THE EVOLUTION OF A PROFESSIONAL LEARNING COMMUNITY:

AN ACTION RESEARCH STUDY IN AN URBAN ELEMENTARY SCHOOL

by

SHERRY L. JOHNSON

(Under the Direction of Sheneka Williams)

ABSTRACT

Educators face increasing expectations to improve student achievement. As a result, school leaders are recognizing the need to increase opportunities for teachers to collaborate about student learning. Professional learning communities are highlighted as effective structures for teacher collaboration that improve teaching and learning. DuFour et al. (2006) defined PLCs as a collaborative group of educators that engage in collective inquiry and action research in an effort to increase student achievement. This action research study focused on the evolution of a professional learning community in an urban elementary school. This study was guided by the following research questions:

1)What are teachers perceptions on the influence of professional learning communities on their teaching practices?

2) How do professional learning communities affect instructional practices?

3)What does the action research team identify as the essential components of developing an effective professional learning community in their setting?

The construct of this action research case study is based on research related to how adults learn and the characteristics of PLCs. According to Bandura (1977), social learning theory

contends that people learn better when interacting with others in social settings. Bandura (1977) stated:

> Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

INDEX WORDS: Professional Learning Community, Collective Inquiry, Social Learning Theory

THE EVOLUTION OF A PROFESSIONAL LEARNING COMMUNITY: AN ACTION RESEARCH STUDY IN AN URBAN ELEMENTARY SCHOOL

by

SHERRY L. JOHNSON

B.S.Ed., Valdosta State University, 1998

M.Ed., Georgia State University, 2003

Ed.S., Capella University, 2010

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

ATHENS, GEORGIA

2019

THE EVOLUTION OF A PROFESSIONAL LEARNING COMMUNITY: AN ACTION RESEARCH STUDY IN AN URBAN ELEMENTARY SCHOOL

by

SHERRY LYNN JOHNSON

Major Professor:	Sheneka Williams
Committee:	Karen Bryant
	John Dayton

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
May 2019

DEDICATION

To

My Parents, Mr. and Mrs. John and Wilma Johnson. As I have shared with you many times before, I am thankful that you two were chosen to be my parents. For you have both walked paths that served as my yellow brick road to reaching this milestone. I wonder, do you know just how dynamic you are as a team? Your combination of relentless fortitude and reverential intuition bound tightly by love has benefactors extending far beyond your children and grandchildren. You know that I Love You. Thank You isn't enough.

My Brother and Sister-in-Law, Mr. and Mrs. Jamarr and Charlotte Johnson. You two know how special you are to me. Thank you for your encouragement during this process. Your support means more that you will ever know. You two already know that I Love You and our two babies!

ACKNOWLEDGEMENTS

To

Dr. Sheneka Williams, Thank You for your support and for sharing your passion for elevating leaders. Your guidance and accessibility were reassuring during each critical milestone.

Dr. Karen Bryant, Thank You for sharing your leadership experiences throughout the program and for your support during each phase of the program.

To the Principal and staff of Chlothan ES, Thank You for welcoming me into your family and for sharing your wealth of knowledge during the action research phase of the program. Please know that I am available to continually support your goal of improving student outcomes.

Beth, Jermain and Kim, you are now my sisters from another mother. It was a great ride with you!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Page

Chapter 1.

Introduction

Professional learning communities (PLCs) have been researched as effectual methods for helping teachers deliver instruction that results in students meeting or exceeding state standards. PLCs are collaborative teams in which the members work toward continuous improvements in teaching subject matter content, concepts, skills, and ideas. PLCs have also been noted as being very effective in bringing educators together, in particular because they are site-based, designed to meet teachers' specific needs, and focused on closing the teaching—learning gap (Sparks, 2005). According to DuFour (2007), effective PLCs must be led by site-based educators specializing in planning and implementing professional development.

Traditionally, professional development was led by an individual delivering a one-size-fits-all presentation at a location outside of the local school that had been developed without assessing the teachers' actual needs or utilizing assessment data. Traditional professional development has also failed to provide teachers with the support they need to implement strategies when they return to their school (Parsad, Lewis, & Farris, 2001). In addition to the generic training that also lacked school-based support, traditional professional development models have offered no instructional delivery post-assessment. Although principals' support is critical to the success of PLCs, they are unable to fit in the time required to conduct ongoing, data-driven professional development and manage the demands of an entire school. As the frequency of professional development has shifted to site-based locations, implementing PLCs that are designed to meet the diverse needs of teachers has become even more critical.

Educators argue that one value of professional learning communities is translating knowledge from the district level to day-to-day school operations. Teachers find the work of a PLC to be challenging and ambiguous in the intersection of the idea of a community and the growth of the community being dependent on acknowledging and respecting the perspectives, beliefs and needs of individuals (Westheimer, 1999). This normally reduces the intended work of a PLC to everyone just getting along, which is why little is known about how to effectively develop and sustain PLCs.

This study will add to the existing body of knowledge informing leaders and districts about the development of PLCs with a core team. In addition, the effects, if any, that PLCs have on instructional planning and delivery that ultimately impact student outcomes will be discussed. Finally, the cycle of data-driven PLCs in this study will inform school leaders of possible adjustments to their school-based PLCs that will enhance instructional practices and increase student achievement, thus narrowing the teaching and learning gap.

Background of the Study

Since the 1950s, teachers have been feeling tremendous pressure to make sure all students meet or exceed state standards as mandated by the Elementary and Secondary Education Act (ESEA, 1965), No Child Left Behind (NCLB, 2002), and Every Student Succeeds Act (ESSA, 2015) reforms (DuFour, DuFour, Eaker, & Karhanek, 2004). The U. S. Department of Education instituted incremental measurements of academic success, and when students did not meet the mark, schools and teachers were penalized until improvements were made (NCLB, 2002). The need for such strict mandates began almost a half century ago with the launch of Sputnik, when Americans began to take a closer look at the American school system (Coleman et al., 1966).

The shock of Sputnik's launch in 1957 arose questions in the minds of Americans about the rigor of U.S. schools (Marzano, 2003). During that time, research was conducted that found little to no correlation between student achievement and schools, but they did find a much stronger link between student achievement and the student's family and home background (Coleman et al., 1966; Jenks et al. as cited in Marzano, 2003). In 2003, Marzano studied 35 years of research on student achievement and found that "high-performing schools almost entirely overcame the effects of student backgrounds" (p. 7).

The quality of education continued to be questioned throughout the 1980s. Americans had the perception that there was something "seriously amiss in our educational system" (National Commission on Excellence in Education, 1983). The National Commission on Excellence in Education, formulated by David P. Gardner, the 17th president of the University of California, conducted a study on the American public education system and found that creating learning societies or groups of people focused on a learning goal were key elements in developing a set of values in education that gave all students, parents, educators, and community members a voice.

This "Learning Society" that the Commission spoke of went beyond the classroom and extended into homes, workplaces, and the quality of a person's life. The following statement summarizes the findings of the study, "Formal schooling in youth is the essential foundation for learning throughout one's life; but without life-long learning, one's skill will become rapidly dated" (The National Commission on Excellence in Education, 1983). Several researchers viewed this study as a catalyst to move in a direction towards reform and excellence in education (Blase & Blase, 2001).

This type of large-scale reform requires collaboration amongst all school-level leaders. In 2003, Coeyman credited the action taken by the federal government as a result of the *A Nation at Risk* (National Commission on Excellence in Education, 1983) report and described the action as irreversible. While Ashby (2004) referred to NCLB (2001) as the most significant effort by the federal government in U.S. history aimed at increasing the quality of education, the ESSA (2015) also includes a mandate that all students are taught high academic standards that prepare them to be successful post-high school. While NCLB (2001) was building a consensus on what it takes to increase student achievement, ESSA (2015) was inclusive of all students, specifically in the lowest performing schools.

Researchers have agreed that increasing student achievement requires a focus on learning and not teaching (Alberta Education, 2006; Barth, 1990, DuFour et al., 2006). DuFour et al. (2004) found that many educators also agree that establishing a theoretical framework such as PLCs is a beginning to success in meeting the federal mandates of NCLB (2001). Since NCLB (2001) was implemented, research has found that schools that implemented PLCs had the best hope for increasing student achievement (Blankstein, 2004; Darling-Hammond, 2001; DuFour, 2007; Fullan, 2006; Reeves, 2006; Schmoker, 2005). Researchers such as Shirley Hord (1997) have agreed upon the characteristics of effective learning communities. She, in particular, identified five research-based characteristics of effective PLCs: supportive and shared leadership, collective creativity, shared vision and values, supportive conditions, and shared personal practice.

According to Louis and Kruse (1995), the support of the principal is a critical component for the development of a school-based professional learning community. It signifies the willingness of the leadership to build capacity and share authority without being the dominant

figure in decision making. Sergiovanni asserts that "the sources of authority for leadership are embedded in shared ideas" (1994b, p. 214). Senge (1995) adds that it is the role of the principal to create an environment in which the staff can continuously learn, which reflects on how critical it is for superintendents to hire principals to create a shared learning environment.

In Senge's book *The Fifth Discipline* (1990), he described collective creativity as the opportunity for people to continually expand their capacity, think out loud and aspire to new heights together in a nurturing environment. Louis and Kruse (1995) coined the discussion in the education arena as reflective dialogue that centers around teaching and learning. Griffin (1994) believes the dialogue forces debate about what is important and leads to an appreciation of what becomes the collective intelligence of the group and creating a bond that leads to greater creativity.

Sharing vision is not about agreeing with an idea, it is a focus on student learning (Louis & Kruse, 1995). The shared vision leads to bonding over agreed upon norms that are supported by the staff. Shared vision in a professional learning community means that members individually operate with the conscious of the common good. Trust and open communication strengthen the dedication to the vision (Fawcett, 1996).

Supportive conditions in professional learning communities includes providing time to meet and providing staff the opportunity to participate in selecting teachers and administrators. This increases respect and trust amongst faculty and staff, which is critical when working towards improvement. Hord (1994) believed that this reduces working in isolation and increases staff capacity.

Effective professional learning communities include peer collaboration and observations that are based on the collective desire for improvement. The shared vision is grounded in mutual respect

and trustworthiness. In these environments, "teachers tolerate debate, discussion and disagreement. They are comfortable sharing their successes and failure. They praise each other and have empathy for each other" (Wignall, 1992, pg. 18).

Educators are facing demands to ensure that all students reach and maintain an acceptable measure of achievement on state standards as a result of NCLB (2002) (Blankstein, 2004; DuFour et al., 2004; Johnson & Donaldson, 2007). Schools are held accountable for students meeting and exceeding levels of standards-based achievement. When these levels of achievement are not met, schools are then placed in a high-needs category and penalties are imposed until improvements are made (DuFour et al., 2006). Upon being labeled as a high-needs campus, teachers are also recommended for professional development to enhance instructional practices when students do not meet standards as measured by state assessments.

All reform mandates have driven educators to constantly seek support from administrators to find time for professional learning and to investigate methods that will increase the number of students who master the content. Research has indicated a correlation between PLCs and student achievement (DuFour et al., 2004; Eaker, DuFour, & DuFour, 2002; Graham, 2007, Leithwood et al., 2004; Schmoker, 1999). Although school leaders have their own leadership style, they need specific guidelines for establishing effective, systemic PLCs. DuFour and Eaker (1998) concluded that guidelines for establishing effective PLCs are necessary to apply the appropriate strategies for instruction and increase student achievement. Another study conducted by Dooner, Mandzuk, and Clifton (2008) indicated that little is known about how to begin and maintain PLCs. Their study is valuable because it provides insight from teachers who participated in PLCs and who gave their perceptions of PLCs along with the effects that PLCs had on instructional practices and student achievement.

According to Imants (2003), PLCs are "learning structures in which interaction among teachers is frequent and teachers' actions are governed by shared norms focused on the practice and improvement of teaching and learning" (p. 296). In summary, the Elementary and Secondary Act (ESEA) of 1965 was a civil rights law that offered grants to school districts with majority low-income students, and the NCLB of 2001 was a reform model that focused on achievement gaps and the support of standards-based instruction to minimize teaching and learning gaps. Lastly, the ESSA of 2015 mandates the success of all students "regardless of race, income, zip code, disability, home language or background" (U.S. Department of Education, 2018).

The History of PLCs

From the birth of education to the end of the 1950s, American educators have made decisions that resulted in the gradual progression of education. Due to that gradual progression, historians agreed that American schools were moving in a positive direction (Newman, 2006). During the 1950s, classrooms became overcrowded as a result of population growth. Toward the end of that decade, the Russian launch of Sputnik initiated a critical point in American education (Hewitt, 2006) as the focus on math and science became more evident and federal support for education increased to support such growth. By the 1960s, support for American schools was waning and criticism was growing (Tyack & Cuban, 1995). Then in 1983, the report *A Nation at Risk* (The National Commission of Excellence in Education, 1983) was published, confirming that American schools were indeed in trouble (Tyack & Cuban, 1995).

Attempts at improving teaching and learning through reform are prevalent throughout the history of American education. According to Archer (2012), the publication of *A Nation at Risk* by the National Commission of Excellence in Education (1983), which cited American schools for a lack of teaching, generated new ideas to change the trajectory of education.

In *Implementing Mastery Learning,* Guskey (1997) wrote about connecting professional development and student learning, and he acknowledged that researchers have been analyzing this concept for decades. According to Kopf (2007) in the Regional Educational Laboratory Southwest, there is a link between the amount of professional development that teachers engage in and the level of student achievement. However, Hudecki (2007) asserted that very little was known about the association between professional development and student achievement. Teacher isolation has been studied for several decades (Schmoker, 2004). Likewise, the advantages of collaboration have been documented in many studies (Thompson, Gregg, & Niska, 2004). To build a cohesive collaboration, teachers need to define the actions of all group members to create a shared practice and "fit together". The terms *learning impoverished* and *learning enriched* schools were coined by Susan Rosenholtz (Thompson et al., 2004), who described that teachers worked together and focused on instruction in learning-enriched schools, but learning-impoverished schools did not apply this idea. In 1989, Rosenholtz conducted a study of 78 schools to determine the characteristics of learning-enriched schools. Her study found that schools where teaching efforts were collaborative instead of individual in nature were rich in continual improvements in teaching practices. Further, students performed better in schools where there was a focus on teacher collaboration, in particular that there was an increase in student achievement with high levels of teacher commitment and shared missions, visions, values, and goals. Thompson et al. (2004) concluded that Rosenholtz's research gave a wide range of examinations into the connection between teacher collaboration and student achievement. According to her research, teachers were more likely to explore and implement new instructional strategies with the luxury of working in a collaborative environment. Fullan

(2006) agreed with Rosenholtz's research and the positive impact of teacher collaboration on instruction.

The idea of PLCs emerged in the business sector with the understanding that groups of people or organizations can learn collaboratively (Walker, 2002). In 1990, Senge introduced the concept of learning organizations in *The Fifth Discipline*. In this concept, members of an organization constantly build capacity to get the desired results by learning together and nurturing new ideas. Senge's (2000) idea of learning organizations includes five categories of learning: personal mastery, shared vision, mental models, team learning, and systemic thinking. Hord (1997) related by applying Senge's categories of learning to the possibility of increasing knowledge and understanding in schools.

NCLB (2002) continued to put a spotlight on reforming teaching and learning processes. Accountability to improve student learning continued to increase as scrutiny of public schools grew (Jennings, 2001; Lee, 2010). The idea of PLCs as a vehicle to improve student learning quickly became popular, as evident by the vast amount of research and literature related to the correlation between PLCs and student learning (Hannford, 2010; Hanson, 2010; Hord & Hirsch, 2009; Hord & Sommers, 2008; Ireland, 2010; Morgan, 2010; Pierce, 2010; Wood, 2007). Archer (2012) performed research into the subject, revealing that schools successful with increasing student achievement had characteristics common to PLCs. With this evidence in-hand, PLCs became the vehicle that educators turned to in their efforts to meet all students' needs and the demands of NCLB (DuFour, 2004; Hord & Sommers, 2008; Katz & Earl, 2010; Seashore Louis & Wahlstrom, 2011; Wood, 2007).

In 1993, Judith W. Little and Milbrey McLaughlin conducted a study that concluded the strongest professional communities had shared norms and beliefs, built collegial relationships,

and had collaborative cultures. They continued to say that teachers should allow for reflective practice, ongoing technical inquiry regarding effective practice, and professional growth. Lastly, Little and McLaughlin (1993) believed that strong professional communities should also have a mutual obligation to provide support.

Two years later, in 1995, McLaughlin addressed educators at the National Staff Development Council conference, saying that researchers were closer than ever to revealing the truth about school improvement, and the most important component of school improvement is the ability of a school to function as a professional learning community. PLCs have since become a popular solution for reforming public schools (Hord & Sommers, 2008; Thompson et al., 2004) and are grounded in the belief that teachers grow over time to examine the effectiveness of classroom instruction relative to student learning growth (Wood, 2007). Wood (2007) also stated that PLCs foster an environment of collaboration for the purpose of designing an instructional delivery method that meets the needs of all students.

There are close to half a million items listed under PLCs on the internet. The U.S. DOE (2016) website lists more than 12,000 resources directly linked to PLCs, and the West Virginia DOE (2016) website has more than 700. Additionally, there are more than 2,000 articles on PLCs on the Southwest Educational Development Laboratory (SEDL, 2013).

Overview of the Case

This study takes place in Lynn County School District (LCSD-pseudonym). Lynn County is located in a metropolitan city in Georgia. The 2016 United States Census Bureau reported 740,321 residents in Lynn County. LCSD includes 83 elementary schools, 20 middle schools, 22 high schools, and 18 centers. There are a total of 101,079 students in LCSD, with 49,142

elementary school students, 22,647 middle school students, and 29,290 high school students. The student-to-teacher ratio is 23 to 1, and there are 8,500 teachers and 13,285 staff.

Although LCSD has continued to show gains in student achievement, gaps in teaching and learning still exist. Therefore, revisiting the structure and protocols of PLCs, as well as prioritizing the instructional focus will provide principals with additional opportunities to improve student performance outcomes and transform teaching and learning.

