PROFESSIONAL LEARNING COMMUNITIES:

FACTORS AFFECTING STUDENT LEARNING

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ABSTRACT

Educators are constantly searching for a worthwhile means of professional development. One current, research-based method is changing the focus of the school to one of a community. Known as a Professional Learning Community, this form of collaboration allows teachers to meet on a routine schedule with a focus on student learning. The purpose of this grounded qualitative study was to examine the Professional Learning Community factors that contribute to student learning. The data were gathered from participants in Professional Learning Community Collaborative Teams taking place within a school district in East Tennessee. The data were collected through observations of collaborative team meetings, semi-structured interviews, and collection of artifacts from collaborative teams and analyzed through open, axial, and selective coding. From the data, two categories developed with supporting themes for each. Five common procedures were found to support a focus on student learning. Likewise, attention to student assessment data allowed teams to differentiate instruction and improve their own professional growth. Recommendations were made to support the Professional Learning Communities’ focus on student learning.
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Dedication

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CHAPTER 1: BACKGROUND OF STUDY

Introduction and Background

Ever since the early American education system began to grow from a one-room school house to several teachers working within the same building, teachers have sought ways to improve their instructional strategies. With reform movements prompting the political agenda to focus on global competition, the effectiveness of traditional professional development has been questioned. A report from the Center for Public Education (2013), stated that 95% of professional development opportunities are provided through a workshop setting, much like that of a classroom, where teachers sit and listen to an expert provide new strategies for improving instruction. Other common practices for professional growth included peer observations, peer-coaching opportunities, research regarding best-practices and educational trends, and school visits. Most teachers continue to attend inadequate professional development, even after research has proven its ineffectiveness (Strauss, 2014). However, changes are being made. Recent reform movements such as No Child Left Behind (NCLB) (2001) and the Every Student Succeeds Act (ESSA) (2015) have promoted collaboration among teachers and encouraged teachers to continuously reflect on student learning (Center for Public Education, 2013). In fact, teachers who work in collaborative teams build relationships and share data and best practices, which leads to an increase in student achievement. According to the website, All Things PLC (“History of a PLC,” n.d.), a high-functioning collaborative team of educators is the “heart and soul” of a school that desires to change its culture to that of a Professional Learning Community, but not all who meet as a group bring the desired results of increasing student learning. Research for this study scrutinized processes and procedures educators can perform during the Professional
Learning Community collaborative meetings that lead to effective student learning and how team members can utilize student achievement data to further enhance student learning.

**Theoretical framework**

The foundation for this study focused on the theoretical framework of a community of practice, which was first proposed by cognitive anthropologist Jean Lave and educational theorist Etienne Wenger. A community of practice is a group of people who share a concern or a passion for something they do, and together, they learn how to do it better as they interact regularly (Wenger-Trayner & Wenger-Trainner, 2015). While the term “community of practice” is fairly new, the practice of collective learning has been evident for centuries and can be seen in multiple disciplines and professions under names such as learning networks, discussion boards, and clubs. In fact, the methods of communities of practice have been in effect since ancient Greece when groups of metalworkers, clay workers, and other craftsmen would work together for a social purpose with occupational goals (Wenger & Snyder, 2000). The history of a community of practice differs from other organizational committees because its goal is not just to manage projects, but to contribute to organizational goals and build relationships of the members. However, it is not just a group of friends meeting to socialize. A community of practice relies on the group sharing a field of interest which the group feels committed to improving and enriching (Hoadley, n.d.). Companies and industries have spent copious amounts of time trying to develop the perfect formula to help these communities of practice succeed. In 2012, Google developed a study of its company’s hundreds of teams to learn why some faltered while others flourished (Duhigg, 2016). Google’s community of practice study found that people who work together and collaborate with meaningful conversations about output tend to report higher job satisfaction and better results in their endeavors. While the study could not determine
that it was a certain dynamic of genders, intelligence, or social interactions that created the perfect team, it concluded that any group, which had a common focus and maintained norms that directed the processes of the group, tended to have a better impact on outcomes and fulfilled the goals of the group. Researchers determined that understanding and implementing group norms were the key element in Google’s teams’ success. When the team functioned as a community, collaborated routinely, and established rules to follow for effective interactions, the output was maximized.

Because of its widespread success, this idea of community has spread from the corporate world to the educational realm. Schools throughout the world are applying the concept of community of practice in an effort to reform the school culture and improve student achievement (Al-Taneiji, 2009; Eaker, DuFour, & DuFour, 2002; Ostovar-Nameghi & Sheikhahmadi, 2016; Park & So, 2014). During the last two decades, the idea of teachers assisting, coaching, and collaborating has been practiced globally as a means of professional development and educational reform. Currently, this shift in a school’s culture is commonly known as the Professional Learning Community.

**Conceptual Framework**

The conceptual framework for the Professional Learning Community trend is research-based and proves effective in making this change toward educational reform (DuFour & Fullan, 2013; Eaker, DuFour, & DuFour, 2002; Hughes, T. A., 2007; Nelson, T. H., LeBard, L., & Waters, C., 2010). The concept of a Professional Learning Community is based on a community of practice in which teachers within the school, or within common parameters such as same grade or subject being taught, meet frequently in a focused, goal and data driven collaborative team. The administrator is responsible for promoting the success of every student in his or her
charge and one means of ensuring this success is through sustaining a school culture that is conducive to learning through nurturing a culture of collaboration, trust, and high expectations in learning (CCSSO, 2015). Together, with other stakeholders, the Professional Learning Community members work to develop positive relationships, focused on the growth and achievement of students.

Differing from traditional professional development, the Professional Learning Community provides a change in the school’s culture and affects all the stakeholders. The term Professional Learning Community is the collective format in which a school community exists. According to Lunberg (2010, p.1),

> When a school is functioning as a Professional Learning Community, you can walk around the building on any given day and see teachers talking to one another, discussing curriculum goals, and discussing what activities they are going to engage in that day; there is a general attitude of cooperation.

Likewise, the support from administration is systemic in a school that functions as a Professional Learning Community. The term is often used to label the smaller units of teachers working with teachers and other stakeholders to collaborate on specific academic areas. For instance, a math Professional Learning Community might scrutinize data to drive instruction for the school year so that students have a more rigorous and differentiated experience each year. However, these smaller communities of practice are better labeled as collaborative teams, as the Professional Learning Community is truly the overall culture in which the school and stakeholders operate. Schools that implement Professional Learning Communities also view the school improvement plan as the vehicle for sustained, cyclical, and continuous improvement in learning (Eaker, DuFour, & DuFour, 2002). The focus should always be on advancing the
knowledge of those involved, and the best way to attain this is through constant and focused cooperation.

As the Professional Learning Community trend has developed globally, research has been performed to determine what improves the success of the process. While there are many aspects of the Professional Learning Community that lead to its success, the conceptual framework focuses on critical common components that researchers agree lead to student achievement. These include a united mission, vision, and set of goals to which the entire school adheres, collaboration with team members and with all stakeholders, a shift in focus, from teaching to learning, a focus on continuous monitoring of student achievement through the use of common assessments, a collective responsibility, and the implementation of group norms (Al-Taneiji, 2009; DuFour & Eaker, 1998; Nelson, LeBard, & Waters, 2010; Park, 2014; Provini, 2012; Riveros, Newton, & Burgess, 2012). When each of these components are met, the school’s culture will develop into a Professional Learning Community, and student learning can become the central focus of each stakeholder.

**Statement of the Problem**

Professional development is meant to be a means of individual growth and learning for educators. In the past, professional development has become a process of teachers listening to a presentation, acquiring notes and new activities, and then returning to their classrooms where they may or may not implement the information and strategies gained. This has proven to be an ineffective way of enhancing one’s educational repertoire as teachers may feel disconnected to the material presented and often find the information to be irrelevant or fragmented to their own teaching practices (Park, 2014). With the increasing pressure to compete globally, educators are looking for more rigorous forms of professional development. For this reason, educators are
seeking better quality educational professional development which can stand as the cornerstone of reform (Fullan, 2000; McLaughlin & Talbert, 2006; Park, 2014).

**Purpose of the Study**

Policies, programs, and processes can change frequently in education. To sustain a positive learning environment, a cultural transformation is necessary (DuFour & Fullan, 2013). The change should alter how people throughout the building relate to one another to achieve a more effective means of cooperation and respect. Research has shown that there are certain strategies, that when followed and implemented routinely, can transform the culture to one that is focused on student learning (DuFour & Eaker, 1998; Whitaker, 2012). One such method is the cultural change that occurs when the school begins to operate as a Professional Learning Community to significantly impact student learning. The purpose of this study is to investigate the practices and procedures of the Professional Learning Community as an educational reform movement which focuses on student learning and increasing achievement.

**Research Questions**

The following research questions will guide this qualitative study:

1. What characteristics of a Professional Learning Community influence student learning?
2. How can student achievement data best be utilized within the Professional Learning Community to impact student learning?

**Rationale for the Study**

With the emphasis on educational reform in the United States, educators are searching for professional development opportunities that will increase student learning and improve assessment achievement. Many professional development activities and teaching strategies have changed over the past decades, leaving educators feeling frustrated and in search of enrichment
that will last and continually improve student outcomes. The focus of a Professional Learning Community is not just on individual teacher’s instructional practices, but on a collaborative process that enhances learning of educators and students alike (Eaker, DuFour, & DeFour, 2002; Gable & Lee, 1997; Park, 2014).

The thought of being able to change the culture of a school and enhance relationships, while improving student learning, can be very appealing to educators. However, one would ascertain there must be certain procedures required to maintain the team’s focus on learning. Previous studies have been conducted to disclose perceptions of teachers involved in the Professional Learning Community process, to determine that these forms of collaboration are an effective means to improve achievement scores, and to review the importance of the administrator’s role in supporting Professional Learning Community development and continuation. However, little research has been conducted to investigate the elements of the Professional Learning Community, which enhance student learning, and how teachers can effectively use student achievement data to improve student learning. This research sought to determine if there are certain strategies and processes that the educators can follow to improve student learning and how collaborative team members can best use achievement data to impact student learning through the cultural shift of a Professional Learning Community.

The Researcher Positionality Statement

The researcher for this study has taught at the elementary level for 21 years, holds the degree of Ed. S. in School Leadership and Administration, and is currently serving as assistant principal in an elementary school that serves 636 students. In the early 2000s, the researcher was introduced to the concept of Professional Learning Clubs when the local school district began using strategies of Silver and Strong’s Thoughtful Classroom. Schools within the district began
to use the Professional Learning Club meetings to focus on learning styles and reaching each student in the manner in which he or she learned best. In 2015, the same school district embarked on a new educational reform movement by selecting Learning Leaders from each school who would receive intensive training about changing the culture through the Professional Learning Community research of Richard DuFour, Rebecca Dufour, Robert Eaker, and the Solution Tree professional development group. This form of collaboration and focus on data is something to which the researcher felt a natural connection. Successful strategies that educators could use as they met to enhance student learning were shared at monthly collaborative meetings and subsequently shared at local school meetings where an emphasis was placed on reviewing data to drive instruction and examining state standards for a deeper knowledge of each standard.

The role of the researcher was to ensure that the study, research, observation, and interview process was free from any bias. The researcher gathered and organized data to determine what a Professional Learning Community can do to ensure the primary focus remained on student learning. The research questions acted as a guide in this process.

**Limitations and Delimitations**

Because this study utilized observation of Professional Learning Community collaborative meetings, it is a limitation that, knowing they are being observed, participants will not carry out normal routines and processes and reflect a meeting that is superficial in practices. In a similar manner, there is a limitation in interviewing the participants because they could alter their responses to reflect what they know they should be doing during meetings and with data analysis instead of sharing their true practices. For these reasons, participants were encouraged to provide honest responses as their participation will remain anonymous in the reporting of data. A third limitation involved the collection of artifacts, due to the possibility that teachers may have
attempted to provide the samples of student work and assessments which demonstrate successful work, rather than the true work of all learners. This was addressed by requesting all work, both successful and those showing failures, be provided to validate the research. The delimitation of this study is indicted because the researcher is a trained Learning Leader for the Professional Learning Community implementation in the research district. For this reason, the researcher’s knowledge might distort what is actually observed or could influence interview responses. Thus, it was imperative that the researcher remain unbiased and accept all responses from the participants without assuming their intention or unspoken ideas.

**Definition of Key Terms**

The following terms are used throughout this grounded qualitative study dealing with the effective strategies for increasing student learning:

1. *Achievement* – Making gains in one’s endeavors or learning process (DuFour & Eaker, 1998).

2. *Collaboration* - A process when members of a team “work interdependently to achieve common goals” (Eaker et al., 2002).

3. *Collaborative Meeting* – A group of people sharing ideas and working together toward a mutual goal (U.S. Office of Personnel Management, 1997).

4. *Community of Practice* - A group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly (Wenger-Trayner & Wenger-Whayner, 2015).

5. *Culture* – Used in the context of “school culture;” how things are done in the school in order to fulfill the vision (Eaker et. al., 2002).
6. **Learning Leaders** – Also known as Teacher Leaders, these educators share the vision of the school, align professional goals with the goals of the school and district, and understand the responsibility for the success of the school belongs to each member. (Harrison & Killion, 2007).

7. **Norms** – Traditions or behavioral standards that govern how teams function as they meet (Duhigg, 2016).

8. **Professional Learning Community** - an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. (Mattos, 2016).

9. **Stakeholders** – The local community residents, including parents, students, central office staff, administrators, and other persons who have a vested interest in what takes place in the school (DuFour & Fullan, 2012).

**Organization of the Study**

This qualitative study is divided into five chapters. The first chapter introduces the study and provides the conceptual underpinnings of the study. This includes the theoretical and conceptual framework. In addition, it provides the purpose of the study and identifies the research questions, as well as defines key terms for understanding the topic. Limitations and delimitations are also presented. The second chapter provides a review of professional literature and previous research. It addresses the basis for Professional Learning Communities as educational reform and an improved technique of professional development for teachers. In addition, the influence of the theoretical framework of a community of practice, which led to collaborative meetings between educators, is detailed. Major contributors to the Professional Learning Community movement and elements of successful implementation are disclosed, as
well as challenges that may arise during the implementation process. Additionally, the second chapter details how other nations are using Professional Learning Communities as a means of educational reform and how the future of such collaborative meetings might impact the practice globally. The third chapter provides the research methodology and includes a description of the population, techniques, and research procedures that were utilized to perform the study. Also included is a description of data analysis. The fourth chapter provides the results of the study and data analysis. The fifth chapter describes the conclusions that were drawn based on the results of the study. Implications of the study are provided, as well as suggestions for further research.

