., 2005). Moreover, the authors argued that teacher commitment levels, or lack thereof, serve as the catalysts for change when seeking to restructure. In arenas where trust has suffered, those who have lost trust in others are responsible for restoring trust (Tschannen-Moran & Hoy, 1998).
According to Park et al. (2005), higher levels of trust exist within organizational teams in schools that support and reinforce teacher commitment. Trust is essential for collaboration and communication in Professional Learning Communities. According to Hoy, Gage, and Tarter (2006), errors are more easily corrected and more honestly admitted versus hidden in climates where trust is central to relationships. Moreover, when things happen out of context and surprises occur, they argue that elements of trust (benevolence, reliability, competence, honesty, and openness) are the key ingredients to facilitating organizational reliance to work collectively towards a solution despite positions held within the organization. Sackney and Walker (2006) argued that principals who lead learning communities should strive to create cultures that develop and sustain trust, collaboration, innovation, reflection, shared leadership, and are data savvy.

Tschannen-Moran (2001) has argued that the processes of collaboration will not unfold as planned if the players involved do not trust each other. She said the ebb and flow of distrust within an organization is cyclical and argued that collaboration and trust are reciprocal processes, depending on and fostering one another. The processes around building a collaborative community can potentially foster greater trust as team members have experience with one another over time, and have opportunities to witness the benevolence, reliability, competence, honesty, and openness of their fellow colleagues. Collaboration has been described as an essential mechanism for schools to work toward excellence (Tschannen-Moran, 2001). In order for schools to reap the benefits of more in-depth collaboration, trust is crucial. I believe that collaboration holds the possibility of higher quality decisions. This supposition is supported by
the outcomes (greater trust, better dialogue, openness, shared decision making) that happens as a result of specific action steps taken to improve trust dynamics within organizations (Hoy, Gage, Tarter, 2006).

According to Hoy et al. (2006), benevolence, reliability, competence, honesty, and openness are behaviors that when displayed and perceived as sincere, serve as a foundation for trust to exist in collaborative relationships in school settings. Hoy et al. (2006) argued the following: benevolence is the most familiar aspect of trust. Where there is no trust extended from leadership, teachers obsess over real and imaginary situations and operate in circles of concern. Hoy et al. (2006) maintained that reliability supersedes consistent behavior. Reliability merges with benevolence to be predictable in evoking positive perceptions of intent.

Competence is more than having good intentions and performing a task. Hoy et al. (2006) purported that one who is competent can complete a task to an acceptable standard. Competent and organized school administrators who are successful in carrying out organizational tasks are more likely to gain a faculty’s trust. Hoy et al. (2006) described honesty as being rooted in an individual’s disposition, integrity, and genuineness and is supported by follow-through. The authentic nature of honest behavior corresponds to deeds, or actions. Openness is the final piece to establishing trust within collaborative settings. Hoy et al. (2006) argued that being open in communication serves as a springboard for the mutual sharing of information without exploitation. They said that this is crucial behavior between principals and teachers. According to Hoy et al. (2006), trust is relational, and inherent to the process are three referents of trust: faculty trust in each other, faculty trust in the principal, and faculty trust in stakeholders.

Hoy et al. (2006) contended trust would be standard in settings that encourage people to take risks and make errors. These authors maintained that an open forum for collaboration
communicates to all parties that there is an atmosphere of trust, where there will be no exploitation of the individual or information. Tschannen-Moran (2000) asserted that collaboration in environments where trust is the normed expectation and standard is the crucial key to transform schools into sustainable learning communities.

School Reform

According to Arredondo Rucinski, Beas Franco, Gomez Nocetti, Thomsen Queirolo, and Carranza Daniel (2009), school reform efforts are central to the expansion of teachers’ knowledge and skills inclusive of occasions to improve their own teaching strategies. They argued that teacher expertise is improved when action and reflection collide. The authors (2009) studied the concept that reflective dialogue with a mentor might serve as a conduit for teachers’ improved professional knowledge that supports them being practitioners of their crafts. Arredondo Rucinski et al. (2009) concluded that effective leadership is critical to successful school reform as teachers engage in professional learning that will impact student outcomes. Arredondo and Rucinski (1996) argued that an integrated curriculum as a measure of school reform is on the rise. They contended that when students see the value in learning as it applies to them, they begin to make connections to the processes of schooling. Arredondo and Rucinski (1996) further maintained that even if there is support for an instructional design encompassing integrated content, there is not a consistent support structure in place for planning the implementation piece.
Summary

According to Penuel et al. (2010), it is crucial that scholars shift their focus from the learning that takes place as part of structured meetings to the more meaningful discussions that happen in hallways, lunchrooms, or staff workrooms to better understand a subset of collegial interactions in a school setting. In order to address this problem, Hoy (2002) suggested that mindfulness be the construct necessary to assist schools in overcoming issues related to enabling organizational behaviors that can negatively impact attainment of goals and objectives. Hoy (2002) described mindfulness as deferring to expertise as opposed to status or experience. Thus, Hoy (2002) argued that teachers need to feel safe enough to question the rules, the procedures, the principal, and especially each other.

According to Gill and Hoffman (2009), teacher beliefs are instrumental in pedagogical decisions. Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) argued that self-efficacy has the distinction of other self-concepts in that it is relegated to a specific task. These authors (1998) maintained that self-efficacy is rooted in self-perception as opposed to authentic competence. If a person perceives himself or herself to have been accomplished in completing a task, their sense of belief in self is heightened. Wahlstrom and Seashore (2008) maintained that feelings of efficacy dictate teachers’ willingness and preparedness to adopt reform strategies. This would include those strategies that may cause them to collaborate with colleagues. According to these authors, when teachers engage in collaborative activities such as shared planning, more authentic conversations about curriculum decisions are uncovered. Hoy et al. (2006) argued that when teachers were mindful about the discourse, they were more flexible, vigilant, open, and willing to deviate from the norm. According to Fullan (2001, p. 67), unless collaborative cultures focus on the main things, they may end up being wrong in powerful ways.
According to Lomos et al. (2011), the five interconnected variables of a PLC are reflective dialogue (mentally focused discourse and reflection on instructional practice), collaborative activity (teachers working together in real time with a specific outcome), deprivatization of practice (teachers observing each other’s classes), a shared sense of purpose or collective responsibility (a consensus among school staff regarding day-to-day operations), and focus on student learning (suggests there is a collective emphasis on teaching for higher order thinking and authentic student learning). Dooner et al. (2007) said that although teachers come to the collaborative process with their own expectations of group work, they should identify roles so they fit together to generate a shared practice.

Bryk et al. (1999) asserted that in order to facilitate a successful PLC, three conditions should be considered: school size, principal leadership, and trust. While a small school may experience greater success because there are more opportunities for the staff to collaborate, school size is a key component of facilitating a PLC. A smaller or compact size school setting promotes engagement in more common activities. Principal leadership, as purported by Bryk et al. (1999), is essential to the lifeline of professional learning communities. If principals are not data savvy and do not know what to address, the leadership days are numbered. Teachers must view their leaders as knowledgeable before they will listen to them on teaching and learning matters. According to Bryk et al. (1999), social trust was a crucial component when facilitating PLCs. Without it, there was little or no commitment among teachers. Principals must view themselves as instructional leaders who support the team in order to gain buy-in and trust from their faculties.

According to Hord (1997), successful leaders learn to utilize PLCs as opportunities to give attention to teachers’ needs for stimulating dialogue that serves to improve their sense of
pedagogy. Hord (1997) argued that leaders who model the expected behaviors of a Professional Learning Community make evident the tenets of a Professional Learning Community culture. Such a culture was described by Hord (1997) as allowing healthy dissent and debate which turns into increased understanding and learning. According to Sackney and Walker (2006), building a Professional Learning Community is contingent upon a sense of shared vision and purpose. Sackney and Walker (2006) described current Professional Learning Communities as having experienced a paradigm shift from traditional (content and rote learning) to learner centered (deeper approach to scope and sequence of topics, higher order thinking skills, and teaching for mastery).

According to Bandura (1993), self-efficacy beliefs affect cognitive processes in a variety of ways. Those with a high sense of efficacy are more apt to visualize themselves as part of successful scenarios. Bandura (1993) described efficacy as being the chief influence in beliefs regarding potential to affect one’s own life. This sense of efficacy impacts how people feel, reflect, encourage themselves, and conduct themselves in situations.

Thus, this review of literature highlighted facets of PLCs relative to collaboration that takes place during job-embedded professional development opportunities, development of teacher efficacy, the perceptions of trust as a result of the collaborative activities, and school reform efforts. According to Rhyne (2011), Professional Learning Communities are predicated on the premise that when educators engage in collaborative activities for reflective purposes, their increased productivity impacts student outcomes. Arredondo Rucinski et al. (2009) purported that school reform efforts can only be effective when curriculum is integrated and focused on meeting the needs of a diverse body of learners.
CHAPTER 3

METHODOLOGY

The purpose of this study was to examine how Professional Learning Communities were used in North Alabama Schools to foster collaboration and to develop teacher efficacy and trust within school settings.

Research Design

This research used a mixed methods model that allowed the researcher to collect and analyze both qualitative and quantitative data to assist in answering the research questions. In situations where researchers first survey a large number of individuals and then follow up with a few participants to attain their precise language and perspectives about the topic, then both closed-ended quantitative and open-ended qualitative data are beneficial (Creswell, 2009, p. 18). According to Creswell (2009), the mixed methods approach to inquiry yields an overall strength of a study that may surpass either qualitative or quantitative research in individual form. The rationale for using this design is it is useful when either the quantitative or qualitative approach is not sufficient in isolation to best understand a research problem.

A challenge to using this type of design is that the researcher cannot focus all efforts on a single design type. Another potential problem is that participants may not respond according to the project timeline. To combat this problem, the researcher was diligent in follow-up to ensure a higher number of responses.
The researcher used the sequential explanatory strategy to collect the data. According to Creswell (2009, p. 211), the sequential explanatory strategy is a popular strategy for mixed methods design that is characterized by the gathering and analysis of quantitative data in a first phase of research. This is followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results. The data collected are separate but connected as outlined below:

<table>
<thead>
<tr>
<th>Quantitative Data and Results</th>
<th>Qualitative Data and Results</th>
<th>Interpretation</th>
</tr>
</thead>
</table>

In order to determine whether schools were active participants in a current Professional Learning Community, a purposeful sample of principals were provided preliminary questions. The researcher conducted a survey with a principal group by emailing a questionnaire inviting them to participate. The researcher accepted those responses that indicated participation in a PLC from the principals. In the email, principals were asked if their school was involved in a PLC, what the Professional Learning Community involvement looked like, and to describe the effectiveness of it. If schools responded yes, that indicated participation level in a Professional Learning Community. Teachers at those schools were the participants in the study. Quantitative data were collected by using the Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a survey that measures teachers’ beliefs in efficacy in classroom management, efficacy in instruction, and efficacy in student engagement. Qualitative data were collected during interviews with participants who agreed to share their perceptions of professional development activities. The data were analyzed for emerging themes that supported the quantitative data.


Research Questions

In order to better understand the impact of collaboration in PLCs on teacher effectiveness and trust, the following research questions were examined:

1. To what extent are professional learning communities established in North Central Alabama schools?

2. In schools that use professional learning communities, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative professional development activities acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross grade-level meetings?

3. In schools that use professional learning communities, to what extent is trust perceived to be established among faculty as a result of collaborative activities?

4. In schools that use professional learning communities, what are perceptions of the effectiveness of PLCs by the professional educators in these North Central Alabama Schools?

Hypotheses

The following hypotheses were tested:

H1: Educators who participate in Professional Learning Communities have a positive sense of efficacy.

H2: Collaborative activities within Professional Learning Communities may foster more trust among faculty.

The TSES (Tschannen-Moran & Hoy, 2001) was used to collect data from participants in Professional Learning Communities. Purposeful interviews were then conducted by the researcher, and data from those interviews were analyzed for common themes reflective of participants’ perceptions.
It was predicted that educators who engage in collaborative activities in PLCs would acquire a deeper and greater sense of efficacy and bonding with colleagues as a result of the participation.

The following table shows a relationship among the research questions, data used to answer the research questions, and the techniques used to address the questions.

Table 1

<table>
<thead>
<tr>
<th>Description of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Questions</strong></td>
</tr>
<tr>
<td><strong>To what extent are PLCs established in North Alabama?</strong></td>
</tr>
<tr>
<td><strong>In schools that use PLCs, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative professional development acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?</strong></td>
</tr>
<tr>
<td><strong>In schools that use PLCs, to what extent is trust perceived to be established as a result of collaborative activities?</strong></td>
</tr>
<tr>
<td><strong>In schools that use PLCs, what are perceptions of the effectiveness of PLCS by the professional educators in these North Central Alabama Schools?</strong></td>
</tr>
</tbody>
</table>
Population and Sample

The participants in this study were educators in school districts across the North Central Alabama region. There were 13 schools and 208 educators in the study. The educators in the study were employed at the elementary level in either kindergarten through fifth grade settings (K-5) or kindergarten through fifth grades within a K-12 setting. Surveys and interviews were conducted via a convenience sampling of teachers in these settings. Convenience sampling is useful in that it saves the researcher time, money, and effort while providing pertinent information (Creswell, 2007, p. 127).