My Role

Currently, my position at LCSD is Regional Superintendent. As the Regional Superintendent, my primary responsibilities include directly supporting principals in the areas of data analysis, teaching and learning, professional learning, finance, safety and operations, stakeholder mediation and engagement, human resources, and transportation. While these responsibilities are numerous, much of the support to schools is provided via site-based professional development, requiring me to visit approximately six schools each week. After ensuring safe schools, my primary responsibility is coaching principals through the process of analyzing multiple data sources to transform and improve teaching and learning through professional learning communities.

As the co-lead of the Strategic Attack Team (SAT), I was appointed by the Superintendent to develop a plan that guides each principal through a cycle of data analysis, professional learning, instructional planning and delivery, assessment of mastery, monitoring student growth, and communication. The SAT plan was developed in a manner that guides each principal through a research-based and question-based method to become more effective PLC leaders in their facility. The plan was written in a manner that allows differentiation according to grade level and content area. Utilizing the SAT plan as a guide, along with other resources to

develop an effective professional learning community, I believe principals in LCSD will close achievement gaps and improve educational outcomes for their students.

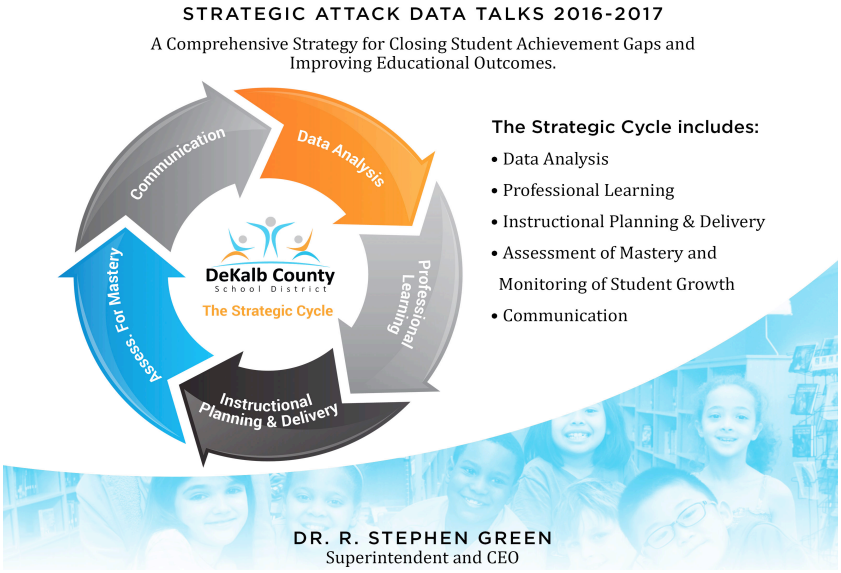

Figure 1. Strategic Attack Plan.

Statement of the Problem

Research has indicated a strong link between PLCs and student achievement (DuFour et al., 2004). Studies have offered evidence on the characteristics of PLCs and their impact; however, there is minimal research on how to develop PLCs with a core team of educators. This action research project will attempt to address the process for developing a sustainable, systemic PLC with the goal of improving teacher practice and ultimately improving student outcomes. According to an AdvancED review that was conducted in LCSD from March 12-15, 2017, all of the improvement priorities directly relate to data-driven professional learning and monitoring and supporting the improvement of teachers' instructional practices. In particular, the improvement priorities directly related to this research include the following from the report:

Enhance professional development for data progress monitoring strategies to ensure all professional and support staff are systematically trained to evaluate, interpret, and utilize a range of data sources to enhance student learning (Indicators 3.2, 5.2, 5.3):

3.2 Curriculum, instruction, and assessment throughout the system are monitored and adjusted systematically in response to data from multiple assessments of student learning and an examination of professional practice.

5.2 Professional and support staff continuously collect, analyze and apply learning from a range of data sources, including comparison and trend data about student learning, instruction, program evaluation, and organizational conditions that support learning.

5.3 Throughout the system professional and support staff are trained in the interpretation and use of data.

Implement fully and monitor closely the newly developed curriculum and the system's instructional infrastructure in order to refine and enhance the instructional processes used by staff to systematically support quality student learning across all classrooms. (Indicators 3.1, 3.3, 3.4, 3.6)

3.1 The system's curriculum provides equitable and challenging learning experiences that ensure all students have sufficient opportunities to develop learning, thinking, and life skills that lead to success at the next level.

3.3 Teachers throughout the district engage students in their learning through instructional strategies that ensure achievement of learning expectations.

3.4 System and school leaders monitor and support the improvement of instructional practices of teachers to ensure student success.

3.6 Teachers implement the system's instructional process in support of student learning.

Not only does this study address the AdvancED improvement priorities, it also aligns with the district's strategic plan. Specifically, goal area one is Student Success with Equity and Access, which has the objective to improve student's mastery of learning standards. Thus, this study seeks to answer the following research questions:

1. What are teacher's perceptions on the influence of professional communities on their teaching practices?
2. How do school-based data-driven professional learning communities affect instructional practices?
3. What does the action-research team identify as the essential components of effective professional learning communities in their setting?

AdvancED has recommended that LCSD train professional staff in the interpretation and use of data as an element of PLCs. As the Regional Superintendent, it is my responsibility to train principals to transform teaching and learning in their schools through systemic data-driven PLCs. As the co-lead of the SAT plan, I will partner with district and local school leaders to utilize the SAT plan to lead data-driven PLCs in addressing professional learning needs according to the plan.

Case Study Organization

Chapter 2 will present a review of the literature and the theoretical framework. Chapter 3 outlines the action research design, triangulation of research methods, data collection, validity and trustworthiness, data analysis, limitations, and researcher subjectivity. Chapter 4 describes the context, action research team members, an overview of the action research cycles,

reflections, and next steps. Chapter 5 presents the findings. Chapter 6 closes the research with conclusions, implications, and future research.

Chapter 2.

Literature Review

Characteristics of Professional Learning Communities

A review of the literature has revealed several definitions of PLCs. Sergiovanni (1992) compared PLCs to an intimate group of people with a sense of sacred connectedness. Kruse and Louis (1995) visualized PLCs as opportunities for educators to engage in reflective discussions and student learning. American Institutes for Research (2000) defined PLCs as a school in which there is continuous learning and sharing by teachers and administrators for the purpose of increasing student achievement. According to Imants (2003), PLCs are "schools in which interaction among teachers is frequent and teachers' actions are governed by shared norms focused on the practice and improvement of teaching and learning" (p. 296). DuFour et al. (2006) defined PLCs as a collaborative group of educators that engages in collective inquiry and action research in an effort to increase student achievement. Additionally, Henderson (2008) referred to PLCs as a mutual group of educators who are unified in their dedication to student learning. The term *communities of practice* was coined by Etienne Wenger in 1998. He viewed learning communities as people who come together for a common purpose and share their concerns about an issue, share their enthusiasm about a topic, and share their knowledge and expertise in an area (Wenger, 1998). In 2006, DuFour et al. modified Wenger's definition of communities of practice so that it included collaborative groups with a commitment to learning. The PLCs that DuFour et al. (2006) referenced focused on the group's actions. Lambert (2003)

did not refer to PLCs as actions but rather a place with a purposeful, outcome-based feeling that allowed engaging collaboration.

In *Professional Learning Communities at Work*, DuFour and Eaker (1998) recognized that educators mostly used the term professional learning communities instead of learning organizations. They noted that each word in professional learning communities was chosen for a specific reason:

> A *professional* is an expert in a particular field who has advanced training in the field and is expected to remain current in its evolving knowledge base. The term *learning* suggests continual action and curiosity. Schools that operate as a PLC understand that its community members must participate in and engage in ongoing learning and practice that distinguish an organization devoted to continuous improvement. In a PLC, educators create nurturing environments that promote shared cooperation, emotional support, and individual, professional growth to accomplish what they cannot do alone. (pp. xi-xii)

There are two parts to DuFour and Eaker's (1998) definition of PLCs: professional and learning. The professional definition refers to the classification or certification required by law, whereas the learning definition represents continuous growth in a particular area. Upon receiving certification, educators are required to remain abreast of current, research-based practices, opportunities for which PLCs can offer. The learning gained through the professional community provides opportunities to plan, reflect, and celebrate accomplishments that positively impact student learning. Hord (1997) and DuFour and Eaker (1998) repeatedly pointed out the importance of teachers and administrators working together guided by the common language of PLCs, which represents continuous learning and growth in an identified area, topic, subject or content.

In *Learning by Doing*, DuFour et al. (2006) described three "big ideas" of PLCs, wherein PLCs should focus on learning, building a collaborative culture, and focusing on results. The primary purpose of PLCs is to ensure optimum levels of learning for all students. The focus on learning is driven by four sets of questions: (1) What is the learning goal? What is it that students should be able to know, do, and understand as a result of the teaching? (2) How will we know what students have learned? Is student's learning monitored on a regular basis? (3) What are the steps when students don't learn? What additional support and resources are available for students who are not mastering learning goals? (4) What is the process when students are mastering the curriculum?

No school can achieve its learning goals for students when teachers work in isolation. Successful collaborative schools have administrative support and dedicated time to meet. Support and time are critical elements for collaborative teams, as teachers work together to clarify learning goals, develop assessments for and of learning, analyze evidence of mastery, and build upon that evidence to learn and grow from each other. High levels of student learning are the measure of an effective, successful PLC. As the collaborative team meets, the focus on results should be grounded in examining programs, policies, and practices. Additionally, staff members should also receive timely feedback from school administration on their effectiveness as it relates to the school's goals.

As stated earlier, the ultimate purpose of PLCs is to benefit the student by enhancing daily instructional practices and raising the bar for student achievement. It can be debated that every meeting in the education arena should operate as a PLC. A review of the literature provides guidelines that characterize PLC meetings differently than other meetings.

One characteristic of a PLC is that educators are not focused on just teaching but also ensuring that students are actually learning (DuFour et al., 2004). Leaders should direct teachers through the process of researching best practices that have proven successful and methods for adapting those practices to fit the needs of students within the school. All educators should work as a single unit within the building to determine learning goals, to identify what mastery of the goals looks like, and how to modify instruction when there are difficulties in learning. Responding to difficulties in student learning sets PLCs apart from traditional schools (DuFour et al., 2004). This setting is specifically designed to increase the number of students mastering content. Depending upon the content, mastery differs for each student; therefore, teachers must be able to quickly respond to gaps in learning. A functioning PLC is when schools operate to ensure students receive support to master learning goals. According to DuFour et al. (2004), what further makes PLCs different from regular groups is that they operate according to intervention instead of remediation.

Efforts to improve students' level of understanding must be continual. Systemic processes are not content with the status quo and create environments for perpetual learning through PLCs. Commitments to continuous improvement within PLCs are evident with changes in the daily routine instead of a checklist with completed tasks.

In addition to looking at whole school progress, PLCs also allow teachers to examine the progress of individual students. Examining performance-based student work along with standardized test scores allows teachers to develop individual plans to support academic mastery (Blankstein, 2004). Asking essential questions about the difference between the product and the learning goal helps teachers to map out a strategic plan to increase student learning and evaluate their instructional practices. Likewise, when mastery of learning objectives is overwhelming, a

similar analysis should be done to determine the successful strategies and duplicate them (Marzano, Waters, McNulty, 2005).

PLCs should be performance-based and action-based. The main reason for coming together as a PLC is to determine next steps or the next action based on student performance (DuFour et al., 2004). Members of the PLC must be committed to acting differently, if necessary, to increase mastery of learning goals. Also, members must understand that until something is done differently, there should be no expectation of better results (DuFour et al., 2004). Ultimately, effective PLCs monitor progress and make adjustments based on results instead of intentions. Each member of the PLC contributes to a continuous process of recognizing existing ranks in student achievement, planning to make improvements, and providing regular evidence of progress and improvement (DuFour et al., 2004). Reactions to student achievement and necessary improvements should be based upon SMART goals or goals that are specific, measurable, attainable, result-driven, and time-bound. Blankstein (2004) stated that PLCs go beyond analyzing standardized testing data and move toward responding to the data. At this point, the objective shifts to designing benchmarks, assessing data from those benchmarks, then implementing interventions to narrow and close gaps in mastery (DuFour et al., 2004). Most importantly, formative assessments are considered to be powerful tools for PLCs, as they are used to identify students in need of additional learning resources (DuFour et al., 2006).

The Role of Leadership in Professional Learning Communities

School-based leaders play a vital role in the transformation of a school into a PLC. This type of community centers around not just student learning but adult learning as well. Johnson, Arumi, and Ott (2006) offered the following comparison of today's leaders of the 21st century and the leaders of yesterday. There was a time when the primary focus of school-based leaders

was to manage the budget, maintain good relations with the school board, abide by federal rules and regulations, and, of course, support the athletic department. That was then, and now school-based leaders are expected to be instructional leaders and change agents with the ultimate goal of increasing and maintaining student achievement of all students—especially minority and at-risk students (Johnson et al., 2006, p. 2).

Fullan (2006) stated that a principal's role is more than that of the instructional leaders of the 80s and 90s. They must be change agents to meet modern demands. He continues on to state that leaders who are change agents have five characteristics, which are: understanding the change process, moral purpose, the ability to be a relationship leader, a desire to create and understand the importance of shared knowledge throughout the organization, and the ability to create consistent reform. The Wallace Foundation conducted a five-year, 180-school study on the link between both student learning and leadership behaviors (Leithwood, Louis, Anderson, & Wahlstrom, 2004). The study examined characteristics of effective leadership as well as the impact that the leadership has on student achievement (Center for Comprehensive School Reform and Improvement, 2005). The results of the study concluded that school leadership was the second most important factor in student achievement, with classroom instruction being the first. The impact of leadership on student achievement was found to be greater in schools where the students' needs were greater (Leithwood et al., 2004). At the Bridge to School Reform conference in 2007, DeVita spoke frankly about leadership and her stance that school improvement efforts could not be successful without strong school-based leadership (DeVita, Colvin, Darling-Hammond, & Haycock, 2007). The Wallace Foundation supported her, saying leadership was the key link to all elements of school reform. In 2001, the National Association of Elementary School Principals (NAESP) acknowledged a need for new models of leadership to

accelerate changes in current practices. To support these changes, NAESP noted that the primary focus needed to be student learning (2001). In 2005, Richardson published an article in the *Journal of National Staff Development Council* in which he issued a reminder that principals commonly make accommodations for the organizational structure of PLCs but often neglect the school's culture. Understanding the process to changing a school's culture requires both administrators and teachers to research solutions for school improvement (Kleine-Kracht, 1993). According to Senge (1990), the principal's role is to create an environment best fitting for continuous learning. Collins (2001), in assessing various leadership levels, considers Level 5 leaders to be the most effective leaders because of their ability to build capacity and give accolades to deserving members of the leadership team. One of the greatest benefits of Level 5 leaders is that when those individuals retire, the organization is able to continue to focus on the mission. Building capacity is also critical in that it creates a sense of shared leadership that builds confidence and competence for the success of the organization (Creel, 2007).

PLCs contribute to high levels of capacity building as administrators were previously seen as leaders and teachers were seen as followers (Eaker, DuFour, & DuFour, 2002). PLCs spawned a paradigm shift in who was considered a leader. Since the wide acceptance of PLCs, administrators have been viewed as, "leaders of leaders and teachers as transformational leaders" (Eaker et al., 2002, p. 22). No other educators are in the best position to be transformational leaders as teachers. Across the nation, teachers should be seen as transformational leaders because of their position to impact students' learning and students' lives.

Recently, there has been increasing interest in PLCs. The Southwest Educational Development Laboratory conducted research that found a few model PLCs (Hord, 1997). Morrissey (2000) identified four steps that administrators should follow when implementing

PLCs. Those steps are to determine school and staff readiness, consider the use of an external change facilitator, identify barriers and boosters, and begin with the learning (Morrissey, 2000, p. 27).

The first step, determining school and staff readiness, provides teachers with an opportunity to conduct self-assessments about their purpose, goals, and next steps. In *Creating Great Schools* (2005), Schlechty noted the importance of clearly identifying the roles, responsibilities, and beliefs of members of PLCs. Asking questions such as: Is there a shared vision among the adults? Are all members willing to be risk-takers? Is the focus on results and continuous improvement? Are the school's practices aligned with the school's mission? Morrissey restated that when PLCs are aligned with the school's vision, they play a vital role in the quality of instruction (2000).

Benefits of Professional Learning Communities

In North America, PLCs are considered the most effective method for improving teaching quality and student achievement (Rolff, 2003). A review of the research shows numerous successes with established PLCs in schools across the nation. Much of the research indicates a positive connection between PLCs and student achievement (DuFour, 2004; DuFour et al., 2004, 2006; DuFour & Eaker, 1998; Fullan, 2006; Marzano, 2003; Thompson et al., 2004). Specifically, McLaughlin and Talbert's (2001) research established distinctions between schools with established PLCs and schools without established PLCs in the areas of academic achievement, attendance, and dropout rates. Barlow (2005) refers to it as a widespread understanding that frequent, organized collaboration enhances the quality of teaching and immediately results in increased student achievement and teacher morale.

The Annenberg Institute for School Reform (2004) also advocated the benefits of using PLCs as the main element for meaningful professional development with reform initiatives, finding several positive outcomes for school districts and individual schools that utilized PLCs: "(a) increased effectiveness, both collectively and individually; (b) collective responsibility for student learning; reduction in teacher isolation; (c) substantial learning about good teaching and increased content knowledge; (d) higher morale; (e) greater job satisfaction; (f) greater retention rates, and (g) enthusiasm" (p. 3).

Kruse and Louis (1995) further observed that when individual teachers thrive, the entire school thrives. According to Deal and Peterson (2002), every organization, especially schools, enhance performance by nurturing a system of shared norms and values. Schools flounder and die without a positive, strong culture. "The key to successful performance is the heart and spirit infused into relationships among people, their efforts to serve all students, and a shared sense of responsibility for learning. Without spirit nourished by cultural ways, schools become learning factories devoid of soul and passion" (Peterson & Deal, 2002, p. 7).