Summary

As the United States educational system struggles to compete globally, administrators and teachers are searching for more rigorous professional development which will not only strengthen instructional strategies, but will improve relationships among all stakeholders in a mutual effort to increase student learning. One trend that has the potential of having a positive effect on school improvement is the cultural transition to a Professional Learning Community. This trend is research-based and has the potential of making positive alterations toward educational reform (Adams, 2012; DuFour & Fullan, 2013). It is a never-ending process in which educators seek to modify the culture of the school by committing to working together in a concerted effort of increasing student learning. The Professional Learning Community is gaining acknowledgement as an effective means of professional development for educators with a focus on student learning and teacher collaboration worldwide (Linder, Post, & Calabrese, 2012; Schmoker, 2005; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Educators involved in a Professional Learning Community have a strong sense of camaraderie with colleagues and connection to the school in which they work.
CHAPTER 2: LITERATURE REVIEW

Introduction

The purposes of this study were to determine what processes and procedures educators can follow during their Professional Learning Community collaborative meetings that lead to increased student learning and how members can best utilize achievement data to impact student learning. The origins of this concept lie in both the corporate and educational fields (Venema, 2007). Due the importance of understanding the historical background of Professional Learning Communities, this a scrutiny of professional literature addresses educational reform in America and how educators have tried to conquer this reform with professional development to improve instructional strategies. Due to the emphasis on improvement, several studies designed to change the culture of schools from teaching in isolation to instilling a community of practices were conducted. These studies used knowledge gained from the business world. The concept of teaching in a Professional Learning Community was examined, specifically examined the necessary elements of establishing an effective collaborative community and the potential challenges members might face while attempting to shift to a standards-based community of practice. Educators are constantly looking for valid and reliable forms of professional developments. Previous research indicates that the Professional Learning Community has demonstrated the ability to lead to achievement and growth in student learning (DuFour & Eaker, 1998; Linder, Post, & Calabrese, 2012; Schmoker, 2005; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Additionally, information detailed in this chapter discloses how other countries use learning communities to advance their educational systems. Because teachers are implementing this form of educational reform and professional development worldwide, this chapter concludes with an examination of how Professional Learning Communities are expected
to change in the future as more nations collaborate via technology through Connected Learning Communities.

**Overview of Educational Reform**

Education in America has been a major contributing factor to the success and growth of the nation. However, to advance and compete globally, the history of the American education system is filled with many reform movements. Soon after the launch of Sputnik in 1957, America recognized the need to improve the education of its own population. Due to this need, in 1965 Congress passed the Elementary and Secondary Education Act (ESEA) and the introduction of the first qualification tests soon followed (Minarechova, 2012). In April of 1983, President Ronald Reagan, along with the National Commission on Excellence in Education, presented a report to the public entitled *A Nation at Risk* to address the widespread public perception that the American education system was weak and ineffective. Among several proposals, it was recommended that a new focus be placed on content being taught and on high expectations to be held about regarding each child’s learning ability (NCEE, 1983). By the early 1990s, the federal focus shifted toward the theory of standards-based reform as the nation worked to align key state policies affecting teaching and learning, curriculum and materials, teacher training, and assessment to these standards. In 2001, George W. Bush’s NCLB initiative continued the focus on the standardized-test reform movement from the 1990s (Roberts, 2009). NCLB held schools accountable for student achievement and growth. The goal of NCLB was to create a fair and equal education for every student, so that each child had access to highly-qualified teachers and strong curriculum. NCLB also focused on groups of students who had underperformed in previous years, in an attempt to provide a more rigorous education for all. Most recently, in 2015, the ESSA was passed in another attempt to increase American
achievement scores. The goals of ESSA are to equalize education among all, with emphasis on the high-needs students, to promote college and career readiness through rigorous standards, and to enhance accountability and positive change (United States Department of Education, 2015). In 2017, America continues to face a growing concern for educational reform and an ongoing comparison against global educational systems, in which the American education system tends to rank at an intermediate position, ranking 14th out of 40 (Ranking American, 2015). This leaves educators seeking new methods to improve students’ academic achievement. To accomplish this goal, a strong trend is developing in changing the culture of the systemic ways of improving the success rate of schools in America.

**Professional Development**

One common method of improving the quality of instruction and promoting learning is to require teachers to annually obtain a certain amount professional development. Professional development typically refers to the learning opportunities in which teachers can learn new strategies for improving academic achievement (Rebora, 2011). The intent of such training is to increase the knowledge of educators in areas such as curriculum, activities, and technology, which can lead to refining student learning. NCLB (2002) required federally funded professional development to be more than a one-day, short-term workshop, which has typically proven to be ineffective to academic growth (Rebora, 2011; Roberts, 2009). This mandate left schools in search of new means of educating teachers to improve instruction methods. To reach this goal, administrators have attempted to provide new teachers with mentors in the building to guide and counsel the new teachers. Other school districts have hired instructional coaches to provide intense support for new teachers and grade-level support for veteran teachers. State and local educational departments have tried two and three-day workshops with intense instruction on
certain topics such as implementing standards, an increased focus on writing across the curriculum, and subject-specific topics like math tasks and English Language Arts strategies. However, a 2007 American Institute of Research review of over 1,000 professional development studies found less than 1% met rigorous federal standards (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Another study revealed that when professional development simply describes a skill, and teachers do not feel a connection to the content, then only 10% of the attendees will transfer that skill to their practice (Gulamhusseim, 2013). The reason behind the ineffectiveness of such professional development stems from the lack of support provided by this technique to teachers for the most critical stage of learning: implementation (Strauss, 2014). Since such a small amount of professional development has proven to be valid and reliable, administrators began looking for new strategies that would prove effective in increasing student learning.

A study provided by the Center for Public Education (2013) stated that for educators to effectively change their practices, professional development must occur slowly over time. In addition, the newly implemented strategies must be ongoing with long-term goals in place. Just as students need multiple opportunities to learn and master a skill, teachers must be allowed time to practice, reflect, and refine their practices. Standards-based reforms have prompted significant changes in the classroom, which is why educators began to seek other strategies that would prove effective in initiating change in education. Utilizing the business world as an example, administrators began to understand the importance of teachers working with other teachers to share and develop new strategies for reaching all types of learners within their classroom (Rebora, 2011). In the early 2000s, the trend of working together as “clubs,” “communities,” or “teams” became an acceptable form of professional development as it allowed teachers to collaborate with one another. As more research was performed concerning the topic of
collaboration, the validity for the practice became evident that if it worked to improve the success in the business world, then it was worth considering for professional development in the field of education.

**History of Collaboration in Schools**

Early education in America was either home-based or multi-ages and abilities instructed by a single teacher, known as a one-room schoolhouse. As school districts began to grow and the government began to collect data to establish more effective school systems in the late 1800s, educators began seeking new ways to improve their instruction and develop their professional strategies (LWVUS, 2011). However, this early data was not easily comparable at the federal level, as it differed from state to state. No two states used the same assessment and thus a baseline of knowledge was not equivalent.

It would take the nation over half a century to determine the necessity of implementing a common assessment for comparison of achievement data. National science assessments became a common practice after the launch of Sputnik in 1957 when the federal government realized the threat of being behind academically in comparison to other large nations. The first federally mandated assessments began in 1969, at which time school districts struggled to advance in scientific achievement (Grant, 2004). Soon after, educational reform with a focus on improving achievement became a political emphasis. Annual achievement tests provided by local or state governments have often been associated with school improvement plans, accountability of educators, and even funding (Minarchova, 2012). Administrators began to recognize the responsibility for enacting policies and ensuring scores increased annually, and professional development became a central means of improving instruction. Soon, new programs were introduced to teachers to solve this dilemma, but after decades of constant modifications and
introduction to a pendulum of changing strategies and curriculum, educators became frustrated and job satisfaction diminished (Ostovar-Nameghi & Sheikhahmadi, 2016). This predicament left educators searching for strategies and tools to reshape their school culture.

Based on the theoretical framework of the Situational Learning Theory, known as a community of practice, collaboration has been a growing trend in reshaping the culture of the educational setting over the last several decades. Communities of practice are created when people participate in a form of collective learning with a goal of improving their common practice as they interact (Wenger-Trayner & Wenger-Trayner, 2015). Traditional professional development as a means of school improvement had become mundane and lacked the ability to improve the quality of student learning, which left administrators seeking to find a means of changing the school culture (DuFour & Fullan, 2013). In 1982, Bruce Joyce and Beverly Showers introduced the concept of educator mentoring or peer coaching to enhance relationships and share best practices for school improvement (Showers & Joyce, 1996). However, only two people, the mentor and novice teacher, were involved in this strategy. Discovering the success of communities of practice in the business world, educators began to formally implement such strategies in their schools and school districts in the early 1900s (McLaughlin & Talbert, 2006; Rebora, 2011). In the mid-1990s, Lave and Wenger sought to further the benefits of collaboration when they introduced the concept of learning as a process, which is strengthened when educators work together to build a community of learners (Wenger-Trayner & Wenger-Trayner, 2015). They noted that shifting from teaching in isolation to working within a peer-driven community requires a change in culture and educator mindset. First, educators must realize they are united in a common goal, which is to educate youth. Thus, a joint effort to advance instruction unites the group. Next, the group must be led by someone who shares the
values of the group and works alongside the team to make advancements. For this reason, an administrator must reinforce the effort to support and direct the efforts of the group. Administrators can provide the funding and scheduling necessary to sustain the movement of the educational community. Finally, the support of the school district is imperative to the success of a shift in culture, such as the transformation to a collaborative community of practice (Eaker, DuFour, & DuFour, 2002; Mattos, et al., 2016). With the support of the district administrators, schools are better able to align their vision and goals so that the impact of the change in culture will be effective. Once these elements are established, the school culture can begin a collaborative process similar to the community of practice apparent in the business realm.

By shifting the paradigm of schools from teaching in isolation to a collaborative process that aligns the members through a community of practice, the school culture could begin to shift with a focus on collaboration. As this change in culture became more widely accepted as a means of reform, more research and development on the theory took place, which helped guide educators in transforming their school culture.

**The Introduction of Professional Learning Communities**

While the idea for collaboration in the school setting is not new, the term “Professional Learning Community” was not widely used until the end of the 20th century. According to All Things PLC (n.d), the following studies led to the enhanced understanding and development of the Professional Learning Community in the field of education. In 1989, Susan Rosenholtz studied 78 highly effective schools. These schools all operated with a community of collaboration as the basis for their learning environment. Further research was performed in 1993 by Judith Warren Little and Milbrey McLaughlin. This research found that the basis for effective schools was operating as a professional community in which educators shared common norms,
visions, and developed collegial relations, which allowed them to share in professional growth.
Based on their research, Little and McLaughlin shared with colleagues that school improvement begins when schools restructure their culture and operate as a Professional Learning Community. This led to more research on Professional Learning Communities and to the development of learning communities in schools nation-wide and globally. In 1995, the quantitative research of Fred Newmann and Gary Wehlage studied over 1,000 schools’ achievement scores, in which they noted that highly effective schools were found to be engaged in a collective effort to share the responsibility of student learning. They also noted that this was best accomplished when educators worked collaboratively. During that same year, a similar study by Sharon Kruse, Karen Seashore Louis, and Anthony Bryk examined 24 schools and reaffirmed that operating as a Professional Learning Community allowed schools to greatly impact achievement test scores. Eaker, et al., (2002) noted common strategies educators can use to attain the effectiveness of schools that were studied in previous research.

**Creating Effective Professional Learning Communities**

When a school or school district decides it is time to implement a research-based, culture change, such as a Professional Learning Community, it must be done with a commitment to school improvement (Eaker, et al., 2002). Administrators must realize that the form of professional development is more than a program implementation, rather it is a valuable cultural transformation (DuFour & Fullan, 2013). There is no recipe for instant success, and it must be realized that such a transformation is a journey that could take multiple years to reach an effective transition as administrators seek acceptance from all stakeholders. When a school desires to function as a Professional Learning Community, its staff and stakeholders must contend with the questions that provide direction for the school as an organization and for the
individual entities: teachers, students, parents, and community (Eaker, et al., 2002, p. 3). For this reason, creation of effective Professional Learning Communities requires support and leadership from the administrator and teacher leaders.

The Role of the Administrator

Administrators can be viewed as catalysts for changing the culture of the school and often initiate the creation of a Professional Learning Community. This change may come as new leadership is presented or achievement scores require attention and change is therefore inevitable. Administrators must challenge teachers to understand their roles in the school. Typically, teachers are accustomed to being responsible for their own classrooms, as they are held accountable for their students’ achievement scores. Recently, however, educators may accept the scores of school-wide growth, which enables the teachers to understand that students are the collective responsibility of all teachers (DuFour & Fullan, 2013; Hughes, 2006). Once teachers understand this mindset, the administrator can empower teachers as leaders to assist in developing smaller collaborative teams of teachers of like grade or subject. This camaraderie is often led by fellow educators, known as Learning Leaders. Administrators may work closely with Learning Leaders to support the efforts of sharing instructional resources and classroom support. The teacher leaders assume a wide range of supportive roles to assist the school’s capacity to improve achievement (Harrison & Killion, 2007). These leaders are often valued for their knowledge because colleagues relate better to one another. Accordingly, they may be used as catalysts for change. Thus, administrators often use Learning Leaders to assist in shaping the culture of the school, improving staff and student learning, and influencing peers. This form of shared leadership allows administrators to empower teachers who can build stronger relationships more effectively with their peers (Weber, 2011). These relationships enable
teachers to maximize their professional development as they spend time collaborating (Vescio, Ross, & Adams, 2006).

Once the Professional Learning Community is established, administrators can add to the overall effectiveness of collaborative meetings by providing support (DuFour & Fullan, 2013; Whitaker, 2012). Such support can come in many forms. Support is given when teachers are allowed a common planning time in which they meet without staying additional hours after school. If additional time is required, the administrator might provide compensation for their collaborative effort. Being available for questions and input is yet another area in which administrators can provide support. This can be accomplished by attending collaborative meetings regularly. Finally, the administrator and Learning Leaders are responsible for encouraging the educators as they embark on the cultural change and implement the elements of the Professional Learning Community.

**Elements of a Professional Learning Community**

Although there is no primary standard that guides the operation of all Professional Learning Communities operate, many implement similar elements, which make the collaborative team meetings differ from other forms of educational clubs or teams. These elements include sharing a mission, vision, and set of curricular goals for the school’s purpose; members collaborating to improve instruction and relationships; shifting the school’s focus from teaching to learning; and a continuous monitoring of student achievement data (Al-Taneiji, 2009; DuFour & Eaker, 1998; Nelson, LeBard, & Waters, 2010; Park, 2014; Provini, 2012; Riveros, Newton, & Burgess, 2012). Other essential elements recommended by DuFour and Eaker (1998) include using data from common assessments, following group norms, and creating a collective sense of educating students.
United Through a Mission, Vision, and Set of Goals

It is difficult to imagine a school without a purpose. The mission of the school is the foundation on which the decisions and functions of the school are made. A mission statement is important because it explains why the school exists and the resolve of education in students’ lives (DuFour & Eaker, 1998; Mattos, DuFour, DuFour, Eaker, & Many, 2016). The mission statement is now considered to be of utmost importance, to the degree that many states now require a mission statement as one component of a school’s improvement plan to serve as a guide for educators. The concept of leading students to academic success is found in the mission statements of most schools. The individuality of the statement derives from a deeper focus on how the school faculty will respond when students do not learn. With federal mandates, such as NCLB, stating that parents have the option to send their students to other schools if the school in attendance is deemed a “failing” school, more educators became attentive to how to help students who were not making adequate gains (Great Schools, 2016). However, the mission is not effective if it is limited to words written on a plaque in the office of the school or a page in the school improvement plan. It must capture something that people can use in every aspect of accomplishing their daily duties (Lunenburg, 2010). The mission statement can involve such aspects as how to ensure students are learning, how members organize and cooperate, how they will incorporate technology, and how learners will apply their knowledge to aspects of life outside of school. These deeper levels of questions can guide a Professional Learning Community to create a mission statement that truly identifies their purpose and drives their decisions.