Quantitative and Qualitative Data Collection

Quantitative data were collected via the Teachers’ Sense of Efficacy Scale (TSES), a tool that measures teachers’ sense of efficacy by Tschannen-Moran and Woolfolk Hoy (2001). This survey measures teachers’ perceived self-efficacy in the following areas: self-efficacy in student engagement, self-efficacy in instructional strategies, and self-efficacy in classroom management. Qualitative data were collected from interviews with participants who indicated on the survey instrument they would allow the researcher to interview them. The interviewer explored the level to which trust and effectiveness were established as a result of participation in PLCs. Data regarding schools and school size were obtained from the district websites for each school invited to participate.

In order to conduct the study, superintendents of the sample school districts received a letter from the researcher asking permission to contact principals. Once permission was granted, principals served as the initial point of contact for the sample schools. To further determine which schools to use for the surveys, a pilot survey was conducted. A pilot survey was sent to
five principals working in a district not invited to participate in the study. The pilot was conducted to determine if schools would be eligible to participate based on the questions asked. The principals were provided a working definition of what a PLC is and asked to respond yes or no to whether their schools were involved in a Professional Learning Community (PLC). If the principals said a PLC existed, they were asked to tell what the PLC looked like in their respective schools. Then, they were asked to describe the effectiveness of the PLCs in their schools. For the participating schools, those who responded yes to whether or not a Professional Learning Community existed in their schools received surveys, and the study continued from there.

According to Hord (1997), Professional Learning Communities are comprised of continuous collaborative activities between teachers and administrators which incorporate supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. The collaborations usually occur during job embedded professional activities such as data meetings, grade level meetings, or cross-grade level meetings. Thus, principals received this definition of what a PLC is as they prepared to respond to a set of questions about their schools as PLCs. The following questions were asked of the principals:

1. Is your school involved in a Professional Learning Community (PLC)?
2. What does the PLC look like in your school?
3. How would you describe the effectiveness of the PLC in your school?

Attached to the email was a description of the study, confidentiality protocol, and the purpose of data collected from participants. Once principals responded, surveys were sent to the respective schools. For principals not responding to the emails, the researcher telephoned them to obtain permission to conduct the study within their schools. In situations where the researcher
was not granted permission to survey and interview participants, there were no further efforts made by the researcher to conduct the study with that portion of the population sample.

Interview and Survey Instrument

The *Teachers’ Sense of Efficacy Scale* (TSES) by Tschannen-Moran and Woolfolk Hoy (2001) was the instrument that was used to measure teacher effectiveness. This survey allowed the participants to choose one option that best fit their sense of efficacy in the following areas: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. According to Creswell (2009, p. 145), survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by polling a sample of the population. This survey was cross-sectional, with data being collected at one point in time (Creswell, 2009, p. 146). Participants were able to respond to the questions by marking answers that reflected their sense of self-efficacy in classroom management, instruction, and student engagement. Items were arranged on a 1-9 Likert-type survey, with 1 or 2 indicating *no influence*, 3 or 4 *very little influence*, 4 or 5 *some influence*, and 6-7 *quite a bit of influence*.

Prior to receiving the mailed survey, the sample members received notice from the researcher expressing intent to conduct the survey. The actual surveys were mailed a week later. Following this, participants received a follow-up mailing. The surveys had a place on the form for participants to mark yes or no regarding the subsequent interviews. Along with a confidentiality acknowledgement for those being interviewed and completing the survey, participants were provided an addressed stamped envelope to return the surveys. Once this process was completed, interviewees were selected based upon the participants’ willingness to participate as indicated on their returned survey. Each participant received a color coded
hardcopy survey instrument. The different colors were used to differentiate the school systems
from each other. Demographic data were collected as part of the initial survey. See Appendix F

Participants received a description of the study in their survey packets and given 10
business days to complete and return the packet in the addressed stamped envelope provided by
the researcher. Follow up contacts were made by the researcher to ensure an adequate number of
surveys were returned. Of the 405 surveys given to the participants, there were 208 returned for a
rate of 51%.

Once the survey portion was complete, the researcher made contact with those who were
willing to participate in the interview process. The participants were asked probing, yet open-
ended questions that allowed the researcher to ascertain their perception of participation the PLC
process and building a sense of trust as a result (see page 35 for sample of interview questions).
During the interview, participants were asked questions that ranged from their thoughts on
involvement in a PLC, feelings about the effectiveness of the PLCs within their respective
schools, impact of collaborative engagement within a PLC on their usage and knowledge of
pedagogy in instruction, data-, and grade-level meetings, the quality of their professional
conversation as a result of participation in a PLC, and impact of the PLC on trust between
colleagues as a result of participation. Hence, the duration of the survey process was about 30
days. The interviews took place during the 2- to 4-week period following the survey process.

Validity and Reliability

The Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) is considered to
be valid and reliable. According to Creswell (2009, p. 149), the validity of an instrument
determines whether one can, “draw meaningful and useful inferences from scores on the instruments.” Creswell (2009, p. 149) identified the three traditional forms of validity as content validity (items measure the intended content), predictive or concurrent validity (scores predict a criterion measure and correlate with other results), and construct validity (items measure hypothetical constructs or concepts identified in the literature). Reliability is judged by measures of internal consistency in test administration and scoring calculated after the instrument has been administered.

The Teachers’ Sense of Efficacy Scale references construct validity and reliability. The TSES was normed three times by Tschannen-Moran and Woolfolk Hoy (2001) and administered to pre-service and in-service teacher populations before the final instrument was presented. The first study reduced the original 52 items to 32. The second study further reduced the number of items to 18, comprised of three subscales. The third study developed and added 18 more items. The final instrument was presented in two forms: a long form, with 24 items, and a short form, with 12 items. The frugal nature of the scales yielded the highest loadings on each scale and an intact factor structure. The unweighted means that load on each factor were computed by grouping in the following manner:

**Long Form**
- Efficacy in Student Engagement: Items 1, 2, 4, 6, 9, 12, 14, 22
- Efficacy in Instructional Strategies: Items 7, 10, 11, 17, 18, 29, 23, 24
- Efficacy in Classroom Management: Items 3, 5, 8, 13, 15, 16, 19, 21

**Short Form**
- Efficacy in Student Engagement: Items 2, 3, 4, 11
- Efficacy in Instructional Strategies: Items 5, 9, 10, 12
- Efficacy in Classroom Management: Items 1, 6, 7, 8

The instrument by Tshannen-Moran and Woolfolk Hoy (2001) was an appropriate scale measuring the original tenets of Efficacy in Student Engagement, Efficacy in Instructional
Practices, and Efficacy within Classroom Management developed that examined factor structure, reliability, and validity, and was shown to be reliable, valuable, and valid for use in measuring teachers’ self-efficacy. Reliabilities, or chronbach α, for the teacher efficacy subscales were 0.91 for efficacy in instruction, 0.90 for efficacy in classroom management, and 0.87 for efficacy in student engagement. Intercorrelations between the subscales of efficacy in instruction, efficacy in classroom management, and efficacy in student engagement were 0.60, 0.70, and 0.58 respectively ($p < 0.0001$). Tschannen-Moran and Woolfolk Hoy (2001) described the subscales as ranging from 6.71 to 7.27 within the testing studies. Tschannen-Moran and Woolfolk Hoy (2001) concluded that the analysis of the Teachers’ Sense of Efficacy Scale were valid and reliable regarding usefulness for those who examine teacher efficacy.

A permission letter to use the survey is included in the appendix of this study (see Appendix F) for more information. The researcher used the data collected to investigate the perceived level of teacher self-efficacy of research participants. The researcher assumed this efficacy was developed through collaborative activities such as grade level, cross-grade level, or data meetings.

Data about participants’ trust in colleagues and in their principals were gathered from face to face interviews conducted by the researcher. Participants were asked to reflect on the level of trust they perceived had been gained as a result of participation in collaborative activities in PLCs. The open-ended questions and prompts were used to probe the participants during the interviews included the following examples:

1. What has your involvement in a professional learning community (PLC) looked like?
2. How do you feel about your approach to instruction as a result of being involved in a PLC?
3. How do you feel engagement in collaborative professional development activities has impacted your sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?

4. Are there differences between the quality of conversation you experience about instruction now versus before you participated in collaborative conversations about teaching and learning during grade level, data, or cross-grade level meetings? If so, please describe.

5. To what extent do you feel trust has been established among faculty as a result of collaborative activities?

6. How do you feel about the level of trust between you and your colleagues following collaboration?

7. Since participating in the PLC, I have now…

Creswell (2009, p. 203) argued that mixed methods studies were useful for expanding understanding of research problems. Mixed methods studies are ideal for those who enjoy both the structure of quantitative research and the flexible nature of qualitative inquiry. Creswell (2009, p. 209) maintained that mixing methods within research indicates the research is connected between a data analysis of the first phase of research that is used to follow up with qualitative data collective in a second phase of research.

Data Analysis

Planned as a mixed methods study, the researcher assessed teacher efficacy via a survey and then transcribed and coded themes from data provided during participant interviews. Quantitative data were collected and analyzed to provide follow up for the qualitative data
collection phase. The *Teachers’ Sense of Efficacy Scale* was used to survey teacher efficacy in the following areas: student engagement, instructional strategies, and classroom management. Eighteen interviews were conducted to assess themes common among the participants. Data from both phases of the study were compared to ensure the findings were valid.

**Variables**

The variables were the elements of the *Teachers’ Sense of Efficacy Scale* by Tschannen-Moran and Woolfolk Hoy (2001), the information provided in the demographic section of the survey, and the theme data gleaned from the interviews.

**Researcher’s Positionality and Skills**

As a first-year teacher in the summer of 2000, my first introduction to Professional Learning Communities was via collaboration between the Alabama Reading Initiative (ARI), local inservice centers, and local school districts in the North Central Alabama region. Thus, collaboration has always been part of my experiences as an educator. Upon completion of ARI professional learning activities, common planning time was integrated into the master schedule and professional development embedded into the work day of my school by my former principal.

Early common planning times for collaboration when I was in the classroom as a kindergarten teacher (2000-2003) and second grade teacher (2003-2005) meant each grade level had a forty minute physical education class together every day except Wednesdays. On rotating “Wonderful Wednesdays,” there were cross grade level collaborative activities. When I became principal of this school in 2005, the same school where I had worked as a classroom teacher, we
continued to operate using the same format, adding one hour of common planning four days per week to the master schedule.

At the beginning of the 2010-2011 school year, my teachers and I collaborated to revamp the master schedule. The redesign of the master schedule included common planning time per grade level to be used for collaboration about student learning one hour a day five days per week. The part missing from the design was the reflection piece on how teachers viewed themselves as a result of the collaborative activities. Past surveys were either about the quality of the professional development or quality of the actual presenters versus personal reflection on the process and participants’ professional growth as a result of participating.

When I became a principal five years after beginning my educational career, I continued to engage teachers in professional development activities. Initially, the collaborative activities were designed to focus on student engagement and student learning and not the acquisition of pedagogy relative to teacher efficacy. Still, there were no known opportunities for teachers to evaluate their sense of efficacy or reflect on the level of trust established as a result of their participation in the PLC. What was available was an opportunity for educators to convey thoughts on the district climate and whether or not they communicated district goals to the schools.

During my first few years as a school leader, material learned in instructional supervision classes began to make more sense to me as I had opportunities to apply knowledge learned in classes to situations that took place in my school. While there were multiple opportunities to engage in conversations about student learning, there were no processes in place to gauge how teachers felt about their own pedagogy as evidenced by participation in such conversations (grade-level, cross grade-level, or data meetings), or their ability to interact with and form
relationships with colleagues that yielded a positive outcome for teaching and learning. I noticed a pattern of teachers being adept at discussing student learning in collaborative environments but not comfortable reflecting on their own learning experiences in the same type settings.