Not only do PLCs contribute to the potential for gains in student learning, but leadership is also enhanced by PLCs. School leaders play a key role in the success of PLCs, and therefore they must closely monitor their school's culture and structure. School leaders set the tone for PLCs and school improvement by modeling active learning, allotting time for the process, respecting the ideas of all members, and empowering other teachers to become leaders (Zepeda, 1999). Although it is critical for school leaders to model, increasing the capacity for other leaders in the building means that the principal is not in charge of most of the leadership roles within the PLC (Lambert, 1998). As such, the best strategy for creating a successful PLC is to build capacity in its members (Eaker et al., 2002).

PLCs possess strong possibilities for building capacity for school districts, individual schools, and classrooms when educators decide to become active. As the capacity for classroom instruction increases, so will student achievement. Since NCLB was enacted, schools across America have been charged with achieving and mastering standards far beyond the expectations of previous generations (DuFour, 2005). Schmoker (2006) came to the conclusion regarding the ideas and suggestions of many school leaders as, "The stakes are high, but success redefines public education and education professions, and enables us to reach unprecedented levels of quality, equity, and achievement" (foreword). With willing educators who are accepting of making critical changes in their practice, successful PLCs yield teachers and administrators who are more motivated as well as an increase in learning for students (DuFour et al., 2005). PLCs offer opportunities for teachers to remain aware of current research practices (Joyce, 2004). While collaborating with colleagues within the school is a critical component of successful PLCs, it is equally important to seek collaboration from educators outside of the school. Chapman (2014) asserted that teachers may benefit from collaborating with teachers from other schools, calling this strategy "networked PLCs." Schools that participate in networked PLCs have access to a wider range of resources and expertise versus working within a single school. Networked PLCs can possibly lead to greater opportunities to collective and self-reflection on instructional practice and increase engagement on more challenging tasks (Leiberman & Grolnick, 1996; Lieberman, 2000). Although a lack of time prevents outside collaboration, providing teachers with adequate time for PLCs within their building will give teachers a chance to learn about other proven instructional practices. With both in-school and networked PLCs, connecting to current literature and practices is critical, as teachers can use the research to enhance their instructional practices (Joyce, 2004).

Complications in Establishing Professional Learning Communities

Even with countless researchers providing positive information about PLCs, the research also sends a note of caution to administrators launching PLCs in their schools. With the popularity and potential benefits of PLCs, administrators must move cautiously to prevent losing their meaning, purpose, and possible positive results. PLCs should be a "custom fit" for the school's needs and therefore, require careful thought in their implementation. Even with the potential success of PLCs, there is also the potential for failure. In *Professional Learning Communities*, Wood (2007) wrote, "I am unconvinced that the world needs yet another account of a defeated effort to 'scale up' school reform" (p. 282).

The most common obstacle of successful PLCs is the time allowance for collaboration (Blankstein, 2004). Loertscher (2005, pp. 35–39) wrote that PLCs can be vehicles for addressing problems with communication, making that the first step in developing strength in the cohesiveness of the members.

A review of the literature gives no help in how to create time for PLCs, only recognizing that it is vital to their success. It generally boils down to time management and prioritizing. Additionally, when the focus is on increasing student achievement, time must be made to collaborate (DuFour, 2004). In 2001, Parsad et al. conducted a survey in which over 5,000 teachers across the nation reported that 69% of them participated in regular collaboration with their peers. As a result, the survey demonstrated administrators' efforts to overcome the issue with time constraints.

In addition to a lack of time, off-topic conversations can be a hindrance in creating successful PLCs (DuFour & Burnette, 2002), thus making it critical for school leaders to select members who will focus on the purpose of collaboration and lessen the chance of negative

comments and complaints dominating the conversation. Marzano (2003) suggested setting norms before meeting to provide outlines for discussion.

Another complication in establishing PLCs is that most veteran teachers prefer working alone. For many, teaching is the profession of choice because educators traditionally work in isolation (Joyce, 2004). Working in isolation allows teachers to become comfortable with their way of doing things. Also, some teachers develop feelings of mistrust, sensing a need to protect their "territory" and reject outsiders (DuFour & Burnette, 2002). Henderson (2008) wrote, "At first, PLCs can be unsettling for teachers who are used to teaching in isolation, but PLCs encourage collaborative teaching." According to Epstein and Salinas (2004), "A professional learning community emphasizes the teamwork of principals, teachers, and staff to identify school goals, improve curriculum and instruction, and reduce teachers' isolation" (p. 12).

Initial success of a PLC is dependent upon school leaders encouraging membership from teachers ready for leadership roles (Blankstein, 2004). Wenger (2002) proposed that everyone should be encouraged to participate and noted that members will be most vocal when a topic interests them. Wood (2007) reported that involvement is based on the meeting: "Teacher learning communities, such as professional networks, critical friends groups, study groups, and teacher research collaborative, provide settings for teachers to learn and build knowledge together" (p. 284). Mullen and Hutlinger (2008) cited study groups as key components of PLCs. School leaders must take careful precaution not to pressure teachers to participate, which increases resistance (Rolff, 2003).

It is the responsibility of school leaders to eliminate obstacles to the success of PLCs. Gone are the days of giving teachers state standards and assuming enough has been done to ensure high levels of student achievement. Teachers must meet on a regular basis to measure

whether or not students mastered learning goals. In most schools, there is little focus on what teachers teach and even less focus on what students learn (Marzano, 2003). That is the gap between the curriculum that is implemented and the curriculum that is attained. PLCs can help bring focus back to these issues.

This leads to one of the biggest issues facing principals: positive and negative academic performance (Marzano et al., 2005). Although it is critical to address and recognize weaknesses, doing so often affects morale. PLCs provide a venue for celebrating success and planning to duplicate the methods that created the success (Marzano et al., 2005). Committed members are also essential to successful PLCs. Building capacity is a collaborative effort, not an individual one (DuFour et al., 2004). Building capacity requires deep thinking about essential questions, trust and adjustment to continuous change.

Principals are constantly asked to improve teaching and learning in the form of a new protocol, a new data management system, new standards, or a new curriculum. With an increase in pressure for students to meet and exceed performance measures, some teachers also become resistant to change (Hall & Hord, 2015). To guide teachers through the change, Hall and Hord (2015) recommended that principals support teachers through an implementation bridge.
The ultimate challenge for school leaders is to change unproductive behaviors by promoting collaboration. Provided time to work within the school day, teachers can collaborate, share ideas, and assess student learning. According to Costa and Kallick (2004), major changes in the actions of those in the learning community affect beliefs and attitudes. Consequently, PLC members who are collectively empowered will be able to face the modern challenges in education. Thus, this study will employ PLCs as a mechanism to increase purposeful collaboration as a means to improve student outcomes. To further understand how PLCs work in the K-12 setting, this study

uses the framework of Bandura's (1977) social learning theory (Figure 2). Bandura (1977) postulated that people learn from each other through observation, emulation and modeling. Social learning theory has often been referred to as a connector of behaviorist and cognitive learning theories because it also includes attentiveness, consciousness and motivation. In terms of professional learning communities, "it is vital that staff members understand the linkage between learning with students in the classroom and learning with colleagues" (Lambert, 2003, p.21). Vygotsky (1978) posits that constructive learning requires a culture in which learners work collegially on authentic tasks.

Figure 2. Social Learning Theory Framework

Table 1

Empirical Findings

Author(s) & Date	**Title**	**Purpose**	**Methods**	**Results**	**Conclusions**	**Implications**
Maloney, C. & Konza, D. (2011)	A Case Study of Teachers' Professional Learning: Becoming a Community of Professional Learning or not?	The purpose of this study was to determine teachers' perception of the effectiveness of professional learning communities during their exploration of early childhood pedagogy.	Qualitative	Three of the five participating teachers saw value in continuing with professional learning communities.	Clarity in the focus of PLCs is critical for buy-in. Relevancy to job duties and responsibilities is vital for engagement.	Future studies can focus on increasing the initial buy-in of teachers participating in PLCs when competing with their individual planning time.

Dooner, Mandzuk &Clifton (2008)	Stages of collaboration and the realities of professional learning communities.	This study focused on how to start and sustain PLCs.	Qualitative	The findings of this study were to first determine if there is enough shared interest to engage in the work and to identify strategies that support collective group learning.	The first year of a PLC is bonding. The structure of the PLC must be consistent with agendas and roles. Including informal engagements helps develop trust, which results in more productive collaboration.	This study is a great reference for school districts looking to implement collaborative, school-improvement structures, such as PLCs.
Prenger, Poortman & Handelzalts (2017)	Factors Influencing Teachers' Professional Development in Networked Professional	The purpose of the study is to investigate the factors influencing teacher development	Mixed Methods Approach (Questionnaire, coaching logs, case	There were 151/276 teachers who responded to the survey. The majority of the teachers believed they shared the same goal and they agreed on what was important. Logs,	In terms of networked PLCs, geography and organizational boundaries did not impact the PLC; however,	This study gives critical guidance to school districts needing large shifts in school improvement and the benefits and

	Learning Communities	during networked PLCs.	study interviews, case study observations)	interviews, and observations revealed that teachers generally agreed on the goal of the PLC. PLCs absent of structure such as a lesson study or plan were distractions to the goal of improving student learning.	professional boundaries do have a significant impact on motivation. Motivation greatly impacts PLCs in the early stages. A collective focus on student learning had a great influence on the perception of gained knowledge and skills.	challenges of schools networking with other schools within the district.
Moynihan, D. (2011)	Setting the Table: How Transformational Leadership Fosters	The purposes of this study are to develop a model that connects	Qualitative	The one clear finding in this study is that "leadership matters." Even with this study, there are	This article validates the strength of transformational	Although there has been significant research on transformational

	Performance Information Use	transformational leadership to performance and to add to the empirical knowledge of factors that lead to use of information that impacts performance.		significant gaps in understanding how leadership matters and in what form. Previous research on transformational leadership tends to focus on the direct influence of leadership, underestimating the true impact of leaders.	leaders in the public sector in relation to performance, which parallels the elements of concern in education (teacher performance and student performance).	leadership to support its impact on use of information, there has been little effort to link this theory to larger theoretical models of leadership.

Social Learning Theory

The construct of this action research case study is based on research related to how adults learn and the characteristics of PLCs. According to Bandura (1977), social learning theory contends that people learn better when interacting with others in social settings. Bandura (1977) stated:

> Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

Even from an early age, most people's behaviors are the result of observing and modeling (Bandura, 1977). Modeling and observation are characteristics of PLCs as well as collaboration. Peer collaboration is an element of zone of proximal development (Vygotsky, 1978). While in the zone of proximal development, individuals work on collaborative tasks that they could not perform alone. Vygotsky (1978) asserted that social interactions that fall in the zone of proximal development transform learning over time, which is one way that PLCs present opportunities for teachers to collaborate with their colleagues and improve their practice.

Social learning theory emphasizes the community of practice concept that is necessary for learning and the transfer of knowledge (Wenger, 2000). Learning in social settings has a notable effect on the creation of knowledge (Prytula & Weiman, 2012). According to DuFour (2011), "when schools are organized to support the collaborative culture of PLCs, classroom teachers continue to have tremendous latitude" (p. 59).

Chapter 3.

Methodology

The goal of action research is to effect positive changes in a selected topic through a systemic investigative approach in the context of the topic (Stringer, 1996). The primary purpose of this action research study is to add to the very limited body of knowledge on how to develop a PLC with a core team, for the purpose of increasing teachers' instructional practices, which ultimately impact student outcomes. This study was guided by three research questions:

1. What are teachers' perceptions on the influence of PLCs on their teaching practices?
2. How do data-driven professional learning communities affect instructional practices?
3. What does the action research team identify as the essential components of developing an effective professional learning community in their setting?

Chapter 3 presents the research methodology for this action research case study. Included in this chapter is the action research design, the process for data collection and analysis, limitations of the study, and researcher subjectivity.

Action Research Design

The research of Parry Graham and William Ferriter (2010) suggests that the educator's actions have a significant impact on student achievement when the actions are coordinated, collective, and collaborative. In the foreword to *On Common Ground: The Power of*

Professional Learning Communities, Schmoker (2005) posited that implementing professional learning communities with fidelity could shift public education into a season of equity and achievement at the highest attainable levels. This compilation of research also suggested that one strength of PLCs is focusing on the learning instead of the teaching. Building and sustaining effective PLCs is multi-dimensional, requiring ongoing cycles of planning, implementing, reflecting, and revising.

Action research cycles include (1) planning for action, (2) taking action, (3) evaluating action, and (4) planning for future action (Coghlan & Brannick, 2014) as shown in Fig. 2. The planning phase of this action research began in December 2018 with developing a common understanding of PLCs and designing a data-driven PLC. It also included the action research team taking the Professional Learning Team Data-Literacy Survey (Appendix A). The action phase of the study began January 2019 with the actual implementation of the PLC with the identified intervention, which addresses research question 2. The evaluation phase of the research began February 2019 and addresses the second research question as well and determines the impact, if any, that the PLC had on educators' teaching. The collaboration of the action research design in this study gives teachers the confidence that comes with the empowerment of being change agents in the school improvement process.

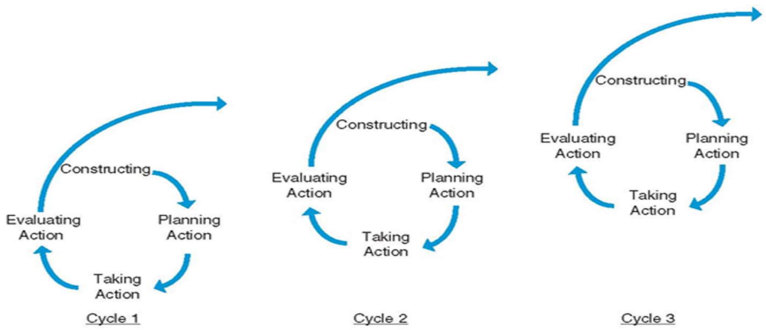

Figure 3. Three cycles of action research (Coghlan & Brannick, 2014).

Creswell and Plano (2014) defined a mixed methods study as a combination of quantitative and qualitative strategies that provide a more comprehensive approach to research than does a singular approach. The research methods and timeline in relation to the research questions are aligned in Table 2 below.

Table 2

Triangulation of Research Methods

Research Questions	**Data Collection**	**Analysis Approach**	**Timeline**
Q1. What are teachers' perceptions on the influence of professional learning communities on their teaching practices?	Book Study PL Team Survey	Coding for Themes Likert Scale	Book Study-1st Action Research Cycle Before 1st Action Research Cycle
Q2. How do professional learning communities affect instructional practices?	Mini-Conference KWL+ Questionnaire Learning Walk Form	Coding for Themes	2nd Action Research Cycle Before 2nd Action Research Cycle After 2nd Action Research Cycle: Start of 3rd Action Research Cycle
Q3. What does the action research team identify as the essential components of developing an effective professional learning community in their setting?	Action Research Team Meeting Vision Boards	Coding for Themes	Throughout all three Action Research Cycles End of 3rd Action Research Cycle

The participants for this study were elementary school teachers. Action research participants included teachers and administrators with an interest in improving student outcomes through the development and implementation of professional learning communities.

Data Collection

Data collection was inclusive of both quantitative and qualitative instruments. Quantitative data collection instruments included the PL Team survey and the Post-PLC survey. Qualitative data collection instruments included book study discussions, vision boards, and interviews. Approval of the instruments was granted through the university and school district Institutional Review Board (IRB) process (Appendices B and C). After receiving data collection approval from the IRB, participants were selected utilizing the informed consent document (Appendix D) that was also approved via IRB for both the university and the school district.

The questions for the book study discussion were a reproducible resource that served as guiding reflection points for each chapter of *Building a Professional Learning Community at Work* (Graham & Ferriter, 2010). Action research team members were assigned two to three questions from the chapters to guide the book study (Appendix E). For the purpose of data collection, the book study served as a format to ensure that all action research team members had the same understanding of the elements of building inclusive and collaborative PLCs that respected varying experiences and perspectives and to identify elements needed to strengthen the foundation of the core team. Book study findings answered research question 1.

Participating teachers and administrators also responded as a Professional Learning Team through a Data Literacy Survey. The survey was a reproducible resource paired with the study book (Graham & Ferriter, 2010). The survey included 27 statements rated on a scale of 1–4 (1-Very True; 2-True; 3-Somewhat True; 4-Not True). It is designed to help schools understand their data literacy levels and where to target their professional learning. This survey data answered research question 1, along with the book study.

The District's Learning Walk Instrument (Appendix E) was structured to provide teachers with feedback on the indicators of effective instruction that (1) engages students during the opening of the lesson; (2) explores, explains, and extends learning during the work period; and (3) evaluates learning during the closing of the lesson based on a scale of developing, proficient, distinguished, or not observed. The instrument is also aligned with the Teacher Keys Effectiveness System (TKES) and allows for observer commentary. Themes from the learning walk instrument answered research question 2.

Each action research team meeting and all interviews were recorded via an independent recorder. Recordings were transcribed. Active research team meetings and focus group meetings were organized in whole group settings to reduce any participants' anxiety, as the researcher is the Regional Superintendent for that particular school. During action research team meetings, interview questions included asking participants to reflect on any relevant topics that were excluded (Roulston, 2010). Additionally, the questions were delivered in a manner that required fluid conversation and thought processes versus simple yes or no responses (Roulston, 2010). Interview responses were coded to answer research question 3.

Validity and Trustworthiness

Table 2 aligns the research questions with their corresponding data collection methods of qualitative and quantitative measures to account for multiple paths to address the problem. It is not the volume of data, but rather the triangulation of data that determines the validity and trustworthiness of the revealed themes (Creswell, 2014). Each research cycle included data collection and analysis of the data collection tools and methods. Recordings were transcribed by a professional transcription company to ensure accuracy of the emerging themes.