The vision of the school is often confused with the school’s mission statement. Since the mission statement is established to communicate the purpose of the school, the vision statement
elaborates on what type of individuals the school hopes students will become (Lunenburg, 2010; Mattos, et al., 2016). Most schools develop a vision statement to share what they aspire to become in the future, including the hopes and dreams for faculty and students’ lives. The vision then becomes the manner in which the school articulates the potential of the students and educators as they use various strategies and curriculum. The goal of the Professional Learning Community is to offer a powerful infrastructure within the school where teachers and administrators can unite in their vision of improving instruction and enhancing student learning (Pirtle & Tobia, 2014). The vision can state that the school aspires for all students to become life-long learners, what students are expected to learn, and how teachers will know that learning is constantly taking place. (Eaker, DuFour, & DuFour, 2002). It is vital for the vision to be credible and useful. To be most effective, the vision statement should be researched-based and focus on the essential elements that lead to student learning. The faculty and staff unite in following the vision and mission of the school, which drives the school environment to be one focused on learning and achievement of all. A vision for the school that operates as a Professional Learning Community must be connected through creating value statements and goals, which involve all stakeholders and help the school organize and connect (Lunenburg, 2010; Wald & Catleberry, 2000).

To achieve the school’s vision, attainable goals are established and become the motivation for daily procedures (Lunenburg, 2010; Mattos, et al., 2016). Goals are the achievement results the Professional Learning Community intends to attain. A collaborative team without stated goals lacks purpose, urgency, and a sense of direction (Weber, 2011). Long-term goals are established to avoid frustration due to short-term failures. For this reason, both the vision and goals focus on the idea that all students can learn and how to respond when learning is
not taking place. High expectations should be implemented to guarantee that each child exhibits growth over the course of a year. When creating the goals, it is imperative for a school seeking to improve to use the standards and learning targets established by higher levels of education sanctions, such as the district and state level (Lunenburg, 2010). Because goals are a means of encouraging educators and students to perform at their highest levels, they are to be shared and understood by both faculty and students. For this reason, goals established by a Professional Learning Community must be followed with a commitment to improve.

The school’s mission, vision, and goals for the learning community should be written and shared with all stakeholders so that each member can take ownership and cooperate with each other in an attempt to advance the learning culture of the school (DuFour & Eaker, 1998; Lunenburg, 2010). Every decision in the school then utilizes the mission, vision, and goals as a means to guide the school’s endeavors. The administrator, along with other stakeholders, can then use these statements to create policies and processes that enable the school to progress toward the vision (Eaker et al., 2002; Lunenburg, 2010). The collaborative teams can subsequently use these statements to establish their own goals which they wish to attain for their grade level or subject area. Eventually, these statements become the basis for every decision the collaborative teams make, as they are student-centered and focused on improving learning.

Collaborative Meetings

Teaching is a complex process in which educators often crave meaningful conversations so they can share ideas and concerns. However, the structural, cultural, and historical characteristics in place have often impeded this process for educators (Sutton & Shouse, 2016). Since the purpose of most Professional Learning Communities is improving student learning and achievement, much of what has been emphasized in current approaches to this process is the shift
from individual approaches to teaching to collaborative or community-oriented approaches with a focus on student learning (Gable & Manning, 1997; Riveros, Newton, & Burgess, 2012; Vescio et al., 2008). Members of learning communities reach this goal by collaborating with one another, reflecting on best practices, monitoring data to assess student achievement, and revising instructional methods as needed. Teaching is complex and many educators realize the benefits of having another teacher with whom to share ideas and make sense of complex standards (Sutton & Shouse, 2016). Collaboration is essential because learning happens when two or more creative individuals combine their potential ideas and correlate their best practices (Erickson, 2013). In this sense, teachers work together to manage, monitor, and advance student learning.

Accomplished educators also involve the parents and community through collaborative efforts to engage them productively in the learning process (DuFour & Eaker, 1998; Vescio et al., 2008). The administrator is another vital asset in this process because the administrator determines the vision and is responsible for ensuring that goals are met. Thus, the involvement of all stakeholders ensures advancements in learning.

Collaborative team meetings are an essential component of a Professional Learning Community. These meetings are more than just teachers conversing or gathering to make lesson plans together. It is important to note that when a group of teachers meet to share resources and strategies, compare student learning for the sake of improving instruction, and develop standards-based common formative assessments, they are working as a collaborative team (DuFour & Fullan, 2013; U.S. Office of Personnel Management, 1997; Weber, 2011). Team members must develop a level of trust to be comfortable admitting weaknesses and asking for assistance in improving their own instructional strategies. Collaboration can mean members must become vulnerable in sharing data that shows a lack of student success in an effort to grow
professionally. The Professional Learning Community process is a method of professional development which many teachers have never experienced because it involves building relationships as well as learning new strategies.

It is important to note that collaboration does not just occur in collaborative meetings. In a true Professional Learning Community, collaboration is the ongoing dialogue between educators, students, and all stakeholders who are invested in the school (Mattos, et al., 2016; McClure, 2008). This collaboration consists of teachers asking for help on an assignment which originally had poor outcomes, as well as administrators and Learning Leaders coaching teachers on strategies to introduce a difficult standard. Collaboration may involve topics of behavior, assessments, strategies, and even celebrations. It is an intentional look at which students are learning and which are not, in addition to what is causing those students to not grasp the skill or concept. Likewise, collaboration may include teachers observing one another, mentoring, and establishing a focus on standards-based instruction (Ostovar-Nameghi & Sheikahmadi, 2016; Vescio et al., 2008). It is continual communication with intent to share knowledge and gain an understanding on student learning. Collaboration cannot be taught or modeled through a seminar, but it can be cultivated as two or more professionals assist each other to improve their educational outcomes.

Professional collaboration has many advantages over traditional methods of professional development. Based on their study of the role of collaboration in schools, Gable and Manning (1997) found that teachers need many accommodations to implement effective collaborative meetings. First, they must have a common planning so they can set goals and develop ownership of the instructional process. As the word implies, collaboration allows members to learn from one another and develop relationships of trust and respect. When teachers work together, they are
able to bring about necessary changes in the improvement of the school and the advancement of achievement.

School leaders who foster collaboration among novice and veteran teachers have found that teacher retention and job satisfaction rates improve as norms are created and sustained (McClure, 2008). According to a 1998 study conducted by the United States Department of Education, collaboration is a characteristic of a highly effective school. Collaboration is named a key component of communication as it builds respect and creates a sense of community within the school. Working collaboratively is also necessary in professional development as teachers share best practices and strategies that have worked within their own classrooms to engage students and promote learning.

A Shift from Teaching to Learning

A Professional Learning Community also differs from traditional professional development in that the focus of the learning community is continual embedded learning for all stakeholders. Professional Learning Communities enable educators to frequently learn from one another through the shared vision and planning, as well as focus on what does and does not work in the education of the youth within the school (Provini, 2012; Vescio et al., 2008). The primary goal of a learning community is a focus on, and a commitment to, improving learning of both students and educators (Eaker et. al., 2002). Since the focus is on learning, this allows teachers to realize the role they play in the educational experience of each child in the school at any given moment, not just the students in their own classroom. This differs from the culture of traditional schools that place the focus only on the instruction of those students within the classroom of each teacher.
As the school culture shifts to a Professional Learning Community, there is also a shift in the classroom from teaching to learning. This means the structured focus is on the result of the instruction, not the instruction itself (Jessie, 2007; Mattos, et al., 2016). Numerous studies have shown that a school that operates within the model of a Professional Learning Community typically experiences growth based on common assessments (Al-Taneiji, 2009; DuFour & Eaker, 1998; Hughes, 2006; Riveros et al., 2012). In fact, in one study of a matrix of 13 Professional Learning Community research projects, nine out of the 13 (69%) studies rendered a statistical significance in the relationship between the implementation of learning communities and student achievement (Wiseman & Arroyo, 2011). This provides evidence that strategic collaboration enhances learning when it is the focus of all members of the Professional Learning Community.

Eaker and DuFour (2002) recommended that collaborative teams use four critical questions to guide their discussion and ensure a focus on student learning. The first question is part of planning a lesson, and it asks what students are expected to learn. Basing instruction on standards using research-based strategies guides the team in making sure the lesson is effective. The second question is determined through the assessment of the skill and allows the teachers to reflect on how they will know when the learning has occurred. In other words, have students grasped the concept of the skill? As intervention and instructional differentiation are key elements in improving student outcomes, the third question considers what teachers can do to help those that did not learn. The final question is one that is most overlooked, but vital in improving the learning of all students. It focuses on what enrichment activities are provided for the students who have already mastered the skill while others are continuing to learn. It allows teachers to provide opportunities for those students to continue to enhance the skill without the boring repetition of drill and practice activities. When collaborative teams use these critical
questions to aid in planning, they will be able to guarantee that differentiation of instruction is providing optimal learning for each student.

The Professional Learning Community is not solely focused on student learning. As it is a form of professional development, the focus is divided between the student and the educator. Educator learning is an integral part of this process. For teachers as learners, the foundation of knowledge rests on creating an effective learning environment for the students (McLaughlin & Talbert, 2006). Professional knowledge is gained as teachers learn about learning styles, assessment strategies, and monitoring the progress of student achievement (Mattos, et al., 2016). One of the benefits of Professional learning communities is that teachers are able to share new strategies and learn from one another. Thus, when one teacher learns a new concept or skill, the entire collaborative team can soon implement it in their own classrooms. In this way, knowledge is communal and benefits both teachers and students in many classrooms.

**Monitoring Student Achievement**

With a focus on learning, it is pertinent that educators working in a Professional Learning Community know what research-based techniques are proven to enhance achievement. According to Nichols (2008), there are many strategies that teachers can implement to promote a learning atmosphere. Among these are monitoring the progress of students along the course of the year. When teachers monitor student performance, they adjust their instruction and provide feedback to the student so that the student feels empowered to succeed. Within the collaborative team meetings, data gathered from student progress monitoring can be shared and team members can reflect on whole-class progress, as well as individual student progress. This information then drives the future instruction. According to the United States Department of Education (1998), when educators realize that all students can learn, and at-risk students must be exposed to
accelerated instruction and not just remediation, then the school will be highly effective. A review of research on the topic of correlation between student learning and other impacts of Professional Learning Communities was conducted in 2006 by Vescio, Ross, and Adams. After reviewing eight studies, it was determined that each of these studies provided evidence that student achievement had improved when teachers were involved in effective collaborative meetings. In order to continually monitor achievement, Eaker and DuFour (1998) recommended that teachers keep four questions in mind as they review data from all students. The first question is used in planning and is predicated upon the notion of what students need to learn. This may be driven by state standards or school curriculum. The second question is used during the data collection process, and asks how teachers know that learning has taken place. The third question is an intervention component and has teachers inquiring about what will happen next for those students who have not learned during the lesson. The final question is one of enriching the curriculum and asks what to do with those students who have mastered the skill. When teachers rely on these four critical questions when reflecting on lessons and utilizing data, then they keep students at the center of their focus. When they share these outcomes and coach peers in improving instructional strategies, then they are working as members of a collaborative team.

Data can be collected and shared from formal and informal assessments during the collaborative team meetings. Likewise, portfolios from a selection of students can be reviewed to monitor progress. By keeping a sample from at-risk, on grade-level, and low risk students, teachers can gain better insights to the advancements of the group (Pirtle, 2014). Individual growth can also be tracked through valid and reliable progress monitoring programs.

When monitoring student achievement, a strategic step that successful Professional Learning Communities’ collaborative teams make is to focus on what happens when students are
not making gains (Eaker & DuFour, 1998; Pirtle, 2014). By addressing instructional challenges, teachers collaborate on the educational practices that work and those that do not. Likewise, they adjust their instruction and manage their time precisely for effective learning to take place. Collaboration allows teams to select evidence-based instructional strategies so that standards can be taught and lesson plans can be shared to incorporate these selected strategies (United States Department of Education, 1998; Provini, 2012). In this manner, teachers coach one another and improve the learning outcomes of all students.

**Common Assessments**

Data collection is an essential component of driving instruction; however, the data must also be meaningful to the teachers. One way to accomplish the goal is for teachers of the same grade and subject to use common assessments based on state standards (DuFour and Eaker, 1998). Reeves (2001) named common formative assessments as one of the best-practices for assessing student learning, naming them the “gold standard in educational accountability” (p.114). Unlike homework and assessments that are only meant to provide feedback to the student, common formative assessments allow teachers to compare and evaluate instructional strategies to determine effectiveness (Mattos et al., 2016). Team members can create these assessments to be formal or informal measures of student learning. The important advantage is for teams to be able to identify which students need intervention and which students are ready for enrichment. The common assessments provide the opportunity to differentiate instruction and provide specific learning targets for all students. In addition, common assessments allow teachers to develop essential learning outcomes for which students must be able to master (DuFour & Eaker, 1998; Weber, 2011). Furthermore, they promote an overall consistency between classrooms in the same grade and subject (Reeves, 2001). This consistency allows for assessment
of the standards-based skills and information that students should gain at the completion of a course of study (Swann, 2010; Weber, 2011). Without stating these outcomes, the curriculum is at risk for becoming disjointed. For the collaborative team, creating such outcomes may take a considerable amount of time, trust, and debate, but when the group reaches a consensus, the effect these outcomes have on student learning will be the reward. Nevertheless, when these are aligned with the mission, vision, and goals of the school, then the teachers will be empowered to make decisions on instructional practices that will positively impact student learning.

Implementing Norms

There are many procedures that collaborative teams can incorporate to better utilize their time and attention, such as implementing team norms and adhering to an agenda. Team norms have been noted to be the foundation of an effective Professional Learning Community’s collaborative team (McLaughlin & Talbert, 2006; Weber, 2011). While not all research will support the idea of collaborative teams using agendas to keep the meeting progressing, many agree that utilizing norms promotes effective management of time (Mattos et al., 2016; Nelson, LeBard, & Waters, 2010). Norms are the commitments to follow procedures that will advance the agenda and eliminate the potential means of slowing progress. Collaborative teams create norms to address their specific problems, and for that reason there is not a set of norms that works for all teams. Some norms might include statements about punctuality, communication, participation, and expectations (Lujan & Day, 2010; Mattos et al., 2016). It is the intention of norms to focus on the behaviors that promote collaboration so that members attend to the purpose, which is student learning. Just as the team has individual norms, it must also develop a means for handling violations of those norms so that time is not lost. This may be accomplished
with the guidance of the administrator or Learning Leader. Norms may need to be reviewed prior to each meeting until they are well known and followed.

**A Collective Responsibility**

Most teachers develop a sense of responsibility for the students within their classrooms. These are the students for whom they are accountable on state assessments. However, one study of successful school systems found that when a collaborative environment embraced a collective responsibility for the achievement of all students, school improvement was impacted greatly (Mourshed, Chijioke, & Barber, 2010). According to *UK Essays* (2015), a collective responsibility means shared accountability. In the education profession, this means all members of the school, including administration, accept the responsibility for student achievement or the lack thereof. In simple form, this means that a 5th grade student is not just the responsibility of the 5th grade teacher or even team of teachers. This can be seen when a school must measure the growth of achievement from a limited number of grades in that school. When teachers understand that knowledge is built through spiraling and upon the foundations established in younger grades, then this achievement measure is better understood and accepted. For that reason, teachers in every grade and every subject matter develop an understanding of their role in each student’s educational process. This mindset can open the way for more sharing of tools, assistants, and materials to promote student learning at all levels.

**Challenges of Professional Learning Communities**

Research has shown that implementing a Professional Learning Community as a form of professional development can be a positive means of school improvement. However, just because a school labels itself as a Professional Learning Community, this does not mean that it will be effective in making the cultural shift. Fullan (2006) noted that it takes an elementary
school between three and four years to successfully implement a change in school culture. Older grades such as high school can take up to six years of continual momentum to see that same change. Thus, it is important to note that transformation will not happen in a year, and all members must stay committed and focused on the vision.