Thus, I felt the need to research these issues and share the implications of my study with the participating schools in order to strengthen the effects of teaching and learning for the stakeholders in the North Central Alabama region. To facilitate the change to authentic, purposeful discussion, I was strategic in telling the teachers how they were the true experts in teaching and learning. In order to build trust, I pointed to specific examples that supported my observations relative to their professional growth and participation within our own PLC. We celebrated together success stories they shared about their own reflections and growth in teaching and learning, and I provided to them a set of items we would discuss that facilitated our collaborative dialogue. As a result of moving from using scripted dialogue in grade level or data meetings from previous years to open ended prompts and questions that focused on reflection, the data analysis within the processes of teaching and learning became integrated into discussions. Subsequently, I stopped using the established questions provided in their intact form and started using open-ended questions and prompts in grade level and data meetings such as:

I wonder…

How do you feel about…

I noticed…

Share how…

What is the evidence of…as compared to…

Talk me through what you do when/if…
This change from using scripted questions to engaging teachers in dialogue set the tone for more high quality discussion and trust between colleagues to share in a lower-risk environment. When the redesigned questions were introduced, I explained that I was interested in supporting their dialogue in a collaborative setting. Initially, the questions were met with silence and responses that coincided with the former questions. As I became more intentional at modeling usage of conversational prompts designed to promote dialogue, providing feedback on professional growth and/or data at checkpoints, allowing the teachers to share their perceptions of successes, celebrating those successes, asking how I could better meet their needs, and being consistent in meeting with them, the atmosphere changed. Teachers started participating in more dialogue and became more open with their reflective feedback of data and instructional pedagogy. They became more data savvy, were more willing to collaborate about all aspects of teaching and learning--especially those areas that required thick-skinned transparency. Teachers owned and were more open about sharing their data. Assessments were used in a more formative manner as opposed to just using them to gather summative data. The more we learned, the more they shared. In addition, they became more willing participants in collaborative discussions and initiated dialogue more often than in the past. They also bounced ideas off one another to solve issues relative to teaching and learning.

Timeline for Completing the Study

This study began in the spring of 2011 and was concluded in the fall of 2011.
Ethical Considerations

The research included in this study did not consist of language or words participants could consider biased regarding gender, sexual orientation, racial or ethnic group, disability, or age. According to Creswell (2009), language and words used by researchers should be at an appropriate level or specificity regarding participants. Additionally, participants were informed of their options to refuse to participate in the survey or interview process without retribution of any form. All participants in this study were guaranteed protection of privacy. Individuals not involved in this project did not have access to data provided to the researcher by the participants.
CHAPTER 4

RESULTS

The purpose of the research was to examine how collaboration within Professional Learning Communities affected teacher efficacy and trust. Specifically, do educators who participate in Professional Learning Communities have a positive sense of efficacy? The researcher was interested in whether, to what extent, and how collaborative activities within Professional Learning Communities fostered trust among faculty.

Planned as a phased mixed methods study, the researcher analyzed survey results of the Teachers’ Sense of Efficacy Scale relative to participants’ patterns of efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management using IBM™ SPSS Statistics 20 software. The researcher conducted interviews to assess patterns of emerging themes relative to teachers’ perceptions of collaboration and their impact on teacher efficacy and trust as evidenced by their participation in data meetings, grade level meetings, or cross-grade level meetings. Data collection occurred via the United States Postal Service and during one-on-one interviews between the researcher and the participants in the interviews. To that end, the following questions guided the study:

1. To what extent are professional learning communities established in North Central Alabama schools?

2. In schools that use Professional Learning Communities, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative
professional development activities acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross grade-level meetings?

3. In schools that use Professional Learning Communities, to what extent is trust perceived to be established among faculty as a result of collaborative activities?

4. In schools that use Professional Learning Communities, what are perceptions of the effectiveness of PLCs by the professional educators in these North Central Alabama Schools?

In order to further assess the impact of collaboration on teacher efficacy and trust, the participants responded to the following sub-questions and probes during the interview process:

1. What has your involvement in a professional learning community (PLC) looked like?

2. How do you feel about the effectiveness of the PLC?

3. How do you feel about your approach to instruction as a result of being involved in a PLC?

4. How do you feel engagement in collaborative professional development activities has impacted your sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross grade-level meetings?

5. How has your approach to conversation changed since participating in the PLC?

6. What is the difference between the quality of conversation you experience about instruction now versus before you participated in collaborative conversations about teaching and learning during grade level, data, or cross-grade level meetings?

7. To what extent do you feel trust has been established among faculty as a result of collaborative activities?
Survey Results

Principals’ Survey

Principals were contacted via email by the researcher and asked if Professional Learning Communities were used within their schools. Principals were asked to describe what they meant by a PLC and the perceived effectiveness of the PLCs within their schools. The principals received an email and a follow up phone call from the researcher requesting this information when there was no email response. Only those schools that had Professional Learning Communities were provided surveys and participated in interviews.

Research Survey

Survey data were analyzed by the researcher as organized to responses to the Teachers’ Sense of Efficacy Scale (TSES). A total of 15 schools and 405 elementary school teachers were invited to complete the TSES. The surveys were sent to the participants at the schools where they were employed in North Central Alabama elementary schools through the United States Postal Service with a pre-stamped researcher addressed return envelope. Of the 405 teachers invited to participate, 208 responded for a return rate of 51%.

Demographic Data

Demographic data were gathered to obtain information about the sample of participants who elected to participate in the study. The researcher gathered this information to get a snapshot of the participants’ backgrounds relative to teaching. The participants were asked about gender, race, total years teaching experience, teaching total years at present school, education level, department taught in, specific subject area taught, PLC attendance, common core and/or
grade-level meetings, and number of people attending the meetings, and willingness to participate in an interview with the researcher. Relative to demographic data, the minimum age of participants was 24.00 with a maximum of 61.00. The mean age of participants was 40.25. The mean for years of teaching was 14.28. There was a mean of 10.17 for years at the participants’ present school. The mean was 4.29 for number of participants present at PLC meetings. The total number of participants’ teaching years ranged from 1 to 40 with a mean of 14.28 years teaching experience. The total number of years that the respondents have taught at their present assignments ranged from 1-30 with a mean of 10.17.

As presented in Table 2, of the surveys completed and returned, there were 200 (96.1%) female participants and 8 (3.8%) male participants. The participants self-identified as African American (13.9%) and Caucasian (86.0%). The age bracket of the largest number of participants was in the 39 to 44 year old range (30.2%) followed by 27 to 32 years old (22.5%), 33 to 38 years old (20.1%), 45 to 50 years old (11.0%), 51 to 56 years old (6.2%), 57 to 62 years old (5.2%), and 21 to 26 years old (4.3%). The most frequently reported category of teaching experience was within the 5 to 10 years category (28.8%) followed by 16 to 20 years (25.9%), 11 to 15 years (23.5%), more than 20 years (12.5%), and less than 5 years (9.1%). The largest concentration of participants’ degrees fell within the bachelors category (55.3%). This was followed by masters (38.9%), specialist (4.8%), and doctorate (.09%). See Table 2 for more information.

These data are relevant in that they provide information about participants to the researcher. All of the participants worked at the elementary school level.
### Table 2

**Demographic Data of Survey Participants**

<table>
<thead>
<tr>
<th>Participants</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>96.1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>29</td>
<td>13.9</td>
</tr>
<tr>
<td>Caucasian</td>
<td>179</td>
<td>86.0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-26 years old</td>
<td>9</td>
<td>4.3</td>
</tr>
<tr>
<td>27-32 years old</td>
<td>47</td>
<td>22.5</td>
</tr>
<tr>
<td>33-38 years old</td>
<td>42</td>
<td>20.1</td>
</tr>
<tr>
<td>39-44 years old</td>
<td>63</td>
<td>30.2</td>
</tr>
<tr>
<td>45-50 years old</td>
<td>23</td>
<td>11.0</td>
</tr>
<tr>
<td>51-56 years old</td>
<td>13</td>
<td>6.2</td>
</tr>
<tr>
<td>57-62 years old</td>
<td>11</td>
<td>5.2</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>19</td>
<td>9.1</td>
</tr>
<tr>
<td>5-10 years</td>
<td>60</td>
<td>28.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>49</td>
<td>23.5</td>
</tr>
<tr>
<td>16-20 years</td>
<td>54</td>
<td>25.9</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>26</td>
<td>12.5</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>115</td>
<td>55.3</td>
</tr>
<tr>
<td>Masters</td>
<td>81</td>
<td>38.9</td>
</tr>
<tr>
<td>Specialist</td>
<td>10</td>
<td>4.8</td>
</tr>
<tr>
<td>Doctorate</td>
<td>2</td>
<td>.09</td>
</tr>
</tbody>
</table>

*Note: n = Total. Table data supplied by participants*
Table 3 depicts demographic data from the interview participants. Of the 208 surveys returned, 18 (8.6%) indicated a willingness to participate in an interview with the researcher. There were 18 (100%) female participants and no male participants for the interviews. The participants self-identified as African American (33.3%) and Caucasian (66.6%). The age bracket of the largest number of participants was in the 33 to 38 year old range (27.7%) followed by 39 to 44 years old (22.2%), 27 to 32 years old (16.6%) and 45 to 50 years old (16.6%), 51 to 56 years old (11.1%), and 57 to 62 years old (5.5%). There were no interview participants in the 21 to 26 year old category. The most frequently reported category of teaching experience was within the 5 to 10 years (33.3%) and 11 to 15 years (33.3%) categories, followed by 16 to 20 years (22.2%), more than 20 years (5.5%), and less than 5 years (5.5%). The largest concentration of participants’ degrees fell within the masters category (44.4%). This was followed by bachelors (38.8%), specialist (11.1%), and doctorate (5.5%). See Table 3 for more information.
Table 3

Demographic Data of Interview Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Caucasian</td>
<td>12</td>
<td>66.6</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-26 years old</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27-32 years old</td>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td>33-38 years old</td>
<td>5</td>
<td>27.7</td>
</tr>
<tr>
<td>39-44 years old</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>45-50 years old</td>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td>51-56 years old</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>57-62 years old</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>5-10 years</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>11-15 years</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>16-20 years</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>7</td>
<td>38.8</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>44.4</td>
</tr>
<tr>
<td>Specialist</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Doctorate</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>PLC Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number Who</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>Attended PLC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The number of people in attendance at the interview participants’ Professional Learning Community meetings was crucial in that it indicated the span of the collaboration pool at their disposal for professional development activities. Participants who indicated a willingness to participate in a researcher-conducted interview were interviewed by the researcher and asked to respond to open-ended questions and/or prompts relative to their perception of how their
involvement in a Professional Learning Community had impacted collaboration, their sense of self-efficacy, or trust with colleagues. Data from those sessions were coded and transcribed by the researcher. Responses to interview questions have been organized and aligned to reflect participant perceptions.

Results by Research Question

Research Question 1

To what extent are professional learning communities established in North Central Alabama Schools?

Principals’ Response

This question was answered by the 13 participating principals via email. In each district where permission was granted by superintendents for the researcher to conduct the study within the respective elementary school communities, individual school principals were contacted by the researcher and provided with a working definition of a PLC along with other questions. In order to determine the extent to which PLCs were established in North Central Alabama elementary schools, the researcher asked the following:

1. Is your school involved in a Professional Learning Community (PLC)?
2. What does the PLC look like in your school?
3. How would you describe the effectiveness of the PLC in your school?
Principal Question 1. Is your school involved in a Professional Learning Community?

Of the 15 schools contacted, 13 (86%) indicated their schools were involved in a Professional Learning Community. Based on this information, it appears Professional Learning Communities are established in 13 of 15 or 86% of schools or school systems in North Central Alabama. Table 4 demonstrates the rate at which principals indicated Professional Learning Community meetings are held within their respective schools.

Table 4

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Schools where PLCs are established</td>
<td>13</td>
<td>86%</td>
</tr>
</tbody>
</table>

Note. N = Total. Table data supplied by participants

Table 3 reflects the number of participants who responded to Principal Question 1 to indicate whether or not Professional Learning Community meetings were happening in their schools.

Principal Question 2. What does the PLC look like in your school? After establishing whether or not PLCs existed in their schools, principals described what the PLC looked like in action on a day to day basis. These individual quotes are examples of principal responses to questions:

We meet regularly as an entire faculty, grade level teams, interest teams, and cross grade-level teams to reflect on instructional practices and collaborate on student data.

In our meetings, we analyze student data, look at the individual student need, and create action steps to address the needs.

Our Professional Learning Community is reflected in how we collaborate on how to help teachers who need extra assistance with students and student learning. These conversations have evolved over time.
This is a work in progress, but we talk every day in some form about use of the 7 Habits (Covey, Covey, Summers, & Hatch, 2008) and how we can become better at what we do. The school is organized around committees which are given the power to make decisions and carry out plans for the school.

Teachers are involved in grade level meetings weekly to plan lessons and instructional activities, analyze student data, make decisions on grade level activities, etc. Teachers have a real voice in what happens in our school.

*Principal Question 3. How would you describe the effectiveness of the PLC in your school?* The final task of the participating principals was to describe the perceived effectiveness of the PLCs in their respective schools. The example comments capture the principals’ perceptions of how effective Professional Learning Communities were within their schools.