Historically, data outcomes have been utilized to determine shifts in personnel. As many teachers are familiar with these processes, to build trust and openness during this process required a delicate balance for me as the primary researcher and the Regional Superintendent for the school. To remove intimidation, participants were not required to utilize or reveal their specific data, which is a limitation that I will expound upon in the limitations section. Removing this element kept the study focused on the process and refinement of developing an effective PLC at the school.

Data Analysis

Individual participant perspectives and emerging themes became evident through the discussion and data collection and coding during the three cycles. At the conclusion of each active research team meeting, I summarized major points that were made and opened the floor for any final connecting thoughts to be shared. Beginning with the second meeting, I opened with a summation of the closing thoughts from the previous meeting. This process, coupled with the review of book study responses, survey data, and learning walk data proved beneficial when identifying themes and determining next steps in the process of developing an effective PLC (Creswell, 2014). This process also proved beneficial to clarify any questions that members of the active research team may have had about the process and/or effectiveness of the intervention as well as recommendations beyond the study.

Limitations of the Study

This action research case study utilized a mix of qualitative and quantitative data collection methods to provide various perspectives on the problem being studied. The totality of the qualitative data proved to be more influential in the study, as it gave insight to the thoughts of those who will serve as leaders during the evolution of the professional learning community. Due

to the nature of the researcher's professional role, the active research team was intentionally chosen in relation to their instructional and professional performance. At the beginning of each meeting, I reiterated that it was my goal for all participants to feel comfortable during the process and to let me know if any aspect of participation made them feel uncomfortable. Additionally, I led with a statement that the goal of participation in this action research study is beneficial to improving student outcomes in the building, as well as creating a model that could be replicated throughout the district.

Time was a limitation. The start of the project was delayed while going through the approval process. The study began late fall instead of early fall as originally intended. This shortened the project from 6 months to 3 months. Not only did it limit the time for the study, but one participant who initially signed a consent form to participate had to back out due to personal graduate studies obligations. Another limitation related to time was arranging convenient meetings with the active research team. In my professional role, I do not have an end time; however, I could not ask the participants to remain late at work for the convenience of my personal research project. I had to take personal leave time for three months to conduct research during my work day.

In addition to the aforementioned limitations, the action research process itself was also a factor. The time required for the action research cycles limited this study to one site and a small number of participants even though this study could easily benefit most schools in the district.

Researcher Subjectivity

Researcher subjectivity was inevitable (Simmons, 2009) with this action research study. Not only have I served the research study site as the district-level Coordinator and Regional Superintendent, my entire educational career has been in this school district. Having led an

action research project through a different research-based university to earn my master's degree, this was not my first involvement with action research. There were many times that I had to listen with the ear of a researcher and not as the Regional Superintendent. Increasing improved student outcomes is an important goal for all students within my region, as with this site (Holly, 1993).

Chapter 4.

Case Study

Description of Context

The context of this study takes place in the LCSD in Georgia. As described in Chapter 1, Lynn County is located in a metropolitan city in Georgia. The 2016 United States Census Bureau reported 740,321 residents in Lynn County. LCSD includes 83 elementary schools, 20 middle schools, 22 high schools, and 18 centers. There are a total of 101,079 students in LCSD, with 49,142 elementary school students, 22,647 middle school students, and 29,290 high school students. The student-to-teacher ratio is 23 to 1, and there are 8,500 teachers and 13,285 staff. From March 12-15, 2017, the district was engaged in an AdvancED External Review to regain full accreditation. The district successfully received a five-year renewal after an intense review that focused on three core areas: teaching and learning impact, leadership, and resource utilization. After the review, the district earned two powerful practices and was given two improvement priorities.

According to the AdvancED Exit Report (2017), the first powerful practice was "The superintendent is a visionary leader who is passionate, supportive, inclusive, instructionally focused, and dedicated to making decisions that are in the best interest of students" (p. 13). The second powerful practice was "Coralwood Center is a highly effective, specialized learning inclusion center that serves preschool students through a research-based educational model with a heightened focus on the Autism Spectrum" (p. 14).

The improvement priorities from the 2017 AdvancED Exit Report include "Implement fully and monitor closely the newly developed curriculum and the system's instructional infrastructure in order to refine and enhance the instructional process used by staff to systemically support quality student learning across all classrooms" (p. 15). The second improvement priority is to "Enhance professional development for data progress monitoring strategies to ensure all professional and support staff are systemically trained to evaluate, interpret and utilize a range of data sources to enhance student learning" (p. 16).

Due to the size of the district, the model for professional learning on utilizing data-rich resources and tools to improve student learning is limited to a few individuals per school. Individual schools are responsible for developing their own processes by which systemic data processes drive actions and interventions that improve student outcomes.

Chlothan Elementary is one of 83 elementary schools in LCSD. During the 2017–2018 school year, the school earned 4 out of 5 stars for the climate rating, and student attendance was at 93.76% with an enrollment of over 1,000 students. Chlothan Elementary's demographics are 95% Hispanic, 92% economically disadvantaged, and 89% English learner. According to the College and Career Ready Performance Index (CCRPI), the school has made significant progress in math, science, and social studies; however, students are not mastering the content in English Language Arts (ELA). An effective PLC will provide teachers with the support needed to develop a collaborative, focused process that utilizes data to plan school-based professional learning, monitor the effectiveness of strategic interventions, and identify additional support needed to address teaching and/or learning gaps. This closely aligns with the second AdvancED improvement priority and connects with the first improvement priority, in which the content that students need to master is in the curriculum.

Action Research Team Members

Participants were invited using purposive or deliberate sampling. Purposive sampling is the selection of a group of participants based on their knowledge about the research topic and population (Creswell & Plano, 2011). This sampling method gives a greater probability of being able to answer the research questions. A total of eight participants were invited to participate in the study as members of the action research team; however, one invitee was unable to devote the time needed, as she was beginning a graduate program of study. The action research team was diverse in their years of experience, degrees, and understanding of professional learning communities. The desire was that their unique perspectives would add fullness to the study and reflect in immediate use in their building as well as recommendations for use in schools across the country.

At the time of the study, Ms. Alex was an administrator. She has a total of 16 years in education and was the 2012 Lynn County School District Teacher of the Year. She has been at Chlothan ES for one year. She has an undergraduate degree in Business Administration and a master's degree in Curriculum and Instruction. Her mother is a retired administrator, and the experiences that she had helping her mother made her want to consider a career change from business to education. Her career started as a paraprofessional, and her first teaching assignment was as a second-grade teacher, after which she became an instructional coach. She is a first-year administrator. To her, professional learning is a prescription, and it is a picnic. The prescription of professional learning is the part of it that gives you what you need to close gaps. The picnic of professional learning is that you have a smorgasbord of items to pick from, with the option to select the things that you need and to leave those things that won't work. In her experiences,

PLCs help to develop a round table of leaders instead of it being a dictatorship, helping to build collaboration and increase buy-in. According to Ms. Alex, “This is what effective PLCs do.”

Ms. Arrow was a first-year teacher who was intrigued by what she heard about the collaboration of professional learning communities. A veteran colleague regarded her as teacher who taught as if she had many years under her belt. She taught English as a Second Language (ESOL) and has aspirations of becoming an administrator. She expressed that she likes working with teachers to find data-related solutions that will help students’ progress. Her goal for participating in the study was learning how to become a better teacher and a better teacher leader.

Ms. Array was a fourth-grade ESOL teacher. She has been teaching for a total of 5 years. She is a graduate of Fort Valley State University and earned degrees in reading and English language arts. She also has a master’s degree in curriculum and instruction. She taught ELA in middle school for four years. She does not serve on any leadership teams. During this research, she was working on her specialist’s degree in teaching and leadership. She enjoys professional development if it is hands-on and if teachers are actively engaged and collaborating throughout the process. Her goal in participating in this study is to gain more knowledge and to become a better educator.

Ms. Alder’s original major in school was accounting. She then switched her major to education because she wanted to work with children. She has a master’s degree in early childhood education and has been teaching at Chlothan Elementary for six years. She has taught first grade for three years and third grade for three years. She thinks PLCs are extremely important, as they give all stakeholders a platform to collaborate on how to grow together professionally; she has also experienced how collaborative learning works in the corporate world

when she was interning as an accountant. Her ultimate goal in participating is to learn how Chlothan Elementary can make PLCs work.

Ms. Affer started off as a nursing major, then switched to education and has a master's degree in early childhood education. She is a first-grade teacher with six years of experience. She teaches all core content areas and serves as the grade level chair for first grade. She is the Council Chair for the Principal Advisory Council, the K-2 ELA representative for the school, and was the TOTY for the 2018–2019 school year. She shared that she has a special place in her heart for Title I students (Chlothan ES is a Title I school). She has been at the school for four years and shared that, in her experience, a strength of PLCs is that ideas can be gained from other teachers. She credits her success to talking with and observing other teachers and learning what they do and seeing what works and what doesn't work.

Mr. Agol was inspired to be an educator by his mother and other members of his family. He has been a pre-k teacher and specifically enjoys working with math and curriculum. He has served as a computer technology/math teacher and has been teaching a total of 6 years. He serves as the science representative for the Instructional Leadership Team. He has the belief that not all PLCs are good PLCs, but he can say that PLCs are like an investment in teachers from administrators. He says they are most powerful when everyone participating has a desire to perfect their craft by learning effective techniques from master teachers. PLCs are also a platform to help relieve any anxieties that he may have and share with other colleagues.

Action Research Cycles

The action research team led three cycles of research. The first cycle included identifying participants, building a common foundational knowledge of PLCs, identifying how effective PLCs can benefit Chlothan ES, and planning the intervention. The second cycle included the

implementation of the intervention, and the third cycle included monitoring the impact of the intervention and planning for next steps to include full implementation for the upcoming school year. A visual representation of the three cycles is in Fig. 2, as established by Coghlan and Brannick (2014).

Cycle One. Prior to the start of action research cycle one, the LCSD required that I gain approval to conduct the research from the building-level principal in addition to getting IRB approval from UGA and the district. Once the principal gave me his written consent to conduct research in his building, he shared the list of teachers and administrators who met the characteristics of the individuals needed to provide diverse experiences for the study. As mentioned in the previous section, members were selected using purposive participant sampling. The initial work with the action research team began with building a common foundational knowledge of what professional learning communities are along with the characteristics of effective professional learning communities. Each member of the team was provided a copy of *Building a Professional Learning Community at Work* by Graham and Ferriter (2010). To inform the discussion of the book, each member took the Professional Learning Team Data-Literacy Survey (Appendix A). The survey includes 27 statements and is a free reproducible survey that the authors paired with the text with the intention of helping them learn more about their capacity to utilize data to make informed decisions about professional learning to attain the desired results. The scale for the survey was Very True=1; True=2; Somewhat True=3; Not True=4. There were no responses of not true. Each member of the team was assigned specific questions from chapters that directly correlated with the results of the survey. A triangulation of the Ga Milestones data, MAP data and teacher feedback revealed a need to focus the efforts of the

intervention in the fourth and fifth grades in ELA/reading utilizing SIOP strategies and constructed response writing. The results of the survey are shown in Table 3.

Table 3

Professional Learning Team Data-Literacy Survey

Data Literacy Statement	**Mean**
Our team has regular conversations about what student mastery looks like.	1.4
Our team has agreed-upon expectations for mastery on most assignments.	2
Our team has measurable instructional goals for all common lessons.	1.5
Our team has developed our own set of common assessments that we use regularly (at least monthly).	1
I believe that our common assessments are tied to state standards and are reliable measures of what students should know and be able to do.	1.75
Our team has developed our own set of common rubrics we can use to score performance-related tasks.	1.5
I believe that our common rubrics are tied to state standards and are reliable measures of what students should know and be able to do.	2.25
Our team has established an effective system for recording results from our common assessments.	1.75
Our team has an effective process for looking at the results of common assessments together.	1.25
Our team is able to discuss common assessment results in a positive and constructive way.	1.5
Our team uses graphs and charts to make student achievement trends visible in our conversations about results.	1.25
Our team makes predictions about student learning based on common assessment results.	1.25

Our team considers multiple hypotheses and looks for multiple sources of verification before drawing conclusions from common assessment results.	1.5
Our team changes our instructional practices based on common assessment results.	1.5
Our team provides remediation and enrichment to students based on common assessment results.	1.75
Our team celebrates achievements that are highlighted in the results of our common assessments.	1.75
*I feel safe when revealing my common assessment data in front of my peers.	1.5
*Our team uses data as a tool for identifying effective practices rather than as a tool for identifying effective people.	1.75
Our team has a sense of shared responsibility for the success of all our students.	2
Our team has the skills necessary to collect and manipulate data effectively.	1.5
I know the difference between and understand when to use aggregated and disaggregated data.	2.25
I know the difference between and understand when to use formative and summative assessments.	1.5
Our team respects the confidentiality of students and teachers when looking at data.	1.5
Our team has looked at our students' standardized exam results.	1.25
Our team is aware of all the varied populations we serve and looks at results for each of these populations individually.	1.5
Our team refers to reliable research when we are testing a prediction we have made about student learning.	2
Our team has created systems for engaging students in data collection for self-assessment.	2

The second phase of the first cycle was to review all data to plan the intervention. Based on the results of the survey, development is needed to: (1) identify the expectation for mastery, (2) develop tools to measure mastery, (3) know when to use aggregated and disaggregated data, (4) utilize reliable research to make predictions about student learning, (5) develop a shared responsibility for the success of all students, and (6) outline how to get students involved. The action research team utilized the survey data, assessment results, and recent training on using Sheltered Instruction Observation Protocol (SIOP) strategies and combining them to outline the elements of the intervention. For the purpose of this action research project and the time of year that the intervention was introduced to teachers (3 months before standardized assessments), this mini-conference focused on clarifying the expectation of mastery for all teachers and getting students involved with knowing where they can grow in the area of ELA/reading utilizing SIOP strategies and constructed response writing.

The final phase of the first cycle included getting input from teachers on their perceptions of what they needed from the mini-conference for it to be worth their time. In addition to getting teachers' input on what they needed to gain from the mini-conference, it was also important to activate teachers' prior knowledge before coming to the mini-conference. Utilizing KWL charts as a research-based strategy that promotes critical thinking and curiosity about a topic while also personalizing learning (Pressley & Johnson, 1989). I extended the KWL chart with an additional column that includes how teachers will utilize what they learned during instruction. This was important, as the next step was observing the impact of the intervention during instruction. A link to the KWL+ spreadsheet was sent to teachers to fill in pertinent information related to mini-conference topics. Prior to the mini-conference, teachers completed the know (K) and wonder (W) sections of the spreadsheet. After the mini-conference, teachers revisited the spreadsheet to

complete the "learned" and "how will you use what you have learned during instruction" sections. The section headings for the spreadsheet included: constructed response, heavily weighted GA Milestones Domains, MAP data trends, utilizing instructional strategies to engage students and accessing resources to utilize during instructional planning and delivery. After further analysis and discussion from the AR team, it was determined that the focus for observational follow up was on constructed response, which is an open-ended essay question that students will respond to on the GA Milestones Assessment for the purpose of demonstrated cognitive knowledge and reasoning on a particular topic. The AR team noted that students were having a particularly difficult time transferring their thoughts to paper. The results from the K and W sections of the spreadsheet can be found below in Table 4 below.

Table 4

Know and Wonder Sections from Mini-Conference Spreadsheet

Constructed Response								
	T1	T2	T3	T4	T5	T6	T7	T8
Know	RACE strategy is essential. Turn That Question Around (TTQA)	Students should follow the RACE strategy. Students should read the directions carefully and include exactly what the prompt demands.	RACE Strategy Students should have typing skills	Race Strategy is essential. Turn that question around (TTQA).	Students are expected to type them. They are a part of weekly CFAs and on the Georgia Milestone.	Students write a short response to answer a question. They can use methods such as the RACE strategy to help guide them through their response.	Constructed responses are when students write short responses using the RACE strategy.	I know that students should respond using the RACE strategy. It is important that the students use evidence from the text to support their answers.

Wonder	More clarity on the 3 scoring rubrics (2,4,7points)		What tools are on the Milestones computer test that will support the reading strategies?	More clarity on the 3 rubrics for scoring.	I wonder how to make their responses better.	I wonder how I can more effectively guide ELs to accessing more vocabulary in order to aid them in writing their responses in their own words.	I wonder how I could incorporate other strategies besides RACE when writing constructed responses.	I wonder what strategies that I can use to support my ELL students more.

Cycle Two. The mini-conference took place after school in January and was mandatory for all 4th and 5th grade teachers. It included concurrent math and ELA/reading sessions. Each session lasted for 45 minutes, and there were a total of 4 rotations (2 math rotations and 2 ELA/reading/writing rotations). Action research participants were also required to be mini-conference attendees. The mini-conference rotations focused on constructed response in ELA, constructed response in math, MAP data trends and heavily weighted GA Milestones Domains, and utilizing math manipulatives. The format of the mini-conference followed the gradual release instructional model.

The gradual release of responsibility model of instruction suggests that cognitive work should shift slowly and intentionally from teacher modeling to joint responsibility between teachers and students, to independent practice and application by the learner (Pearson & Gallagher, 1983). This model provides a structure for teachers to move from assuming "all the responsibility for performing a task … to a situation in which the students assume all of the responsibility" (Duke & Pearson, 2004, p. 211).

Gradual Release is built upon the following theories:

- Jean Piaget's work on cognitive structures and schema (1952).
- Lev Vygotsky's work on zones of proximal development (1962, 1978).
- Albert Bandura's work on attention, retention, reproduction, and motivation (1965).
- David Wood, Jerome Bruner, and Gail Ross's work on scaffolded instruction (1976).

Collectively, these theories suggest that learning occurs through social connectedness with others, supporting the theory upon which this study is grounded, social learning theory (ASCD, 2013).

Facilitators of the mini-conference were district-level professional learning facilitators, who were able to answer teachers' questions and guide them to the appropriate resources. For the purpose of this study, the professional learning facilitators were the teachers, and the teachers were the students. The "learned" and "how will you utilize the information during instruction" sections of the spreadsheet served as the post survey (Table 5).