A concern for many administrators is getting teachers out of the routine of teaching in solitude and willing to work with one another. Educators frequently struggle with the idea of sharing resources, teamwork, and collaboration because it is not commonly practiced (Weber, 2011). The desire to teach in isolation can be a psychological state in which teachers feel safe within the confines of their own classroom (Flinder, 1988; Lujan & Day, 2010). In this sense, the teacher feels secure in isolation and resists interaction with others. Demanding teachers to collaborate will not remedy this feeling of anxiety within teachers. Administrators can help alleviate this phobia by providing opportunities for team teaching and use of instructional assistants in the classroom. Providing teachers of the same grade or subject with a common planning time will encourage teachers to work together in a more comfortable manner (Ostovar-Nameghi, Seyyed, & Sheikhahmadi, 2016). In addition, providing reclusive teachers with the opportunity to coach novice teachers will also allow them the opportunity to share their knowledge in a less judgmental environment. Dr. DuFour (2011) advised that educators will work together collaboratively when they are ready, and must not be forced into doing so. However, modeling and supporting teachers in the process are one way that administrators and Learning Leaders can assist in the process.

Another common challenge of Professional Learning Communities is the unwillingness for members to share. Often, teachers are afraid of comparison of students and teaching styles (Ostovar-Nameghe et al., 2016). They feel their peers are judgmental and this can make
collaboration threatening. This also allows administrators to utilize Learning Leaders, peers who can model and coach respective dialogue within the groups. Norms can also be established, which address communication and allow teachers to become vulnerable in sharing information with respect and the knowledge that what is spoken in the collaborative meeting will not be shared outside of the group (Weber, 2011). Once teachers are cooperative in their groups, new techniques for instruction and learning can be shared.

Once collaboration has begun, there is still a potential for challenges because no two people are always in total agreement. When there is a team of three or more, controversy is inevitable on some topics. One way to overcome this challenge is to establish a set of norms to which the members of the meeting adhere (Mattos et al., 2016). Protocols can also be used to maintain a constant structure for meetings. When protocols and norms are used, collaboration can be more productive because members have agreed upon expectations which are followed.

Time is an essential component of the Professional Learning Community process. If teachers are not provided with adequate amounts of time to meet, collaboration cannot happen. Strategic scheduling allows for time to collaborate and is the responsibility of the administrator (DuFour & Eaker, 1998; Lujan & Day, 2010). To be effective, collaborative teams need to meet weekly to share data, discuss the four critical questions about student learning, and coach teachers on new strategies that have been found to be successful in other classrooms. However, it is important to also note that not all collaborations require formal meetings. When two teachers converse about student learning and share best practices, collaboration is occurring. Still, for those formal Professional Learning Community team meetings, if time is not available in the daily schedule for a common planning time in which teachers can meet, then administrators become creative in scheduling so that teachers have the necessary time to effectively collaborate.
(Mattos et al., 2016). Some districts may allow early dismissal for students to allocate time for teachers to collaborate. Others may provide compensation time for after school meetings. No matter what solution is found, it should be supported by the administrator and decided upon by the teachers so they continue to feel valued in the process.

Another common challenge is revealed when new teachers join the staff. This problem can arise when the new teacher does not feel welcome or is unsure of the procedures. Veteran team members might also feel threatened by the new member or feel frustration for having to review past agendas and norms (Lujan & Day, 2010). This is the time for coaching and guidance from the administrator or a Learning Leader who can promote continual collaboration and introduce the new teacher to the process. Relationships can be strengthened if a team member can become a mentor for this new teacher both in and out of the classroom (Whitaker, 2012). Team members should be asked to model proper behaviors in sharing data and share expectations in a positive manner so the team continues to be effective in improving student learning.

Finally, one of the more significant challenges faced by any school which undertakes a change in culture is how to work with those who do not embrace the change. Eaker, DuFour, and DuFour (2002) revealed that it is not necessary to have 100% approval for the cultural shift from all teachers in the school. There is a need for a consensus, but unanimity may not occur. The goal is for the administrator and Learning Leaders to provide the support and guidance, which will allow teachers to eventually accept the culture of collaboration. It is important for teams with members who are non-compliant to continue to follow their agenda and use the norms to establish routines and processes so that all members become comfortable with sharing the vision to drive instruction.
A qualitative research study by Lujan and Day (2010) discovered that although teams will face challenges, it is vital that the members persevere and move forward. These challenges may include getting teachers out of routine, isolated practices, or encouraging teachers who resist change to see the value in the transformation. Other stressful encounters which interfere with the successful implementation of collaborative meetings might be scheduling time to meet collaboratively or introducing new teachers to the faculty who might be unfamiliar with the processes and practices of established teams. By addressing the challenges as they arise, teams can grow and become effective.

Benefits of Professional Learning Communities

When strategically implemented, shifting one’s school culture to a Professional Learning Community has proven effective as a means of school reform (DuFour & Eaker, 1998; DuFour & Fullan, 2013; Gable & Manning, 1997; Hughes, 2006; Riveros, et al., 2012). Gable and Manning (1997) found that professional collaboration has a distinct advantage over conventional approaches to reform because teachers to share goals and gain a sense of ownership of the instructional process because they feel responsible for ensuring positive learning outcomes for all students. Other benefits of this collaborative culture include increased educator relationships and relationships with other stakeholders, an improved impact of professional development, and a positive effect on student learning, attendance, and motivation, which leads to increased achievement scores.

Due to the focus on collaboration and the commitment to building relationships, it is no surprise that effective Professional Learning Communities have a direct impact on educator relationships. A survey study of teachers involved in collaborative relationships noted strong evidence that members of team-based cultures felt more involved in their school-related
activities and decisions, which led to increased teacher involvement (Supovitz, 2002). Through participation in transforming the school culture, teachers have learned effective strategies for implementing a Professional Learning Community with success (Sutton & Shouse, 2016). In addition, schools that have effectively implemented learning communities have noted an increase in trust and respect as teachers collaborate and encourage one another in their efforts to improve student learning (Al-Taneiji, 2009; DuFour & Eaker, 1998). This in turn becomes a model of positive relationships for students, who grow both academically and in maturity in their own collaborative relationships.

The change in culture which allows for maximum collaboration means that stakeholders outside of the immediate school staff are also involved in decisions. Thus, relationships and accountability are strengthened (DuFour & Fullan, 2013). Recent studies show that building a Professional Learning Community allows for a group of people to unite through a common vision and reflect cooperatively on the established goals (Al-Taneiji, 2009; Fulton, 2003; Graves, 1992). This ability for a group of stakeholders to reflect on learning outcomes and respectfully share one another’s perspectives toward the educational vision of the school allows for continued growth and support.

Because participation in a Professional Learning Community is a research-based form of professional development, when teachers share new strategies and techniques with colleagues during the collaborative meetings, multiple teachers can implement these in their classrooms (Al-Taneiji, 2009; Ostovar-Nameghi & Sheikahmadi, 2016; Supovitz, 2002). This collaborative way of learning new techniques of teaching is more effective because teachers can reflect on the new practices and improve to become more effective. The emphasis on continued learning enables teachers to reach high-level of performance, reflect on new practices, and share these
with colleagues to further fine-tune the strategies to optimize student learning. In addition, when teachers inform others about new teaching methods, they tend to deepen their own understanding and can make more meaningful and accountable implementations of new strategies and skills (Sutton & Shouse, 2016). Thus, cooperation is the catalyst for teachers’ continued learning.

Professional Learning Communities have been studied to determine how they impact students within the school. One study of a large urban Midwest school district found a positive correlation between teacher collaboration and achievement in both mathematics and reading (McClure, 2008). Another study in a Pacific Northwest high school found that educators were turning to Professional Learning Communities to stem decreased enrollment, to lessen a given achievement gap, and to provide support for the lack of student motivation in required coursework (Sutton & Shouse, 2016). Through data collection, routine collaborative meetings, and coaching teachers, the members have redesigned curriculum and improved student outcomes. A 2008 study by the United States Department of Education indicated that teacher collaboration had a direct and positive impact in improving achievement in 35 schools deemed chronically low-performing when implemented over a three-year period. Research of 452 teachers involved in the collaborative process found a positive relationship between implementing effective collaboration techniques and improved mathematics and reading achievement scores of over 2,500 4th grade students (Goddard, Goddard, & Tashannen-Moran, 2007). Therefore, the research is available to support the use of Professional Learning Communities to positively impact student learning and achievement.

A Worldwide Approach to Educational Reform

Just as American schools are turning to Professional Learning Communities to improve student learning, other nations have been finding similar success with this trend. Although each
country approaches the processes differently, the idea of professional collaboration is a global success. In some countries, such as Finland, Singapore, and parts of Canada, professional collaboration is not only a means of professional development, it is mandatory for teachers to participate (Harris, 2013). These nations have noted that collaboration is necessary for educational reform to be effective. In 2000, the United Arab Emirates’ educational system embarked on a reform movement known as Vision 2020 (Al-Taneija, 2009). The current vision of this national movement focuses on employing new instructional pedagogies, which include standardizing curriculum and developing Professional Learning Communities to develop cultures within the system that place an emphasis on continuous learning for students and educators. The focus of these cultures is to support teacher development, build trust and relationships, and respect differences as they work together. The Department of Education for Alberta Canada has endorsed a recommendation which requires every school to operate as a Professional Learning Community dedicated to continuous improvement in achievement for its students (Venema, 2007). It has noted that when teachers work in this type of learning environment, they feel empowered in the school improvement process. Likewise, the United Arab Emirates (UAE) has mandated schools to implement this cultural shift with a focus on learning. Similar to the American Professional Learning Communities, the UAE Professional Learning Communities focus on five attributes to be successful. These include a supportive and shared leadership between administrators and teacher leaders, a set of shared values that enables teachers to work together, and a collective learning and application process. This allows teachers to share knowledge and instructional practices. Another attribute practiced by these collaborative teams include sharing feedback and observing fellow teachers to improve one’s own instructional practice. Finally, these teachers work to improve relationships by creating a sense of trust,
respect, and support within their groups. The study of these Professional Learning Communities by Shaikah Al-Taneiji (2009) found that teachers affirmed that when the support and time for collaboration was provided by the administrator, then teachers could carry out the other four attributes much easier. Thus, principals have proven to be a vital member of the Professional Learning Community creation in the United Arab Emirates (Leithwood & Riehl, 2003; Youngs, 2002).

Japan is a worldwide leader in educational achievement (Venema, 2007). The implementation of Professional Learning Communities is not new to Japan’s educational system. This collaborative process incorporates goal-congruence and a deep understanding of core concepts and implementations. In addition, the development of an organizational vision and clear accountability for learning, as well as teaching, helps to guide educators. This is further impacted by data collection, which is used to track the learning progress of students so that intervention and enrichment curriculum can be provided. Because of the success of this culture of collaboration in primary and secondary schools, Japan’s tertiary-level schools are now researching the implementation of similar processes to improve their student learning outcomes.

In other countries, such as Russia, Australia, and Malaysia, educators are using professional collaboration as a means of improving teacher quality and maintaining high standards, but this collaboration is not nationally mandated (Harris, 2013). Park and So (2014) found that implementing Professional Learning Communities in South Korea led to support and growth with colleagues. In addition, educators increased their ability to self-reflect on their lessons to improve student outcomes. As teachers collaborated, they established higher goals for student learning. Teachers in South Korea have discovered that by working collaboratively, they not only improve their professional knowledge, but the process also has effects on student work.
England and Finland are two other nations where public policy has strongly encouraged the implementation of Professional Learning Communities as an effective means of professional development. A qualitative study using semi-structured interviews of elementary teachers in these countries found four common themes from successfully implemented learning communities (Webb, Vulliamy, Sarja, Hamalainen, & Poikonen, 2009). The first of these themes is establishing a community environment. This differs from a traditional school setting in that the community relies on relationships built between educators, students, and families to improve the success of the learning environment. The community is strengthened when members are involved in decision making and share goals for the school. The second theme is one found to be essential in any Professional Learning Community, and that is collaboration. The interviews showed that collaboration is essential and feedback must be provided in a non-threatening manner so that teachers are comfortable to discuss freely. The third theme relies on continued professional learning. Teachers must not settle on teaching routines. Instead, it is important for them to improve their professional knowledge and return to their learning community to share new strategies and increase achievement. The final theme found in this study was a need to establish trust and accountability. Trust comes through building relationships within the community. Accountability has a multifaceted meaning. Teachers must be accountable to each member of the community, sharing and coaching to help the community advance. In addition, teachers are accountable for their students’ achievement. The study concluded that Professional Learning Communities in England and Finland are worth the investment because they have great potential in contributing to both teacher well-being and student learning.

Educators worldwide involved in Professional Learning Communities have determined that implementing these changes to the school culture has become a cornerstone for reform
(Fullan, 2000; McLaughlin & Talbert, 2006; Park & So, 2014). While there is no primary set of standards that each Professional Learning Community follows to ensure success, there are many common characteristics that distinguish Professional Learning Communities apart from other professional development models. Teachers improve their own professional knowledge when they share practices and participate in reflective dialogue (Fullan, 2000). Many studies report that sharing student data and using this data to improve instruction will also improve student learning (Al-Taneiji, 2009; Borko, 2004, Park & So, 2014).

**The Future of Professional Learning Communities**

Education continues to be a perpetual profession that is based on continued learning for educators so they can better instruct their students (Spirrison, 2016). According to the United States Department of Education (2014), high-quality professional learning is directly linked to the achievement of students. Because the Professional Learning Community is not just an American response to intervention, but rather a global source of reform and professional development, the future of these collaborative meetings will be technology-based. The internet has become a communication tool that has transformed education and allowed for instant interaction (Spirrison, 2016). Educators are joining this global web to self-organize through social networks where they share knowledge and resources with peers around the world. In a sense, today’s educators are the pioneers in a global Professional Learning Community. New digital components such as apps, the ability to share educational resources, and video-conferencing make connecting with other teachers a virtual reality. Collaboration is easy as teachers can conference through live-video meetings to discuss strategies that have worked, those that have failed, and ways to improve instruction with others in the same grade or subject taught. Posting written conversations through blogs and video techniques via sites such as You
Tube and TED Talks is another way teachers can gain valuable information and collaborate with global peers. These continuous learning platforms have little limit as to what is accessible from educators and available for learning tools.

The United States Department of Education (2014) recommended Connected Learning Communities, which take place through a variety of online platforms and avenues, as a means of nationwide, and even global, collaboration and provides guidelines for successful implementation. Like school-based Professional Learning Communities, administrators play a vital role in the success of implementing formal Connected Learning Communities. Support can be provided by making teachers aware of the opportunities and rewarding successes that come from implementing strategies learned through this venue. In addition, time can be provided for teachers to participate in online learning communities and to then share what was learned in school-based collaborative meetings. Also, technology can be enhanced to enable teachers to connect globally. This could mean acquiring stronger bandwidth, cameras for video conferencing, and access to software which allows this form of collaboration. Finally, the administrator is vital in blending the two worlds of collaboration: face-to-face and online. When the administrator realizes the value, it can be incorporated in the vision of the school. Educators can be empowered to lead each side of the initiative, further enhancing their leadership skills. By aligning professional learning strategies with standards and research-based standards, educators impact student learning in a positive way.