PLCs are an integral part of our school community. I feel that our best functioning groups are those that are interest based and membership is self-selected. Teachers take a more active approach to the collaborative process when they know they are making a difference in student learning.

When considering how effective we are at the actual implementation of the PLC concept, I begin to reflect on how ineffective we were as a less structured, more unorganized group of professionals whose approach to education was simply looking at the bottom line. Currently, we are more strategic in how we approach teaching and learning.

The evidence of the effectiveness can be witnessed in the expanded knowledge base the teachers gain from collaborating with their peers. This can also be seen in how much more savvy we are now at analyzing student data, discussing where we are in our individual instructional journeys in a risk-free environment, and teaching students to take ownership of what they learn.

The PLC at our school is highly effective. Teachers and students have ownership. Students set goals and take responsibility for their own learning. Our students score 95% and above on state tests. Surveys indicated 98% of parents are satisfied or highly satisfied with the school.

Essentially, the participating principals accepted the responsibility for ensuring their schools were active participants in the PLC process, had a solid and positive understanding of what the Professional Learning Community looks like in their individual schools, and considered
them to be effective. The commonality among the principal responses was collaborating for the outcome of improved teaching and learning, with the emphasis on growth for adults and students during the process.

Research Question 2

In schools that use PLCs, to what extent do educators who engage in collaborative professional development acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?

In order to assess more specifically, the survey data, the long form version of the Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was used. The survey assessed teachers’ beliefs in their ability regarding efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management and captured some background information on the participant. The results of this survey are presented in Table 5 for self-efficacy data in student engagement, instructional strategies, and classroom management.

Table 5

Teacher Self-Efficacy in Student Engagement, Instructional Strategies, and Classroom Management

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>208</td>
<td>4.50</td>
<td>9.00</td>
<td>7.3768</td>
<td>.79004</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>208</td>
<td>5.00</td>
<td>9.00</td>
<td>7.3302</td>
<td>.81708</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>208</td>
<td>4.75</td>
<td>9.00</td>
<td>7.3486</td>
<td>.79327</td>
</tr>
</tbody>
</table>

n=total

The participants who responded to the questions for self-efficacy in student engagement had answer choices ranging from 1-9 relative to the amount of influence teachers felt they had
over things that can create barriers to high quality school activities. There was a minimum scale 
score of 4.50 and a maximum of 9.00. The mean for teacher self-efficacy in student engagement 
was 7.37. This indicates the participants have a relatively high degree of self-efficacy in how 
they keep the students engaged in the classroom. The component items for teacher self-efficacy 
in student engagement (items 2, 3, 4, 11) assessed expectations in the following areas: teachers’ 
belief in their ability in gauging comprehension, teachers’ adeptness at clarifying fallacies, 
teachers’ ability to create self-belief in students, teachers’ response to defiance, fostering 
creativity, assisting families in helping students do well in school, and using a variety of 
assessment strategies. Data showed the range of scores with an outlier indicating a score of 4.50 
in regards to efficacy in student engagement.

All participants responded to questions that assessed efficacy in instructional strategies 
(items 5, 9, 10, and 12). These items included scores that ranged from 5.0-9.0 with a mean of 
7.33. The high mean score signifies the participants feel they have a great deal of influence over 
school activities with regard to instruction. Another significant indication from the mean score 
for efficacy in instructional strategies was the participants felt they have a good grasp on 
pedagogy. With answer choices ranging from 1-9 relative to the amount of influence teachers 
had over things that can create barriers to high quality school activities, the questions asked of 
the participants regarding efficacy in instructional strategies were centered on crafting good 
questions, providing appropriate challenges for students who excel, adjusting lessons to address 
least mastered standards for individual students, improving understanding of students who fail, 
implementing alternative strategies, motivating students, controlling disruptive behavior, and 
helping students value learning. While the scores ranged from 5 to 9, data revealed that the 
heaviest concentration of indicators was between 7 and 8. This would indicate a high degree of
efficacy with regard to high quality instruction and a belief they are being effective in impacting student learning outcomes.

Scores for teachers’ self-efficacy in classroom management ranged from 4.75 to 9.00. Each of the 208 participants responded to every question about teachers’ self-efficacy relative to classroom management. The mean for those questions was 7.34, indicating teachers perceived they had a positive sense of control over management of school activities. Items (1, 6, 7, and 8) on the Teachers Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) focused on self-efficacy in classroom management dealt with calming disruptive or noisy students, getting through to difficult students, establishing a classroom management system, establishing routines and running smooth activities, fostering critical thinking skills, responding to complex inquiries from students, getting children to follow rules, and confidence in teachers’ ability to keep a few problem students from ruining the essence of a lesson. The high degree of self-efficacy indicated by participant’s responses relative to classroom management is important because being able to run a smooth classroom helps to set the tone for learning and instruction.

While the majority of participants indicated they exercise control over classroom management processes, there were a few outliers who indicated otherwise. The outliers’ scores of 5 or below indicated there was not as high of a degree of efficacy in classroom management, as on the other two components. The scores showed the respondents did not feel they have as much control over what happens with regard to management of school activities and behavior as their counterparts. The outliers represented only four or .01% of the respondents.
Interviews

In order to further assess the extent to which educators who engage in collaborative professional development activities acquired a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings, the researcher conducted interviews. There were 18 participants in interviews. The theme categories were determined when the researcher coded the interview data and found similarities in the participant responses. The researcher coded the interview data and found that three common themes emerged: sharing, collaboration and trust, and improvement in instruction. Moreover, when coding the interview data, the researcher noticed a trend in the responses. The participants associated collaboration and trust with one another in their responses to the interview questions and probes. Thus, the rationale for using collaboration and trust as one theme category in the participant responses led the researcher in that direction. From the perspective of the interview participants, sharing was demonstrated in their willingness to be open when engaging in collaborative dialogue. Sharing was aligned with whether or not they shared strategies and/or ideas with colleagues during grade-level or data-meetings. Although they are two separate concepts, as the researcher coded the data, it was evident in the responses that participants connected collaboration to trust. The two concepts were, more often than not, mentioned in tandem with one another. Collaboration and trust were evidenced in how the participants engaged one another in discussion and the scope and sequence of their conversations. The more trust there was among them, the more willing they were to engage and be engaged, particularly when dealing with pedagogy, instruction, and gaps in student achievement data. Improvement in instruction seemed to be a natural path from sharing and collaboration and trust for the interview participants. When talking about how they perceived
their professional growth as a result of participation in the PLCs, the participants, inevitably, discussed usage of pedagogy with regard to improving their own instructional delivery.

All participants appeared open with their responses. It was evident the more seasoned teachers (those with 15 or more years of experience) had a deeper sense of collaboration and trust, although they used various scenarios to describe those tenets. Participants were asked how they felt collaboration impacted their sense of pedagogy and if there was a deeper sense of trust between them and their peers as a result of participating in collaborative activities. There was one participant who actually became emotional and said she and her colleagues really have a tight bond talking at lunch and other impromptu times, such as afternoons, about teaching and learning. For example, this interview participant (#16) said,

Trust is there because we do go to each other. You know if we didn’t trust another grade level or another teacher, we wouldn’t go and ask for an opinion. I would hate to work in a situation where I didn’t feel trusted or felt like one grade level was back-stabbing another. I’ve been there before I came here, and it was more like trying to out-do the other. I think it’s very important that we all bond as a faculty because they are all our kids. We know each other at this school as well as we know the children. We can talk shop at lunch, on the playground, or in the structured meetings. If my scores are lower on a language test than my grade level colleague, then I don’t hesitate to ask about the specific strategies she used to convey the concepts. She does the same with me. That sort of transparency comes with trust.

This participant had taught 25 years in the same school alongside the same individual and valued their professional relationship.

While a couple of teachers responded and actually used pedagogical descriptions in their responses, most talked about how their instructional delivery looked in the classroom. For example, interview participant 11 shared the following about her sense of pedagogy relative to participations in grade level conversations and how it impacted instruction:

It’s deepened my knowledge of the curriculum and what I’m expected to teach and to prepare them for the next grade. I feel like with all four of us, kindergarten teachers, sharing what we’ve done throughout the day, we figure out where we are. We might not
all have done the same thing and may not be on exactly the same lesson, but we talk about different concepts we are teaching. As we talk, we usually remember something somebody has used from another year or discuss how to bring in a new concept. When we were doing shadows, we talked about different ways you could have the children understand the light and the person. We tried playing shadow tag with the boys and girls taking turns being runners and shadows, but for some reason it seemed harder for the children to understand the concept this year. They couldn’t get that if you don’t be still, you can’t stop on a shadow. So, we had a few different conversations on how to reword things during instruction so the kindergarteners could understand.

Other comments were about sharing during meetings versus actually saying the terms collaboration or dialogue. Three major themes surfaced from the data analysis (1) Sharing, (2) Collaboration and Trust, and (3) Improvement in Instruction. See Table 6 for coding information for interview questions.

For the second interview question, participants were asked their feelings about their approaches to instruction as a result of participation in a professional learning community. Teachers were forthcoming with their responses, indicating growth from their participation. For example, interview participant 7 said,

I think that over time, I have grown because we share more ideas between each other. The sharing of the different information has improved my instruction. Now, I have a rolodex of ideas. The conversations, alone, have brought about changes in the way we do things. With everything being so data driven, it forces you to use and speak the language.

There was a common thread around collaboration and taking away ideas to improve their own teaching. See Table 7 for examples of comments coded as sharing, collaboration and trust, and improvement in instruction.
### Themes for Interview Question 1

**Interview Question 1**: What has your involvement in a professional learning community (PLC) looked like?

<table>
<thead>
<tr>
<th>Teacher #</th>
<th>Theme 1: Sharing</th>
<th>Theme 2: Collaboration and Trust</th>
<th>Theme 3: Improvement in Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher #1</td>
<td>It has changed through the years. Our ideas of what a Professional Learning Community is have evolved over time. We now look forward to being able to share with each other. Initially, we were not as open to the discussions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #3</td>
<td>There are several ways the PLC looks. We collaborate in grade level meetings and also on IB (International Baccalaureate) activities for grade levels.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #16</td>
<td>I have led as grade level chair and participated with the principal facilitating. The discussions are more structured now...less straying from topic among those who have been stable in teaching.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #5</td>
<td>My experiences have been facilitated but not led by others. The meetings were always open for discussion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #14</td>
<td>We have grade level and data meetings. There are also book studies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #15</td>
<td>We have the structured times like data and grade level meetings, but there are also time when we talk in passing to share something that worked on a particular lesson.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #17</td>
<td>We collaborate in data and grade level meetings. The cross-grade level meetings are where we discuss how to get better at meeting student needs, learn where we can improve, and talk about what the big picture looks like.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #7</td>
<td>I have been a participant and facilitator. As a facilitator, I helped teachers analyze data to form instructional groups. We used formative assessments to inform our instruction. The teachers were receptive to the collaborative times because it helped them learn more about their own instruction. As a participant, I shared data from assessments, offered tips, and learned what my colleagues were doing to meet student needs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher #12</td>
<td>We set goals for instruction in faculty meetings and reflected on that progress in grade level meetings where data is discussed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7

Themes for Interview Question 2

<table>
<thead>
<tr>
<th>Interview Question 2: How do you feel about your approach to instruction as a result of being involved in a PLC?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme #1: Sharing</strong></td>
</tr>
<tr>
<td><strong>Teacher #3</strong> The information I get when my colleagues share what’s worked in their classrooms helps to validate my own approach to teaching and learning. I feel I’ve become more global-minded as a result. We talk about so many varied things but all relate to teaching.</td>
</tr>
<tr>
<td><strong>Teacher #8</strong> I’m always listening for ways to support the students. The collaboration benefits my instruction in that way.</td>
</tr>
<tr>
<td><strong>Teacher #15</strong> Sharing ideas makes it easier to do a good job. We all know what’s going on in the others’ classrooms.</td>
</tr>
<tr>
<td><strong>Theme #2: Collaboration and Trust</strong></td>
</tr>
<tr>
<td><strong>Teacher #7</strong> The time collaborating makes me more willing to try new ideas in teaching. There also has to be trust because there are times when I may need guidance on how to reach a certain student who’s struggling with a particular concept. Either I have to go to a grade level colleague, or talk with some on another grade level who can help with the issue. The end result is the approach to instruction is not so one-sided. We’re truly a team.</td>
</tr>
<tr>
<td><strong>Teacher #14</strong> I’m more confident of what I do in the classroom because I have multiple chances to talk about it during meetings with my colleagues.</td>
</tr>
<tr>
<td><strong>Teacher #17</strong> I truly believe the collaboration has improved my trust in my own teaching and learning. I feel better trusting my gut instinct now as opposed to when I first started teaching.</td>
</tr>
<tr>
<td><strong>Theme #3: Improvement in Instruction</strong></td>
</tr>
<tr>
<td><strong>Teacher #1</strong> My approach to instruction is two-fold. I am a contributor in that I offer suggestions in the way of strategies, especially in math. I’m also a learner because I take away things from the dialogue that can be applied to improve student learning.</td>
</tr>
<tr>
<td><strong>Teacher #10</strong> The ongoing collaboration definitely has helped strengthen my preparation for and approach to instruction. I’m more apt to ask for tips on how to present a certain concept. It has, certainly, benefitted my delivery of content.</td>
</tr>
<tr>
<td><strong>Teacher #16</strong> I have been able to better structure my lessons when planning because I’ve planned with my colleagues, listened to similar issues their having, and applied what will work to my own students.</td>
</tr>
</tbody>
</table>
Interview question 3 focused on engagement in a PLC and whether participants felt their sense of pedagogy had been impacted through the conversations in which they participated. The researcher explained pedagogy to the participants as a wide range of strategies and concepts that improve presentation of content. Some teachers asked for additional clarification or an example. The researcher told them that pedagogy in action is when effective teaching is supported by use of rubrics, exemplars, use of different strategies, and incorporating academic language. The researcher explained to the participants that pedagogy can be thought of as a repertoire of instructional strategies used to enhance the art of teaching. Most did not need clarification on what pedagogy means. The more experienced teachers spoke with confidence about how engagement in professional learning activities had served to deepen their sense of pedagogy.