Table 5

Learned and How to Utilize During Instruction Section

Constructed Response								
	T1	**T2**	**T3**	**T4**	**T5**	**T6**	**T7**	**T8**
Learned	No Response	No Response	I 've learned to emphasize Constructed Response	I learned how to emphasize the use of rubrics.	I learned how to grade these responses and to discuss rubrics with my students more often.	I gained a better understanding of the scoring breakdown for constructed responses. I learned specifically what is required for the students to score a 2 on their 2-point constructed responses.	More information about the rubric.	No Response
How to utilize during instruction	No Response	No Response	I will provide a rubric for all students to refer to.	I will provide each student with a rubric for better understanding of expectations.	I will have students use the rubric to grade their responses more frequently.	No response	I will post the rubrics for students and have them put them in their reading journals.	

Cycle Three. Following the implementation of the mini-conference in cycle two, cycle three focused on monitoring the results and providing ongoing support for teachers. Two weeks after the mini-conference, the impact of the mini-conference was assessed with a round of observations. The observation tool that the district uses is a slight modification of the Effective Learning Environments Observation Tool (eleot) used by AdvancED. Observation results were utilized to determine the continuous, differentiated support that each teacher needed. The action research team also met to review the cycles of each intervention and mapped out how to continue with the professional learning cycles. Table 6 in Chapter 5 includes responses to "What they learned and how they will use it during instruction." The findings of the observation revealed more professional learning needed on how to actually teach a unit of writing utilizing the available resources. Teachers were receptive to the mini-conference and the resources; however, the gradual release model needed to be more intentional, as not all teachers had experience teaching writing and experienced difficulty modeling the process for students.

Reflections

The project got to the core of the greatest impact on student learning, which is teacher preparedness. The teacher leaders who served as action research participants have a comprehensive understanding of the development needed to enhance the effectiveness of the PLC at Chlothan ES. Additionally, they will be instrumental in serving as a model of an effective PLC for other schools in the district.

The action research model was beneficial, as this model allowed those with the greatest ability to build teacher capacity and improve student outcomes to engage in a comprehensive process to make changes at their school. Prior to the mini-conference, teachers had not been shown how to utilize the constructed writing rubric during instruction. The rubric provided a

tool, but teachers needed to learn how to teach the cognitive process of writing was needed for full transference from teaching to learning. The process also paired teachers together who wouldn't normally interact with each other. The observations include the need to be more specific with outcomes and instructional expectations.

Next Steps

Completion of the three cycles of action research give the school a solid foundation for further development for data utilization to build teacher capacity and improve student outcomes. The action research team referenced their experiences as part of the study to collaborate with the principal and administrators to begin full implementation for the summer that will flow into the school year.

Chapter 5.

Findings

The purpose of this action research was to identify a core team to assist with the development, to development and implementation of a school-based PLC, and to evaluate the agreed-upon intervention. The design of the intervention included utilizing data to identify learning gaps and a KWL+ survey giving teachers the opportunity to define the specific instructional preparation needed within each of the identified support areas. The action research project was guided by three research questions:

- What are the perceptions of teachers on the influence of PLCs on their teaching practices?
- How do data-driven PLCs affect instructional practices?
- What does the action research team identify as the essential components of effective PLCs in their setting?

Data was initially collected utilizing the Professional Learning Team Data-Literacy Survey (Appendix A) to determine the capacity of the core team. Additional data was collected via the KWL+ survey that teachers completed prior to the intervention, which was the mini-conference. Action research team meetings and focus group sessions were recorded, transcribed, and coded. The triangulated data is located in Chapter 3, Table 2, and a summary of the findings is located in Table 6.

Table 6

Summary of Research Findings

Research Questions	Findings
What are the perceptions of teachers on the influence of professional communities on their teaching practices?	• Beneficial when data is utilized to target specific instructional needs • Outcome specific and time bound • Team building and consensus gaining • Non-Threatening • Make local-school experts more visible
How do school-based data-driven professional learning communities affect instructional practices?	• Immediate clarification of misconceptions that cause teaching and learning gaps • Immediate implementation of strategies into instructional planning and delivery • Identifies commonalities in teaching styles, reduces working in silos and increases collaboration • Builds confidence at the elementary level, especially for teachers who may have all four preps • Accounts for some of the time needed for ESOL and SWD teachers to plan with their co-teacher
What does the action-research team identify as the essential components of effective professional learning communities in their setting?	• Teachers need to develop their deep listening skills • Design professional learning and interventions based on gaps in student learning • The collective intelligence of the core team needs to reflect the diversity of the entire teaching staff • Identify the strengths of the people in the building • Engage in lesson studies to separate personality from practice

Research Question 1. What are the perceptions of teachers on the influence of professional learning communities on their teaching practices?

The overall perception of the influence of PLCs on instructional practices is that teachers feel a greater sense of being able to address learning gaps when the content is developed based on data and chunked to avoid doing too much in a short period of time. The intervention for this action was a mini-conference with two concurrent sessions that lasted 45 minutes each. The focus group was pleased with the overall concept of the mini-conference, content, and the format; they each indicated that they incorporated the strategies into their lesson the very next day. They did,

however, recommend just one session per day instead of two, as they were tired at the end of the school day and started to drift off during the second session.

Teachers stated that they did not want to participate in professional learning that was pre-determined without their input. Teachers perceived PLCs as a waste of time when the topics were randomly selected from the current list of buzz words. Teachers stated they could begin to trust the process and value the additional time needed after school when the delivery model was interactive and not a "sit and get." They further stated that the person facilitating the session also gave credibility to the value of the time because that was the individual who could provide further support during actual teaching at the school. Conducting a pre-survey gave teachers awareness of the focus and preparation to actively participate.

During the book study, it was noted that one of the major drawbacks to PLCs is that teachers often felt attacked, and coaching conversations on how to communicate with teachers would be beneficial, as the focus should be on enhancing instructional practice and not a personal attack on the teacher. For example, instead of saying, "You can't teach," say, "Since your students did not understand the concept with this strategy, here is an alternative strategy that is working for Ms. A down the hall. Try it and I'll come back to see how it works."
Teachers also perceived PLCs beneficial for identifying who the experts are in the building. In this regard, Ms. Affor stated, "*Without an ESOL teacher, I have been struggling with chunking material for some of my students. Even though they may not be identified as ESOL students, they still need the modifications. Since participating with this project, I have gotten to know Ms. Array better, who is an ESOL teacher; we have exchanged numbers and I have much more clarity on how I can make it work*."

Higher numbers on the data literacy survey equate to the areas that teachers felt the most support was needed prior to the intervention. Based on the data, the five areas below are perceived to be the opportunities for the greatest improvement to develop and sustain an effective PLC at Chlothan ES:

1. Understand what students need to know, understand and be able to do to master standards.
2. Local school rubrics need to align with the state's measures of success for content mastery.
3. More collaboration to create a greater sense of commitment and belief that all students can be successful.
4. Utilize data and research to validate thinking.
5. Involve students in their own data-reflective process.

Ultimately, teachers stated that they were in favor of PLCs because they had a vested interest in wanting to see the students succeed; however, the survey results challenge that statement. It brought them closer together as a staff and naturally eliminated the proverbial gripe session that most teacher meetings normally become.

Research Question 2. How do school-based data-driven PLCs affect instructional practices?

Teachers overwhelmingly voiced their appreciation for the clarification gained with teaching constructed response (writing) to students after participating in the mini conference. A 2nd years teacher stated that, "*it (mini-confernece) was extremely helpful for me, as I really didn't know how to teach writing because it wasn't an education-specific course that I had to take*". Additionally, because she was a new teacher, she did not have a model or personal experiences

from which to draw. She was aware that her students were struggling with writing but did not feel particularly comfortable with asking a colleague, as she did not want to look like she did not know what she was doing. A veteran teacher shared a contrasting perspective that, because she had been teaching four preps for so long without teaching writing and had always received satisfactory evaluations, she felt she was doing a good job teaching writing until the mini-conference simplified the process for her.

When professional learning is held at a site other than the local school, one or two teachers are sent as representatives for the school. These representatives are expected to redeliver the content. Barriers with this model are that time does not always allow for the redelivery to take place and/or the content is not delivered with fidelity. This leads to either a delay in implementation of the practice or incorrect delivery of the content. When the focus group was asked when they plan to utilize the strategies shared during the mini-conference, Ms. Alder stated that she started using them the next day. That was echoed by others in the focus group. The focus group also shared that the mini-conference replaced time that they would have normally used trying to plan for the work period of the lesson.

Teachers shared that, after the mini-conference, they organically began to have conversations about instructional practices and adjustments to what was planned that were not administrator-directed. Ms. Alex stated that it just felt better in the building because the conversation was about students. As an administrator, she felt that teachers were more receptive to constructive feedback after the mini-conference. Teachers cited more collaboration across grade levels and sharing strategies that worked and didn't work. They also noted that just one mini-conference prompted them to do their own research to address their students' needs.

The teachers also noted that students do better in the subject that the teachers are most comfortable with teaching. At the elementary level, most teachers have to teach four preps or all content areas. The data normally reflects either what the teachers like to teach or the content that they know best. Teachers stated that they felt better equipped to teach content that they were uncomfortable with after the min-conference. Additionally, because they learned through the PLC who the strong teachers were in this area, they knew who to ask for additional clarification and learned multiple ways to teach the same concept or idea.

One of the most profound comments came from an ESOL teacher. She shared that she is expected to walk into four different classrooms on a daily basis and know the lesson plan and pair the best strategies to help students. She expressed her frustration with this but felt a huge relief during the mini-conference because she not only knew what the data reflected but also how to approach it in each teacher's class. Because the grade levels were paired together, she was able to work with all teachers at the same time.

Research Question 3. What does the action-research team identify as the essential components of effective PLCs in their setting?

The action research team identified several essential components needed to develop an effective PLC at their school, including developing deep listening skills, designing professional learning based on students' learning gaps, and ensuring the collective intelligence of the team is reflective of the staff's diversity. Additionally, they recognized the need to identify teachers' strengths and begin utilizing the lesson study format to separate personality from practice.

Developing deep listening is a skill that enables members of PLCs to actively and cognitively listen to each other instead of listening to prepare a response to what is being said (Sawyer, 2007). When members listen with the intent to respond, the conversation rarely evolves

because preconceived notions are in competition instead of expanding thoughts of individual members and their relevance to closing the existing learning gap. Schmoker (2006) echoed the importance of deep listening, as it correlates to the quality of teacher conversations and the quality of student learning:

> To take full advantage of the collective expertise of the team, we can listen carefully-and nonjudgementally- to each other's best ideas… Listening helps to ensure that we select the best of several alternatives. The collective wisdom of the team can then inform the all-important direction the team will take. This kind of thoughtful approach will have a high payoff in student learning. (pp. 16–17)

In reality, effective PLCs require teacher buy-in. Teachers can't feel that they are being attacked, and the conversation must center around student learning. The conversation also needs to reflect, "students mastered this concept" or "students struggled with this concept" instead of "the way you taught this confused students" or "you should have…." Conversation that is personal to the teacher may be taken as an attack, which leads to apathy towards PLCs.

The collective intelligence of the core team must also reflect the diversity of the core team. In a school with multiple departments and a strong cultural presence, the voice and perspective of each must be represented in the core team. Without representation, the core team is limited in its ability to effect change with each group and/or department represented at the school.

The core team thought that one of the most powerful aspects of building an effective professional learning team was to identify the strengths of teachers in the building. As time is one of the greatest challenges in teacher collaboration, identifying the strength of individual members takes the guess work out of figuring out who to go to for support. Additionally, it leads

to a greater probability that effective practices are replicated throughout the building and a greater probability of improved student outcomes.

The core team also thought that utilizing a lesson study was an effective process for improving instruction. Lesson studies originated in Japan and involve the observation of the implementation of and analysis of the effectiveness of a lesson that was developed by a team of teachers. The action research team liked that lesson studies embed reflection into the process, especially with the option to record the lesson. The greatest selling point of the lesson study is that it reflects the work of many teachers and not just one. According to Lewis, Perry, and Hurd (2004), lesson studies can lead to the following:

1. Increased knowledge in subject matter as teachers engage in discussion about what is needed to increase student learning. This type of discussion usually leads to a deeper look at content standards and academic skills needed to master the content.
2. Increased knowledge in content-specific pedagogy as teachers discuss the effectiveness of various instructional strategies.
3. Increased ability to observe students as the teams of teachers focus on student learning and behaviors during the lesson.
4. Stronger connection of daily practice to long-term goals as objectives are tied to learning outcomes. (pp.18-22)

Chapter 6.

Conclusions, Implications, and Summary

The purpose of this study was to develop a school-based PLC with the goal of building teacher capacity and improve student outcomes for students in the area of ELA/reading in grades 4-5. The action research team collaborated to design a professional learning intervention and collect data that informs the following research questions:

1. What are teachers' perceptions on the influence of PLCs on their teaching practices?
2. How do data-driven PLCs affect instructional practices?
3. What does the action-research team identify as the essential components of effective PLCs in their setting?

Chapter 6 provides insights into the implications of this study at the school level and at the district level as well as possibilities for the continuation of this study. This chapter also includes research alignment and the intervention, conclusions, and reflections on the conceptual framework. Additionally, future considerations will be included with a self-reflection and implications for future research.

Action Research

Action research has been around for quite some time. Advocates of PLCs highlight the collective inquiry present in action research that allows teams to be reflective of their practices. Eaker et al. (2002) stated:

> In a professional learning community, we use collaborative teams to engage in collective inquiry and action research. Perhaps the best way to think of collective inquiry is to think of it in these terms: we expect collaborative teams to seek out best practice. We have a tendency in more traditional schools to have teachers collaborate and essentially average their opinions about what they think about a particular problem or issue…But in a professional learning community, we do the opposite. We expect collaborative teams and teachers to seek out best practice. (p. 91)

Action research was the preferred approach for this study because it allowed for an action/intervention to address a problem. In the PLC environment, action research helps the team identify an issue to investigate, discuss a possible solution to the problem, implement the proposed action, evaluate the action, then change the practice as a result of the evaluation (McNiff, 2003). In the case of this action research study, a mini-conference was the intervention developed for the purpose of addressing instructional gaps as a component of developing a school-based PLC. School improvement is at the top of everyone's list. Not only does society utilize school achievement data to measure their perception of effectiveness, but Fortune 500 companies and global markets also watch, very closely, the progression of education in the United States. Teachers are at the crux of changing the narrative of school improvement in public education. As the regional superintendent for 26 schools in a large, metropolitan school district, and as someone who lives in the school community, I have a vested interest in implementing and supporting a systemic intervention that will coach teachers out of their silos and into a collaborative culture that focuses on learning.

Professional Learning Communities and Teacher Evolution

The evolution of teacher conversations is a natural occurrence during the development of PLCs. Initial planning sessions typically reflect assigning tasks and confirming timelines. As data discussion deepens and the crux of the work begins, conversations shift with more questions being asked, leading to frustration (Perry & Graham, 2010). According to Schmoker (2005), building a shared understanding is the true power of PLCs and not planning. Through shared understanding, teachers collectively discover their power in the art of teaching.

The authors of *Building a Professional Learning Community at Work* (Graham & Ferriter, 2010) suggested using facilitation techniques to maintain the productivity of collaborative conversations. Strategies such as think-pair-share, brainstorming, sticky note taking, and thumbs up/thumbs down surveys are simple ways to ensure that everyone participates and cognitively contributes to the topic(s). For the purpose of this action research project, the think-pair-share strategy was used during the intervention.

Conclusion 1. Ensuring that the core team embodies all of the elements of an effective PLC prior to going school-wide increases the probability of attaining the desired outcomes once the concept expands to the entire teaching staff. The time that the core team spends collaborating to transform the principal's vision into a plan, and learning each other's beliefs and strengths, which in turn helps to naturally reveal their role as a member of the core team. Additionally, they are able to glean from each other how to utilize data to identify gaps in student learning and transfer that to a PLC that prepares teachers to return to the classroom and address learning misconceptions that students may have. According to Bandura (1977):

> Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling:

> from observing others one forms an idea of how new behaviors are performed and on later occasions this coded information serves as a guide for action." (p.22)

As noted by multiple researchers, the power of a team comes with the power of having a shared understating of the vision desired outcome. The vision shouldn't be left up to the core team to develop—it must emanate from the leader, who simplifies the vision for the core team to develop the actions. Utilizing purposive participant sampling to select members of the action research team ensured a greater level of commitment from each individual. Overcoming low-levels of commitment is a huge hurdle for traditional schools because of the lack of time teachers have to collaborate. Teachers normally work in isolation when it comes to planning and implementing instruction, and a lack of commitment greatly impacts trust. In *The Collaborative Teacher* (2008), Cassandra Erkens stated, "Trust in a team is jeopardized when members hold fast to autonomy and self-select the responsibilities, conversations, or values to which they will commit. We *require* the participation and expertise of the *entire team* when working collaboratively" (p. 14).

The commitment of each of the action research team members was strengthened throughout the project, as each of them had a strong desire to improve the outcomes of the students that they taught. Their collective efficacy increased each time we met, as they had not had previous opportunities to connect due to having different planning times throughout the school day. The book study and intervention discussions served as a "discovery" of and value in other educators who shared the same or similar thoughts on how to improve student outcomes. During the team meetings, it was revealed that Ms. Alder was considered to be a teacher of teachers. She responded to the third question from chapter 8, which read *What makes lesson study such a valuable strategy? How might you incorporate it into your own team practices?* Her

response to the question, along with the discussion that it led to were both eye-opening, aha moment for the entire team. *"As a business major, performance expectations came from the CEO with a defined path and method to reach the goal. We all knew which tools to use, the purpose of each tool and how one tool linked to another. It just wasn't ambiguous. I feel that the expected outcome is clear in education, but how to get there just isn't clear. When I read the section on lesson study, I felt like this was something that we can implement here. We collaborate on data outcomes and identify the standards that students need to master, but we don't as deep as developing lesson plans together. With the lesson study, we can develop the lesson plan together since most of our students are performing at the same level, video it then look at how students did at the end of the lesson. It would be "our" lesson, instead of "my" lesson or "your" lesson."*

Lewis, Perry and Hurd (2004) assert that utilizing lesson study as a framework can lead to an increase in knowledge of the subject matter, an increase in knowledge of content-specific pedagogy, an increase in the ability to serve students with different learning styles and a stronger connection of daily practice to long-term goals. James Surowiecki (2004) calls this the benefit of collective intelligence. He argues that the make up of the team contributes to its collective intelligence, which supports my decision to select purposive sampling to identify members of the core group. Surowiecki (2004) also contends that teams needs to be diverse to bring a greater perspective and broader experiences on how to solve problems and have a better chance of something positive emerging from their work.