**Summary**

For many years, the American education system has been scrutinized for the lack of academic achievement, which would allow it to compete globally. For this reason, reform movements have been a major part of political rhetoric since 1957. Laws such as the ESEA,
NCLB, and ESSA, as well as federal programs such as A Nation at Risk have placed an emphasis on achievement and rigorous instruction for all students. To meet these federal demands, American educators are looking for more than just a quick fix. Traditional forms of professional development are proven to lack the support necessary to provide teachers with effective and lasting strategies. In 2014, Education Secretary Arne Duncan stated that the federal government spent $2.5 billion on professional development that showed little evidence of changing the education of students or improving student achievement (Strauss, 2014). The intense initiative to reach every student with common standards and equality in education left administrators and teachers searching for new means of reshaping the culture of the school. After viewing the success of team alliances of those in the business world, administrators and teachers began to realize that building relationships and working together might be the solution they have sought. Teacher collaboration is one way that schools can increase relationships with all stakeholders, and remediate significant issues facing education reform (McClure, 2008; U.S. Dept. of Educ., 2014). The Professional Learning Community is a research-based change in culture which focuses on student learning. By adding components such as routine collaborative meetings that concentrate on student achievement data, a school united by a common mission, vision, and set of instructional goals, and a collective mindset that understands that each student’s success is the responsibility of the entire faculty, schools transform into Professional Learning Communities. However, this change is not instant. Rather, it is a journey that requires constant reflection and refinement. Educators must understand that humans are not always going to agree and challenges may arise during collaborative meetings. The administrator and Learning Leaders, teachers who assume leadership training and roles in assisting with coaching teams, have the responsibility to provide support and guidance to teams as necessary. Through this shared leadership role,
teachers strengthen their knowledge and return to share the information with peers, who can then implement the new strategies in their classrooms with assistances of the Learning Leaders. This shift from top-down management to teacher empowerment is an essential component of the Professional Learning Community. Additional essential elements for effective Professional Learning Communities include a collective atmosphere where the responsibility of every child belongs to every teacher, a use of data to answer the four critical questions concerning who shows evidence of learning and how to differentiate instruction, and teachers who continue to learn and share new strategies (Mattos, et al., 2016; Rentfro, 2007). Some of the important processes that collaborative teams can follow to ensure the focus remains driven by the vision and goals of the Professional Learning Community include following an agenda, taking minutes, using norms to guide the collaborative process, and meeting at regular scheduled times to remain focused. Assuming these procedures are followed, the Professional Learning Community can maintain a focus on learning.

When schools intend to change their culture, and shift their focus to learning and collaboration, research shows it will lead to success and improved achievement (Al-Taneiji, 2009; DuFour & Eaker, 1998; Nelson, LeBard, & Waters, 2010; Park, 2014; Provini, 2012; Rentfro, 2007; Riveros, Newton, & Burgess, 2012). Based on research analyzing the benefits of schools operating as Professional Learning Communities, the results are promising. This trend can impact the growth of both students and educators, and it has proven to be effective in educational systems in many nations. It is reasonable to assume that American educators can learn new strategies by researching how other nations use learning communities to enhance student learning. In this fast-paced, technology-driven world, educators cannot forsake the opportunity to learn and advance their own professional knowledge. The fact that professional
learning communities are utilized around the globe only adds to this phenomenal development. The ability to connect to teachers around the world and share resources, ideas, and even failed attempts means that the teaching profession is moving away from the original solitude form and becoming more collaborative. The foundation of global professional development is based on sharing values, ideas, resources, best practices, failures, and celebrations (U. S. Department of Education, 2014; Spirrison, 2016). The use of Connected Learning Communities to enhance the Professional Learning Communities provides a collaborative platform to draw on the experiences of educators around the world, a type of professional development that is more flexible and empowering than traditional forms. Teachers provide a more equitable, high quality education for all when they collaborate, share data to drive instruction, and focus on student learning.

An examination of pertinent, relevant literature has disclosed the effectiveness of this corporate and educational research-based collaborative practice. Professional Learning Communities are being implemented around the world as an attempt to reform education so that countries can better compete globally. While not all collaborative meetings are productive or effective in improving student learning, there are research-based processes educators can follow that will increase the success of these groups.
CHAPTER 3: METHODOLOGY

The purpose of this study was to determine what factors contribute to PLC members placing a priority on student achievement and shifting their focus from instruction to learning. Since teachers are the direct link between students and learning, it is vital to determine their perceptions on the processes and procedures that lead to student learning as teachers participate in the Professional Learning Community. Research in this study determined what characteristics led to the focus on student learning by Professional Learning Community members. Teachers are responsible for managing and monitoring student progress (DuFour & Eaker, 1998). For this reason, the study also examined how teachers most effectively use student achievement data to ensure learning is taking place.

Research Questions

The following questions guided this study:

1) What characteristics of a Professional Learning Community influence student learning?
2) How can student achievement data best be utilized within the PLC to impact student learning?

Qualitative Research

A qualitative research design was used to answer the research questions. A qualitative research procedure is based on an individual’s connection to the topic and is intended to provide participant perceptions on the organization to which he or she belongs (Ary, Jacobs, Sorensen, & Walker, 2014). Therefore, the results are descriptive rather than predictive (Qualitative Research Consultants Association, 2017).

This was a qualitative study utilizing observations, semi-structured interviews, and collection of artifacts. The Robert Woods Johnson Foundation (2008) provided guidance on
selection of these forms of data and afforded the following information on each. Observations are used in qualitative research so that the researcher can use all senses to collect evidence. They allow the researcher to study an event in the natural setting. For this study, the researcher observed teachers as they collaborated in the Professional Learning Community meetings. In addition to observing teachers in collaborative meetings, semi-structured interviews were used to gain additional information from Professional Learning Community participants. Semi-structured interviews offer open-ended questions so that participants can elaborate, providing the researcher with a keen understanding on the topic. The last form of data collected was artifacts from the Professional Learning Community meetings. Collecting artifacts can foster an understanding of that groups’ customs and behaviors, which allows researchers to study the culture of a group. Artifacts for this study included meeting minutes, agendas, and documents such as the norms and data analysis. Using qualitative research, patterns and trends emerged which were journaled and documented during observations and interviews.

**Research Approach**

The research approach for this study was a grounded qualitative study utilizing observations, interviews, and collection of artifacts. According to the Grounded Theory Institute (2014), this type of research involves rigorous procedures which lead the researcher to the emergence of conceptual categories. These categories resolve the main concern of the participants in the given field of study and involve a constant comparative analysis. There are five stages of grounded theory, which were implemented in this study. The first stage involves preparing the researcher to eliminate preconceptions about the study. While there was an examination of relevant professional literature, Grounded Theory studies do not begin with a stated problem that has been defined through this review. The second stage involves collecting
data. For this study, this was accomplished through observations, interviews, and collection of artifacts. According to the Robert Woods Foundation (2008), observations require the researcher to immerse herself in the routines and practices of the participants, within the setting of the group. Interviewing involves talking to and questioning participants of the group being studied about their processes and practices. Artifact collection was the final component of this study and involved collecting materials used by the group in their daily routines and methods. The third stage in Grounded Theory studies involves analyzing the data gathered through the observations, interviews, and collection of artifacts (Grounded Theory Institute, 2014). This may involve coding and categorizing the data. The fourth stage is called “Memoing” (p.1) and is the ongoing process of writing about what is observed and understood through the process of data collection. The final stage, known as “Sorting and Theoretical Outlines” (Grounded Theory Institute, 2014, p.1) involves sorting the memos made during Stage 4 and combining them into one journaled account.

**Research Participants and Setting for the Study**

The data for the research were gathered in 11 elementary schools located in an East Tennessee school district. The research district serves over 3,500 students in grades K-5. From these elementary schools, four Professional Learning Community collaborative groups were observed, each three times. No two groups came from the same building. Their selection was based on input from a district-level administrator, who oversaw this district initiative. In 2015, the research district hired 36 teachers to serve in the role of Learning Leaders as they worked to implement Professional Learning Clubs in each elementary school, middle school, and high school. These Learning Leaders have met monthly for collaboration and to gain new knowledge on implementing this new culture. They also were responsible for leading informative sessions at
their own schools and providing support to their administrator and collaborative teams. Since there were 22 Learning Leaders at the elementary school level, 10 were chosen to be interviewed for this research. A district-level administrator aided in the selection of the 10 who were interviewed. Artifacts were requested and collected from both groups being observed and members being interviewed. Prior to selecting the participants, a consent form was filed with the school district stating the procedures and processes of the study, listing the interview questions which would be asked, and requesting permission to continue with the study (see Appendix A). Once participants were selected, the researcher sent a letter to each participant requesting their voluntary participation (see Appendix B). After receiving acceptance notification from the participants, appointment times for observation of collaborative meetings and for interviews were scheduled. Prior to each observation and interview, a reminder letter was sent to each participant to reiterate the time, date, and location. In addition, a letter of consent was sent and participants were asked to sign and return it to the researcher (see Appendix C). Participants were repeatedly informed that their participation was anonymous and voluntary and that they could withdraw from the study at any time during the process.

**Data Collection Procedures**

Permission was obtained from the Carson-Newman University Institutional Review Board to proceed with the study and begin the process of data collection. With the assistance of a district-level administrator, participants from four elementary schools were selected for two observations each. Professional Learning Community collaborative meetings were held at the participants’ schools, during school hours. Each group’s meeting was observed two times to establish processes and procedures routine for each individual group. During each observation, detailed notes were taken about these practices. The researcher remained in the role of observer
and did not interact with the participants during the meeting. Guided by the research questions, two main areas were noted. These consisted of the characteristics of collaborative group and how the group used data to determine student learning had occurred. This included what type of assessments of learning had been provided to students and how that data was utilized within the group.

Ten participants from the elementary school level Learning Leaders were selected for interview participants. These participants were chosen based on the district administrator’s recommendation, due to the belief these participants were more likely to be unbiased and answer questions in a forthright manner. The district-level administrator also provided input regarding the formulation of interview questions because these results would be shared with other Learning Leaders to support their implementation of Professional Learning Communities in the district.

Artifacts such as collaborative meeting notes, agendas, norms, and other materials were requested from the meetings being observed. In addition, interview participants were asked to provide any materials used by their own collaborative teams which they felt aided in the effectiveness of increasing student learning. These collected artifacts were then categorized and notes were taken concerning their use in the collaborative meetings.

**Ethical Considerations**

During the qualitative research process, it is imperative to remain truthful in the data collection and relaying of observations and responses. The initial stage of the research was to secure authorization from Carson-Newman University’s Institutional Review Board. The participants were contacted and permission was granted by each participant with an understanding that his or her identity would remain anonymous throughout the study and that he or she could withdraw from participation at any time. All involved persons were assigned
pseudonyms throughout study process. All methods and data were presented accurately and without bias in the final report of the study.

**Data Analysis Procedures**

Data analysis occurred after each observation and interview. The Robert Wood Johnson Foundation (2008) was utilized to develop a better understanding about open-coding, axial coding, and selective coding. Data analysis for this research involved open-coding, in which the researcher began to segment or divide the data in similar categories of information. Thus, the researcher could form common practices of Professional Learning Community collaborative teams to determine what processes and procedures led to positive student learning outcomes. This also allowed the researcher to determine if there were outliers present in the practices of effective or less-effective teams. In addition, axial coding assisted in the determination of common practices that may or may not have been present in the second chapter of this study. Axial coding is the ability of the researcher to bring categories together into larger groupings which resemble themes. These enable the researcher to develop new ways of understanding the phenomenon under study. Axial coding was administered to assist in understanding important aspects of the processes that successful collaborative teams perform. Finally, selective coding was applied. This form of coding aids in the organization and helps the researcher integrate the categories and themes in a way that articulates a coherent understanding of the phenomenon of study. For this research study, it allowed the researcher to scrutinize the whole process of collaborative teams and the influence their procedures have on student learning.

**Summary**

The qualitative research design was used in this Grounded Theory study on Professional Learning Communities. Through observations, interviews and the collection of artifacts, the
researcher attempted to determine what characteristics of the Professional Learning Community influenced student learning and how groups best utilized student achievement data to impact student learning. Four collaborative team meetings, each from separate schools, were observed, each three times. In addition, 10 Learning Leaders were interviewed individually. The interviews were transcribed in detail. Upon completion the interviews and observations, notes were reviewed and coded through a three-step process involving open coding, axial coding, and selective coding. Categories and themes were presented in the fourth chapter.
CHAPTER 4: PRESENTATION OF FINDINGS

The purpose of this qualitative study was to validate the practices and procedures of the Professional Learning Community as an educational reform movement and means to professional development which focuses on student learning and increasing achievement. The data and information gathered through this study provide a better understanding of the processes followed by a collaborative team that leads to improved student outcomes. The study involved collecting data through interviews, observations, and the artifacts from collaborative meetings. Ten elementary Learning Leaders were questioned through one-on-one, semi-structured interviews. The questions provided an opportunity for participants to share their knowledge and practices through eight open-ended questions (Appendix A). Four elementary Professional Learning Community collaborative teams were observed during their regularly scheduled times so their routine practices and procedures could be noted. Artifacts, such as meeting agendas, group norms, assessment data collection strategies, and other documents, were collected and used to determine what processes enhanced the team’s focus on student learning.

Presentation of Descriptive Characteristics of Participants

A district-level administrator assisted in the selection of Learning Leaders to participate in the interview process. Ten participants were selected from a group of 22 Learning Leaders. They ranged in experience. Eight had been Learning Leaders since the initial Professional Learning Community initiative began in 2015. Two were novice Learning Leaders for the 2017-2018 school year. School-level administrators assisted in selection of Professional Learning Community collaborative teams to be observed. Administrators were asked to base their selection on groups that had demonstrated positive gains in student assessments and grades, groups that met regularly, and those that demonstrated a high-level of collaboration during the
Table 4.1 provides demographic information about the interview participants of the study, while Table 4.2 provides demographic information about the study participants involved in the observation process.

Table 4.1
Demographics of Interview Participants

<table>
<thead>
<tr>
<th>Assigned Number</th>
<th>Years Teaching</th>
<th>Years in Role of Learning Leader</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>2</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>2</td>
<td>Kindergarten</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>1</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>2</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
<td>2</td>
<td>Kindergarten</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>1</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
</tr>
<tr>
<td>8</td>
<td>11</td>
<td>2</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>9</td>
<td>17</td>
<td>2</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>2</td>
<td>Reading Specialist</td>
</tr>
</tbody>
</table>
Table 4.2
Demographics of Observed Professional Learning Community Collaborative Teams

<table>
<thead>
<tr>
<th>Team Letter</th>
<th>Number of Teachers within Group</th>
<th>Grade Level(s) Represented</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; &amp; SPED</td>
<td>all</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>all</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>ELA</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>all</td>
</tr>
</tbody>
</table>

Research Questions

The following research questions were used to guide the study:

1. What characteristics of the Professional Learning Community influence student learning?
2. How can student achievement data best be utilized within the Professional Learning Community to impact student learning?

Data Collection Process

The interview process consisted of a nine question, open-ended inquiry based on the research questions. The interview topics aimed at addressing the first research question, encompassed organization of the collaborative meeting, including frequency and allotted time of meetings as well as how the team was structured, routine procedures followed during collaborative meetings, and the overall feeling of success in impacting student learning. The interview topics aimed at addressing the second research question included how the team utilizes assessment data in differentiating future instruction, compares student work and assessment data, and how common formative assessments (CFA) are utilized in determining teacher strengths and weaknesses that can be addressed through professional development. The final open-ended
question allowed the participants to share other processes unique to their group that was intended to affect student learning.

The observation process consisted of watching four Professional Learning Communities in four separate locations, each consisting of four to six members, as they routinely met on two separate occasions. Detailed notes were taken as group members collaborated and discussed topics, which ranged from review of standards, creation of common assessments, review of student data from recent common assessments, and how to differentiate instruction so that learners who needed remediation would receive it, and when those who mastered the skill would be provided with enrichment activities.

During both the interview and observation phases, artifacts were requested which would aid in understanding what procedures let to answering the research questions. Table 4.3 discloses what type of documents were provided.

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Number Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting agenda</td>
<td>12</td>
</tr>
<tr>
<td>Collaborative team norms</td>
<td>8</td>
</tr>
<tr>
<td>Meeting notes</td>
<td>10</td>
</tr>
<tr>
<td>Common Formative Assessment data review form</td>
<td>12</td>
</tr>
<tr>
<td>Plans for addressing students who have not mastered the skill</td>
<td>12</td>
</tr>
<tr>
<td>Plans for addressing students who have mastered the skill</td>
<td>12</td>
</tr>
</tbody>
</table>
Steps were taken to ensure the fidelity of the data collection process. Peer debriefing provided the researcher an opportunity for uncovering biases and assumptions by using a disinterested examiner (Robert Wood Johnson Foundation, 2008). This occurred at the beginning of the observation period to ensure that the researcher did not enter the research collection with any biased opinions. In a similar manner, member checks provided an opportunity to understand and assess what the participants intended to do during the meetings. Members checks were performed both formally and informally, for the observations and interview process, to clarify misconceptions or questions that might arise. In addition, triangulation was used to maintain a comprehensive and well-developed understanding of the Professional Learning Community process. Triangulation allowed for a close examination of the consistency of different data sources for the study, and was performed after the interviews, observations, and collection of artifacts. The final technique to ensure trustworthiness was a detailed description of the phenomenon which allowed conclusions to be drawn that were transferable to other Professional Learning Communities' times, settings, situations, and people.

**Study Findings**

After completing the initial phase of data collection, data were sorted through open, axial, and selective coding, which narrowed the data from common themes to categories which articulate a coherent understanding of the processes of the Professional Learning Communities which affect student learning. Selective coding allowed the data to be divided into two categories, which addressed the two research questions. Through the preliminary open and axial coding, themes emerged which support these categories in providing relevant information in answering the research questions. The study findings have been separated into the two categories and the themes which support each. These levels of coding can be found in Table 4.4.
Table 4.4
_Data Sorted in Levels of Coding_

<table>
<thead>
<tr>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal (grade-level) meetings</td>
<td>A stable structure</td>
<td></td>
</tr>
<tr>
<td>Vertical (adjacent grade) meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination of horizontal and vertical meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfortable to share data</td>
<td>Respectful collaboration and data sharing</td>
<td></td>
</tr>
<tr>
<td>Willing to ask for help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honest practice reflection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fostering of relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing team norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewing team norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using a formal agenda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designating team roles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designating team leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing effective strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional observations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed vision/focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in/visiting team meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using student data in post-conferences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing support in logistics</td>
<td></td>
<td></td>
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- **A stable structure**
- **Respectful collaboration and data sharing**
- **Routine procedures**
- **Professional growth**
- **Common procedures affect student learning**
- **Administrative support**
- **Positive mindset**
Open Coding

- Sharing results from CFAs
- Using student data from state assessments
- Comparing data from pre-tests and post-tests
- Being vulnerable to share data from student work/assessments
- Using a form to record data

Axial Coding

- Routine comparison of student data

Selective Coding

- Making instructional decisions based on student data
- Providing additional instruction to students that did not master skills
- Providing enrichment to students mastering skills
- Using center time, assistants, and co-teachers to differentiate instruction

- Sharing data to determine a teacher’s instructional strengths to share
- Sharing data to determine a teacher’s instructional weaknesses

- Using assessment data to differentiate instruction

- Analyzing student data affects student learning

- Addressing teacher strengths and weaknesses
Category One

Observations and responses to interview questions 1, 2, and 3 led to the development of the first category, which answered the research question: What characteristics of the Professional Learning Community influence student learning? In establishing the first category, the following six themes developed through the data analysis of the interview and observation process:

1. A stable structure based on the individual school’s needs
2. Respectful collaboration and sharing of data
3. Routine procedures
4. Professional growth
5. Administrative support
6. Positive Mindset

Professional Learning Community Structure

Professional Learning Community structure is school-specific and may include horizontal by grade-level, vertical, which consist of adjoining grades meeting together, or a combination of these with similar benefits to enhancing student learning. Of the 14 Professional Learning Communities that were represented in this study, both through the interviews and observations, the common structural thread that emerged was that teachers within the school were provided a stable structure and time to collaborate. The size of the school influenced the way the Professional Learning Communities were structured. Eleven of the participants reported having horizontal meetings on a regular schedule. Of these 11 Professional Learning Communities, five schools also had additional vertical meetings. Vertical meetings allowed teachers in adjoining grades to collaborate so that the curriculum could be aligned and teachers could be informed of previous grades’ standards and responsibilities. Typically, these additional vertical meetings
were held after school, while horizontal meetings were provided a common planning period in which teachers could meet during the school day. Three of the schools had a split structure, which utilized horizontal teams in grades K-2, and because the upper grades departmentalized with only one teacher per grade per subject, vertical teams met for grades 3-5.

Through the interview process, it was determined that the structure of the Professional Learning Community affected student learning because it provided teachers time to scrutinize student data to determine which students required remediation of the standard, and which students, having mastered the standard, were ready for enrichment activities. According to Participant 8, “Vertical Professional Learning Community meetings enable our teachers a chance to see how the standards spiral and build on one another from year to year. We were more prepared to teach new standards because through our vertical meetings, we understood what skills students had been exposed to, and how we could build on this prior knowledge without wasting time in repeating instruction.” Participant 6 stated that her school had added vertical meetings for grades 2-5 because these are state-tested grades. She specified, “My principal wanted us to have the opportunity to meet at least each six weeks across the tested grades to make sure all teachers were presenting material in the same way that mimicked the testing format.” In addition, they were working together to create common formative assessments (CFAs), which would allow students to practice the testing format of the state assessment. This included having students practice multiple-select answers and questions which hinged on previous question answers, as well as using text evidence in answering questions. Another positive motive for meeting as a vertical team, according to Participant 5, was that they could locate “holes in the standards,” or areas which were weak and needed additional information to fortify their instruction. Participant 1 stated that this was the first year they were given a
common planning time so that teachers could meet horizontally. She noted, “Having a common planning time was important to our teachers because it meant we did not have to stay after school additional hours to meet. This was really important for teachers with children, second jobs, or other commitments.” This allowed members to attend regularly with minimal distraction. In this time, members worked on understanding the standards being taught and creating a common approach to instruction, as well as examining assessment results so teachers could differentiate future instruction to guarantee each child reached a successful level of mastery.

Three of the four observed Professional Learning Communities operated as horizontal meetings. Team D spent a portion of its time in two smaller groups due to departmentalizing math and English Language Arts. During this time, the teachers of these subjects primarily focused on standards being taught and the creation of assessments for these standards. The second portion of time was spent in a united grade-level group. Topics of this time included students involved in the Response to Intervention (RTI) program and how writing could be incorporated in all subject areas to broaden the students’ writing skills. One member of Team D stated prior to the observation, “Our administrator allowed us to choose how we set up our PLC. We chose this format to make sure we had time to meet with the subject-specific teachers and not waste the time of the teachers of other subjects. However, to truly collaborate and help our students, we realized we needed time to meet as a united grade level to discuss the success of students and look at problematic areas together.” Team C operated as a vertical Professional Learning Community due to the size of the school. One teacher from grades 3, 4, and 5, along with the English Language Learner teacher, met to collaborate on English Language Arts, while a similar format was established for the math teachers. Due to the nature of the group, this team met after school to accommodate classroom schedules. One member of Team C summarized
their structure by stating, “This vertical team works for us. As an ELA team, we can discuss how standards progress across our three grade levels. In addition, we can share gaps found in student work and address ways to modify our instruction.” She went on to state that the grade level teachers often collaborated informally to share similarities and differences in student work.

**Respectful Collaboration and Data Sharing**

Regardless of the structure of the Professional Learning Communities, all 14 participants stated a positive response to the way they met at their school. Participant 1 stated, “We have found that our meetings grew stronger when everyone agreed to collaborate. After one and a half years of meeting, members feel comfortable and respected.” This safe feeling allowed teachers to share results of their students without the fear of being humiliated for their shortcomings.

Participant 5 explained that when teachers took an honest look at their weaknesses, they could improve their instructional strategies. Participant 4 stated that the Professional Learning Community has removed the competitive aspect between teachers and has led to a more supportive atmosphere. To reiterate this, she stated, “Team members frequently admit when help is needed and will ask other members what strategies they used to help students grasp the standard.” She subsequently explained that at meetings, it was common to have members ask others to walk through the lesson they taught, the tasks that were used, and the strategies that could be modeled to improve others’ instruction. She added, “By being able to ask for assistance from each other, our team has grown as we work together and continue to share with confidence knowing that we won’t be judged by teammates.” Participant 8 said that most of the school’s teams were moving forward and gaining in their ability to discuss strengths and weaknesses. She admitted, “We still have a few teams that struggle with sharing student work. It seems that teams of five members or more struggle with sharing student work because they do not feel as closely
knit as the smaller collaborative groups.” In addition, she stated, “The upper grades are doing a better job of collectively sharing students, because they departmentalize and often work with a wide range of students. Lower grades have not fully committed to the idea of sharing students.” In her opinion, Kindergarten and 1st grade were more protective of the students within their individual classrooms and less likely to participate in this community aspect. She called this the “mother duck” syndrome and said that these teachers felt a strong connection to their classroom students and were less likely to share openly about the difficulties that developed within. For her school, upper grades were already sharing instructional responsibilities for all students because classes had been departmentalized, and thus the sharing was easier for these teachers as they were all invested in each child’s success. Participant 1 echoed this enhanced ability for teachers who shared students in classes to develop the sense of community. She stated it was easy for her school to focus on “our students” and the responsibility for each child’s learning success because this school leveled students and departmentalized. She added, “Teachers in primary grades seem to have a stronger sense of community since they have had the majority of the students in class. They know the struggles they have overcome. It’s easy for them to feel invested in each child’s success as they move up through each grade.” In her school, teachers were involved in vertical Professional Learning Communities, and she said this also encouraged the community ownership of all students because teachers were able to collaborate with other grades to share data and student success.

This area of innocuous collaboration and sharing of data was evident in all four observed teams. Team A had 6 members. During the observed meeting, members were attentive and discussed topics openly. There was a sense of comradery among the teachers. The leader of this group would ask each member how the given lesson was taught in each classroom. Afterward,
members discussed benefits as well as perceived problems with the instruction. Members discussed ways to differentiate instruction to better instruct students to ensure mastery of a skill. Each member was attentive when others spoke and often asked questions to better understand strategies that were implemented. In the second observed meeting, this team scrutinized common misconceptions that proved difficult for past students. One teacher admitted that when she taught this standard the previous year, her students struggled to grasp the concept. Another teacher began to detail her the strategies he had used, and how he planned to revise these strategies. A third teacher added how her students could develop an understanding when she used peers working together. This feedback seemed to ease teacher concerns about proceeding with instruction regarding this standard. Team C was a vertical team but was observed to be very collaborative as team members noted how standards spiraled and worked toward ensuring students were mastering the necessary skills to be able to advance in the next grade. To do this, their collaboration dealt with viewing the same-strand standards for grade 3-5. Discussion regarding possible gaps in knowledge and instructional methods to minimize these gaps occurred. Shared data emphasized the common topic of nouns. The team had previously discussed the mastery level necessary for each grade, and created an assessment that was shared at this observed meeting. Teachers openly discussed struggles and accomplishments of their students on these assessments. The fourth member of this team was an instructor of English Language Learners. She had worked with her students to ensure they developed a conceptual understanding of the skill as well. Each member seemed to value the information others provided and collaboration seemed open and flawless in nature.

Team D worked in two divisions and prior to merging into one entity. This team was comprised of members from one grade level. However, two team members were math teachers
and three team members were English Language Arts teachers. Thus, the first 20 minutes of each meeting were departmentalized. As the math section was observed during the first meeting, the teachers worked together easily to share student data and develop a CFA, which would detail how students mastered the next standard to be taught. The ELA group was observed during the second meeting, and a guest who shared the school’s new Response to Intervention strategies was present. Due to the nature of this meeting, there was less collaboration to be observed, but teachers seemed amenable to asking questions and sharing strategies they were already implementing. Once the two groups merged for their grade-level portion of the meeting, it was evident that team members shared the community belief that all students were each teacher’s responsibility. Members asked how students who might not be mastering skills in their class were performing in other subjects. Discussion revolved around how to reach each child and if some children needed more intense remediation and how this remediation could be implemented.

Collaboration is a collective aspect, as was evident by both interviews and observations. Participants generally reported that member rapport tended to grow over time as teachers became comfortable with sharing data and felt a sense of trust develop with other members.

**Routine Procedures**

While each observed team followed their own meeting format, there were several components evident in each that led to an enhanced focus on student learning. This was likewise apparent in the interviews and collection of artifacts.

The research on Professional Learning Communities reiterated that there were several procedures that could be followed to ensure that teams stay focused on student learning. Thus, one interview question was devised to determine if teams followed these formats, and if an increased focus on learning occurred. One such procedure is the development of team norms,
which are intended to keep the members focused. Of the participants that were interviewed, four stated they routinely reviewed the norms to protect their time together and remain on-task. Five participants stated they had created norms as a team at the initial stage of development. These norms were reviewed periodically, but not routinely. Two groups indicated they had norms established by the school, but these norms were not reviewed at each meeting. Participate 3 stated, “We chose 4 simple norms aimed at keeping our meeting on-track and we keep them posted on the table. These few ground rules are important to our group. Some other groups in our school have more norms, but these four worked best for us.” On this same topic, Participant 7 stated that the norms were on their agenda and kept visible in case they were needed. Participant 10 stated, “We created norms at the start of this PLC process. In the beginning we reviewed them at each meeting, but we felt after a while that this just took up time we could better spend addressing student work.” For that reason, the group did not feel it was necessary to review these norms at each meeting because they were understood. It was apparent that the participants whose groups had created their own norms and reviewed them routinely were less distracted during meeting times. This was evident in the observed groups as well. Team A began each meeting with one member reading the norms aloud. These were written as “We will” statements and included topics such as “we will work together,” “we will keep our data confidential,” and “we will work together.” In sum, there were 14 norms for this group, and they were reviewed if members lost focus during the meeting. This was observed once during the first meeting and members quickly resumed the discussion at hand. Similarly, Team D noted the norms at the beginning of a group meeting. When conversation deviated from the appropriate topic, one member stated, “Let’s follow our norms and not engage in side-bar conversations.” The members then returned to discussing student data. Team B did not read the norms aloud, but
these norms were displayed on the cover of the team’s Professional Learning Community notebook and remained in the center of the table during the meeting. Team C did not have visible norms; however, this team was able to provide a list of norms upon request. This team worked together and did not seem to have issues other than when two members engaged in a separate conversation while others were working collaboratively. This situation could have been addressed by reviewing norms.

A formal agenda was also a common procedure in most meetings. Although research debates the vitality of this component, participants who adhered to an agenda felt more focused in their groups. Eight of the interviewed participants admitted that following an agenda was important to their team. Five participants provided an agenda template, which was used for each routine meeting. Participant 1 stated their agenda was uploaded to a website, which all teachers could access and edit. Each team in her building used the same template. Participant 6 stated that her administrator developed the agenda to include a goal for each meeting, members present and the role they assumed for that meeting, notes taken, and a list of norms. Participants 3, 8, and 10 used an agenda which focused on the four essential questions of a Professional Learning Community. These questions address what standard is taught, how it is assessed, what to do when students do not learn the standard, and how to provide enrichment for those mastering the skill early. Participant 3 addressed this by stating, “Having the four questions, which we learned about in a Learning Leader meeting, keeps us focused on student learning and results. Without it, we often got off track and our meetings became more like traditional planning sessions.” One agenda, which was collected as an artifact by Participant 4, provided a place for noting the upcoming standards to be taught, what materials would be used in student activities, and how the
standard would be assessed. She stated, “This allows us to primarily focus on one subject or standard each week, but we try to rotate these so each subject is discussed during the month.”

Of the three participants that did not routinely create an agenda, one stated that her administrator did not require one, one state she had a notebook that detailed meeting notes, a materials inventory, and prioritization of standards in lieu of a weekly agenda. Another participant did not mention using an agenda a part of a routine procedure.

Three of the four observed teams had a written agenda. One agenda was handed out during the meeting. Two teams came with the agenda which had previously been developed and emailed to each participant. Each of the three teams reviewed the agenda prior to the meeting and seemed to follow the agenda. Team C did not have an agenda, but stated an objective for the day’s meeting prior to each observed meeting. Like the agenda, this objective focused on improving student learning.

Four interview participants practiced the procedure of providing roles to members. A few roles that tend to be given during collaborative meetings include: facilitator, recorder, timekeeper, and mediator (New Teacher Center, 2012). Participant 3 specified, “In our PLC, each member has a responsibility. The team leader guides the meeting, while the recorder captures evidence and reports outcomes of our meeting. We also have an ‘air-traffic controller’ who keeps our members in-check according to who has not participated and who has talked too long.” Participant 6 noted that roles for her team members did not change. These roles were discussed and selected at the initial meeting of the year. They included a leader, time-keeper, note-taker, sergeant-at-arms, and reporter. Participant 10 stated, “The leader is the designated team leader for our grade. The other roles alternate each week. This keeps everyone attentive and if you get a job you don’t really like, it will change the next week.” During Team A’s observed
meetings, roles were evident and utilized to maintain focus and keep the meeting progressing in a timely manner. The team leader used a to emphasize the significance of the meeting. One member read the norms and reviewed the agenda. Another member kept the time and noted when members needed to transition from one topic to another. A fourth member warranted that the group remained focused on four essential questions and ensured the topics stayed student-oriented. This was the only observed team which had assigned roles to members. The leader of this group stated, “We have given roles to keep us focused and maintain the purpose of our meeting. By having roles, members know this is more than just a common planning time. It provides emphasis to increasing student knowledge.” Although team roles are not a common practice to all Professional Learning Communities, each of the other three observed teams had a leader which directed the meeting and was responsible for the production of the group. It was apparent that groups could focus on student learning without stated member roles. The participants who utilized roles for members believed that their teachers were more responsive to the goals of the group than when they operated without roles, due to the accountability mandated of teachers.

**Professional Growth**

Professional growth of teachers was also a factor in positively affected student learning. Participant 8 stated, “Our teachers have grown professionally as we share new strategies and collaborate in weekly, focused meetings.” She subsequently explained that new teachers were more invested in the school vision and veteran teachers, who were once reluctant to share or accept new methods from new teachers, were more receptive to new ideas because they recognized the benefits of new strategies as evident in student assessment data. Participants 3 and 9 both spoke of the increased teacher learning as collaboration provided an intentional look at student learning. Participant 3 noted, “If student work shows that one teacher had more
success with a lesson, other teachers often will ask what strategies were used in presenting the lesson. We also have the opportunity to observe the teacher using that strategy.” The team of Participant 3 would divide students so that one teacher was free to observe another teacher for approximately 20 minutes. She said, “This has been the most powerful form of professional development for our team because we are constantly learning from each other which in turn improves student outcomes.” Five of the 10 participants specifically mentioned that although official collaborative meetings were held weekly, the process had prompted a constant collaboration between teachers, which was focused on improving student and teacher learning. Participant 4 credited improved student assessment scores to the fact that her school was a Professional Learning Community. She said, “We PLC all day, with any teacher that is willing to collaborate. It may not be formal meetings all the time, but we are constantly reaching out to others to improve our instruction and assist our students.” Participant 1 attributed the success of her school’s Professional Learning Communities to a shift in thought with an emphasis on student learning over instructional strategies. She said this concentration on outcomes led to teachers’ professional growth. Participants 3, 5, and 10 indicated that time had improved their relationships, which impacted their professional growth and led to more successful student outcomes. Participant 2 stated that about half of her school’s teams were demonstrating intended professional growth. She said, “For the grades who have put their heart in the Professional Learning Community process and carry out meetings the way they were intended, success was evident. For those who were going through the motion of having meetings because they were told to have them, then success was not as evident from the rest of the school.” She subsequently detailed that it took several months for her to personally accept the change in focus and implement the Professional Learning Community as envisioned. However, when she began to
listen to her teammates, practice their shared strategies, and confer the common assessments so she could share her students’ data openly, then she began to recognize the impact of the team to her own professional growth. Similarly, a member of Team C, which was observed sharing results of a common assessment and analyzing the data, stated that once team members accepted that sharing openly was the only way to grow professionally, then they observed an improvement in student learning – in class work and on assessments. This prompted team members to implement new strategies so that both team members and each student would benefit.

During its second observation, two newer teachers who struggled with teaching a new math concept were members of Team B. During the meeting, another member used the class white board to demonstrate to the group how she had taught the concept for the past three years. Although it was not a traditional strategy, she stated she believed this method helped students enhance their understanding of this concept when this method was used. Discussion followed, and the two new teachers agreed that they would try this strategy because it seemed to make this concept more relatable.

Participant 6 remarked, “It has taken a year and half, but my team and I are beginning to appreciate this new initiative for using Professional Learning Communities.” She stated, “There are so many aspects that make this a better form of professional development. We have time to collaborate with teachers in our school, we acknowledge that the students are a collective community for which we are all responsible, and we have shifted our focus to student learning. This makes me a better teacher, and I know my teammates would say the same.” In her opinion, this shift in the focus to student learning benefits students because the wealth of strategies and activities that are shared provides more learning opportunities for each child.
Administrative Support

Although not every participant mentioned the effect of administrative support, those that did were adamant about the importance of this factor. Six of the participants mentioned some form of administrative accountability as a vital component of the success of their Professional Learning Community. Participant 9 stated, “My administrator has made an agenda which we use and then submit following our meeting. This helps keep the administrator up to date on what we are doing. We also submit our CFAs to him. This keeps us accountable for the work we do.” Participant 2 discussed a similar form of accountability stating, “My principal uses a system of checks and balances to make sure we remain focused on student learning and not just use our time to plan future lessons. Her support is a crucial part of our school’s Professional Learning Community success. We are required to submit assessment data, agendas, and goals that align to our school’s vision.” Participants 3 and 4 both said that while their administrators allowed the teachers to lead the Professional Learning Community, they provided support and were approachable when needed. Four of these six participants indicated administrators regularly visited the Professional Learning Communities, but were there mainly to observe and provide answers if questions arose. A school administrator attended during the researcher’s observation of Team C. He primarily listened to the team members, but his role appeared to be one of support as opposed to one of criticism. Upon the departure of the school administrator, one team member stated that the administrator or the school’s learning leader attended occasionally. Team members did not perceive these visits as a threat, but instead used the visits to ask questions or remain updated on the activities of other groups. It was noted that while the administrator was present, the team was more focused staying on-task and was less likely to engage in off-topic conversation. Both Team A and B both displayed notebooks, which were randomly collected by
their administrators for review. One Team B participant stated this was a way to ensure team members were completing tasks established by the school, such as standard prioritization, development of a materials inventory, and an in-depth dissection of priority standards. This was a common district goal to be completed by the end of the school year with the intention of helping teachers better understand what should be taught and best teaching practices.

**Positive Mindset**

A positive mindset also emerged during the interview process as a common theme. Participant 10 said that the first year of participating in the Professional Learning Community was a struggle because many members believed Professional Learning Communities were meaningless, district-required initiatives. However, once members of the group determined the changes in routine were possible and observed positive outcomes in student learning when they shifted their focus from instruction to what students were learning, then they believed their time was spent in a worthwhile manner. She stated, “It may take time, but our students can all learn the skills set before them.” Participants 3 and 6 had similar responses, which reiterated the belief that optimism improved the outcomes of student learning. Participant 3 stated, “When we recognized we had ownership in the collective group of students, we all became excited to see them reach their potential. We wanted to help each other because we knew it would help the entire student body.” This positive way of thinking empowered the teams to strive for student success.

**Category Two**

Observations, artifact collection, and responses to interview questions 4, 5, and 6 led to the development of the second category, which answered the research question: How can student achievement data best be utilized within the Professional Learning Community to impact student
learning? In answering the second question, the following three themes developed through the data analysis of the interview and observation process:

1. Routine comparison of student assessment data
2. Utilizing assessment data to differentiate instruction
3. Utilizing assessment data to address teacher strengths and weaknesses

**Routine Comparison of Student Data**

A common theme throughout the interview responses and found in both the observations and collection of artifacts was the analyzation of student assessment data during the Professional Learning Community. This seemed effortless when the assessment was a common exam administered to all children being compared. Known as a CFA, these exams could be pre-developed, created by the team, or a combination of the two. Participant 6 explained that at the beginning of the year, her team examined the previous year’s state achievement data to compare students and determine strengths and weaknesses of each. Based on this data, the team determined that the entire grade-level was deficient in vocabulary, so this team developed a goal of improving vocabulary skills. She said as the year progressed, team members used CFAs to maintain their focus on student learning and modify instruction for students based on individual learning levels. To do this, she said the group brought work samples from similar assignments and determined which students were progressing and which students might need additional time on the skill. Students were then divided into groups, where they could be given the attention necessary for understanding and mastery. In a similar manner, Participants 3 and 7 stated that creating CFAs and analyzing the data from those was a primary focus of their weekly, horizontal Professional Learning Community. Participant 7 added, “Our team members use CFAs as a pre-test and then we give it again mid-way through the unit to determine which students need to
continue practicing the skill and which students have developed an understanding and can move on to applying the skill in an enrichment activity.” In addition, she discussed how in the past teachers might all be on the same standard, but teaching through different methods and strategies. Through participation in the Professional Learning Community, over the course of a year and a half, her team has begun to keep the students on the same standard, using the same materials and assessments, which subsequently allowed teachers to have deeper conversations about the mastery of the standard by the students. Each of the 10 participants interviewed stated that they used assessments to track student progress on a routine basis. Similar practices were observed in the four Professional Learning Communities. In both observations, Team A spent about 25% of its time discussing student assessment data and 25% of its time creating a CFA for the upcoming standard to be taught. The form used to compare their data was specific to the provided assessment. This form detailed the numbers of each test item, and a place to write how many students mastered that item. In addition, during the creation process, the team recorded every possible acceptable answer so that each teacher was grading in the same format. During the meeting, discussion from each member scrutinized which students mastered each item, and examined reasons why items were missed. If an item was missed by most students, the teacher would ask for input on how more successful teachers had taught the skill. It was apparent that the teacher then intended to return and reteach the skill in a new manner. This collaborative process continued for each item number. In both observations of Team B, a similar process was followed, although not as extensively. Team B studied CFA results from a math assessment and from a reading assessment during both meetings, but their discussion was streamlined. Team members made more generalizations based on which students passed the assessment, and then further scrutinized those who failed the assessment, as well as possible reasons why these
students failed. From this discussion, team members detailed plans to re-teach skills in small, differentiated groups. Team C, a vertical team comprised of three grade-levels of the same subject, explained that it could not provide a CFA due to the diverse standards of each grade. However, Team C detailed that when possible, a means of assessing strands of similar standards was created. In the first observation, team members reviewed the data from a quick assessment, which each teacher had administered on the grade-specific strand of the standard dealing with nouns. Team members discussed common misconceptions of the students and strategies for addressing these at each level. These team members noted that a previous goal was to find ways to better prepare students so some skills would not need to be taught again in the next grade. Team members indicated this focus was evident because they spent less time during the current school year reviewing prerequisite skills. This focus continued during the review of current assessment data. Team D, who met horizontally, but in subject-specific mini-teams, had similar practices. The math teachers collaborated to analyze student data for a previously administered CFA on adding two-digit numbers. These teachers divided the student work samples into a group of those mastering the skill with a score of 85% or higher, and those scoring below 85%. Subsequently, common mistakes were analyzed, and discussion occurred regarding better instructional methods. The ELA team utilized a similar method during analysis of a reading assessment. The Reading Specialist provided assistance to those students who had not mastered the required skill.

Using Assessment Data to Differentiate Instruction

Upon completion of CFAs and analysis of student data, team members and interview participants could focus on subsequent instruction. Question 5 emphasized use of assessment data to identify students requiring support or enrichment. Each of the 10 participants interviewed
stated that their Professional Learning Community used assessment data to guide differentiated
learning groups to reach students’ strengths and weaknesses for any given standard. In fact, nine
participants provided artifacts where members recorded ways for providing extended activities
for those students who mastered the skill and those who would require further instruction for
mastery. Six of these used a four-block method of recording strategies as they scrutinized the
four essential questions during their meeting. This format, which is based on a strategy provided
by DuFour and Eaker (1998) can be found in Figure 4.1.

Figure 4.1
Four-Block Essential Question Recording Strategy

<table>
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<th>What are students learning?</th>
<th>How will we know students have learned?</th>
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<tr>
<td>How will we respond when students have not learned the skill?</td>
<td>How will we respond when students have mastered the skill?</td>
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Other participants that provided artifacts for differentiated instruction used a more narrative
format in their notes. The sole participant who did not provide an artifact for this theme said she
discussed the differentiation, but rarely explicitly documented what would be used to reach these
ability groups because it was the same strategy, small groups in which standards could be
targeted for each group, was frequently utilized. She stated that RTI time was used to assist
students with the same deficit determined by the CFA. Participant 4 stated, “We look at students
scoring less than 85% on the CFA and provide additional support through centers or small
groups. These last between 15 and 30 minutes based on the standard and the need.” Participant
10 stated, “Once our team realized it was okay for students to reach mastery at different rates,
our focus became reaching children at their own rate.” She said this was best accommodated by
providing additional activities in small groups, but occasionally, there would be just one or two students who needed additional assistance. She said her team realized that repeating instruction for all students was just as unfair as moving on without ensuring these students had mastered the skill. For that reason, she said her group made it a goal to reach each child on his or her level. She stated if just two students needed extra support, the teacher would call them aside and provide more individualized instruction. Occasionally, a teacher assistant might work with those two students on a skill until mastery was reached. By maintaining this focus, Participant 10 stated that students seemed more confident, which should result in success on standardized achievement tests, which measures student learning for the year.

Each of the four observed Professional Learning Communities transitioned flawlessly between analyzing assessment data and determining how to continue instruction for those not mastering the skill. Team A collaborated on a means for spiraling standards in which large groups of students seemed unable to master fully. This would be done by a whole-class review of the standard in a few weeks, and then following up with additional review in the next six-week term. One member stated that students in her grade seemed more receptive to this type of reteaching. For skills missed by smaller numbers of students, two strategies emerged from Team A. Members discussed small groups for specific instruction, and one team member discussed using peer tutors to reteach the skill. One member in Team A stated that in his class, half of the students had mastered the skill. This same member of Team A planned to pair those students with a student who had not yet mastered the standard to allow the peer to reteach the skill because this had worked well on several standards where a similar ratio of students reaching mastery and non-mastery ensued. Teams B, C, and D all discussed using small groups and teacher assistants to reach students at their individual levels of mastery. The math team of Team
D discussed allowing students who had mastered the skill to work in one teacher’s room for an extended activity on the skill, while students who had not mastered the skill would attend the other teacher’s room. This class time would be divided into three centers, utilizing the teacher and two assistants to work on the standard in various activities. In the ELA group observed from Team D, members were creating an assessment for the currently taught standard. They planned to give this assessment and then use the data to determine who required further instruction. These students would be provided this instruction during small group time. Students who mastered the skill would be provided an activity in which they could further develop the standard, without the remediation provided to those who did not master the skill on the initial assessment. Those requiring further instruction would be given the CFA a second time to determine if mastery of the skill occurred.

**Addressing Teacher Strengths and Weaknesses**

The final theme connected to the second research question developed from analyzing the responses to the 6th interview question. This question addressed how the members of the Professional Learning Community utilized assessment data to scrutinize teacher strengths and weaknesses, which subsequently assisted in strengthening student learning outcomes. Responses indicated a direct correlation between analyzing student assessment data and addressing the strengths and weaknesses of teachers. Participant 2 stated that through the collective analyzation of assessments, team members become open and honest about whose scores were the best, and how that teacher instructed the students to reach this level of mastery. Participant 2 said that since their students were heterogeneously mixed, this could not be attributed to student ability, and subsequently explained that it allowed for an open conversation about strategies and activities which were implemented. This increased both teacher learning and student learning.
This participant provided one strategy that her Professional Learning Community could implement. There were six members in this team, so if one teacher felt weak in an area, team members would divide the students between the other five teachers and the teacher in need of suggestions would take time in each of the rooms, observing how the lesson was re-taught or the activities used for enrichment. Participant 2 stated, “This has helped our group grow because at some point each teacher has requested to observe the others.” Participants 3, 6, and 10 all mentioned that weekly collaboration time was dedicated to conversations regarding whose students might not have grasped a particular skill. Subsequently strategies are shared for re-teaching of the skill. Participant 3 stated, “Our team members sometimes ask our principal, RTI instructor, or other grade-level teacher to join us during our meeting. This allows for so additional ideas, and provides an opportunity for us to grow on instructional strategies.”

Participant 4 mentioned that the Professional Learning Community shift toward collaboration and away from competition meant that teachers in her team were more willing to work together to address teacher needs. She said it was typical to hear a teacher say, “How are you teaching this skill, my students aren’t grasping it the way I taught?” or “I need help with this standard.”

Participant 4 indicated that in those instances, another teacher will share the lesson that was taught, provide strategies, or offer to model a lesson. In a similar manner, Participant 1 stated that it was becoming a natural conversation as assessment scores are sorted. “We look at those scoring above and below 80%. Then we share strategies, Notebook games for the computer, and other activities.” Teachers use this collaborative information and reteach to students scoring under 80%. This participant also stated that teachers in her Professional Learning Community are more likely to become vulnerable as they discuss strengths and weaknesses because of the limited time, 1.5 years, that has been devoted to this process. Participant 7 stated that as teachers
began to address their own weaknesses, the team began to prosper and student scores began to rise as well.

**Summary**

While many of the study participants indicated the use of similar procedures in their meetings, there is not a specified format for a successful Professional Learning Community’s ability to positively affect student learning. Instead, there are many common practices, that when consistently emphasized, lead any given team to success in this area. Through the process of open, axial, and selective coding of interview responses, observation data, and collected artifacts, two categories emerged which served to answer the two research questions. For each category, themes developed through the data analysis, which supported these categories. The common procedures that supported the Professional Learning Community’s focus on student learning included a structured format for the group, respectful collaboration and supportive sharing of data, a focus on professional growth which could enhance student learning, administrative support, and routine procedures which include, but are not limited to reviewing team norms, following an agenda, taking meeting notes, and providing roles for team members. While not all participants listed each of these procedures, each team had routines which kept members focused. Three themes emerged to support in answering the second research question. The category which dealt with analysis of student assessment data was supported by teams that routinely compared student assessment data, utilized assessment data to differentiate instruction, and employed assessment data to address teacher strengths and weaknesses. It is important to note that most participants mentioned at some point that the growth and success of the team was related to the length of time the team had been meeting. Since most of these teams had met for a year and half as part of the district’s initiative, participants were noticing a growth in the
relationships and ability to become vulnerable in sharing data. As Participant 3 stated, “Rome was not built in a day, and likewise, it takes time for teachers to open up and collaborate freely with one another. We are getting there, but time will strengthen our focus on student outcomes.”

This chapter presented the findings of four Professional Learning Community collaborative meeting observations, 10 semi-structured interviews, and the collection of artifacts from participants. Chapter 5 provides conclusions, implications, and recommendations for future studies.
CHAPTER 5: FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

The goals of a Professional Learning Community include a focus on four key concepts: learning, educator collaboration, assessment results, and timely utilization of data (Eaker, et al., 2002; Mattos, et al., 2016). Previous studies on Professional Learning Communities have addressed topics such as educator perceptions toward the benefits of collaboration, strategies for implementation of the Professional Learning Community, and professional learning within the collaborative culture. However, the literature revealed certain procedures need to be routinely implemented to foster sustained focus on student learning (DuFour & Eaker, 1998; Lujan & Day, 2010; Mattos et al., 2016; McLaughlin & Talbert, 2006; Weber, 2011). The purpose of this grounded qualitative study was to examine the Professional Learning Community factors that contribute to student learning. To address the findings of this study, this chapter will be divided into the following four sections: summary, conclusions, implications, and recommendations for future research.

Summary

The foundation of the Professional Learning Community is based on the theoretical framework of a Community of Practice in which a group of people from within the same discipline share concerns and passions through regular interactions to make improvements on some aspect of the group (Wenger-Trayner & Wenger-Trayner, 2015). The conceptual framework was based on using the Professional Learning Community as a valid and reliable means of professional development and educational reform.
The study was guided by two research questions:

1. What characteristics of a Professional Learning Community influence student learning?
2. How can student achievement data best be utilized within the Professional Learning Community to impact student learning?

This was a qualitative study utilizing observations, semi-structured interviews, and collection of artifacts. Participants were from an East Tennessee school district, which began implementing the Professional Learning Community concept in 2016. The observation process included four Professional Learning Communities from separate schools within the district. Each was observed at two different times to reduce bias and observe the group’s routine procedures. The semi-structured interview process involved ten Learning Leaders; teachers who were trained by the district leaders to be liaisons in the development and implementation of Professional Learning Communities. Each participant was asked eight questions, which helped to answer the guiding research questions. In addition, artifacts were collected from both observed and interviewed participants to aid in understanding the procedures and ability to focus on student learning. Once the data were collected, a process of coding began. Open Coding allowed the data to be divided into two categories, each of which focused on answering one of the research questions. Next, axial coding and selective coding assisted in determining smaller themes to support each category and develop a coherent understanding of the study.

Findings

In answering the first question, six themes emerged from the data that affected student learning. The collaborative process serves as the basis of the Professional Learning Community. For collaboration to affect student learning, it must be purposeful and respectful. This was evident in the observations and interviews. All 10 interviewed participants stated a positive
response to change in culture as collaboration became a means of professional development. This collaboration was found to reach beyond the realm of the collaborative meeting, and participants responded that teachers began to feel comfortable discussing student learning throughout the day, on the playground, at lunch, and even during other duties. Collaboration and professional development seem to be a symbiotic relationship. Participants revealed that the more collaboration occurred, the more teachers learned from one another and shared strategies that could be used to enhance student learning within their own classes.

The team is at the center of the collaborative culture (Eaker, et al., 2002). Professional Learning Communities may be structured as either vertical or horizontal. Vertical structures involve teachers from several grade levels and are typically united through one subject of curriculum. The findings revealed this structure to be the most conducive to members contributing to the view of students throughout the school as a collective group, for which each teacher is responsible. The horizontal structure is a uniformed grade level, but may encompass a variety of subjects taught. Findings from this study revealed that the structure was not as important if the structure benefited the school. Members of either structure could focus on student learning and collaborate to share new strategies and analyze data.

While there was not one set of procedures which is uniform in all Professional Learning Communities, several common procedures were found to assist in focusing on student learning. These procedures were mentioned in the responses of the interviews; their importance was evident during the observed Professional Learning Communities. Only one observed group utilized member roles. However, this group maintained a pristine focus for the duration of the meeting. Each member knew his/her role and adhered to that role to assist in an efficient use of time. Meetings in which norms were followed and utilized when teachers were off-task remained...
focused on student learning and team objectives. The findings of the interviews demonstrated that using norms and following an agenda allowed the team to focus on student learning with minimal distractions.

In addition to following routine procedures, the findings of the study revealed that administrative support was crucial in providing a system of checks and balances that encouraged the team to maintain its focus and reach its goal. Participants whose administrator came to meetings, required agendas to be submitted, or provided a notebook for collecting team data reported their team continued to focus on student learning throughout the collaborative process. Another key support provided by administration was a common planning time for the Professional Learning Community to meet. Participants reported that having time to meet during the school day allowed members to attend without external reasons such as doctor’s appointments and after-school activities. In fact, being provided with a regularly scheduled time to collaborate is a key recommendation for Professional Learning Community success (DuFour & Eaker, 1998; Mattos, et al., 2016). In addition, participants made it evident that having a routine meeting time allowed relationships to strengthen and collaboration to become effortless. This led to a less restrictive environment when teams met and participants correlated this to an increased sharing of strategies and data.

The final factor which was found to affect student learning was a team with a positive mindset. Although this factor was not noted in the literature review, several participants mentioned that once teachers were comfortable and familiar with the processes, positive results were evident for student outcomes. This also positively affected teachers sharing data and being willing to ask for assistance.
Three themes emerged from the data to answer the second research question, which addressed collecting and sharing data to improve student learning. The study findings revealed that when collaborative teams compare student data from common formative assessments, the members can use that information to differentiate instruction and improve their instructional strategies. This form of professional development allows teachers to learn from one another and develop new strategies from someone who is available to answer questions as they arise (Rebora, 2011). The study found that over time, teachers began to rely on one another to share ways of teaching in weekly meetings. Similarly, teachers who shared assessment data could then divide students into smaller groups with similar mastery or non-mastery of the skill, allowing teachers to work with these groups to reteach or enrich the curriculum as needed.

**Implications and Conclusions**

The findings of this study revealed common practices and procedures that led a Professional Learning Community to maintain a focus on student learning. From these findings, seven implications can be made. The findings reveal that while the structure of the collaborative team may not be significant to the focus on student learning, the stability and consistency are significant. The criterion for structuring teams is based on the needs of the school, and shared responsibilities of the teachers must be considered. To become productive, a collaborative team needs to meet regularly for a minimum of three years to mature (Mattos, et al., 2016). It can be inferred that teams need to meet regularly in the same-structured group to build relationships and reduce vulnerability in sharing data and strategies. These relationships can impact the respectful collaboration and sharing of data, two factors which affect the focus on student learning. Study findings conclude an importance of reducing vulnerability within the collaborative team to make gains in student outcomes. This reduction of vulnerability occurs when members trust one
another and rely on positive feedback to improve instructional strategies. Participants in the study stated that this is not an easy process, and it takes times to build these relationships. It is important for the collaborative team to understand that with a variety of personalities, conflict is inevitable. However, finding a consensus is vital and may require assistance from an administrator or a Learning Leader.

Although the structure of the team was not determined to be vital in the focus on learning, the procedures which were routinely followed impacted the focus. Teams and participants which utilized norms, agendas, and team roles were more likely to sustain an emphasis on the goals and objectives. This focus on protocols is important because teams are most effective when they have a clear understanding about the results they desire to achieve (DuFour & Eaker, 1998). Norms, which were observed to be reviewed at the beginning of each meeting by the collaborative teams, were internalized by the group and supported the focus on student learning.

The implementation of Professional Learning Communities is a method of professional development for school districts such as the one utilized in this study. Productive collaboration is an essential strategy for professional growth. Study findings implied that when teachers shared instructional strategies and were provided time to observe effective teachers within their team, then growth in professionalism occurred. In addition, the Professional Learning Community was effective because members were available to provide answers to questions that developed. Teachers in collaborative teams can practice the craft of teaching while meeting in a supportive group for clarification and job-embedded strategies (Eaker, et al., 2002).

Another factor which was found to be essential in maintaining the focus on student learning was a supportive administration willing to provide time during the school day for teams
to meet on a regular basis. The study findings revealed that when the administrator required some form of monitoring of the work of collaborative teams, the work was more productive and focused on student learning. However, monitoring is not a means of micromanaging, rather a way for accomplishing the goals and objectives of the Professional Learning Community (Mattos, et al., 2016). This form of checks and balances also allowed the team to deem that their work was important and a priority of the administration.

While a positive mindset may not be found in most lists of factors that influence student learning, this study determined that many participants believed it to be essential. There can be an abundance of hesitation when a shift in culture and methods is implemented. Participants of this study discussed that growth of the collaborative team, as well as a focus on student learning, could not take place as long as members were not fully invested in the change. The study found it took at least a year and a half of practice for members to feel comfortable with the shift in focus and for relationships to grow. Once this positivity was abundant, members of the Professional Learning Community participated in discussion, sharing of data and strategies, and the collective view of students being the instructional responsibility of all faculty.

The final implication of this study involves the combination of the three themes determined to support the second research question, which scrutinized analyzing student data. The study findings supported the strategy of the Professional Learning Community as an avenue for analyzing student data to support student learning. The focus was clearly on student learning when the collaborative team routinely compared data and used this comparison to differentiate instruction to support students not yet mastering a particular skill. This shift in the school’s focus from instruction to learning was driven by student work, and the implications that occurred. Teachers who spent time using results of data to determine teacher strengths and weaknesses for
assisting student growth clearly were focused on affecting student learning rather than simply teaching standards and proceeding to the next skill.

**Recommendations**

Future research could include broadening the region of data collection. For this study, one district in East Tennessee was utilized. This district had only recently implemented Professional Learning Communities. Thus, it would be advisable to extend the interview process to schools which had implemented collaborative meetings as a means of professional development for more than three years to determine how longevity affected the focus. Interviews for this study were limited to Learning Leaders, who had been trained in implementing the Professional Learning Community and acted as liaisons from the district administrators to the individual schools. Future studies might include interviews of non-learning leaders. This would allow for non-trained members of Professional Learning Communities to share information regarding the factors that affect student learning.

**Summary**

Previous studies on the topic of Professional Learning Communities have scrutinized strategies for implementation of the Professional Learning Community, educator perceptions toward the benefits of collaboration, and professional learning which occurs within the collaborative culture. Data collection for this study involved observations, interviews, and collection of artifacts. Together, these three data sets provided findings which answered the two research questions and provided an understanding of Professional Learning Community factors which affect student learning.

With further research on the topic of factors affecting student learning, it is feasible to garner enough research-based data to form a Professional Learning Community model that could
serve as a universal basis for successful collaborative meetings. While there are many characteristics which define successful Professional Learning Communities, there is not an identifiable model which describes inclusive practices that are currently able to be generalized to all Professional Learning Communities.
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Appendix A

PROFESSIONAL LEARNING COMMUNITIES: FACTORS AFFECTING STUDENT LEARNING

Interview Questions

1. How often do the Professional Learning Community collaborative meetings occur at your school?

2. Does your school meet in grade level, vertical, or other types of collaborative meetings? If other, please specify how teams at your school are formed.

3. What procedures are routinely followed during the collaborative meeting?

4. How do your teams utilize student assessment data in differentiating future instruction?

5. How are common formative assessments created and utilized within your school?

6. What provisions has your school administrator put in place to ensure a successful collaborative meeting occurs?

7. Do you share assessment data with anyone other than your team, if so how?

8. How successful do you feel your school’s collaborative meetings are impacting student learning? To what do you contribute this?

9. Is there anything else you would like to share about your school’s PLC collaborative meeting processes?