The next question asked whether participants were aware of any difference in the quality of their conversations on teaching and learning during grade-level, data, or cross-grade level meetings now versus prior to participating in collaborative discussions. The participants discussed how they went from having what they called basic talks to having more in-depth conversations during data, grade-level, and cross-grade level meetings. They described how they were unsure of how to converse appropriately in their earlier years of teaching and evolving into more self-assured teachers. The time spent in the professional learning activities connected to the needs being seen in the data was described as helpful to their growth. Teachers discussed how they are more focused on the specific needs of students as a result of talking about them and reflecting on the data with their colleagues in the PLC dialogue process.
Table 8

*Themes for Interview Question 3*

<table>
<thead>
<tr>
<th>Interview Question 3: How do you feel engagement in collaborative professional development activities has impacted your sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme #1: Sharing</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #5</td>
<td>I put more ideas out there now versus when I didn’t have the knowledge.</td>
</tr>
<tr>
<td>Teacher #8</td>
<td>Being able to share openly has, certainly, had an impact on my sense of pedagogy. For example, when I was a younger teacher, I used to seek out the more seasoned teachers to help me with things. As time went on, we started having job embedded opportunities. Coupled with that were expectations to talk about teaching and learning in a certain way. I used those opportunities to be more accountable for what I was doing in the classroom. So, yes. My sense of pedagogy has been improved because I’ve participated in activities directly tied to my needs as an adult learner. I don’t think I would have had these thoughts 5 years ago. We were just starting to feel our way then about what should happen in professional learning settings. I used to go to things and ask for presenters to come because they appealed to me, but it wasn’t really tied to anything. Now I know better and am more purposeful about seeking strategies and concepts to help our own learning. What I say and do matters to the children, so my pedagogy has to be on point!</td>
</tr>
<tr>
<td>Teacher #11</td>
<td>During grade level, you can share information you have learned and then use the data for planning and cross grade level meetings. My sense of pedagogy is tweaked because I became more aware of what I should be doing. I taught in a different school my first few years. We didn’t have these type meetings but would talk about teaching and learning but not in the context we do now.</td>
</tr>
<tr>
<td><strong>Theme #2: Collaboration and Trust</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #1</td>
<td>I used to be a math coach. Those things I learned to apply to the coaching cycle can are the exact tenets used in instruction. The “I do. We do. You do.” concept should be present at all levels of instruction.</td>
</tr>
<tr>
<td>Teacher #4</td>
<td>Knowing growth for me takes place during collaboration when I can be vulnerable in professional learning settings with my peers helps me to create that same risk-free learning environment for my students.</td>
</tr>
<tr>
<td>Teacher #13</td>
<td>I feel that it has been helpful because bottom line is we want to do this to improve student achievement. The discussions we have when sharing are focused on making sure the type of quality instruction necessary is going on so the students will actually learn.</td>
</tr>
<tr>
<td><strong>Theme #3: Improvement in Instruction</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #7</td>
<td>It’s deepened my knowledge of the curriculum, what I am expected to teach, and how I prepare them for the next grade. For example, we had a few different conversations on how to reword things so the kindergarteners could understand. I don’t think we would have been able to arrive at that collective thought had we not been talking regularly and analyzing the data.</td>
</tr>
<tr>
<td>Teacher #13</td>
<td>I am able to learn from my peers when we collaborate. I feel I can be more effective at delving into the Course of Study for instruction. I take the data and use it to benefit my students. I also change things up if it’s not going right.</td>
</tr>
<tr>
<td>Teacher #18</td>
<td>The professional development activities definitely impact my attention to how instruction is going. During the meetings, I can ask my colleagues what they did to get a certain outcome. After the meetings, I take the information to improve my teaching.</td>
</tr>
</tbody>
</table>
Table 9

**Themes for Interview Question 4**

<table>
<thead>
<tr>
<th>Theme #1: Sharing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #1</strong></td>
<td>I have developed a better sense of what works and am more likely to participate with more meaningful points about what I’ve noticed has worked. Because I was unsure of myself in the past, I didn’t always know what to say. Since we have more purposeful discussions designed to help us all grow, I would say that I don’t go into left field when unsure. I can draw from what has been shared to make a more intellectual decision based on the data and rich conversations.</td>
</tr>
<tr>
<td><strong>Teacher #7</strong></td>
<td>I’ve always enjoyed the professional development activities, especially when they’ve been job-embedded. I have learned more from those opportunities through the discussions collaborations on learning. Those conversations we have get repeated when we go back to our own informal meetings and talks. I feel my conversation has become more structured.</td>
</tr>
<tr>
<td><strong>Teacher #9</strong></td>
<td>Now when I’m in a collaborative setting, my conversations are more focused on specifics related to teaching and learning. Strategies and the like are discussed more in-depth, we reflect on our practices in an honest and open manner, and provide feedback to each other. I like the more collaborative settings better than teaching in isolation. When we talk about what we’re doing with</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #2: Collaboration and Trust</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #13</strong></td>
<td>Having those opportunities to share and talk to other professionals has been really good for me. It helps to know that I can ask about a strategy I don’t quite understand without being fearful of the backlash.</td>
</tr>
<tr>
<td><strong>Teacher #15</strong></td>
<td>Analyzing the data during meetings has helped me to learn how to ask the right questions to my own students, especially when I provide them with feedback about their progress.</td>
</tr>
<tr>
<td><strong>Teacher #16</strong></td>
<td>Being able to talk freely about teaching and learning has allowed me to grow from the information shared by others. We have learned to trust each other and know we need to operate like this for our own sakes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #3: Improvement in Instruction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #4</strong></td>
<td>I’ve gained a stronger sense of what I’m doing. Collaborating with my colleagues and talking about specifics helped me go back to the drawing board and teach content better. We must reflect on what we say and apply it to our classrooms.</td>
</tr>
<tr>
<td><strong>Teacher #7</strong></td>
<td>Professional conversations have exposed me to strategies that I can apply in my classroom. In addition to my own learning being developed, I am learning more about how to address various learning styles.</td>
</tr>
<tr>
<td><strong>Teacher #18</strong></td>
<td>I have found that teachers will come to ask for help in certain areas, and I do the same. I have improved by simply being in the room when teaching and learning are discussed. We ask each other questions about what the strategies teaching of concepts look like behind closed doors. Comparing the data and information in data meetings helps my teaching improve.</td>
</tr>
</tbody>
</table>
Research Question 3

In schools that use PLCs, to what extent is trust perceived to be established as a result of collaborative activities?

In order to ascertain the impact of collaboration on trust, participants were asked if they felt trust had been established as a result of the collaborative activities. The participants discussed comfort, bonding, ideas, collaboration, environment, and risk-free with reference to trust. Their comments are reflected in the following excerpts:

After asking the participants about the general feel of trust established among the faculty, the researcher asked them to describe the level of trust they perceive to be present between them and their colleagues as a result of collaboration. The participants shared how their confidence in self has improved and how they have learned a great deal from participating in the collaborative discussions.
Table 10

*Themes from Interview Question 5*

Interview Question 5: To what extent do you feel trust has been established among faculty as a result of collaborative activities?

<table>
<thead>
<tr>
<th>Theme #1: Sharing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #1</strong></td>
<td>You know it is more than okay to share your ideas and your thinking. It is expected and sets the tone for learning. I think because of that this is a safe, comfortable, and risk-free environment for teachers. We create that for students, but teachers need it as well.</td>
</tr>
<tr>
<td><strong>Teacher #5</strong></td>
<td>For them to trust me, I think they needed to realize that my heart was in the right place and that what I was willing to share about what I knew. For me to have that trust with them is also to know that putting yourself out there is not an easy thing to do. That level of comfort grows through bonding in risk-free environments.</td>
</tr>
<tr>
<td><strong>Teacher #6</strong></td>
<td>I thing we’ve become more supportive of each other. We have become more open about sharing and talking outside the set meeting times. We’ve always done that, but it wasn’t always about the right sorts of things.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #2: Collaboration and Trust</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #7</strong></td>
<td>Individuals feel comfortable, and trust has become better between us. The collaboration has helped to open the lines of communication. We’re more focused and talking about the goals in a more honest and open manner.</td>
</tr>
<tr>
<td><strong>Teacher #11</strong></td>
<td>I have now been able to sit down and reflect on the things I need to get better. I have learned that things that I feel comfortable in I still need to explore and go back and see what I can do that I’m not doing now.</td>
</tr>
<tr>
<td><strong>Teacher #18</strong></td>
<td>Of course, the opportunity for collaboration is what helps us bond and promote these discussions. So, I think the trust has helped us to look beyond ourselves and focus more on the students.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #3: Improvement in Instruction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #3</strong></td>
<td>I know I struggle with technology, so I am less embarrassed about asking for help. I’ve noticed that when I do ask, the resident tech expert makes time to come into my classroom and shows me what to do. We end up talking about other concepts that she wants to know. So, we all benefit, and it helps improve our skill sets when it comes to teaching.</td>
</tr>
<tr>
<td><strong>Teacher #12</strong></td>
<td>The collaboration has helped me become stronger in teaching. I have learned how to follow the Course of Study better. Because I trust enough to ask, I have done just that and learned how to create small groups on my own.</td>
</tr>
<tr>
<td><strong>Teacher #16</strong></td>
<td>The trust is there because we go to each other. Trust is essential to instruction in that it makes it easier to work together. I know that even as a seasoned teacher, I am often viewed as the “sage” of instruction. However, there are times when I need to see or find out how another person is teaching a concept. Trust allows me to go to a younger, less experienced teacher and ask those questions or mention my issues in a collaborative setting.</td>
</tr>
</tbody>
</table>
### Themes for Interview Question 6

**Interview Question 6:** How do you feel about the level of trust between you and your colleagues following collaboration?

<table>
<thead>
<tr>
<th>Theme #1: Sharing</th>
<th><strong>Teacher #1</strong>&lt;br&gt;I feel that you can’t be seen as an “expert” in a true learning community. I’ve noticed the climate for collaboration has given us a platform to share what we see in the data patterns, to talk about issues that prevent us from getting better as professionals, and plan for the future.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #6</strong>&lt;br&gt;The collaborative activities have been a welcomed breath of fresh air these past several years. The level of trust is so much better and has made it easier to get to know them. We share some much more freely…there is comfort in saying we don’t understand.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher #8</strong>&lt;br&gt;‘We’re more confident in sharing best practices in what can be considered formal settings!</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #2: Collaboration and Trust</th>
<th><strong>Teacher #3</strong>&lt;br&gt;I think the level of trust has, basically, skyrocketed as a result of the collaboration we’ve experienced. There is an unspoken freedom to fail when trying to make progress. Without the trust, I would not be as apt to talk about my failures the way I do with my colleagues. We truly have bonded.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #8</strong>&lt;br&gt;I feel we enjoy the collaboration. I’ve noticed that we don’t feel judged when asking for or receiving direction about our practices. It wasn’t like that in previous years.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher #9</strong>&lt;br&gt;I’ve become spoiled in a good way. Having worked in another setting, I believe we’re more accepting of each other within our learning community. I am more willing to seek input from others and operate less like a lone ranger…more confident.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme #3: Improvement in Instruction</th>
<th><strong>Teacher #4</strong>&lt;br&gt;Being able to reflect in a supportive environment has helped me gain confidence in myself and my fellow teachers. We all have the same goal and trust that we’re moving in the right direction together. I was a new teacher and came into this setting. They embraced me helping me understand the specifics of teaching and learning; now I trust the process that much more.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher #11</strong>&lt;br&gt;There are four teachers on my grade level. We learn from each other about how to improve in teaching. I have to trust them in order to get what I need from them. My instructional approach has gotten stronger because I was purposeful in how I interacted with my colleagues and participated in the activities and meetings.</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher #15</strong>&lt;br&gt;I teach a testing grade. There is no way I can operate as if I am an island. It is due to the collaboration that I have seen the growth in myself and my peers. We make it a point to reflect together and discuss the trends and patterns in the student assessment data. So, I feel the level of trust between my colleagues and me is high and would have it no other way.</td>
<td></td>
</tr>
</tbody>
</table>
Research Question 4

In schools that use PLCs, what are the perceptions of the effectiveness of PLCs by the professional educators in these North Central Alabama Schools?