Different experiences in education also led to respectful disagreements and a greater understanding of a different perspective. Teachers are normally able to avoid considering their colleagues' thoughts, experiences, and beliefs because of the natural isolation of the teaching

profession. In relation to research question 1, perceptions are shaped by personal experiences; participation in the action research project gave participants different perspectives to consider and test throughout the entire process, which led to new learning and beliefs about the influence of PLCs on their practice.

Conclusion 2. The effectiveness of data-driven professional learning communities increases with repetition in a cyclical process. The KWL+ chart revealed that teachers wanted to know how to utilize the rubrics and they wanted to know more about specific strategies, the mini-conference included reading strategies and utilizing rubrics for constructed response writing. The observations focused on the constructed response rubrics and revealed that teachers knew about the elements of the rubric, but more work was needed to actually include the gradual release model for teachers.

As previously stated, the strongest PLCs have a collective understanding and buy-in of the desired outcome. For the purpose of this study, the goal was to improve student comprehension and mastery of the ELA/reading standards, specifically constructed response writing in grades 4-5 through the mini-conference. Steven Covey's (2013) second habit of highly effective people is to, "Begin with the End in Mind," which includes defining goals. An activity that could be considered for future research to synergize participants and cognitively connect them to the goal is to have teachers create a vision board of where they want their students to go while in their class. They first present it to peers, then to their students and parents. This ensures that all involved have the same understanding of where they're going and builds the collective synergy. To improve student outcomes, the desired result must be aligned with the mastery of standards/content, using the curriculum as a guide and assessments to determine levels of proficiency.

Also, teachers must be reassured that the PLC is about improving their instructional practices and not about improving them personally. There are goals for "improved student outcomes" and goals for "improved instructional practices." Ms. Alex shared that one area that could be improved was *"being clear about the purpose of the meeting ahead of time by sending the agenda out to teachers at least two days before the meeting. Even if it changes some, teachers will have time to gather their thoughts about the topics and come with prepared questions."* Presenting the purpose of engaging in a school-wide PLC from administrators will have the greatest initial impact on the trust of why we're doing this, and the second greatest impact will be how closely actions align with the "why." Mr. Agol included that *"the agenda before the meeting would help a lot; most times I don't know what the meeting is about until I get there."*

Teachers need time to digest their students' data and reflect on what can be done differently to improve their instructional practices. There is a greater probability for change if teachers develop their own course of action and thoughts prior to collaborative learning. The act of a term that I am coining as a theory of "self-prescribed learning theory" (Figure 2) is closely related to self-actualization. This new theory that I am authoring takes into account that while developing and sustaining effective PLCs is the goal, it is not guaranteed that all schools will attain this goal; however, that does not negate the fact that teachers, individually, must be able to look at their students' data and determine what is needed next. In the absence of a functioning PLC, this at least assures that teachers know what has and has not been learned. In the presence of a fully functioning PLC, teachers come to the collective, collaborative setting prepared to (1) identify frequency of missed concepts/standards, (2) share different strategies, (3) share their

model lesson and (4) share resources for reteaching. This preparation prior to the PLC balances the contribution of each member of the team.

Figure 4. Self- Prescribed Learning Theory

Maintaining the buy-in of PLCs is more likely if the goal setting is chunked or categorized for teachers to keep them from feeling overwhelmed. Teacher experience, proficiency in practice, student proficiency, availability of resources, and time of year are all factors in this process. This is where individualized support is most effective in the process of skill development.

Although there are steps to creating an effective PLC, building effective PLCs comes with the repetition of steps within a cycle. It is a cyclical process of understanding the data, planning to address the learning gaps (this is where the mini-conference comes in and includes making sure students also understand their opportunities for growth), implementing the strategy,

getting feedback, and support for improving where necessary before assessing the next round of data.

Conclusion 3. Essential components of an effective PLC are identified through a process involving a common language and common understanding of the identified SMART team. SMART teams link learning and improvement in a continuous process (Conzemius & O'Neill, 2002). Learning is a school-wide effort in which the team members apply what was learned to continuously improve. It's a state of mind and belief that there is always room for improvement. The core team of a PLC must be able to continuously sharpen each other's saws to design more innovative methods to challenge complacency.

Conzemius and O'Neill (2002) assert that PLCs and SMART teams intersect when:

> (a) the staff shares clear goals for student learning **focus**,
>
> (b) **collaboration** and collective responsibility exists among staff to achieve the goals,
>
> (c) professional inquiry by the staff addresses the challenges they face as a point of **reflection**, and
>
> (d) opportunities for staff exist to influence the school's activities and policies, building their **leadership capacity**. (p. 7)

Throughout the entire process, it was evident that there were different levels of understanding of certain strategies and terminology. When the learning goals are shared, it's critical to not assume that all teachers have a full comprehension of what is being asked of them. The fact that core PLC teams should be diverse includes a greater probability that everyone does not necessarily interact with the same core content; therefore, building a common language results in a stronger collaborative process. To close the project, AR team members had to design

and present their vision boards that answered three questions in which they expounded on what they've learned as a participant in the action research, their individual role in being a leader in the development of a PLC and what was most critical in helping Cholthan ES move forward in developing and creating a fully-functioning PLC.

Ms. Arrow's vision board (Figure 4) is a reflection of her take aways of learning *"…loosely-coupled and interdependent teams. Cholthan ES is somewhere in between; we have pockets of both and I know the goal is for us to move to more interdependent teams to build a stronger collaboration. The stages of a PLC was my favorite part because it made sense that we were storming at the appropriate time and to know that it wouldn't continue endlessly. I plan to use fist to five next year with my students to determine their readiness to move on to new content. I appreciate learning how powerful it is to have clear expectations…for anything. I struggled with my role as a leader, I think because I'm open-minded. It's not my way or the highway, ever. I'm great at building relationships and I feel like people think they can trust me, which they can. I'm innovative and bring fresh ideas to the team. I'm still working on how to bring those gifts to the team. But I think I model it. Cholthan ES needs a common language, we need to trust each other and we need to collaborate more. I don't just mean collaboration with my team. When we did the observations, I went back to a couple of teachers to tell them how much I learned from them. Reading and math are very loosely coupled here."*

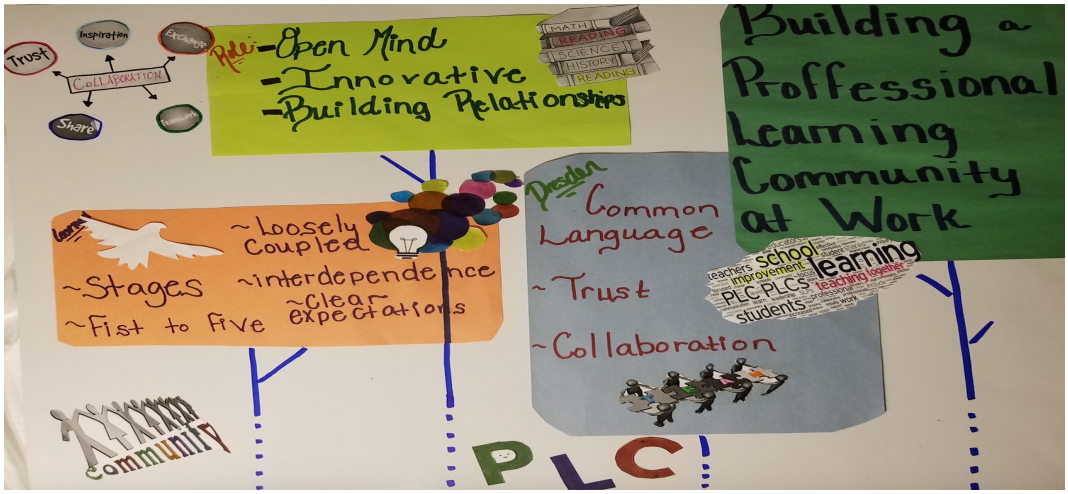

Figure 5. Ms. Arrow's Vision Board

Ms. Array (Figure 5) shared *"...the first thing we learned is that we all have to trust each other. Everyone should know their role and no one should feel left out. Positive deviants and looking at how other people do things and make it work then looking at how you can include it in your class. Instructional conversations is not just, "what did you do this weekend." I really like the forming, storming, norming and performing. You know, you can go through this by yourself too. My first year as a teacher, I experienced all of this by myself. Cholthan ES needs teamwork, trust, inspiration, sharing, success, collaboration, move forward and interaction with eachother. My role is to be flexible because we all get stuck in our ways; we have to understand that education is ever-changing. I need to collaborate more and promote student learning for all students. This is my first year teaching ESOL."* Ms. Affer stated that *"ESOL needs to have their own PLC. We don't really know what their role is and we've been in a cloud on this for such a long time."* To that, Ms. Array replied, *"We feel like we're overstepping, because teachers will be like, what are you doing or why don't you do it that way."*

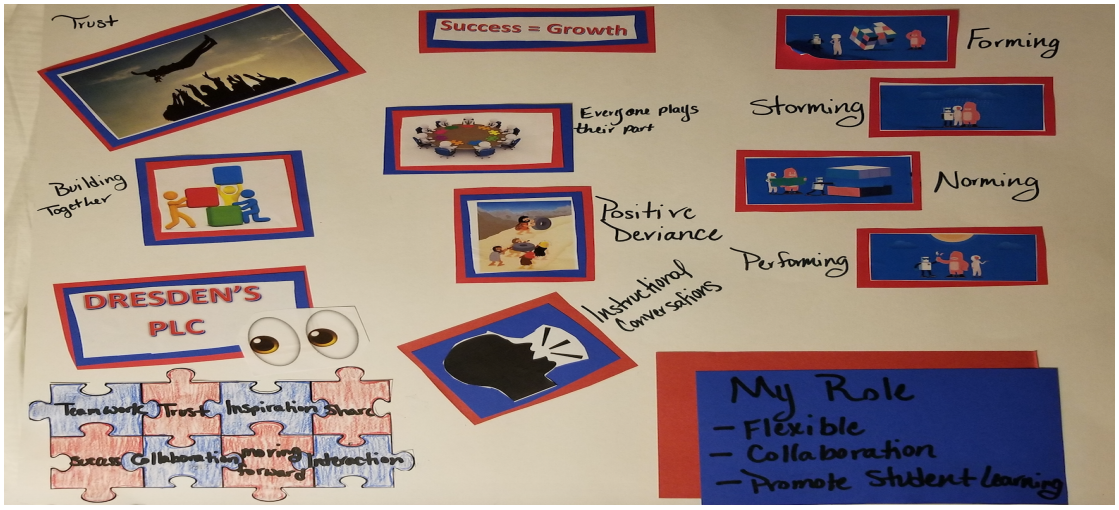

Figure 6. Ms. Array's Vision Board

Ms. Alder (Figure 6) started her presentation with, *"There is a lot to focus on. It starts with a vision that the focus is on learning. Then we moved to fist to five, conflict and experiencing frustration. Then we talked about having clearly defined roles and team development with the lesson study and positive deviants. Here is where I see myself as a piece of the puzzle and part of the team."* Her poster was the most interactive and expressive; however, she verbally seemed to hold back when sharing her thoughts. *"With conflict, I seem to hold on to things a little bit more."* Ms. Alex followed with, *"Ms. Alder has a lot of good information that she holds on to."*

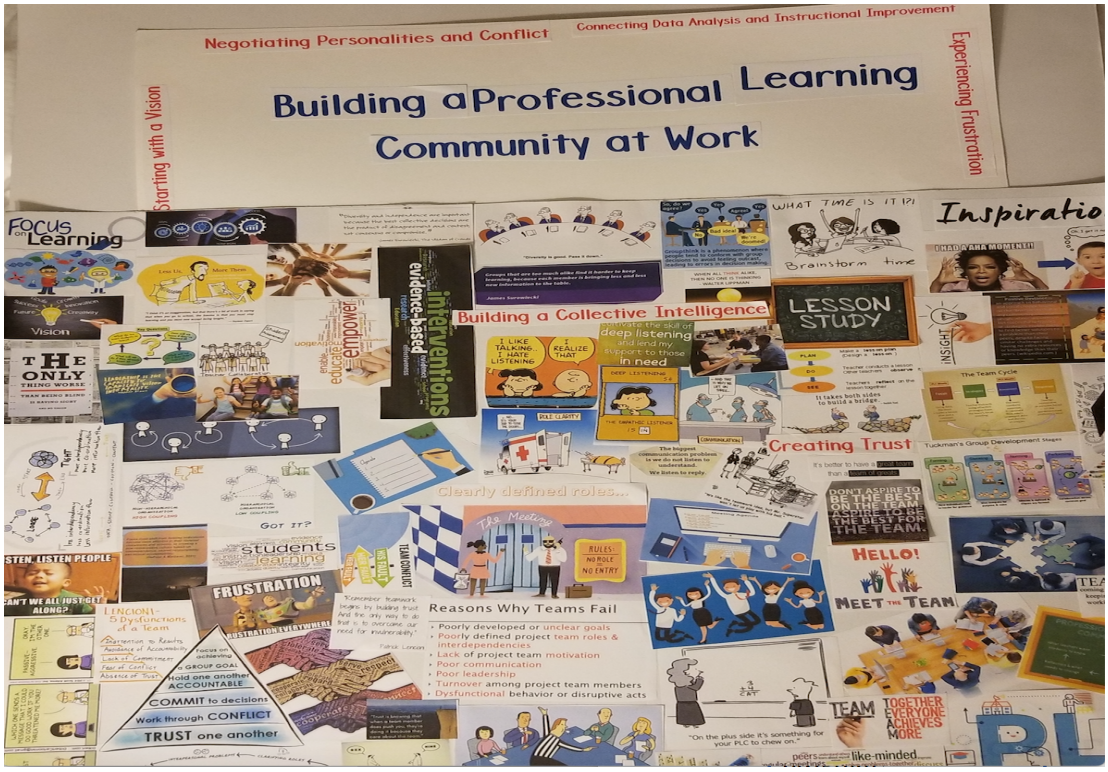

Figure 7. Ms. Alder's Vision Board

Ms. Alex (Figure 7) began her presentation with *"First, I would like to say that I hope and pray that the creation of this group was strategic (purposive sampling ☺) because you have to have the willingness to be disturbed. With the principal, I know what he wants before he asks for it. That's my job to know what he wants. I am hoping that he does take this group to become the PLC group. Although we do need to add a few more people to it to add to the diversity, I hope this is the core group. This PLC research gives us some much needed guidance. When I was doing my vision board, I wasn't sure if I needed to put trust in the middle because when we come together, we don't really know each other. The trust develops during the process. Right now, I think we are in a place where we are creating a culture for improvement in the building. This PLC will help us get to where we're going. Just being able to see what is needed is critical when presenting the proposal to the principal. We are working to become an A school. We know how*

we're doing based on student behaviors and academic successes. This is a teaching school; we're here to help each other and if everyone has the mindset that these structures are not punative but to help us reach our goal, we'll all be better."

Figure 8. Ms. Alex's Vision Board

Ms. Affer's vision board (Figure 8) reflected her thoughts of *"…this work on PLCs made me think that I am a leader now with being a grade chair leader and chair of the Principal's Advisory Committee (PAC). I would say that we first have to start with a vision, Cholthan ESs vision that would come from leadership. We would then develop our PLC based on those goals. We want to hit the bullseye and that will all lead to the road to success. Then this is what I do as a leader that is not so good…being amicable and talking about those vacations and weekends trying to make sure that everyone on the team just likes me and thinking that if they like me, they'll respect me more. I need to move beyond that and break free and have more powerful conversations. Student success is in the middle because that is the main reason we are here.*

Making sure that all voices are heard. In most rolls, I'm one of the people doing most of the talking, so making sure to use the fist to five so that all voices are heard and all brains are together. Collaboration is leads to the ultimate goal of our reason for being here for students."

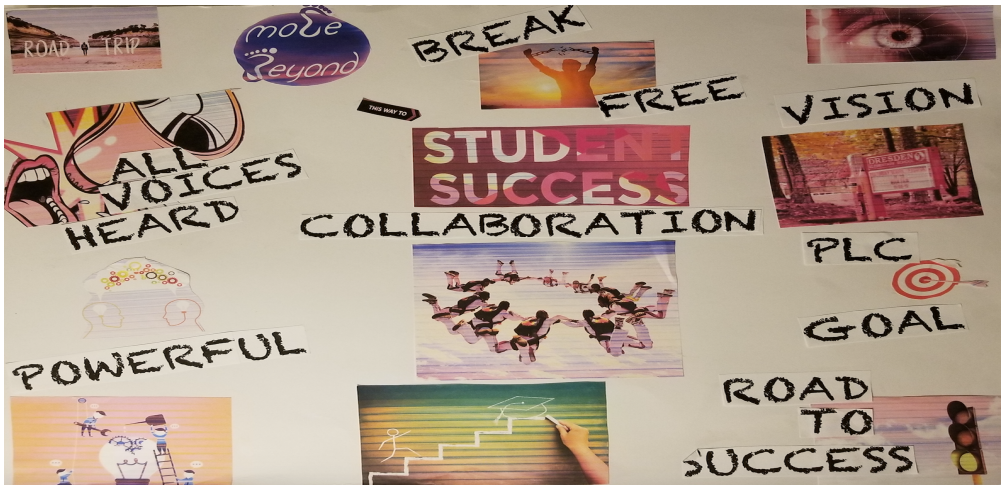

Figure 9. Ms. Affer's Vision Board

Ms. Asis (Figure 9) reflects her thoughts on building a PLC with *"having professional conversations that are more than just how was your weekend. Then you go through the four stages of forming, storming, performing and norming. I really love those, they stood out for me. It was such a light bulb because no one could pinpoint what was going on, but we knew something was happening. As I looked at the description for each, I was like check, check, check. Then you realize that you're supposed to collaborate. The book says we're to make all major decisions together and lesson plan together, then once you get into that you might reach a level of frustration. Something that might take that frustration away is to use technology, maybe one of those cool websites. I thought about that. I learned a lot of assessment tools that we can all use. Even though it's tough, trust the process. We all have a piece of the puzzle. When we're all in there together, we have that one target and we're all trying to reach that bullseye and that's*

success through teamwork. Once we're successful together as a team, then we reach student achievement. Keep calm and collaborate and we can all be happy teachers with student success."