To gauge teacher perceptions of the teacher effectiveness, the researcher examined the theme patterns that emerged from interviews. Participants were asked about the quality of their processes now as compared to before they participated in a PLC. Remarks that illustrate the thoughts of all the participants relative to the themes in sharing, instructional growth, and collaboration and trust are located in Table 12.

The themes that emerged from the interviews were captured in comments that were overwhelmingly positive about the results of collaborative engagement in professional development settings. The bottom line for the teachers from those meetings altered their discussion, how they shared ideas, changed their instruction, viewed curriculum, participated in collaborative activities, and formed trust bonds within their learning teams. The participants’ responses, while different in terms of actual wording, were similar in connotation. This evidence indicates the participating school systems have many of the same foundational tenets about the operation of and processes within active Professional Learning Communities.
Table 12

**Themes for Interview Question 7**

<table>
<thead>
<tr>
<th>Interview Question 7: Since participating in the PLC, I have now…?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme #1: Sharing</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #4</td>
<td>I have learned to be open to the dialogue. I used to think it was invasive when I first started teaching. I don’t shy away from sharing best practices and enjoy the brainstorming for ideas and solutions to problems. Now, we talk about how best to address teaching and learning concerns. In the past, we used to put a band-aid on the issues. Personally, I was afraid that if I talked about my students’ problems, that I would be seen as a failure. I would share with a trusted colleague but not the group. That way of operating didn’t help the matter. So, I learned to share openly and trust the process. It proved to be advantageous. That has been the best thing for me as a professional.</td>
</tr>
<tr>
<td>Teacher #15</td>
<td>I am more willing to share what I have learned and use what others give me. I have not always been in this place.</td>
</tr>
<tr>
<td>Teacher #16</td>
<td>I have now seen the advantages of collaborating and sharing. I’ve learned when you do collaborate, you become more effective and students learn more. It’s a lot more fun to come to work because you’re all on the same page. We’re all here for a common goal of helping the students learn.</td>
</tr>
<tr>
<td><strong>Theme #2: Collaboration and Trust</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #13</td>
<td>I also trust myself and colleagues outside of formal collaboration enough to ask questions that cannot wait until we are in a structured setting. I think it’s helped me to be more aware and more knowledgeable of the Course of Study than when I first started teaching. In the past, I didn’t know what to ask and felt silly asking questions all the time for clarification. Since participating in the meetings on a regular basis, I don’t even think twice about it.</td>
</tr>
<tr>
<td>Teacher #16</td>
<td>I have now built more meaningful relationships with other teachers. Now, we can share more openly on how we feel about different things we’ve read in books, about our different experiences, and we just talk about everyday things even common things. We have really planned well together. Initially, we all just shared what we were doing in our individual classrooms. Now, we can honestly say that all students get the same content no matter the classroom.</td>
</tr>
<tr>
<td>Teacher #18</td>
<td>One interesting thing I have noticed is we can discuss how our personalities impact instruction. For instance, we may discuss if we use sarcasm and how we can try to improve on different things and just share personal experiences. So just participating in the PLC has improved my sense of professional growth. I think I have just gotten to know my colleagues better, and I think they feel free to talk about different things without being judged.</td>
</tr>
<tr>
<td><strong>Theme #3: Improvement in Instruction</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher #5</td>
<td>At this point, I can easily spot when a student is struggling. I can also better assess whether or not the students get the concepts. I have learned that asking the right questions will help students think critically about their learning. When we collaborate, I listen and ask questions. Then, I do go back and apply what I have learned to my teaching.</td>
</tr>
<tr>
<td>Teacher #9</td>
<td>My overall sense of effectiveness has been altered. We challenge each other to get better for the students. I have worked in schools where teaching was done in isolation. Here, I value and grow professionally from the times I spend with colleagues. Over time, the collaborative discussions have increased. I think we all know we benefit from them.</td>
</tr>
<tr>
<td>Teacher #17</td>
<td>I’ve come a long way in my teaching. As a younger, more inexperienced teacher I would not take risks in teaching. Those teachable moments that I seize as soon as the opportunity arises didn’t seem within my reach in my early years of teaching. Routines for me are important. I know to start with the data to see what it’s telling me about concepts I might not have conveyed well to the students. I’m more data driven and reflect on all the pieces of data I have available to me regarding a student. When I am in collaborative settings, formal or informal, I speak with authority about what’s going on with my students. So, participation in a learning community for me has been an enriching experience.</td>
</tr>
</tbody>
</table>
Summary of Interviews

The researcher interviewed 18 participants and asked open-ended questions about their involvement in a Professional Learning Community and whether their perceptions of collaborative activities with peers had impacted their sense of pedagogy and increased trust among them as a result. Themes from the group were similar. Although they did not always say it specifically, there was evidence of reflection which served to increase a sense of trust within school settings. Hence, the teachers appreciated the relationships that formed as a result of the professional development activities. They indicated their instructional approaches such as planning and data analysis had changed. In short, they developed a deeper understanding of how curriculum works as a result of consistent discussion about teaching and learning.

Summary of Results

This chapter presented the results of the data analyses and reported the findings. Four research questions were explored.

1. To what extent are professional learning communities established in North Central Alabama schools?

2. In schools that use Professional Learning Communities, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative professional development activities acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?

3. In schools that use Professional Learning Communities, to what extent is trust perceived to be established among faculty as a result of collaborative activities?
4. In schools that use Professional Learning Communities, what are perceptions of the effectiveness of PLCs by the professional educators in these North Central Alabama Schools?

The specific focus of this research was to determine if Professional Learning Communities impacted collaboration, efficacy, and trust within school settings. This research indicated teachers were impacted by participation in PLCs. They discussed how they began to share more in data and grade-level meetings. In addition, teachers talked in their interviews about their feelings of collaboration at this point in their careers versus when they first started. There was a theme present in all of the participant interviews of improvement in instruction as a result of engagement in collaborative activities within professional learning settings. Chapter 5 presents the results of the study, a summary of the findings, the conclusion, and a discussion of the conclusions. Implications for research and practice are also described.
CHAPTER 5
SUMMARY OF RESULTS, DISCUSSIONS, CONCLUSIONS, AND IMPLICATIONS

This chapter presents a summary of study results, discussions, conclusions, and implications. The purpose of this study was to examine how Professional Learning Communities were used in North Alabama Schools to foster collaboration and to develop teacher efficacy and trust within school settings. The researcher began by asking participating principals about what Professional Learning Communities looked like in their schools. Surveys were distributed to schools that elected to participate in the study, and interviews were conducted with willing participants. Participating principals said the PLCs were, indeed, established within their respective schools. They shared a number of activities they considered relevant to the description provided to them regarding what a professional learning community entails.

The principals also were asked to reflect on the effectiveness of the PLCs in their schools. They described effectiveness by making references to the quality of the discussions they had as a result of the PLCs. Effectiveness seemed to be tied to participation in the process. Eight principals elected not to participate in the study. In addition, two superintendents did not respond to the researcher’s request to conduct the study.

From there, data from the Teachers Sense of Efficacy Scale (TSES), a survey used to assess teacher efficacy in student engagement, teacher efficacy in instructional strategies, and teacher efficacy in classroom management, were analyzed along with themes that emerged from interviews surrounding the establishment of trust as a result of participation in collaborative activities in professional development settings.
Results

This chapter presents a summary of the results, discussions, conclusions, and implications for future research considerations. The researcher found that teachers who worked in settings where collaboration was the norm had a working knowledge about what a PLC should look like. They were also more willing to participate in collaborative discussions, to share openly about their own learning, and gained more awareness of data analysis as a result of participation in the PLC process. Teachers who worked for principals where open dialogue was the norm were more willing to share instructional concerns with their colleagues. In addition, those teachers who were more experienced in their field (15+ years or more of teaching experience) collaborated more often but in informal settings. This study supports findings of other researchers. For example, according to Wahlstrom and Louis (2008), collaborative behaviors exhibited in Professional Learning Communities are choices teachers make based on what they know and what is encouraged in their schools. Moreover, teachers who took risks with colleagues and applied the strategies and concepts to their own reflection and instructional pedagogy in their classrooms had a higher sense of self-efficacy. In addition, this study supported Tschannen-Moran and Hoy’s (2001) work on teachers’ self-efficacy. According to Tschannen-Moran and Woolfolk Hoy (2001), teachers who have a high sense of self-efficacy have a high self-efficacy in classroom management, self-efficacy in instruction, and self-efficacy in student engagement.

A positive sense of self-efficacy evolves into trust within settings where teaching and learning are discussed. According to Tschannen-Moran, climates that promote collaboration set the atmosphere for trust to develop. Teachers in this study said that the more they discussed teaching and learning, the better they felt about their own knowledge base. They talked about how their self-confidence improved as a result of being in a PLC. For example, they indicated
when they felt safe to talk in what they perceived to be low-risk settings, they spoke freely about concerns and trusted that what they said would not be held against them. This pattern of thought was evidenced in how they responded.

Discussion

The researcher examined whether or not collaboration within Professional Learning Communities had an impact on teacher efficacy and trust. Specifically, do educators who participate in Professional Learning Communities perceive that they have a positive sense of efficacy following their participation in collaborative activities? How do collaborative activities within Professional Learning Communities foster more trust among faculty? In order to further assess the impact of collaboration on teacher efficacy and trust, the participants responded to the open-ended questions and probes during the researcher conducted interviews. The data were tape recorded, transcribed, and analyzed by the researcher for emerging themes. The data supported the information the participants provided in the surveys, and provided answers to the questions guiding the study and sub-questions of the researcher.

By analyzing the data from the surveys to find out about teacher efficacy and conducting interviews aimed at assessing emerging patterns of trust within PLCs, the researcher was able to learn about teacher perceptions of their efficacy in student engagement, instructional strategies, and classroom management and connect the literature described on collaboration and professional learning experiences, teacher efficacy, and trust in schools to the data provided in this study. The data provided useful information about how district and school leaders can continue to sustain the trajectory of their academic and professional development paths by creating purposeful Professional Learning Communities. The common thread from participating
participants was they all operate off the premise that a functional and effective Professional Learning Community is vital to improving student learning outcomes. Although each school had its own unique approach to creating a PLC, meetings within the goal of creating a win-win for all vested stakeholders was fundamentally essential to the schools as a whole. This is consistent with what the teachers expressed within the interviews. They indicated they were on the same page with regard to teachers collaborating for the purpose of improving student learning.

The initial question explored the extent to which Professional Learning Communities were established in North Central Alabama schools. The results indicated that 86% of the schools invited to participate in the study had PLCs established. Principals indicated they set the tone for what should happen by being hands-on in the collaborative activities within the PLCs. They described what the process looked like in their respective schools. While most referred to data, grade-level, and faculty meetings, others said they have book studies and provide time for job embedded professional learning. When responding to their perceived effectiveness of the PLCs in their schools, the principals identified participation in the process of collaboration around data analysis with a focus on improving instruction and instructional outcomes as the reason for the improved effectiveness.

The researcher wanted to know in schools that use Professional Learning Communities, to what extent do educators (teachers, instructional coaches, and/or curriculum specialists) who engage in collaborative professional development activities acquire a deeper sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings? The researcher found that the job-embedded collaborative activities at the participating schools created an outlet for new strategies to be shared among the participants and taken away for future effective usage of strategies with classes. In addition, the interview
participants felt that because trust had developed to promote their learning, they began to view and implement the curriculum in ways that impacted their repertoire of strategies for instruction. The sharing of ideas in collaborative settings created an awareness of their perceived strengths and weaknesses. In short, the interviewees were very candid about how they articulate and contribute to discussions in collaborative settings. Most had seen a marked improvement over time. In addition, they indicated they felt what they contributed now was more valid to the structured conversations on student learning and expected student learning outcomes. Essentially, the teachers said they grew professionally because there was a platform provided for them that promoted open talks about growth and the growth process relative to learning and teacher effectiveness, planning for use of strategies learned, and action plans for application of pedagogy they gleaned from collaborative engagement activities in the professional learning community. This is consistent with previous research by Hord (1997) that connected professional learning activities to improvement.

The researcher wanted to explore the extent to which trust was perceived to be established among faculty as a result of collaborative activities where Professional Learning Communities were functioning in a school. Relative to the level of trust the interview respondents felt had been established as a result of collaboration, professional growth led as their main essential learning. The collaborative activities promoted opportunities for educators to be open enough to ask for help, share in a risk-free environment without fear of ridicule, and become more adept at strengthening student learning. They said they learned more and were more apt to approach colleagues in informal as well as formal PLC settings. The educators participating in the interviews were clear in conveying that in order for them to feel comfortable enough to speak freely among peers, there needed to be a risk-free environment in place. The
educators indicated in the interviews that trust was established over time through the bonding and sharing of ideas. Thus, collaboration served as the catalyst for trust within risk-free settings for educators to share freely ideas to improve student learning.

The final research question focused on schools that used the strategy of Professional Learning Communities and perceptions of the effectiveness of PLCs by the professional educators in the participating North Central Alabama schools. Since participating in Professional Learning Communities, the interviewees pointed out that collaboration is an expected part of their professional growth experiences. In addition, they were all in agreement with how their level of effectiveness was elevated by the knowledge shared during grade level, data, or cross grade level meetings within their PLCs. Perhaps the most common thread that emerged was the increased sense of efficacy with regard to instruction. The interview participants’ perceptions of themselves had been transformed over the duration of their involvement in Professional Learning Communities. They talked about how they had one idea of their instruction prior to the collaborative discussions and how their perspectives shifted as a result of the process. The participants cited the sharing of strategies, receiving specific feedback, and data analysis occurring in teams as being the reasons for the changes. They said their confidence levels increased the more they participated. Thus, the themes within the research coupled with the outcomes of the TSES supported the prediction that educators who participate in PLCs would be more effective in the delivery of instruction and feel a greater sense of trust as a result of the purposeful collaborative activities within their work days. The activities were specific, focused on student learning, allowed the educators to bond with one another and grow individually and collectively, and fostered a sense of ownership and responsibility for setting and meeting outcomes.
Summary of Research Findings

Findings indicated that participants regularly attended grade-level and data meetings and found them to be useful in sustaining and developing their professional growth. Moreover, after a continued pattern of meetings to discuss student growth, changes in terms of professional growth and improved student learning were expected outcomes from the participants. The descriptions were mostly positive, with interview participants being candid about being able to discuss assessments with other faculty in a trusting setting. Participants discussed trusting, feeling trusted, and feeling safe. One participant alluded to sarcasm being a prevalent component of initial collaborative discussions among grade level colleagues. This participant went on to indicate that continued participation in a risk free environment free of judgement provided them with a platform to move forward and experience more high quality dialogue.

Conclusions

The study supported the idea that teachers in North Central Alabama schools have a high degree of teacher self-efficacy in student engagement, instructional strategies, and in classroom management. With a participation rate of 86% from 13 of 15 schools, principals of those schools noted the establishment of Professional Learning Communities within their schools. The information provided to the researcher in the interviews by the participants supported the following hypotheses:

H1: Educators who participate in Professional Learning Communities have a positive sense of self-efficacy.

H2: Collaborative activities within Professional Learning Communities fostered more trust among faculty.
It was predicted that educators who engage in collaborative activities in Professional Learning Communities acquired a deeper and greater sense of self-efficacy and bonding with colleagues, and that they would attribute these results to their participation in collaborative activities within their respective Professional Learning Communities. The survey responses support the hypotheses that educators have a positive sense of self-efficacy as a result of participating in job-embedded collaborative activities within PLCs. Further, the emerging themes and responses to interview questions confirmed the prediction that trust was fostered among faculty as a result of collaborative activities within PLCs. The responses from participants indicated the time spent collaborating promoted the bonding that helped to build and sustain trust among the faculty in the school settings examined.

From this study, the researcher was able to conclude the following:

1. Teachers who participate in Professional Learning Communities develop a positive sense of self-efficacy that strengthens over time.

2. The quality of discussion in collaborative settings such as grade level meetings, data meetings, or cross grade-level meetings improves the more the professional learning community members meet.

3. Trust develops between teachers as collaborative discussions focus on how they can apply reflection to their own teaching and learning.

Implications for Practice

The purpose of this study was to examine how Professional Learning Communities were used in North Alabama Schools to foster collaboration and to develop teachers’ self-efficacy and trust within school settings. The data from the TSES were analyzed for perceptions of self-
efficacy relative to student engagement, instructional strategies, and classroom management. This data were then coupled with patterns that emerged from interviews held to assess trust within PLCs.

Implication 1. District leaders may wish to evaluate the extent to which Professional Learning Communities are part of their school district’s culture and expectations for school sites. District leaders that had schools not respond or indicate they did not have active PLCs could encourage schools to implement them at their respective sites. Of 15 schools, 13 were active participants in the study, demonstrating an overwhelming presence of PLCs within North Central Alabama.

Implication 2. District leaders may want to encourage school leaders to provide more time for collaborative activities. Job-embedded professional development can happen if there is collaboration with regard to how the master schedule is designed to meet teacher needs. The collaboration that takes place during common time, while consistent, does not always yield the minutes needed to fully develop plans of action with regard to student learning. Therefore, additional time may be set aside by their principals. There are benefits to developing semblance of a set schedule dedicated to professional learning tied to student and teacher need. Teachers may be overwhelmed if they are tasked to create time within an already hectic schedule to collaborate. This is a task for the principal with input and shared decision making from faculty. This empowers teachers to bond and promotes ownership of plans and facilitates a sense of responsibility for teaching and learning.

Implication 3. Principals will benefit from leading the way in establishing trust within school settings. If the school leaders are active participants in the Professional Learning Communities, they set the tone for and model how the PLCs are expected to operate. When the
teachers can participate with their leaders and know their opinions are valued, their efficacy levels increase and trust is built. This can be more beneficial if open-ended questions and specific parameters for meetings are used, coupled with an expectation of participation and an authentic sense of learning and vulnerability on part of the leader. Further, some hard limits will need to be in place with regard to expectation of implementation. If teachers feel they will not be held accountable for their actions, they will be less willing to participate in the process. Also, they need feedback and support as they go through the process. This helps the process become more meaningful to the team, helps everyone with staying on task by using a specific plan of action, and lets the teachers know their time is valued and the purpose for the meeting is valid.

Because discussion quality may be subjective, they may want to consider developing a set of meeting standard norms to include possible discussion stems to be used in collaborative settings. This can be especially helpful as new initiatives and research-based programs are implemented.

Future Research Considerations

While the span of this study focused on the development of teacher efficacy and trust in a collaborative PLC setting, there are some considerations for future research. One suggestion for future research is to examine the relationship between teacher effectiveness as a result of participating in a PLC and its impact on student achievement outcomes. The research focus could be on how principals use PLCs within their schools to measure teacher effectiveness before and after participating in the PLC process. Interview participants commented on how their instruction improved as a result of participation in a PLC. The data from such a study could be used to facilitate the trajectory of the professional growth plans tied to student achievement.
Additional future research measures could be expanded to encompass a comparison of the efficacy measures between those teachers who are new (less than 5 years), mid-range (5-15 years), and advanced (15+ years) in their careers. Another consideration for future research could be on the development of teacher efficacy in novice teachers or those teachers 21-26 years old. A question to ponder in such a study could focus on why novice or younger teachers seemed to be reluctant to participate in interview portions of research. There were no participants in the 21-26 year old category for the interview portion of this study. Could it be that they worry about not receiving tenure? Do younger teachers trust the confidentiality of the process? The researcher believes that the more experienced teachers felt it was safe to be candid because they had more perceived job security than the teachers who were 21-26 years old or those who had less than 5 years teaching experience.

One area not explored in this study was relative to the principals’ backgrounds. A future study could consider the dynamics of their demographics with respect to leading PLCs. We were privy to the teachers’ information but not the data of the principals who led them.

One final suggestion is around gender participation in studies. There were 208 participants, 200 female participants and only 2 male participants. There were also no male participants in the interviews. There could be research focused on why so few males choose to participate in studies.

Concluding Comments

Professional Learning Communities have become the new norm with regard to what the processes of learning look like within school settings. Gone are the days of teaching in isolation.
The notion of the African proverb imploring all that a village is needed when raising a child is evident in developing an active Professional Learning Community.

While they were, admittedly, initially reluctant to participate in a structured Professional Learning Community, the experienced teachers who chose to be interview participants had a better handle on what the processes of a PLC meant for them, their level of effectiveness, and the camaraderie gained as a result of bonding with their peers. How the teachers perceived what they did as professionals had an impact on what transpired in the classroom. Subsequently, the teachers had a positive sense of their experiences and said it translated to positive student and professional growth outcomes.

Leadership matters when empowering teachers to indulge in professional growth activities. When seeking to affect change and create a purposeful and productive learning community focused on the right things with the right people in place, Marzano et al. (2005, p. 99) suggested that leaders focus on the concept of a purposeful community as a guide for developing and maintaining quality leadership teams. Ultimately, process over outcome matters more when thinking of a quality professional learning community.
REFERENCES


APPENDIX A

SUPERINTENDENT CONSENT LETTER
Dear Superintendent,

My name is Datie Priest, and I am a graduate student conducting dissertation research in the Department of Leadership at The University of Alabama on *Collaboration in Professional Learning Communities and Perceived Effects on Teacher Effectiveness and Trust*. I am requesting your permission to conduct this study in your school district. The purpose of this study is to examine how Professional Learning Communities (PLCs) are used in North Central Alabama Schools to foster collaboration and the subsequent impact on teacher efficacy and trust within school settings.

Once principals indicate they are involved in a PLC, the research will be two-fold: a 20-25 minute survey and a follow up interview that will take no longer than 15-30 minutes. As participants, educators will be asked to complete a questionnaire on their beliefs relative to student engagement, instructional strategies, and classroom management. The survey should take no longer than 15-20 minutes to complete. At the end of each questionnaire is a section that asks some demographic information relative to participant experience in education and grade level taught. If additional permission is granted by the participant, the researcher will follow up with an interview that will be focused on the level of trust gained as a result of participating in the PLC collaborative activities. A short series of 4-5 open-ended questions will be asked at this time.

There are no known risks associated with completing and returning the survey or participating in the interview. Participation is voluntary. All information will be kept confidential, and the participants may withdraw from the study at any time with no further inquiries from the researcher. Should the participants choose not to remain confidential, they are, hereby, made aware of the nonconfidentiality risks associated with the inclusion of data in the final report.

Thank you in advance for your consideration. Follow up in the form of either an email or phone call regarding permission will take place within five days of your receipt of this letter.

Datie Priest  
Graduate Student  
The University of Alabama  
Department of Educational Leadership  
307 Graves Hall  
Tuscaloosa, AL 35847  
(205) 348-7826

Datie Priest  
1944 Red Sunset Drive  
Decatur, AL 35603
APPENDIX B

PRINCIPAL INFORMED CONSENT
Dear Principal,

My name is Datie Priest, and I am a graduate student conducting dissertation research in the Department of Leadership at The University of Alabama on *Collaboration in Professional Learning Communities and Perceived Effects on Teacher Effectiveness and Trust*. I have requested and obtained permission to conduct this study in your school district. The purpose of this study is to examine how Professional Learning Communities (PLCs) are used in North Central Alabama Schools to foster collaboration and the subsequent impact on teacher efficacy and trust within school settings.

Once principals indicate they are involved in a PLC, the research will be two-fold: a 20-25 minute survey and a follow up interview that will take no longer than 15-30 minutes. As participants, educators will be asked to complete a questionnaire on their beliefs relative to student engagement, instructional strategies, and classroom management. The survey should take no longer than 15-20 minutes to complete. At the end of each questionnaire is a section that asks some demographic information relative to participant experience in education and grade level taught. If additional permission is granted by the participant, the researcher will follow up with an interview that will be focused on the level of trust gained as a result of participating in the PLC collaborative activities. A short series of 4-5 open-ended questions will be asked at this time.

There are no known risks associated with completing and returning the survey or participating in the interview. Participation is voluntary. All information will be kept confidential, and the participants may withdraw from the study at any time with no further inquiries from the researcher. Should the participants choose not to remain confidential, they are, hereby, made aware of the nonconfidentiality risks associated with the inclusion of data in the final report.

Thank you in advance for your consideration. Follow up in the form of either an email or phone call regarding permission will take place within five days of your receipt of this letter.

If you have any questions about your rights as a research participant, you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Office at 205-348-8461 or toll free at 1-877-820-3066.