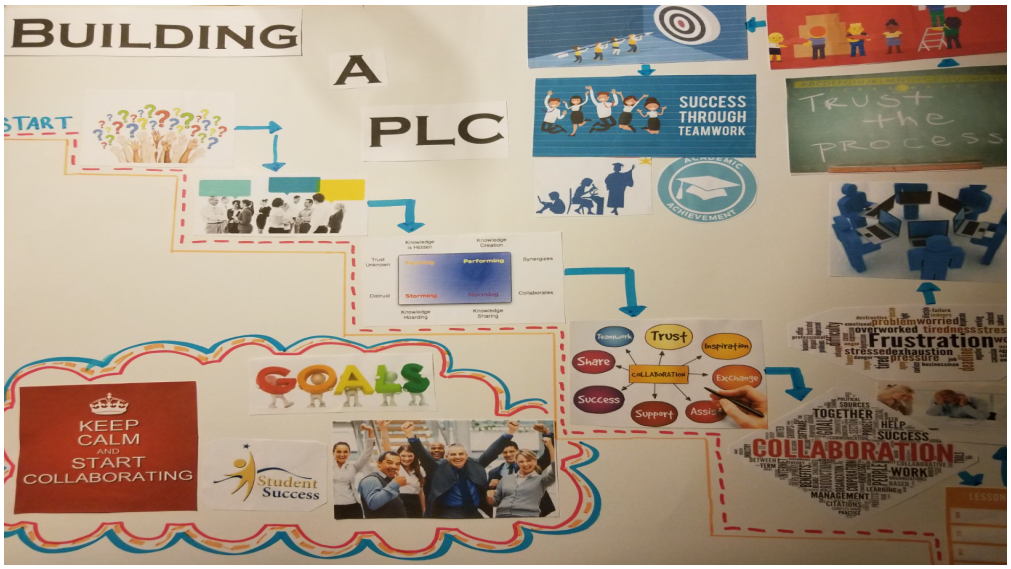

Figure 10. Ms. Asis' Vision Board

Mr. Agol (Figure 10) was unable to attend the culminating session, but he did send me the communication below as a reflection of his participation in this process.

Reflection on Conceptual Framework

According to Creswell (2014), appropriate conceptual framework design is one of the most critical components for measuring the impact of the interventions during research. The design of the conceptual framework for this study hypothesized that if data guides the work of PLCs, instructional practice will improve, thus improving student outcomes, which is the ultimate goal of the framework over time. The design of the conceptual framework supports the findings and conclusions of this study.

During the study, it became clearly evident that even before schoolwide data analysis began developing, the core team was the most critical element to implementing an effective PLC.

The core team goes through the stages of collaboration and are better able to coach their peers through the process to reaching the end goal.

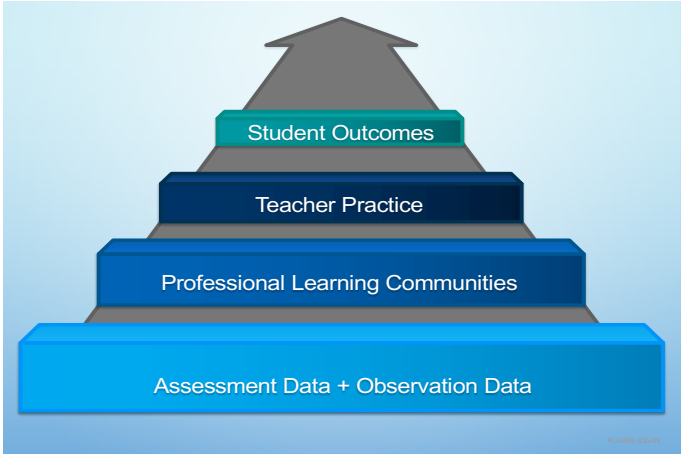

Figure 11. Conceptual Framework

Implications

Not only will this action research impact the evolution of professional learning at Chlothan Elementary, the intervention will become an integral part of the school improvement cycle for all 26 schools that I supervise. Additionally, I will share the model with my colleagues in the event that they want to engage in the process with their schools. Although PLCs is not a new concept, educational leaders still struggle with full implementation. A prescriptive how-to guide for this process is a resource that could spark a revolution.

The action research team has gone through the norming and storming phases of bonding, and therefore they can focus on the data outcomes and designing professional learning that clarifies misconceptions and motivates teachers. Their bond will continue to strengthen, which will permeate throughout the building enabling the ability to have critical conversations without taking it personally. Ultimately, the process of end of cycle 1 of implementing PLCs, which will equate to a full school year, will yield more model teachers.

The model in this study validates the case for developing and maintaining site-based professional learning. This research forces me to begin thinking about how deepen the collective intelligence of my schools. I will continue to support Chlothan ES in their development of their PLC. Also, I serve on committees that would benefit from the exposure of this research.

Future Research

Research supports the benefits of PLCs. Research also points out that there are gaps in research on how to begin and sustain PLCs. This was the impetus behind me authoring a new learning theory reflective of the process needed prior to transitioning into PLCs grounded by social learning theory. As long as there are public schools, utilizing professional learning to improve schools will be a topic.

Research could also be conducted on how to prioritize professional learning in a school with many needs. Action research team members were more intrigued by the stages of PLCs, recognized that they were storming but wondered how long they would remain in that phase. The body of research could also benefit from a PLC transition guide for high-needs schools. The research needs to be practical and not theoretical.

Summary

At the conclusion of the study, the action research team reflected on the process, tier growth, future implications, and their role as a leader in this process. We also reflected on the initial intent and purpose of the study and how it changed during the process. The teachers and administrator who participated in the study will be able to better help the principal move the school in the desired direction to improve student outcomes and teacher preparation. The intervention was so successful that the principal requested another mini-conference the following

week. He suggested a list of topics for the next session, focusing on topics that needed school-wide attention.

Because the principal is committed to developing his leaders through a continuous improvement cycle with PLCs, the commitment of his teachers and the effectiveness of their practice is anticipated to reflect in improved student outcomes. PLCs bring value, pride, trust and confidence back to the school where it belongs.

References

American Institutes for Research. (2000). Launching professional learning communities: Beginning actions. *Issues… about Change*, *8*(1). Retrieved from http://www.sedl.org/change/issues/issues81/

Annenberg Institute for School Reform. (2004). *Professional learning communities: Professional development strategies that improve instruction*. Providence, RI: Author.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Barlow, D. (2005). On common ground: The power of professional learning communities. *Education Digest*, *70*, 76–77.

Blankstein, A. M. (2004). *Failure is not an option*. Thousand Oaks, CA: Corwin Press.

Collins, J. (2001). *Good to great: Why some companies make the leap and others don't*. New York: Harper Collins.

Conzemius, A., & O'Neill, J., (2002). The handbook for SMART school teams. Solution Tree Press.

Costa, A. L., & Kallick, B. (2004). Building a self-directed community for learning: A self-assessment checklist. In *Assessment strategies for self-directed learning* (pp. 84-97). Thousand Oaks, CA:Corwin Press.

Creel, W. (2007, April). *Building capacity for continuous school improvement*. Atlanta, GA: Georgia Department of Education.

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, *6*, 68–71. doi:10.1177/003172171109200616

DeVita, M., Colvin, R., Darling-Hammond, L., & Haycock, K. (2007). *A bridge to school reform*. New York City: The Wallace Foundation. Retrieved from

https://www.wallacefoundation.org/knowledge-center/pages/bridge-to-school-reform.aspx

Dooner, A., Mandzuk, R., Clifton, A., (2007). Stages of collaboration and the realities of professional learning communities. *Teaching and Teacher Education*, 24, 564-574.

DuFour, R., & Burnette, R. (2002). Pull out negativity by its roots. *Journal of Staff Development*, *23*, 27–30.

DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn*. Bloomington, IN: Solution Tree.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: Reculturing schools to become professional learning communities*. Bloomington, IN: Solution Tree.

Epstein, J., & Salinas, K. (2004). Partnering with families and communities. *Educational Leadership*, *61*(8), 12–18.

Fawcett, G. (1996, Winter). Moving another big desk. *Journal of Staff Development, 17*(1), 34-36.

Fullan, M. (November 2006). Leading professional learning. *The School Administrator*. Retrieved from http://michaelfullan.ca/wp-content/uploads/2016/06/13396072310.pdf

Graham, P., & Ferriter, W. (2010). *Building a Professional Learning Community at Work*. Solution Tree Press.

Guskey, T. (1997). Research needs to link professional development and student learning. *Journal of Staff Development*, *18*(2).

Henderson, J. (2008). Professional learning communities: School leaders' perspectives. *Education Update, 50.* Retrieved from http://www.ascd.org/publications/newsletters/education_update

Hord, S. (1997). Professional learning communities: What are they and why are they important? *Issues About Change*, *6*(1). Retrieved from http://www.sedl.org/change/issues/issues61.html

Hord, S. M. (2008). *Leading professional learning communities: Voices from research and practice*. Thousand Oaks, CA: Corwin Press.

Hudecki, P. (2007). *REL Southwest reviews evidence on how teacher professional development affects student achievement*.

Imants, J. (2003). Two basic mechanisms for organizational learning in schools. *European Journal of Teacher Education*, *26*, 293–311.

Johnson, J., Arumi, A., & Ott, A. (2006). *The insiders: How principals and superintendents see public education today (Reality Check 2006, Issue 4)*. New York: Public Agenda.

Joyce, B. (2004). How are professional learning communities created? *Phi Delta Kappan*, *86*(1), 76–83.

Kleine-Kracht, P. (1993). The principal in a community of learning. *Journal of School Leadership*, *3*(4), 391–399.

Kruse, S., & Louis, K. (1995). Professional communities and learning communities: What school leaders need to know.

Lambert, L. (1998). *Building leadership capacity in schools*. Alexandria, VA: ASCD.

Leithwood, K., Jantizi, D., Earl, L., Watson, N., Levin, B., & Fullan, M. (2004). Strategic leadership for large-scale reform: The case of England's national literacy and numeracy strategy. *School Leadership and Management, 24*, 57–79.

Lewis, C., Perry, R., & Hurd, J. (2004). A deeper look at lesson study. *Educational Leadership*, 61(5), 18-22.

Marzano, R. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results.* Aurora, CO: Mid-Continent Research for Education and Learning.

McLaughlin, M., & Talbert, J. (2001). *Professional communities and the work of high school teaching.* University of Chicago Press: Chicago.

Morrissey, M. (2000). *Professional learning communities: An ongoing exploration: What we are learning*. Southwest Educational Development Laboratory. Retrieved from www.sedl.org/pubs/change45/5.html

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002). Retrieved from http://www.ed.gov/policy/elsec/leg/esea02/pg13.html#sec1601

Parsad, B., Lewis, L., & Farris, E. (2001). *Teacher preparation and professional development: 2000. NCES 2001-088*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Prenger, R., Poortman, C., Handelzalts, A. (2017). Factors influencing teachers' professional development in networked professional learning communities. *Teaching and Teacher Education* 68, 77-90.

Pressley & Johnson (1989). Strategies that improve children's memory and comprehension of text. *The Elementary School Journal*, 90(1), 3-32

Prytula, M., & Weiman, K. (2012). Collaborative professional development: An examination of changes in teacher identity through the professional learning community model. *Journal of Case Studies in Education*, *3*, 1–19. Retrieved from http://www.aabri.com/manuscripts/11964.pdf

Richardson, J. (2005). Students' approaches to learning and teachers' approaches to teaching in higher education. *Educational Psychology*, *25*(6), 673–80.

Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. *The Elementary School Journal, 89*(4), 421–439.

Schlechty, P. (2005). *Creating great schools: Six critical systems at the heart of educational innovation.* San Francisco, CA: Jossey-Bass.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. Knopf Doubleday Publishing Group: New York.

Sergiovanni, T. (1992). Why we should seek substitutes for leadership. *Educational Leadership*, *5*, 41–45.

Sergiovanni, T.J. (1994a). *Building community in schools.* San Francisco: Jossey-Bass Publishers.

Southwest Educational Development Laboratory (1996). *Constructing knowledge in the classroom.* Retrieved from http://www.sedl.org/pubs/classroom-compass/cc_v1n3.pdf

Stringer, E. (1996). *Action research: A handbook for practitioners*. Thousand Oaks, CA: Sage Publications.

Surowiecki, J. (2004). *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes businesses, economies, societies and nations.* New York: Random House.

Thompson, S., Gregg, L., & Niska, J. (2004). Professional learning communities, leadership and student learning. *Research in Middle Level Education Online*, *28*(1), 35–54.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wenger, E. (1998). *Communities of practice*. Retrieved from http://www.infed.org/biblio/communities_of_practice.htm.

Wignall, R. (1992, June). *Building a collaborative school culture: A case study of one woman in the principalship.* Paper presented at the European Conference on Educational Research, Enschede, The Netherlands

Wood, D. R. (2007). Professional learning communities: Teachers, knowledge, and knowing. *Theory Into Practice, 46*, 281–290.

Zepeda, S. (1999). *Staff development: Practices that promote leadership in learning communities.* Larchmont, NY: Eye on Education.

Appendix A

Professional Learning Team Data-Literacy Survey

Because professional learning communities focus on results and make every effort to ensure that all students are successful, effective manipulation of data is essential. This survey is intended to help us, as a school, learn more about our levels of data literacy. The results of this survey will help us target our professional development in the next year, and we thank you in advance for answering in an honest and thoughtful manner.

Your Team:

Please indicate the extent to which each of the statements below is true by circling one of the four numbers using the following scale:

1 = Very true 2 = true 3 = somewhat true 4 = Not true

Data-Literacy Statement	**Rating**			
Our team has regular conversations about what student mastery looks like.	1	2	3	4
Our team has agreed-upon expectations for mastery on most assignments.	1	2	3	4
Our team has measurable instructional goals for all common lessons.	1	2	3	4
Our team has developed our own set of common assessments that we use regularly (at least monthly).	1	2	3	4
I believe that our common assessments are tied to state standards and are reliable measures of what students should know and be able to do.	1	2	3	4

Our team has developed our own set of common rubrics we can use to score performance-related tasks.	1	2	3	4
I believe that our common rubrics are tied to state standards and are reliable measures of what students should know and be able to do.	1	2	3	4
Our team has established an effective system for recording results from our common assessments.	1	2	3	4
Our team has an effective process for looking at the results of common assessments together.	1	2	3	4
Our team is able to discuss common assessment results in a positive and constructive way.	1	2	3	4
Our team uses graphs and charts to make student achievement trends visible in our conversations about results.	1	2	3	4
Our team makes predictions about student learning based on common assessment results.	1	2	3	4
Our team considers multiple hypotheses and looks for multiple sources of verification before drawing conclusions from common assessment results.	1	2	3	4
Our team changes our instructional practices based on common assessment results.	1	2	3	4
Our team provides remediation and enrichment to students based on common assessment results.	1	2	3	4
Our team celebrates achievements that are highlighted in the results of our common assessments.	1	2	3	4
I feel safe when revealing my common assessment data in front of my peers.	1	2	3	4
Our team uses data as a tool for identifying effective practices rather than as a tool for identifying effective people.	1	2	3	4
Our team has a sense of shared responsibility for the success of all our students.	1	2	3	4
Our team has the skills necessary to collect and manipulate data effectively.	1	2	3	4
I know the difference between and understand when to use aggregated and disaggregated data.	1	2	3	4
I know the difference between and understand when to use formative and summative assessments.	1	2	3	4
Our team respects the confidentiality of students and teachers when looking at data.	1	2	3	4

Our team has looked at our students' standardized exam results.	1	2	3	4
Our team is aware of all of the varied populations we serve and looks at results for each of these populations individually.	1	2	3	4
Our team refers to reliable research when we are testing a prediction we have made about student learning.	1	2	3	4
Our team has created systems for engaging students in data collection for self-assessment.	1	2	3	4

Please take a few moments to share any thoughts about the use of data on your learning team. What are you most proud of? What are you the most concerned about? What kinds of support would you like from administration to continue your work next year? What are the most significant barriers preventing your team from using data more effectively? What kinds of resolutions can you imagine for those barriers?

Appendix B

UGA IRB Approval

UNIVERSITY OF GEORGIA

Tucker Hall, Room 212
310 E. Campus Rd.
Athens, Georgia 30602
TEL 706-542-3199 | FAX 706-542-5638
IRB@uga.edu
http://research.uga.edu/hso/irb/

Human Research Protection Program

EXEMPT DETERMINATION

December 10, 2018

Dear Sheneka Williams:

On 12/10/2018, the Human Subjects Office reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	The Role of Professional Learning Communities in Enhancing Teacher Practice
Investigator:	Sheneka Williams
Co-Investigator:	Sherry Johnson
IRB ID:	STUDY00004931
Funding:	None
Review Category:	Exempt, FLEX (7)

We have approved the protocol from 12/10/2018 to 12/9/2023.

This is an exempt study, so it's not necessary to submit a modification for minor changes to study procedure. You can keep us informed of changes that don't affect the risk of the study by using "Add Comment".

Please close this study when it is complete.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103).

Sincerely,

William Westbrook, IRB Analyst
Human Subjects Office, University of Georgia

Appendix C

DCSD IRB Approval

Dr. Knox Phillips
Associate Superintendent

DeKalb County
School District
www.dekalb.k12.ga.us

Dr. R. Stephen Green
Superintendent

Office of Accountability
Research, Data, and Evaluation
1701 Mountain Industrial Boulevard
Stone Mountain, GA 30083-1027
678-676-0300

December 5, 2018
Ms. S. Johnson
P.O. Box 2173
Lithonia, GA 30058

Reference: The Role of Professional Learning Communities in Enhancing Teacher Practice
(File # 2018-023)

Dear Ms. S. Johnson:

This letter is to inform you that your research proposal has been approved by the Department of Research, Data, and Evaluation for implementation in the DeKalb County School District (DCSD).

When you begin your research, you must secure the approval of the principal/chief site administrator(s) for all schools named in the proposal. You should provide the application with all required attachments and this district approval letter to the principal(s) to inform their decision. **Please remember the principal/chief site administrator has the final right of approval or denial of the research proposal at that site. In addition, note that teachers and others may elect not to participate in your research study, even though the district has granted permission.**

Please be reminded there is no data collection in schools between Friday, March 29, 2019 and May 23, 2019. The deadline is to protect instructional time during the assessment season and end of the year activities scheduled at individual schools. This approval is valid for one year from the date on this approval letter. Should there be any changes, addenda, design changes, or adverse events to the approved protocol, a request for these changes must also be submitted in writing/email to the DCSD Department of Research, Data, and Evaluation during this one-year approval period. Changes should not be initiated until written approval is received. Further, should there be a need to extend the time requested for the project; the researcher must submit a written request for approval at least one month prior to the anniversary date of the most recent approval. If the time for which approval is given expires, it will be necessary to resubmit the proposal for another review by the DCSD Research Review Board.

Completed results are **required** to be submitted to the Office of Accountability (Research, Data, and Evaluation).

Feel free to call 678.676.1113 or 678.676.0325 if you have any questions.

Sincerely,

Dr. Knox Phillips
Associate Superintendent

Dr. Joy Mordica
Assistant Director

Appendix D

Informed Consent Document

The Role of Professional Learning Communities in Enhancing Teacher Practice

Researcher's Statement

I am/We are asking you to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. This form is designed to give you the information about the study so you can decide whether to be in the study or not. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. When all your questions have been answered, you can decide if you want to be in the study or not. This process is called "informed consent." A copy of this form will be given to you.

Principal Investigator: Dr. Sheneka Williams, Department of Educational Administration and Policy, 706-542-1615 or smwill@uga.edu

Co-Investigator: Sherry Lynn Johnson, Department of Educational Administration and Policy, 404.759.4718 or slj70955@uga.edu

Purpose of the Study

The purpose of this study is to investigate the impact that professional learning communities have on teacher practice. There is a pool of research related to teacher perceptions of professional learning communities; however, there is little work related to the impact of teaching practices in elementary schools with a high Hispanic population. You are being asked to participate in this study because of your interest in helping students master content and your unique skill set and perspective that you will bring to the action research team.

Study Procedures

If you agree to participate, you will be asked to:

- Complete a pre- and post-survey about how your self-efficacy at the beginning and the end of the data collection period
- Participate in an audio recorded focus group at the conclusion of the action research project about your experiences during the new teacher training sessions held at the school and your work with your assigned mentor.

Risks and Discomforts

There are no anticipated risks from participating in this action research study. There may be minimal discomfort as participants will be asked to reflect on their work as a member of the action research team and their work as a mentor. It is important to emphasize that participation is voluntary and you will be able to decline to answer a question at any time or withdrawal from the study.

Benefits

Participants in this study may benefit from the professional learning taking place as a part of the project as well as from the relationships they build with members of the action research team, mentors, and other new teachers.

Incentives for Participation

Water and snacks will be provided at meetings where surveys are completed and during the focus group.

Audio/Video Recording

All action research team meetings and interviews will be audio recorded. All recordings will be password protected. Recordings will be transcribed using pseudonyms for participants.

Recordings and transcripts will be archived and password protected until deletion at the end of the study.

Privacy/Confidentiality

All data will be coded to identify trends that relate to the research questions. All participants will receive pseudonyms to remain anonymous throughout the study and in publications. All identifiable information will be stored electronically in a password protected file for duration of the study. At the completion of the study, all data will be destroyed. There is a risk in participating in focus groups. While the participants will be told to keep all information confidential, it can't be guaranteed.

Taking Part is Voluntary

Participation in the study is voluntary. Members of the action research team may elect to withdrawal from the program at any time without loss of benefits or punishment. If you decide to withdrawal all information will be used unless you request in writing for it to be removed from the research project. If a request is made, all identifiable data as yours will be destroyed and not used as a part of the study.

If You Have Questions

The main researcher conducting this study is Sherry Lynn Johnson, a *graduate student,* at the University of Georgia. Please ask any questions you have now. If you have questions later, you may contact *Sherry Johnson* at *slj70955@uga.edu* or at *404.759.4718*. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 706.542.3199 or irb@uga.edu.

Research Subject's Consent to Participate in Research

To voluntarily agree to take part in this study, you must sign on the line below. Your signature below indicates that you have read or had read to you this entire consent form, and have had all of your questions answered. The decision to participate or not participate in no way impacts that participant's employment status or standing with the school.

Please mark the activities you agree to participate in as a part of our signed consent:

____ Completing the pre- and post-survey ____ Focus Group

_____	_____	_____
Name of Researcher	Signature	Date
_____	_____	_____
Name of Participant	Signature	Date

Appendix E

Building a Professional Learning Community at Work Study Guide

Solution Tree | Press

Building a Professional Learning Community at Work™:

A Guide to the First Year

By Parry Graham and William M. Ferriter

Study Guide

This study guide is a companion to the book *Building a Professional Learning Community at Work: A Guide to the First Year* by Parry Graham and William M. Ferriter. By focusing on the successes and challenges inherent in the process, *Building a Professional Learning Community at Work* is designed to help teachers and administrators accomplish the difficult task of building a professional learning community from the ground up.

This guide is arranged by chapter, enabling readers either to work their way through the entire book or to focus on the specific topics addressed in a particular chapter. It can be used by individuals, small groups, or teams to identify key points, raise questions for consideration, assess conditions in a particular school or district, and suggest steps that might be taken to promote the creation of a professional learning community.

We thank you for your interest in this book, and we hope this guide is a useful tool in your efforts to create a healthy culture in your school or district.

Chapter 1

Starting With a Vision

---

1. When working toward becoming a professional learning community (PLC), why is it important to take the time to research PLCs and have a clear initial vision of what you want your school to look like? What role does this vision play in developing a PLC?

2. Why is it important to engage in open-ended conversations about the PLC model before initiating the building process, and how do you connect with colleagues who are not as interested? How might the *living systems theory* help encourage collaboration on all levels?

3. Why is it important for colleagues to make decisions—even about hiring new teachers—collaboratively, rather than individually? How might differences in opinion help or hinder progress?

4. What is the importance of the dinosaur story, and why did Steve consistently reuse it?

5. What are the three expectations Steve presented, and why do they need to be accessible to everyone from parents to practitioners?

6. What is the hedgehog concept? How might it be beneficial to your school?

7. What issues do you anticipate, or have you encountered, in your own process of beginning a PLC?

Chapter 2

Empowering the Core Team

---

1. Why are many teachers uncomfortable with the pledge to *ensure* high student achievement? How does that pledge help promote success, even with the threat of failure? Does the sense of collaboration that comes with a PLC help make the pledge seem more attainable?

2. How does a core group help determine the future shape of an organization? How would you organize your colleagues into a core group based on Steve's list of important skill sets, or on Gladwell's *Connectors*, *Mavens*, *and Salesmen*?

3. Why is communication the lifeblood of a successful PLC? Give some examples of how, in your own experiences, various forms of communication have helped the initial vision of a PLC succeed.

4. Why is trust critical to the success of a PLC? How does trust help distribute the sense of power and authority, keeping everyone accountable?

5. How does the metaphor of a *phase transition* apply to a school implementing a PLC? Describe any instances of such a transition in your own school.

Chapter 3

Creating Trust

1. Discuss ways school leaders can create a trusting environment where teachers and administrators share in decision making. When participants' voices are heard and valued, regardless of seniority, how does the dynamic of a group change?

2. How should an administrator facilitate decision making so that everyone works toward common goals?

3. Why is it important to move beyond being amiable and push to deepen professional conversations and relationships built on shared experiences? How have your school leaders modeled reflection, collegial relationships, and professional dialogue?

4. Why is it important to set up guidelines for collaboration between colleagues? Describe a situation where collaboration did not help, and then explain how it could have been different if clear expectations had been laid out.

5. Which forms of communication among colleagues has your school used? Describe how each worked or didn't work. What new types of communication would you like to try?

6. How can you or your school rearrange the schedule in order to allow extra time for collaboration and discussion?

Chapter 4

Supporting Team Development

1. Describe a situation like Tom's, where you or a coworker had the best of intentions, but the lack of communication blocked any progress toward becoming a true PLC. How did you resolve the situation, and would you have handled things differently given a second opportunity?

2. Why is it important for all parties involved to understand team development and recognize where the group is on the developmental continuum? How can a common language help keep participants on the same page?

3. Which of Tuckman's four stages (*forming, storming, norming,* and *performing*) describes where you see your group currently, and why?

4. How can establishing clear parameters and priorities help teams circumvent the struggles of filling (and overfilling) group meetings?

5. Has your team defined what students should learn and what student mastery looks like? Describe the struggles and successes of implementing a common assessment.

6. Receiving the results of a common assessment can be overwhelming emotionally. What steps in your school are designed to improve teacher performance via support and frequent, informed conversation? What steps would you like to see in place that would help avoid feelings of inadequacy, failure, and defensiveness?

7. Are teachers in your school—both as teams and as individuals—encouraged to have professional ownership over their instructional practices? In what ways have you and your colleagues been challenged by proactive questions?

8. Which instructional practices has your team decided are the most effective for your students? How did you come to that decision?

Chapter 5

Negotiating Personalities and Conflict

1. When has your team turned a hostile confrontation built up over time into a productive conversation, and how did you work together to figure out what the real issue was?

2. How can you build the understanding of and respect for different perspectives into the structure of the team and the meeting?

3. How can using an agenda, recording minutes, and assigning clear roles in meetings help dispel tension? What is the *fist-to-five* method of decision making, and how can it create a level ground for all team members?

4. How do you know when an administrator should or shouldn't handle a conflict within a team? How should the administrator deal with the conflict if there is a need for action?

5. What are Lencioni's five dysfunctions? Give examples of how you have dealt with these dysfunctions within a team setting, as well as how you would like to deal with them if they arise again.

Chapter 6

Experiencing Frustration

1. What are the differences between a loosely coupled environment and an interdependent one? What kinds of roadblocks can you expect if moving from a loosely coupled environment into interdependence?

2. A key challenge in building a PLC is the systematic tightening that must occur. Which of Steve's five strategies have you used, which would you like to try, and why?

3. The authors describe three general categories of frustrations related to developing a PLC. What are these three categories? Describe any experiences with frustrations in these categories, as well as how the frustrations were resolved.

4. When a school is not used to collaborating via technology, what challenges might arise? Describe how Shirky's three levels of collaborative technology might help ease a school into more efficient work.

Chapter 7

Connecting Data Analysis and Instructional Improvement

1. Why is collecting and assessing collaborative data so difficult? How can a focus on student learning rather than teacher success shift the understanding of the data analysis?

2. List the data analysis strategies and discussion strategies that you think would work well in your school, and explain how they could improve the current methods in place.

3. What does it mean to build shared understanding, and why is it important?

4. Describe the *everything-goes brainstorming* and *final word* techniques, and explain how they might help your team work toward developing shared understanding.

5. What effect can overreliance on structures set up at the beginning of the development process have on a team?

6. Define *positive deviants* and explain how the term relates to improving understanding of student data analysis.

Chapter 8

Building a Collective Intelligence

1. Why is it incorrect to say that "ah-ha!" moments come in a flash of inspiration? How does this idea relate to the progression of a PLC?

2. Explain *deep listening* and give examples of the differences it has made or might make within your team.

3. What makes lesson study such a valuable strategy? How might you incorporate it into your own team practices?

4. What is the basic process of action research, and how does it differ from traditional research?

5. How do the authors define *intervention*? How might your school or team use the various types of intervention?

6. What are Surowiecki's three conditions for a group to make intelligent decisions? Have you achieved these conditions within your own team?

Appendix F

Learning Walk Template

Lesson Segment Observed: ☐Opening ☐Work Period ☐Closing							Duration Observed:
TKES	**Instructional Behavior**		**Yes**	**No**	**NOT OBSERVED**		**Comments**
1, 2, 3, 4, 9	Instruction shows alignment to the priority standards, supporting standards, and guiding practices.						
1, 2, 3, 9	Instruction is structured around essential questions and big ideas.						
1, 2, 3, 4, 9	Instruction is part of a coherent learning sequence in which students engage in rigorous, authentic, and relevant learning tasks.						
TKES	**#**	**Indicators of Effective Instruction**	**Dev.**	**Pro.**	**Dist.**	**NOT OBSERVED**	**Comments**
	OPENING: ENGAGING INSTRUCTIONAL ACTIVITY						
1, 2, 3, 9, 10	**1**	Instruction begins with an activity that helps students think critically and connect with prior knowledge, thereby, generating curiosity as new concepts are introduced.					
	WORK PERIOD: EXPLORING, EXPLAINING, EXTENDING, AND ELABORATING						
1, 2, 3, 7, 8, 9, 10	**2**	Teacher utilizes 21st century learning skills and research-based instructional strategies from the unit plan that provide opportunities for inquiry and dialogue.					
1, 2, 3, 4, 7, 8, 9, 10	**3**	Teacher facilitates learning by appropriately pacing the delivery of instruction according to the weekly planner to ensure that **all** students are engaged.					
1, 2, 3, 4, 9	**4**	Differentiation is evidenced by instructional modifications (content, process, or product) to meet student needs by providing content and developing skills which address individual learning differences. *See lesson plan for specific intervention strategies for Tier I, Tier II, Tier III, exceptional education students, English Learners, and gifted learners as identified in the unit plan.					
1, 5, 6, 7, 8, 9	**5**	Teacher uses questioning to intentionally support students in moving to higher levels of thinking.					
1, 5, 6, 9	**6**	Teacher checks for understanding through a variety of means that are valid and appropriate for the content and the student population (i.e. formative assessments, etc.).					
1, 2, 3, 4, 5, 6	**7**	Teacher challenges students to extend their learning to pursue self-discovery, inquiry, and evidence.					
	CLOSING: EVALUATING						
1, 4, 5, 6, 10	**8**	Teacher facilitates and engages students to provide the review of the lesson to reveal their understanding and give students the opportunity to reflect on what they should have learned. (Why do you think? What evidence do you have? What do you know about…? How would you explain?)					

Connections to TKES Performance Standards: 1-Professional Knowledge, 2-Instructional Planning, 3-Instructional Strategies, 4-Differentiated Instruction, 5-Assessment Strategies, 6-Assessment Uses, 7-Positive Learning Environment, 8-Academically Challenging Environment, 9-Professionalism, 10-Communication

Appendix G

Data Crosswalk

Research Questions	Data Collection	Analysis Approach	Timeline	How It Shaped the Study	Related Research
Q1. What are the perceptions of teachers on the influence of professional learning communities on their teaching practices?	*Book Study *PL Team Survey	*Coding for Themes *Likert Scale	*Book Study-1st Action Research Cycle *Before 1st Action Research Cycle	*The book study grounded AR team members with a common language to understand what PLCs. Participants felt more comfortable moving forward with the action research understanding the clear alignment of PLCs and improving student outcomes at Chlothan ES. *The PL Team Survey assisted the researcher with knowledge of existing gaps on the utilization of data and how to build capacity in that area during the action research. While actual student data was not accessed for this study, there are specific guiding questions that bring about better understanding of how data feeds professional learning.	*Dooner, Mandzuk & Clifton (2008). Stages of collaboration and the realities of professional learning communities. "Although professional learning communities are often promoted as unique learning opportunities, little is known about how they get started and how they are sustained." The book addresses all stages of PLCs, from inception to sustaining. The data literacy survey
Q2. How do professional learning communities affect instructional practices?	*Mini-Conference *KWL+ Questionnaire *Learning Walk Form	*Coding for Themes	*2nd Action Research Cycle *Before 2nd Action Research Cycle *After 2nd Action Research Cycle: Start of 3rd Action Research Cycle	*The mini-conference was the intervention that addressed the gap in teachers' needs of understanding the rubric for constructed response writing. *The KWL+chart responses served as data in planning the topics/foci of the mini-conference *`The learning walk data reflected	Riswanto, Risnawati & Lismayanti (2014). The effect of using KWL strategy on EFL students' reading comprehension achievement. "It helps teachers elicit prior knowledge of the topic; set a purpose; monitor comprehension; assess comprehension; and expand ideas." The KWL+ activity gave teachers in put on mini-conference topics and clear guidance on the

				the impact of instruction for teachers who participated in the mini-conference.	instructional practices needed improving.
Q3. What does the action research team identify as the essential components of developing an effective professional learning community in their setting?	*Action Research Team Meeting *Vision Boards	*Coding for Themes	*Throughout all three Action Research Cycles *End of 3rd Action Research Cycle	* The AR team designed the intervention. *The vision boards were the culminating activity that visually represent each team member's response to the following three questions: What are your takeaways about PLCs? How do you see yourself as a leader in building PLCs at Chlothan ES? What does Chlothan ES need to build and sustain an effective PLC.	*Assaraf ,J. (2008). The vision board book. "A vision board is a powerful tool used to shape an ideal future through the power of intention and visualization." The creation of the vision boards gave participants an opportunity to reflect on the entire action research project, who they have become during the process and how to move their school forward.