Datie Priest  
Graduate Student  
The University of Alabama  
Department of Educational Leadership  
307 Graves Hall  
Tuscaloosa, AL 35847  
(205) 348-7826  

Datie Priest  
1944 Red Sunset Drive  
Decatur, AL 35603
APPENDIX C

INFORMED CONSENT FOR PARTICIPANT SURVEY
Informed Consent for Participant Survey

University of Alabama

You are being asked to be in a research study. This study is called “Collaboration in Professional Learning Communities and Development of Teacher Efficacy and Trust in Alabama Schools.” This study is being done by Datie Priest. She is a graduate student in the College of Education at the University of Alabama.

What is this study about?
The specific reason for this study will be to examine how Professional Learning Communities (PLCs) are used in North Alabama Schools to promote collaboration and impact of the collaboration on teacher efficacy and trust in school settings.

Why is this study important?
The findings can be used to determine professional growth areas of concern for the schools.

Why have I been asked to be a part of this study?
In order to be considered for participation, the educators must be employed as a certified teacher in a North Central Alabama elementary school.

How many other people will be in this study?
The investigator hopes to survey at least 300-500 people from North Alabama within the next few months.

What will I be asked to do in this study?
If you agree to be in this study, you will be asked to complete a survey (questionnaire) on your beliefs relative to student management, instructional strategies, and classroom management. The survey should take no longer than 15-20 minutes to complete. At the end of each survey is a section that asks some specific information on participant’s experience in education and grade level taught. If additional permission is given by you, the participant, the researcher will follow up with an interview that will be focused on the level of trust gained as a result of participating in the PLC activities.

How much time will I spend being in this study?
The survey should last no longer than 15 - 20 minutes.

How will I get the survey form?
Your principal will distribute the surveys to you.

Where do I return the survey?
Your principal will collect the surveys and they will be returned in the self-addressed stamped envelope provided.

Will being in this study cost me anything?
There is no monetary compensation for being involved in this study.

What are the risks (problems or dangers) from being in this study?
There are no known risks associated with participating in the survey. Participation is your choice. All information will be kept confidential, and the participants may withdraw from the study at any time with no further contact attempts from the researcher.

What are the benefits of being in this study?
The benefit of participating is you will help your school gain information that can assist in making professional growth plans in the future.

How will my privacy be protected?
The information about teaching experience and grade level taught will not be shared with anyone not connected to the study.

How will my confidentiality be protected?
The only place your name appears in connection with this study is on this informed consent. The consent forms will be kept in a locked file drawer in Datie Priest’s office, which is locked when she is not in there. A name-number system is not being used. So there is no way to link a consent form to a survey participant. Once surveys are collected, the data will be analyzed to detect patterns and themes about teacher beliefs.

The investigator will write up the data identifying participants as “educators from school systems in Central North Alabama.” No one will be able to recognize you.

What are the alternatives to this study?
The only alternative is not to participate.

What are my rights as a participant?
Being in this study is totally voluntary. It is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical treatment of people in research studies. They may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?
If you have questions about the study right now, please call Datie Priest at 255-345-1673. If you have questions or complaints about your rights as a research participant, 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 a suggestion, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html. After you participate, you are
encouraged to complete the survey for research participants that is online there, or you may ask Datie Priest for a copy of it. You may also email participantoutreach@bama.ua.edu.

I have read this consent form. I have had a chance to ask questions.

Signature of Research Participant          Date

Signature of Investigator                  Date

I will participate in the survey portion of this study.☐
I will not participate in the survey portion of this study.☐

Printed Name of Participant          Participant Signature          Date
APPENDIX D

INFORMED CONSENT FOR PARTICIPANT INTERVIEW
Informed Consent for Participant Interview

University of Alabama

You are being asked to be in a research study. This study is called “Collaboration in Professional Learning Communities and Development of Teacher Efficacy and Trust in Alabama Schools.” This study is being done by Datie Priest. She is a graduate student in the College of Education at the University of Alabama.

What is this study about?
The specific reason for this study will be to examine how Professional Learning Communities (PLCs) are used in North Alabama Schools to promote collaboration and impact of the collaboration on teacher efficacy and trust in school settings.

Why is this study important?
The findings can be used to determine professional growth areas of concern for the schools.

Why have I been asked to be a part of this study?
In order to be considered for participation, the educators must be employed as a certified teacher in a North Central Alabama elementary school.

How many other people will be in this study?
The investigator hopes to interview at least 12-15 people from North Alabama within the next few months.

What will I be asked to do in this study?
If you agree to be in this study, Datie Priest will interview you in a place designated by your principal at your local school about the bonds formed and level of trust you feel has been gained by being in a PLC. The interviewer would like to audiotape the interview to be sure that all your words are captured accurately. However, if you do not want to be taped, simply tell the interviewer, who will then take handwritten notes. If additional permission is given by you, the participant, the researcher will follow up with an interview that will be focused on the level of trust gained as a result of participating in the PLC activities. The following open-ended questions/prompts will be presented at that time:

1. What has your involvement in a professional learning community (PLC) looked like?
2. How do you feel about the effectiveness of the PLC?
3. How do you feel about your approach to instruction as a result of being involved in a PLC?
4. How do you feel engagement in collaborative professional development activities has impacted your sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?
5. How has your approach to conversation changed since participating in the PLC?
6. What is the difference between the quality of conversation you experience about instruction now versus before you participated in collaborative conversations about teaching and learning during grade level, data, or cross-grade level meetings?
7. To what extent do you feel trust has been established among faculty as a result of collaborative activities?
8. In what ways has the bond between you and your colleagues been impacted since participating in the PLC?
9. How do you feel about the level of trust between you and your colleagues as a result of collaboration?
10. Since participating in the PLC, I have now…

How much time will I spend being in this study?
The interview should last no longer than 15 minutes, depending on how much information about your experiences you choose to share.

Will being in this study cost me anything?
There is no monetary compensation for being involved in this study.

What are the risks (problems or dangers) from being in this study?
There are no known risks associated with participating in the interview. Participation is your choice. All information will be kept confidential, and the participants may withdraw from the study at any time with no further contact attempts from the researcher.

What are the benefits of being in this study?
The benefit of participating is you will help your school gain information that can assist in making professional growth plans in the future.

How will my privacy be protected?
You are free to decide with your principal where we will visit so we can talk without being overheard.

How will my confidentiality be protected?
The only place your name appears in connection with this study is on this informed consent. The consent forms will be kept in a locked file drawer in Datie Priest’s office, which is locked when she is not in there. I am not using a name-number system so there is no way to link a consent form to an interview. When we audiotape the interview, we will not use your name, so no one will know who you are on the tape. Once back in the office, the investigator will type out the interview. When the interviews have been typed, the audiotapes will be destroyed. This should occur within one month of the interview. You may also refuse to be audiotaped, in which case the interviewer will take handwritten notes.

The investigator will write up the data identifying participants as “educators from school systems in Central North Alabama.” No one will be able to recognize you.

What are the alternatives to this study?
The only alternative is not to participate.

What are my rights as a participant?
Being in this study is totally voluntary. It is your free choice. You may choose not to be in it at all. If you start the study, you can stop at any time. Not participating or stopping participation will have no effect on your relationships with the University of Alabama.

The University of Alabama Institutional Review Board (IRB) is a committee that looks out for the ethical treatment of people in research studies. They may review the study records if they wish. This is to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if I have questions or problems?
If you have questions about the study right now, please call Datie Priest at 255-345-1673. If you have questions or complaints about your rights as a research participant, 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 a suggestion, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html. After you participate, you are encouraged to complete the survey for research participants that is online there, or you may ask Datie Priest for a copy of it. You may also email participantoutreach@bama.ua.edu.

I have read this consent form. I have had a chance to ask questions.

_______________________ _______________________ ___________________
Signature of Research Participant       Participant Signature  Date

Signature of Investigator       Date

I will participate in the interview portion of this study.□
I will not participate in the interview portion of this study.□

_______________________ _______________________ ___________________
Printed Name of Participant       Participant Signature  Date
APPENDIX E

PERMISSION LETTER TO USE *TEACHERS’ SENSE OF EFFICACY SCALE*
Dear [Name],

You have my permission to use the Teachers' Sense of Efficacy Scale in your research. A copy the scoring instructions can be found at:

http://www.ohiou.edu/hoy/research/instruments/

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D.
Professor Emeritus
APPENDIX F

TEACHERS’ SENSE OF EFFICACY SCALE/DEMOGRAPHIC INFORMATION
**Teachers' Sense of Efficacy Scale/Demographic Information**

**Teacher Beliefs**

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential. After completing this survey please return it to the person who administered it. Thank you for your assistance in assessing teacher efficacy.

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To what extent can you make your expectations clear about student behavior?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>How much can you gauge comprehension of what you have taught?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3.</td>
<td>How much can you do to calm a student who is disruptive or noisy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>To what extent can you provide an alternative explanation or example when students are confused?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>How much can you do to get through to the most difficult students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6.</td>
<td>How much can you do to get students to believe they can do well on school work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>To what extent can you craft good questions for your students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8.</td>
<td>How well can you establish a classroom management system with each group of students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9.</td>
<td>How well can you respond to defiant students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10.</td>
<td>How well can you provide appropriate challenges for very capable students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11.</td>
<td>How much can you do to adjust your lessons to the proper level for individual students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12.</td>
<td>How much can you do to foster student creativity?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13.</td>
<td>How well can you establish routines and keep activities running smoothly?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nothing</td>
<td>Very Little</td>
<td>Some Influence</td>
<td>Quite a Bit</td>
<td>A Great Deal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>How much can you assist families in helping their children do well in school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>How much can you do to help your students think critically?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>How well can you respond to difficult questions from your students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>How much can you do to improve the understanding of a student who is failing?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>How well can you implement alternative strategies in your classroom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>How much can you get children to follow classroom rules?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>How much can you do to motivate students who show low interest in school work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>How well can you keep a few problem students from ruining an entire lesson?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>How much can you use a variety of assessment strategies?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>How much can you do to control disruptive behavior in the classroom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>How much can you do to help your students’ value learning?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PART II. DEMOGRAPHIC INFORMATION:
Would you please provide the following information about yourself?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Gender: Male [ ] Female [ ] Age?</td>
</tr>
<tr>
<td>26.</td>
<td>Race: African-American [ ] Asian [ ] Caucasian [ ] Hispanic [ ] Other [ ]</td>
</tr>
<tr>
<td>27.</td>
<td>How long have you been teaching? Years Months</td>
</tr>
<tr>
<td>28.</td>
<td>How long have you been teaching at this school? Years Months</td>
</tr>
<tr>
<td>29.</td>
<td>What is your educational level? BA [ ] MA [ ] EdS [ ] EdD [ ] PhD [ ]</td>
</tr>
<tr>
<td>31.</td>
<td>What specific area of your subject do you teach?</td>
</tr>
<tr>
<td>32.</td>
<td>Do you regularly attend PLCs? Yes [ ] No [ ]</td>
</tr>
<tr>
<td>33.</td>
<td>Do you have common core planning or grade level meetings? Yes [ ] No [ ]</td>
</tr>
<tr>
<td>34.</td>
<td>How many teachers attend the planning and grade level meetings?</td>
</tr>
<tr>
<td>35.</td>
<td>Would you be willing to participate in an interview?</td>
</tr>
</tbody>
</table>
If you answered “YES” to question #35, please give the following information:

<table>
<thead>
<tr>
<th>Name:</th>
<th>School Name:</th>
</tr>
</thead>
</table>

APPENDIX G

OPEN-ENDED QUESTIONS AND PROMPTS
OPEN-ENDED QUESTIONS AND PROMPTS

1. What has your involvement in a professional learning community (PLC) looked like?

2. How do you feel about your approach to instruction as a result of being involved in a PLC?

3. How do you feel engagement in collaborative professional development activities has impacted your sense of pedagogy as evidenced by participation in conversations during grade level, data, or cross-grade level meetings?

4. What is the difference between the quality of conversation you experience about instruction now versus before you participated in collaborative conversations about teaching and learning during grade level, data, or cross-grade level meetings?

5. To what extent do you feel trust has been established among faculty as a result of collaborative activities?

6. How do you feel about the level of trust between you and your colleagues as a result of collaboration?

7. Since participating in the PLC, I have now…
APPENDIX H

IRB APPROVAL
October 8, 2012

Datric Priest
ELPTS
College of Education
The University of Alabama

Re: IRB # 11-OR-246-R1 “Collaboration in Professional Learning Communities and Development of Teacher Efficacy and Trust in Alabama Schools”

Dear Ms. Priest:

The University of Alabama Institutional Review Board has granted approval for your renewal application.

Your renewal application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your application will expire on October 7, 2013. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, 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, complete the appropriate portions of the IRB Study Closure Form.

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

Good luck with your research.

Sincerely,

[Redacted]
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama