SECONDARY TEACHER EXPERIENCES IN PROFESSIONAL LEARNING COMMUNITIES: A PHENOMENOLOGICAL RESEARCH STUDY

by

Tiphani Jo Morris

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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Abstract

The purpose of this transcendental phenomenological research study was to describe secondary mathematics, science, English Language Arts (ELA), and social studies teachers' experiences with PLCs at Central Texas secondary schools. Using Wenger's (1998) social theory, the study answered the central research question: What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? The sub-questions included: What collaborative experiences do secondary teachers have during PLCs? What professional learning experiences do secondary teachers have during PLCs? The setting included two middle schools and one high school located in Central Texas. The sample size was 12 public-school teachers, and data were collected through interviews, focus group conversations, and observations. The data were categorized into common themes and patterns.

Keywords: Professional Learning Communities, secondary teachers, collaboration, perspectives, experiences

Copyright Page

Dedication

I dedicate this dissertation to my husband, Jonathan, and our children, Emilie and Averee. Jonathan, your continued support throughout this journey has truly been incredible! You pushed me when I wanted to give up, and you were there for every step along the way. Emilie and Averee, you are so resilient! Thank you for your patience and understanding! May this journey teach you to never give up on your dreams! I love each of you so very much!

Secondly, I dedicate this dissertation to my parents, mother-in-law, and father-in-law. I would have never completed this journey without your encouragement, love, and continuous help with Emilie and Averee! Each of you has helped build the person that I have become. I appreciate everything that each of you have done for our family!

Acknowledgments

I would like to first thank, Jesus Christ, our Lord and Savior. Thank you for the strength, knowledge, and ability to complete this journey! Thank you to my chair, Dr. Ozolnieks, and my committee member, Dr. Beavers. Your encouragement has been remarkable! I deeply appreciate your assistance and feedback through each steppingstone of this journey. I could not have done this without the both of you! Lastly, I would like to thank all the participants that gave their time for this study!

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Professional Learning Community (PLC)

Institutional Review Board (IRB)

English Language Arts (ELA)

No Child Left Behind Act (NCLB)

Adequate Yearly Progress (AYP)

CHAPTER ONE: INTRODUCTION

Overview

Society is continuously changing with the vast growth in technology as well as the increase in unemployment, funding cuts, and increase in poverty (Bhopal & Sleeter, 2013). The world of education was granted the overwhelming task of meeting the demands of these changes and this tends to lead educators to work in isolation and divert from collaboration with colleagues (Coenen et al., 2012; Wheelan, 2005). Professional learning communities (PLCs) are a way that educators can stay abreast of current research and meet those demands of education. Constituents can collaborate to increase student achievement and professional growth (Johannesson, 2020; Mu et al., 2018). How PLCs are implemented within a district or campus determines the actual benefits, and unfortunately, the implementation and support behind PLCs differs for each campus and school district (Carpenter & Munshower, 2020; Turner et al., 2018). The varying implementation processes result from educational leaders having various interpretations of PLCs based on their educational beliefs (Boom et al., 2021; Bush, 2018; Daniels et al., 2019). The inconsistencies cause confusion with the understanding and knowledge base of successful PLCs among educators and educational leaders alike (McLaughlin & Talbert, 1993).

Chapter One will provide the historical, social, and theoretical context of PLCs. I will explain the problem and purpose surrounding the research for this study. Lastly, I will provide the significance behind the study. There are limited studies that determine secondary teachers' experiences in PLCs in Central Texas. The study will answer the central research question: What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? The sub-questions included: What collaborative experiences

do secondary teachers have during PLCs? What professional learning experiences do secondary teachers have during PLCs?

Background

Richard DuFour (2004) described the powerfulness of collaboration among teachers as they work together to analyze and improve their professional practices. When educators can collaborate with colleagues, the product of the work is better than what could be produced individually (Hinchman, 2019). Educators engage in teamwork and build relationships that establish support and veer away from isolation (Lazenby et al., 2020). Cooperative learning and collaboration promote shared teaching practices with colleagues, asking questions, and creating shared goals that foster self-confidence and professional growth for teachers and educational leaders (DuFour, 2004). Educators have an opportunity to develop better teaching practices and understand the relationship between collaboration, shared purpose, and deeper team building in PLCs. Collaboration and cooperative learning ultimately lead to increased student growth and achievement both socially and academically (DuFour, 2004; Fred et al., 2020; Prenger et al., 2017).

Historical Context

The PLC endeavor began in the early 1960s and offered a solution to the isolation concern among educators (Solution Tree, 2021). In the late 1980s and early 1990s, the research began to develop quickly, and this built a foundation amongst schools across various countries (Gao & Wang, 2014; Giles & Hargreaves, 2006; Hord, 1997; Louis & Kruse, 1995; Solution Tree, 2021). In addition, research determined that educators who had the opportunity to work collaboratively with colleagues on shared goals focused on student achievement led to improved

educator learning, commitment, confidence in change, and gains in student success (Avidov-Ungar, 2019; Schaap & de Bruijn, 2018; Solution Tree, 2021).

As research continued in the 1990s, researchers Judith Warren Little and Milbrey McLaughlin determined the characteristics of PLCs. These characteristics included shared norms and beliefs, collegial relations, collaborative cultures, reflective practice, ongoing technical inquiry regarding effective methods, professional growth, and mutual support and obligation (Solution Tree, 2021). Other researchers such as Fred Newmann and Gary Wehlage determined that successful schools engaged in a common purpose of student learning, created a collaborative culture, and approached the responsibility for student learning as a collaborative team (Newmann & Wehlage, 1993; Solution Tree, 2021). Sharon Kruse, Karen Seashore Louis, and Anthony Bryk built on that research of PLCs. They determined the following elements: reflective dialogue, derivatization of practice, collective focus on student learning, collaboration, and shared norms and values would have a significate impact on teaching practices and student achievement (Kruse et al., 1994; Solution Tree, 2021).

A significant event for the concept of PLCs involved the research presented by Richard DuFour and Robert Eaker. Their research determined that individuals that participate in PLCs pursue a shared mission, vision, values, and goals; work collaboratively and focused on learning; engage in inquiry; focus on action; participate in continuous improvement; and focus on results (DuFour & Eaker, 1998; Solution Tree, 2021). Later, Rebecca DuFour was added to the research team. This new team established *Three Big Ideas* for the work of PLCs that involved educators ensuring that all students received the highest level of learning, educators not working in isolation, and educators continuously seeking evidence of student learning (DuFour et al., 2005; Solution Tree, 2021). These renowned researchers introduced and aided in building the

knowledge of PLCs over the past few decades. They have truly impacted the learning and collaboration of educators within schools and districts across many countries. Their work and efforts have led to continuous research on PLCs and transformed how educational leaders conduct organizational success daily. Continued research on this concept can only grow the knowledge and skills of individuals within education on student learning and professional learning for teachers and educational leaders alike.

Social Context

Collaboration begins in the early stages of life as children learn how to interact with one another, play collaboratively, ask questions, and justify their thinking (Kukkonen et al., 2020; MacDonald et al., 2000). Children are exposed to collaboration long before entering the school building. Children learn collaboratively through interactions with parents, siblings, other family members and through television shows they may watch at home. For example, the Power Rangers television show involved a team of five individuals that each had an individual power that the team used as a collective whole to work together to beat the evil villains. As students attend school, collaborative learning becomes more relevant as students learn to interact with peers. Many studies have demonstrated that children actively involved with collaboration gain knowledge that has shown an increase in understanding the objective (MacDonald et al., 2000).

Collaboration is a critical component of any organizational success as collaboration creates better ideas and products when compared to those produced individually (Chandler-Olcott & Hinchman, 2019). Collaboration can come in various forms, including face-to-face meetings, digital technology, or a blended combination of both (Barfield, 2016; Chandler-Olcott & Hinchman, 2019). It goes beyond the schoolhouse walls, and PLCs are essential in any work and organizational environment. Businesses, like Apple, did not become successful by the work

of one person but of a team of experts. Companies and organizations from car dealerships, hospitals, and retail corporations collaborate to create goals, share responsibilities, and work as a team to achieve more than what could have been completed alone (Barfield, 2016; Chandler-Olcott & Hinchman, 2019). Individuals who participate in collaboration move beyond their thinking and learn from others, which will allow the team to build knowledge and expertise together (Barfield, 2016).

Moving beyond social context and into the educational world, collaboration has created a school reform towards improving student achievement (Riveros, 2012). In fact, in the past couple of decades, collaboration has surged into educational organizations and has increased the importance of discourse among constituents (Joyce, 2004; Stoll & Louis, 2007). Collaboration has created an impact among educational organizations within the United States and other countries as well. For example, in Canada, The Alberta Commission on Learning (2006) started goals involving implementing PLCs and collaboration among campuses to improve their education system. The commission members found that the six components of PLCs, supportive leadership; shared vision; collaboration; supportive learning environment; shared accountability; and structured time, were essential to increase student achievement (Alberta Education, 2006). Other countries, such as China, determined the importance of collaboration within their higher education system concerning their financial industry and economic development due to the connection between collaboration and creating an effective staff structure (Yao & Steemers, 2009). Regardless of location or organization, collaboration creates an organization that accomplishes shared goals and is built on strong relationships of all constituents involved.

The COVID-19 pandemic also put a strain on the education system and halted how education delivered collaboration among students and teachers (Bansak & Starr, 2021; Daniel,

2020). Educators worked diligently to provide meaningful learning, and for most districts, this included remote learning through an online platform (Schwartz, 2020). Educational leaders determined that collaboration would suffer greatly among students and teachers. A plan to determine ways to collaborate among colleagues and students needed to be created quickly (Daniel, 2020). Districts and campuses clung to online platforms to hold meetings and continue collaboration among the organization (Demir et al., 2020). Although the pandemic brought various obstacles to the educational world, teachers and educational leaders understood the importance of working together and continuing collaboration. The continued collaboration and online gatherings gave teachers support through the difficult times and made the transition back to face-to-face instruction less difficult.

Theoretical Context

Cooperative learning and collaboration are something that individuals experience and do every day (Casey & Quennerstedt, 2020). John Dewey's (1933) work emphasized the importance of social interactions and cooperative learning within education as these concepts build on students' background knowledge and experiences. Dewey (1933) argued that students needed to develop appropriate social skills and actively use the skills to be successful outside of the classroom. The cooperative learning model stresses the importance of the role of the teacher in providing students opportunities to be involved in their learning and creating opportunities for students to work collaboratively within the classroom. Dewey (1933) believed that these pieces would lead to social and academic success for students.

The isolation culture of the teaching profession is not a new concept within the education organization as this has been the norm for schools for decades (Wheelan, 2005). The workload, student behaviors, time management, and poor relationships have led to less time for adult

interactions and closed classroom doors (Mawhinney, 2008; Dassault et al., 1999). The isolation can create a lack of community among the organization and lessens their interests in their work (Mawhinney, 2008; Rogers & Babinski, 2002). School districts have recognized the issue of isolation among their teachers and have implemented reforms such as PLCs to lessen the repercussions of teachers working in isolation. Collaboration among teachers is essential to moving away from the culture of isolation among the education profession and building capacity among educators (Mawhinney, 2008).

Problem Statement

The problem is that educators lack a true understanding of the framework and application of PLCs (Campbell & Lee, 2017; Carpenter & Munshower, 2020; DuFour, 2007; Turner et al., 2018; Talbert, 2010). Educators are becoming very overwhelmed with the daunting workload within education. They are tasked with staying abreast of new research, implementing new instructional strategies, and meeting the needs of all the students within their classroom. Teachers are expected to meet all these demands while also maintaining documentation and deadlines required by campus and district administration. Teachers are also faced with increased accountability measures, high-stakes assessments, limited resource access, and demeaning pay (Dunn et al., 2017). These demands have caused teachers to work in isolation and have decreased collaboration among themselves and educational leaders, ultimately causing new teachers and veteran teachers to leave the classroom to pursue new careers (Hepburn et al., 2021; McLaughlin & Talbert, 2007; Song & Choi, 2017; Teles et al., 2020). PLCs can be the answer to solving the concerns among educators as these communities enforce collaboration among an organization regarding instructional practices and student learning (DuFour, 2007; Fulton et al., 2010; Little, 2002; Morrissey, 2000; Vescio et al., 2008).

The No Child Left Behind Act (NCLB) was signed into law by President George W. Bush in January 2002 to close student achievement gaps; however, this created a strain on the educational world (Bogin & Nguyen-Hoang, 2014; Darling-Hammond, 2007; Reback et al., 2014). The NCLB Act was designed to increase student academics and school accountability by meeting Adequate Yearly Progress (AYP). Schools that did not meet this progress were deemed "in need of improvement" or "needing improvement" (Bogin & Nguyen-Hoang, 2014; Darling-Hammond, 2007; Reback et al., 2014). These designations came with more than just a title. The schools with these designations were often referred to as "failing," which affected various factors, including surrounding property values and funding (Bogin & Nguyen-Hoang, 2014; Darling-Hammond, 2007; Reback et al., 2014). As a result, these schools lost funding, families did not want to send their students to the schools, and teachers did not want to work on these campuses. The NCLB Act intended to create fair and equitable educational opportunities for all students. Instead, this educational reform created untended consequences that harmed targeted students rather than increasing student achievement (Darling-Hammond, 2007).

Every Student Succeeds Act (ESSA) replaced the NCLB Act in 2015 and redefined the involvement of the federal government in education (Black, 2017). Although the NCLB Act and ESSA are different, there continue to be similarities between the two laws (The Understand Team, n.d.). The most significant change between the two laws involves the federal government handing over the responsibility of student performance, accountability, and school reform to the states (Black, 2017). Some other changes involved the requirement of parent involvement, focus on literacy and reading, and creating plans for struggling school districts (The Understand Team, n.d.). However, ESSA had untended consequences, including flatting federal funding, eliminating additional resources, and weakening equity standards (Black, 2017). ESSA was

created to elevate some of the pressures of education on educators; yet there continues to be unintended consequences for educators and students alike.

The ESSA created untended consequences for students and created obstacles for educators and educational leaders. Various research has demonstrated an increase in accountability pressure among educators and started a shift in instructional practices to include teaching to the test and, in some cases removing low-performing students from the testing pool (Caullen & Reback, 2006; Figlio and Rouse, 2006; Figlio, 2006). The increased accountability pressure also pushed educators out of the profession and into new careers. When new teachers were asked about leaving the classroom, 44% stated that they would not likely leave in the future, 26% were unsure, and 20% said that they would leave in the first five years (Hepburn et al., 2021). More specifically, the Department of Education's research has demonstrated a steady decline of secondary teachers beginning in 2010 (Table 1). Texas Teacher Workforce Report found that approximately 50% of teachers quit after their first year (Ford, 2022). In 2019, a random sampling was completed to determine why teachers left the profession (Table 2). Approximately 22% left due to inadequate pay/benefits and 19% left due to stress/pressure/burnout (Texas Association of School Boards, 2019). To include and support reflection and collaboration, PLCs have been implemented among campuses to create changes in educational practices that could increase teacher retention and student success (Dogan et al., 2016; DuFour et al., 2005; Durksen et al., 2017).

Figure 1

The Number of Secondary Teachers Continues to Decline
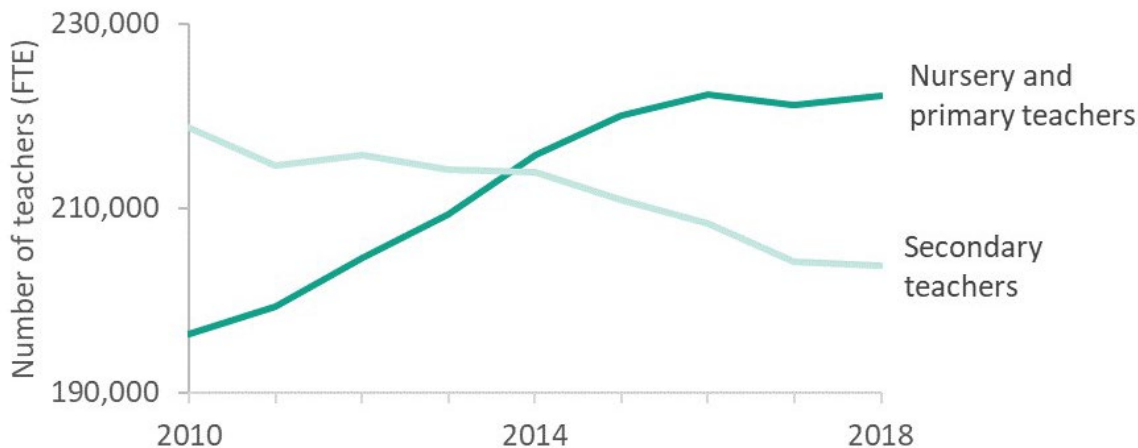
Collaboration provides educators the opportunity to analyze the "problem of practice" and build relationships among colleagues (Snow-Gernon, 2005). Partnership within PLCs also allows educators to understand and support the mission, vision, and shared goals set for the organization (Stoll et al., 2006). Educators can discuss professional practices and analyze data to create a foundation for change. Without reflection and collaboration, educators could continue to work in isolation or revert to prior techniques, and the achievement or success of the organization or students would stagnate (Chauraya & Brodie, 2017; Vanblaere & Devos, 2016). Various factors influence the discrepancies among PLCs within campuses when implementing and supporting collaboration. The discrepancies include leadership styles, distribution of authority, social resources, and social programs (Song & Choi, 2017). There is also a current gap in research regarding the experiences of secondary teachers with collaboration and PLCs (DuFour, 2007; DuFour et al., 2005; Mu et al., 2018; Snow-Gerono, 2005; Stoll et al., 2006). A phenomenological research study on the experiences of secondary teachers with collaboration

and PLCs would work towards filling this gap and would provide educational leaders with a better understanding of how to create PLCs that remain consistent in the processes needed to implement change and support educator professional and student growth.

Figure 2

Reasons Teachers Have Considered Leaving the Profession
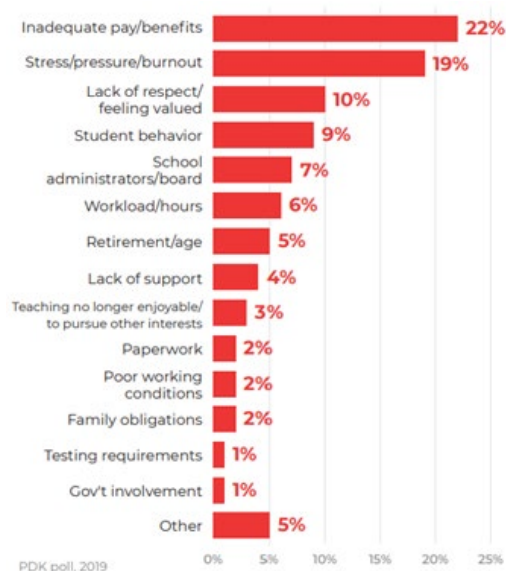
Note. Texas Association of School Boards, 2019.

Purpose Statement

The purpose of this transcendental phenomenological study was to describe secondary teachers' experiences with PLCs at Central Texas secondary schools. At this stage in the research, PLCs are defined as a team of individuals working collaboratively to share and reflect on their practice processes to professionally grow those involved (Mitchell & Sackney, 2000). Participants included in this study were secondary teachers that teach grades sixth through twelfth. The teachers also taught a core content subject area including mathematics, science, ELA, and social studies at a middle school or high school in Central Texas. Teachers must have more than one year of teaching experience and participate in PLCs within their campus.

Wenger's (2000) social learning theory will guide this study as this theory highlights the significance of collaborative learning amongst a team working towards common goals.

Significance of the Study

The significance of this study contains a description of the impacts that the study made on the discipline from a theoretical, empirical, and practical perspective. The study's theoretical significance conveys how the study contributed to the theoretical underpinnings of the current problem. The empirical significance of the study discusses how the study relates to similar studies and how the study added to the existing literature. Finally, the study's practical significance articulates why the knowledge produced from the study may be significant to the location, organization, general population, or sample studied.

Theoretical Significance

This study focuses on Ettienne Wenger's (1998) social learning theory and the relation to secondary teacher experiences in PLCs. Wenger's (1998) theory of social learning concentrates on the importance of collaboration for learning among a group of individuals that strive to accomplish the same goals. Members work together as a collective whole to learn from experience, learn from doing, learn as a community, and learn about their individual identity (Wenger, 1998). PLCs thrive on social community and collective knowledge to build relationships, achieve goals, and refine professional practice (DuFour et al., 2005). The characteristics from both Wenger's (1998) social learning theory and the characteristics of DuFour et al. (2005) PLCs are essential to growing educators professionally and increasing student achievement socially and academically. This study will enhance the theoretical framework of PLCs by integrating the concept of the social learning theory and utilizing the experiences of secondary teachers to improve the implementation and support of learning within

these communities. An increase in learning within these communities will increase student achievement and increase retention among teachers.

Empirical Significance

Research has demonstrated a plethora of information surrounding the characteristics and benefits of PLCs; however, there is a gap in the research regarding the experiences of secondary teachers within PLCs (DuFour, 2007; DuFour et al., 2005; Mu et al., 2018; Snow-Gerono, 2005; Stoll et al., 2006). In addition, the implementation and support surrounding PLCs look vastly different on each campus (Campbell & Lee, 2017; McLaughlin & Talbert, 1993; Song & Choi, 2017; Talbert, 2010). The differing implementation of PLCs causes varying perceptions by the individual members of the communities and varying leadership styles (Campbell & Lee, 2017; McLaughlin & Talbert, 1993; Song & Choi, 2017; Talbert, 2010). The current research shows a slight understanding of the elementary teachers' experiences with collaboration and PLCs. Yet, limitations and a gap in the research highlight research on secondary teacher experiences within PLCs is evident. A research study on this topic would deepen the understanding of PLCs and provide educational leaders with essential knowledge for implementing change in the collaborative framework within their campuses.

Practical Significance

The data collected and knowledge gained from this research will provide educational leaders with the experiences teachers face regarding collaboration, professional learning, and professional experience practices in PLCs within secondary campuses (DuFour, 2007; DuFour et al., 2005; Mu et al., 2018; Snow-Gerono, 2005; Stoll et al., 2006). With very little research on the experiences of secondary teachers with collaboration and PLCs, this study will add to the current research database and encourage additional research in the future (DuFour, 2007; DuFour

et al., 2005; Mu et al., 2018; Snow-Gerono, 2005; Stoll et al., 2006). Educational leaders and teachers could gain insight on effective collaboration and successful implementation of PLCs and incorporate this framework within their current organization. Educational leaders could also evaluate the advantages and disadvantages of the organization's current PLCs and make adjustments in order to create professional learning that increases student achievement and teacher retention. Organizations outside of education may also consider the research beneficial as these individuals may use the information to adjust the current collaborative structure among their constituents to grow their organization.

Research Questions

The purpose of this transcendental phenomenological research study was to understand secondary teachers' perspectives of PLCs based on their experiences in Central Texas secondary schools. The following questions directed this study include the following:

Central Research Question

What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas?

Sub-Question One

What collaborative experiences do secondary teachers have during PLCs?

Sub-Question Two

What professional learning experiences do secondary teachers have during PLCs?

Definitions

1. *Adequate Yearly Progress (AYP)*-measurable goals created by the No Child Left Behind (NCLB) Act to determine the academic performance of schools and districts on standardized tests (Darling-Hammond, 2007).

2. *Collaboration*-deciding goals, sharing responsibilities and working together with others as a team to achieve more than what would be completed by an individual by themselves (Barfield, 2016).

3. *Cooperative learning*-small group learning where individuals work together as a team on a shared task (Casey & Quennerstedt, 2020).

4. *Every Student Succeeds Act (ESSA)*-replaced the NCLB Act in 2015 and eliminated the involvement of the federal government in education (Black, 2017).

5. *Isolation*-individuals work alone without collaboration with peers or colleagues within an organization (Mawhinney, 2008).

6. *Leadership*-a process in which an individual motivates others to achieve goals established for the organization and inspires others to agree to what needs to be accomplished for the organization to be successful (Kesting et al., 2016).

7. *No Child Left Behind Act (NCLB)*-Education bill passed by the Bush Administration to close student achievement gaps and provide all students with fair and equitable educational opportunities (Darling-Hammond, 2007).

8. *Professional Learning Community*- involves a team of individuals working collaboratively to share and reflect on their practice processes that professionally grow those engaged and create change among the organization (Mitchell and Sackney, 2000).

Summary

Collaboration and cooperative learning are the heart of organizational change and professional growth; however, understanding the implementation of collaboration within an effective PLC is where the genuine concern lies. Educators are feeling overpowered by the demands of the workload, student behavior, and time management within the profession, and this

has caused isolation and a decrease in collaboration (Mawhinney, 2008; Dassault et al., 1999). At times, PLCs held are led by educational leaders who struggle with understanding the actual characteristics of implementing and supporting effective PLCs within an organization. The lack of understanding has affected educators' professional growth and student learning as these components are tied to the success of implementing PLCs. A phenomenological research study investigating the experiences of secondary teachers with PLCs may find the answer to eliminating isolation among teachers and increasing collaboration among effective PLCs.

Chapter 1 provided the historical context, social context, and theoretical context of PLCs. Furthermore, this chapter explained the problem and purpose surrounding the research for this study. Lastly, the chapter provided the significance behind the study. The purpose of this transcendental phenomenological research study was to understand the impact of collaboration among secondary teachers and their perspectives of PLCs based on their experiences. The theory that guides this study is Etienne Wenger's (1998) social learning theory. The study answered the central research question: What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? The sub-questions included: What collaborative experiences do secondary teachers have during PLCs? What professional learning experiences do secondary teachers have during PLCs? The current research shows a slight understanding of the elementary teacher experiences with PLCs. It leaves limitations and a gap in the research that focuses on secondary teacher experiences with PLCs. With very little information on the experiences of secondary teachers with PLCs, it is crucial to research this topic to bridge the gap of knowledge with this trending concept among educators.

CHAPTER TWO: LITERATURE REVIEW

Overview

A review of the literature was completed to determine the characteristics of PLCs in relation to the experiences of secondary teachers. A review of current literature related to PLCs and collaboration will be presented in this chapter. In the first section, the theoretical framework of Wenger's (1998) theory of social learning in relation to PLCs will be discussed. The second section will address recent literature regarding definitions, characteristics, key features, non-characteristics, and benefits of PLCs. The third section will discuss the literature surrounding the experiences of secondary teachers on PLCs with a focus on four core subjects to include mathematics, science, ELA, and social studies. Lastly, the importance of the study will be determined by discussing the gap in literature.

Theoretical Framework

The theoretical framework for this study is Wenger's (1998) theory of social learning. Social learning emphasizes the importance of interactions and collaboration between colleagues and allows each member of the PLC to grow in their professional practices and content knowledge (Wenger, 2000). As a result, constituents can analyze teaching practices and make adjust based on evaluations and feedback to improve their individual practices. This literature review will examine how the theory of social learning relates to the fundamentals of PLCs and assist with determining the discrepancies between the experiences of secondary core subject teachers, including mathematics, science, ELA, and social studies. These discrepancies will guide educational leaders in adjusting the implementation and support behind the current PLC processes. Additionally, the information gathered will influence future research regarding this phenomenon.

Social Learning Theory

In educational research, many theorists have influenced the progression of social learning theory. The works of Bandura (1965), Vygotsky (1978), Bourdieu (1980), Engestrom (1987), Lave and Wenger (1991), and Wenger (1998) are predominantly known within the theory of social learning (Farnsworth et al., 2016). The theory or idea of social learning, along with communities of practice, was used to explore the professional learning of educators (Sutherland et al., 2005). Teaching is composed of a group of practitioners who actively understand the tools and activities within education as a collective whole (Lampert, 2010). The group effort emphasizes that education is centered around a collective group effort instead of an individual teacher (Lampert, 2010). Studies have shown that learning happens when educators participate in various social practices (Farnsworth et al., 2016). Furthermore, studies have demonstrated how these practices can create organizational change that lead to success over time for both educators and students (Farnsworth et al., 2016). These social practices can ultimately be applied within PLCs, and learning can occur for all constituents involved.

Wenger's (1998) social theory of learning focuses on the importance of collaboration for learning among individuals. This theory explains that learning occurs through collaboration as participants negotiate and embrace the problem of practice (Wenger, 2000). Participants involved in collaboration also build identities within the social community or organization. Through collaboration, educators can analyze and reflect on teaching practices and adjust those practices based on the data collected, much like various other organizational groups. From tribes working together to build a fire to a group of nurses and doctors in a hospital, human beings have worked in groups and learned from each other for centuries and continue to do so today (Wenger, 2000). This collective learning is the center of gaining knowledge through

engagement, collaboration, imagination, and alignment (Wenger, 2000). Individuals are engaged in learning that emphasizes the practice of the organization. These individuals can also enhance personal practices by determining the answer to the following three questions: "Why focus on it?; Which way is up?; and What is doable?" (Wenger, 2000).

An organization that supports the learning of everyone builds a culture of professional learning throughout the culture. The organization also maintains the community of practice (Wenger, 2000). A community of practice includes three elements: shared repertoire, mutual engagement, and joint enterprise or interest (Wenger, 2000). Shared repertoire suggests that the members have shared resources that can benefit everyone in the PLC team (Mills, 2011; Wenger, 2000). The resources could include documents or experiences (Mills, 2011; Wenger, 2000). Mutual engagement states that members who collaborate focus on common goals (Mills, 2011; Wenger, 2000). The collaboration could include problem-solving, planning, and in some cases, negotiation (Mills, 2011; Wenger, 2000). The last element, joint enterprise or interest, indicates that the team members share common interests and goals (Mills, 2011; Wenger, 2000). PLCs thrive on social community and collective learning (Zonoubi et al., 2017). Both concepts are essential to growing educators professionally and increasing student achievement. In the world of theory, social learning theory creates a structure for professional learning within PLCs. (Watson, 2013). Teachers can build knowledge and self-efficacy through a social learning environment (Watson, 2013).

Social learning theory is centered around individuals learning by experiences through observing, imitating, and modeling (Bandura, 1965; Wenger, 2000). Teachers are guided by the social learning theory components in the education profession before entering a classroom. Through college courses, teacher candidates are exposed to various opportunities to observe,

imitate, and model effective teaching strategies that they are taught. For example, a teacher candidate may work with a veteran teacher to observe a teaching strategy that the teacher uses within their classroom. The teaching candidate may have an opportunity to utilize this teaching strategy and receive feedback on their delivery. The teacher candidate can then reflect and determine whether the strategy worked and determine the next steps needed to be successful moving forward. The critical element of this process is the time to reflect on the strategies and processes. This concept could remain valid for veteran or novice teachers currently working in classrooms daily. This social learning theory concept could be utilized as the foundation for PLCs and provide teachers with the opportunity to use the same steps of observing, imitating, and modeling to grow professionally (Wenger, 2000).

The last two main components of Wenger's (1998) social learning theory were centered around building the individual for the betterment of the organizational whole. The idea of learning as becoming highlights the importance of building the individual teacher by knowing their unique teaching styles and philosophies (Smith, 2006). Wenger (1998) defined becoming by understanding where we have been and where we are going and utilizing that information to help the community or organization. Learning as belonging emphasizes community as one identity (Smith, 2006). How an individual grows or does not grow with professional practices determines the contributions to the community (Wenger, 1998). The community's overall success is based upon the success of each member. These concepts are comparable to the framework of a PLC. DuFour (2007) and various other researchers discuss the importance of individual professional growth and community building when discussing the essential components of an effective PLC. Both concepts emphasize the importance of personal

improvement for improving an organization as a collective whole that leads to the achievement of common goals (DuFour et al., 2008; Wenger, 2000).

Social learning theory and PLCs require individual and collaborative efforts to work effectively and efficiently towards change (DuFour et al., 2008; Wenger, 2000). Within the social learning theory, an individual can reflect on personal, professional practices that are observed, imitated, and modeled (Bandura, 1965). An effective PLC utilizes the same framework by having a collection responsibility among the team (Bolam et al., 2005; Feger & Arruda, 2008; Lomos et al., 2011; Jones & Thessin, 2015; Louis et al., 1995). A PLC's framework is also centered around supportive leadership, reflecting on current practices, collaborating, promoting learning by each team member, and the team agreeing on a set of shared values and vision (Bolam et al., 2005; Feger & Arruda, 2008; Lomos et al., 2011; Jones, & Thessin, 2015; Louis et al., 1995). The connections between the social learning theory and the framework for PLCs accentuate the value of growing teachers individually and building a community towards a thriving organization.

This study will utilize the social learning theory within the research questions, data collection, and reporting results. Discussions will be framed around this theory as this focus will assist with a better understanding of the experiences of secondary teachers with PLCs. Social learning theory provides a foundation for understanding how collaboration, reflection, and individual growth are crucial elements for sustaining learning and creating change within an organization (Wenger, 2000). This understanding can flow into the framework for PLCs as these are vital components for implementing and supporting organizational members through the PLC process. Furthermore, educational leaders can utilize the connection of the social learning theory and PLCs to change current processes and procedures to achieve organizational goals.

Related Literature

Our society is everchanging, and education must continue to keep up with the same pace by reinventing the role of the teacher and educational leader (Ell & Major, 2019). Educators are handed the daunting task of meeting these changes and demands while also increasing student achievement and closing achievement gaps. Improving student achievement can only be accomplished by analyzing the campus data and making and supporting changes that will enhance the learning environment throughout the organization (Stoll et al., 2006). Implementing and supporting change to meet the demands of the 21st-century learner begins with PLCs. These communities are the foundation for shaping educators that constantly learn and grow professionally within the educational organization (Stoll et al., 2006).

This literature review discusses the various vital concepts behind the idea of PLCs to include the following: the definition of PLCs, benefits of PLCs, characteristics of effective PLCs, key features, and non-characteristics of PLCs. Lastly, the literature surrounding secondary mathematics, science, ELA, and social studies teacher experiences PLCs is discussed. Understanding the interpretations, critical components of PLCs, and the experiences of secondary teachers will only broaden the research behind improving the understanding and implementation of PLCs. In the end, this phenomenological research study will support educational organizations and leaders with a systematic change towards cohesion with PLC implementation and support.

Definition of Professional Learning Communities

The idea of a PLC began with the knowledge and understanding of the importance of educators working together collaboratively (Darling Hammond, 1996; Guskey, 1985; Louis and Kruse, 1995). The idea ignited continuous development in research regarding PLCs; however,

the varying research has caused multiple understandings of the definition surrounding these organizational communities (Campbell & Lee, 2017; DuFour, 2007; Talbert, 2010). Although there is no universal definition of a PLC, the definitions within research are very general and broad and vary based on the researcher (Campbell & Lee, 2017; Hord, 1997; Lomos et al., 2011). Furthermore, there are numerous perceptions of the definition of a PLC and collective interpretation that this idea involves a group of individuals that share the same goals and values (Alzayed, & Alabdulkareem, 2021; Chauraya & Brodie, 2017; Mitchell & Sackney, 2000; Turner, 2018). PLCs are described as a group of educators that meet consistently over a certain length of time to discuss instructional concerns and student learning that leads to instructional improvement and reform (Fulton et al., 2010; Little, 2002; Morrissey, 2000; Vescio et al., 2008). Additionally, PLCs are also described as a group of connected teachers and administrators responsible for creating change and seeking learning within an organization to benefit students (Harris & Jones, 2010). PLC members are willing to collaborate and reflect on professional practices that focus on student learning to grow as an individual and as a collective whole (Alzayed, & Alabdulkareem, 2021; Chauraya & Brodie, 2017; Mitchell & Sackney, 2000; Turner, 2018).

Throughout the related literature on PLCs, there may be varying definitions of a PLC; however, research indicates that PLCs are essential factors for improving instruction, leading change within schools, and building relationships among constituents (Dogan et al., 2016). PLC concepts move from traditional professional development provided by an outside expert to the collective learning of individuals of an organization within a community (Oolbekkink et al., 2017; Tam, 2015). In PLCs, not only are teachers and educational leaders working as an organization, but each member is assisting with developing an organizational family (DuFour et

al., 2008). The learning environment created within a PLC creates a safe place to ask questions and share teaching strategies (Dogan et al., 2016). Educators engage in various activities that involve designing activities, analyzing data, and measuring student progress (McLaughlin and Talbert, 2008; Mindich and Lieberman, 2012). At the center of PLCs, educators and educational leaders work together to improve student education, increase goal achievement, and organization success (Lomos, Hofman, & Bosker, 2011; Stoll et al., 2006).

Although there is continuous research behind PLCs, educators continue to confuse educators about the true meaning and implementation of these communities (Campbell & Lee, 2017; Carpenter & Munshower, 2020; DuFour, 2007; Talbert, 2010; Turner et al., 2018). For example, when education compared to other organizations, such as medicine, it was determined that there was not a common language regarding the function and implementation of PLCs (Grossman et al., 2001). This confusion has caused concern that the proper understanding of PLC processes will be lost (DuFour, 2007). Furthermore, the PLC teams of educators tend to function differently at each campus level including elementary, middle, and high school and across districts (Campbell & Lee, 2017). For example, elementary schools are more likely to engage in PLCs for each grade level (Mindich & Lieberman, 2012). Secondary campuses middle and high school PLCs are implemented through subject content such as mathematics, science, ELA, and social studies (Dogan, et al., 2016). Additionally, PLCs may involve teacher leaders in a large professional development effort or involve an entire school with other constituents (Brodie, 2014; DuFour, 2014; DuFour et al., 2008). On some campuses, the PLC team will meet each week, while other PLC teams might meet bi-weekly or, in some cases, monthly (Dogan, et al., 2016). Ultimately, the leadership teams are responsible for determining the space, time, and resources necessary for the communities to function correctly (Brodie, 2021; Katz et al., 2009;

Stephan et al., 2021; Stoll et al., 2006). Although the logistics of organizing a PLC seems simple, consistency and organization are foundational steps to creating a culture of continuous learning and should not be taken lightly.

Beyond the logistics of organizing a PLC, educational leaders determine the concepts covered within each PLC meeting. These processes may look different between each campus and PLC team; however, PLCs should be centered around the same key components. These components include the following: (1) shared mission, vision, values, goals (2) collaborative teams focused on learning (3) collective inquiry (4) action orientation and experimentation (5) commitment to continuous improvement (6) results orientation (Bolam et al., 2005; DuFour et al., 2016; Feger & Arruda, 2008; Lomos et al., 2011; Jones, & Thessin, 2015; Louis et al., 1995). Unfortunately, these components are not consistent among campuses and districts. The confusion of the processes, procedures, components of effective PLCs has led to a discrepancy among the implementation of PLCs (Campbell & Lee, 2017; DuFour, 2007; Talbert, 2010). These discrepancies have created various experiences from educators across education. Understanding these multiple experiences will provide education leaders with a better foundation for changing the processes and implementation of the PLCs within their organization.

Characteristics of Professional Learning Communities

PLCs are networks that have inherited the reform of education organizational collaboration and student improvement (Carpenter, 2018; DuFour et al., 2008). These networks can effectively lead campuses and districts through change to promote student achievement and improve teacher practices (DuFour, 2007). However, for the improvement or change to be accomplished, the educational leaders must understand and gain knowledge of the characteristics that drive an effective PLC. The main characteristics for PLCs that are frequently described

throughout research include: (1) shared mission, vision, values, goals (2) collaborative teams focused on learning (3) collective inquiry (4) action orientation and experimentation (5) commitment to continuous improvement (6) results orientation (Bolam et al., 2005; DuFour et al., 2016; Feger & Arruda, 2008; Lomos et al., 2011; Jones, & Thessin, 2015; Louis et al., 1995). When a leader leads with these characteristics in mind, it can provide educators with professional growth and create effective PLCs that promote student achievement, professional growth, and organizational success.

The first characteristic of having a shared mission, vision, values, and goals provides the members of the PLC clarity of where the campus is headed and an understanding of the common objectives that are needed to be achieved (Gurley et al., 2015). Educational leaders and teachers are a community in which all team members are on the same page regarding the direction of the school and can measure the progress of the goals created (DuFour et al., 2016; Hord, 1997; Newmann, 1996; Stoll et al., 2006; Wells & Feun, 2007). The mission statement has the school organization determine why it exists, and the vision statement has the school organization determine what it will become (DuFour and Eaker, 1998). The values are typically linked to the vision of the school organization and focus on the actions that will take place to achieve organizational change and success (DuFour and Eaker, 1998).

Shared values and vision are the first pieces of implementing and supporting effective PLCs and are considered essential key features (Stole et al., 2006). The shared values and vision are centered around student achievement. With this cohesive agreement, constituents understand the structure of the PLC, and an understanding of the organization's purpose is critical to success (Handelzalts, 2009; Katz & Earl, 2010; Stoll et al., 2006). Developing a shared mission, vision, values, and goals have long been identified as essential for strategic planning for organizational

change and improvement (Bryson, 2004; Kaufman, 1992). Additionally, these fundamental processes have led to increased student achievement when applied effectively to an organization (DuFour et al., 2008; Wiggins and McTighe, 2007).

The second characteristic, collaborative teams focused on learning, work in conjunction with the first characteristic. Members of the PLC work in a collaborative team to reach common goals that are created together, agreed upon by each member, and each member is held accountable for attaining each goal (DuFour, 2003; Prenger et al., 2017; Vanblaere & Devos, 2018; Wells & Feun, 2007). For the goals to be achievable, the organization must create goals that focus on what is to be accomplished (DuFour and Eaker, 1998). The goals must also contain the steps needed to achieve the goals, identify the responsible individuals required, and have a timeline (DuFour and Eaker, 1998). A process must be created to evaluate the success of the goals or determine the adjustments that need to be made (DuFour and Eaker, 1998). The educational leaders must ensure that the organization is focused on supporting the learning of all professionals and is centered around the common established goals (Wald and Castleberry, 2000). Collaborative learning involves working together to improve professional practices that result in increased collective results (DuFour et al., 2016).

The third characteristic of PLCs is collective inquiry, where the PLC team interacts and directs their learning on the organization (Carpenter, 2017). The PLC team works together in a continuous cycle of questioning the organization's current state to create change (DuFour et al., 2016; Newmann, 1996). Each member asks questions that promote discussion regarding the positive and negative aspects of the organization. From there, the community creates a plan to make positive changes. These changes include determining new professional practices, implementing these new practices, and reflecting on the outcomes to assess the success of the

plan when compared to the organization's goals (DuFour et al., 2016; Newmann, 1996). The collective inquiry process provides PLC team members the opportunity to solve problems to transform teaching and learning (Brandmo et al., 2021; Carpenter, 2017).

The fourth characteristic, action orientation and experimentation, works closely with the third characteristic, collective inquiry. Members of the PLC team that are part of a learning organization that acts and do not allow members to be non-participants (Hughes and Kritsonis, 2006). PLC members learn from their actions and acknowledge the significance of each member of the PLC team. Each member is committed to implementing shared ideas and is willing to take risks (Hughes and Kritsonis, 2006). PLC members are open to testing ideas, accepting failure as an option, and learning from experiences (DuFour et al., 2016; Hughes and Kritsonis, 2006). These processes allow the PLC team to evaluate existing ideas and to be open to new ones.

The fifth characteristic of a PLC, commitment to continuous improvement, involves each member determining new ideas to accomplish the mutually created goals (DuFour et al., 2016; Hord, 1997). This process is continuous and consistent with gathering evidence, beginning professional practices that address areas of strengths and weaknesses, implementing the professional practices, analyzing the impact of the changes, and adding to the new cycle for the next level of work (DuFour et al., 2016; Scheerens et al., 2003). Results orientation is the sixth and last characteristic of PLCs and is based on the results of the collective efforts of the PLC team. The members of the PLC assess their results as a team and use the information to make improvements in their practice (DuFour et al., 2016). Robert DuFour declares that the characteristics of the PLC are simply characteristics without the commitment of the educators within the organization.

Key Features

There are two types of conditions needed to build a successful PLC, and this includes both essential characteristics and key features. As previously discussed, the characteristics of a PLC include the following: (1) shared mission, vision, values, goals (2) collaborative teams focused on learning (3) collective inquiry (4) action orientation and experimentation (5) commitment to continuous improvement (6) results orientation (Bolam et al., 2005; DuFour et al., 2016; Feger & Arruda, 2008; Lomos et al., 2011; Jones, & Thessin, 2015; Louis et al., 1995). In the review of the literature regarding PLCs, the discussion of key features is also highlighted when describing the implementation of a successful PLC (Brodie, 2021). These key features include the following: focus, collective responsibility, reflection, collaboration, support, and trust (Grossman et al., 2001; Katz et al., 2009; Stoll & Louis, 2008; Vagrieken et al., 2017; Vescio et al., 2008; Westheimer, 1998). Characteristics describe essential pieces to determine the quality of PLCs, while the features describe the distinctive parts that create a PLC.

To have a successful PLC, there must be a clear focus and understanding of the purpose of the meeting (Brodie, 2021). The main agreement should be centered around teacher learning and should not be so broad that collaboration among the PLC team members is not valued (Katz et al., 2009). The learning that takes place within the community allows for disagreements and questioning that spark discussion and challenge all members to think beyond what they already know (Brodie, 2021). However, choosing the focus for the PLC meeting should not be left for the educational leader to decide. Members of the community take on a collective responsibility to drive the focus towards the organization's needs or make modifications based on conversations that will steer the community in a different direction (Brodie, 2021; Stoll et al.,

2006). All members are responsible for keeping the meetings focused so that the work does not become irrelevant or seen as a waste of valuable time (Brodie, 2021).

The critical feature of collective responsibility requires all members to take ownership of the focus behind the PLC purpose (Akiba et al., 2019; Stoll et al., 2006). This focus should be centered around teacher learning and student achievement. With this commitment, members are dedicated to the critical characteristics of a PLC that include the mission, vision, and goals of the organization and are willing to complete each step required to accomplish the goals at hand (Stoll et al., 2006). In addition, supportive leadership supports buy-in for the vision, mission, and goals for the organization and builds leadership capacity among other team members (Owen, 2004; Bolam et al., 2005; Scott et al., 2011).

Reflecting on current practices requires members to analyze current educational issues and determine a solution that fits the organization's needs (Lomos et al., 2011). The reflection process involves examining current teaching practices and lesson plans and redesigning or designing the curriculum (Popp, & Goldman, 2016; Visscher & Witziers, 2004; Woolway et al., 2019). The use of the reflective tool raises the likelihood of learning among the constituents in an organization and makes the new learning relevant and meaningful (Higgins, 2011). Reflection is another valuable piece of PLCs as this process produces critical thinking and questioning that leads to driving learning into practical action (Higgins, 2011).

Collaboration is not only a key feature of PLCs but is also a significant benefit of the model (Hairon et al., 2017; Stoll et al., 2006). Collaboration allows educators to share ideas, ask questions, and build relationships while simply supporting each other. Change reforms for an organization are more sustainable when collaboration is included as teachers are given a voice regarding the framework of the practice, and re-establishment can occur (Brodie, 2021;

Crawford, 2007; Stoll et at., 2006). PLCs that promote learning and collaboration will ultimately invite educators to learn together and solve issues related to practice and student learning (Dogan, 2016). By allowing educators to work together, analyze data, and engage in conversations within PLCs, researchers have declared that PLCs will transform professional practices and build a practical organizational framework (Dogan, 2016; Mulford, 2003; Silins et al., 2002; Silins & Mulford, 2002; Stoll et al., 2006; Yu et al., 2002).

Leadership support can drive the productivity of a PLC and determine the quality of the learning (Brodie, 2021; Woolway et al., 2019). The leadership support can derive from the administration team, and the veteran teacher leaders. Both hold valuable experiences and knowledge that can be useful in PLC meetings. Support can come in various forms, such as providing time and resources needed to maintain an effective PLC meeting (Katz et al., 2009; Stephan et al., 2012; Stoll et al., 2006). For example, daily scheduled conference time may include a timeframe of forty-five minutes; however, on days that PLCs are held, the time would be extended to give sufficient time to have valuable discussions. Additionally, leadership support involves taking an active role in the meetings by being present and showing interest in the topics discussed (Brodie, 2021). Teacher experiences with PLC meetings could be influenced positively or negatively based on the involvement of the leadership team and could determine their views for future experiences.

Trust is the final key feature of a PLC and, in some cases, is considered one of the most crucial pieces. Trust drives PLC teams' learning and collaborative processes as teachers learn to ask questions and challenge ideas without becoming defensive (Brodie, 2021). Without the trust to have challenging conversations, morale among the team members and engagement in PLC meetings becomes low (Schechter, 2012; Wong, 2010). Each member must trust in the processes

of the community and believe that challenging conversations lead to positive change and professional growth for all members of the team (Brodie, 2021). When mistrust is present in an organization, not only will the teachers lose interest in attending PLC meetings, but the purpose behind each meeting will be lost.

DuFour's Big Three Ideas

DuFour et al. (2005) research determined big three ideas for PLCs to ensure that students learn, a culture of collaboration, and a focus on results. The first concept, ensuring that students learn, provides educators with the foundation to think beyond teaching students and ensuring that each student is retaining and learning information. The question that leads PLCs shifts from "Was it taught?" to "Was it learned?" and ensures that all students learn skills for increased achievement (DuFour & Eaker, 1998). To accomplish increased student achievement, there must be a clear vision of where the organization is headed to assist all students with learning (DuFour & Eaker, 1998). DuFour and Eaker (1998) present four questions for PLC teams to explore when focusing on student learning: (1) What is it we expect students to learn? (2) How will we know when they have learned it? (3) How will we respond when they have not learned? (4) How will we respond when they already know it? When members of the PLC buy into this framework, each member works towards determining solutions to educational issues centered around student learning (DuFour et al., 2005).

The second concept, a culture of collaboration, allows educators to work together as a team, ask questions, and genuinely gain knowledge from each other and are crucial frameworks for teacher professional development (Popp & Goldman, 2016). Educational leaders and teachers must understand the importance of working together as collaboration provides a shared purpose and sense of community (DuFour et al., 2005). Teachers take responsibility for the students of

the entire team and work towards common goals that will create learning for all students

(DuFour et al., 2005). Additionally, when collaboration is included within the PLC, educators are

gaining new knowledge, and student achievement is increased to higher levels (DuFour et al.,

2005).

The last concept, a focus on results, allows the team to work together to enhance student

achievement by implementing and supporting student-centered goals (DuFour et al., 2005). The

ideas behind DuFour et al. (2005) research have demonstrated a belief that educators must work

as a team to effectively increase student achievement and meet the needs of all learners. Meeting

the needs of all learners is accomplished by teachers and educational leaders participating in a

continuous process of examining current student achievement and creating purposeful goals

(DuFour et al., 2005). Then, each member of the PLC team continues to reach those goals by

collecting data and analyzing data to determine the next level of work (DuFour et al., 2005).

Non-Characteristics of Professional Learning Communities

PLCs are present within campuses and districts across the nation; however, there are

discrepancies in the implementation and support for PLCs from campus to campus and district to

district (DuFour, 2015). When PLCs are not implemented efficiently and effectively, teachers

become disconnected from the organization's purpose and express frustrations (DuFour &

Reeves, 2015; Gates, 2014). Educational leaders cannot simply declare a PLC by gathering

members of the organization for a meeting but must also be faithful to executing the

characteristics or concepts of a purposeful PLC (DuFour, 2015). Research has demonstrated the

key characteristics and non-characteristics surrounding PLCs and how to implement and support

educators through those practices. Educational leaders who have this knowledge will adjust the

current PLC framework for their campus and implement new practices that will lead to professional growth.

A key aspect of sustaining purposeful PLCs is understanding the "non-characteristics" of implementing and supporting this endeavor. PLCs should never be a time to address matters negatively (Dogan et al., 2016). Handling negative issues includes members of the PLC speaking in a negative tone about or to other constituents and gossiping (Dogan et al., 2016). The PLC discussion should also not be led with a lecture-style delivery (Dogan et al., 2016). This type of delivery leads to disengagement and dissatisfaction from the PLC members. Teachers that can work and grow in PLCs that allow for professional discussions and disagreements will be the foundation towards improvement (Stoll et al., 2006). This type of learning is a team effort, and there should not be a single member that leads the committee. It is often that educational leaders will want to lead the discussion of the PLC. However, to build leadership capacity within the committee members, each member should be equally involved with leading the discussions or activities of the PLC meeting (Harris & Jones, 2010). Every educator should have the opportunity to share ideas and feel as though they are respected community members. PLCs should be a safe learning environment that promotes collaboration and where members keep the shared values, vision, and goals at the forefront of each gathering (DuFour et al., 2005; Durken et al., 2017; Vangrieken, et al., 2017).

Time is an extremely valuable possession in education and should be considered when scheduling and supporting PLCs. Educators often discuss paperwork, classroom management tasks, and lesson plans to reduce the time needed for inquiry and collaboration with colleagues (Harris & Jones, 2010). A teacher's time is significant due to the demands of the school, students, and society, and educational leaders must sustain from wasting this time (Aqulia,

1992). The PLC time should not be used for teachers to complete tasks that are not student-centered and irrelevant to the vision of the campus. PLCs should be an opportunity for teachers to influence colleague practices that leads to organizational change, and educational leaders must strategically design this time to allow this to occur (Day et al., 2007; Harris & Jones, 2010). This time should be considered sacred and used effectively; otherwise, constituents will lose faith in the changes implemented, and the purpose behind PLCs will be lost (Aqulia, 1992; Day et al., 2007).

The profession of education can be a demanding career, and this is another reason why PLCs should not be an opportunity for teachers to work in isolation (Turner et al., 2018; Wilson, 2016). Some tasks need to be completed daily, and these tasks demand a significant amount of time from educators. Completing these tasks tends to lead teachers to isolate themselves from one another to complete these tasks; however, PLCs are not the place or time to assign or discuss these particular tasks (Turner et al., 2018; Wilson, 2016). The administration team should purposefully plan PLCs. Educational leaders must understand that this time is sacred, and educators often feel as though they are constantly in "meeting overload" (York-Barr & Costa, 2016). Committees should focus on learning and growing as an organization and maintaining the true characteristics of a PLC. This focus will ultimately allow the organization to stray away from negativity and keep student success at the forefront. This focus will eventually enable the organization to stray away from negativity and keep student success at the forefront.

Benefits of Professional Learning Communities

Effective and purposeful PLCs provide countless benefits for districts, campuses, and educators (DuFour et al., 2007). Education is an ever-changing organization, and each member must stay well-informed of new research and policies, and PLCs are a way of accomplishing this

(Johannesson, 2020). Educators and educational leaders alike are expected to adapt to new developments while maintaining a classroom or organization that focuses on student needs and professional growth (Johannesson, 2020; Mu et al., 2018). These tasks might seem impossible; however, PLCs provide various benefits such as collaboration, the ability to build trust, and collegiality that allows educators to grow in their practice (Little, 1982; Lomos et al., 2011). PLCs also provide an opportunity for educators and educational leaders to meet the demands of the profession to increase achievement (Little, 1982; Trust, Carpenter, & Krutka, 2018). PLCs have the potential to build respect and trust among constituents, provide essential professional development that improves the quality of education, allows educators to meet the needs of all learners, and enable teachers to grow into leadership capacities (Desimone, 2009; Dogan et al., 2016; Harris & Chrispeels, 2008; Kools & Stoll, 2016; Stoll et al., 2006; Stoll & Seashore Louis, 2007; Vescio et al., 2008; Van Venn, 2010).

Collaboration

Foundational research has demonstrated how networks and collaboration improve teacher efficacy moves towards developing individual skills for the benefit of all PLC team members (Praise & Spillane, 2010; Stoll et al., 2006). Educators that participate in PLCs and collaboration are highly involved with examining the main "problems of practice" that are current within their organization, exchanging information, and engaging in collective decision-making (Snow-Gerono, 2005; Horn et al., 2017). This collaboration creates professional relationships where educators feel as though they are safe to ask questions, feel valued, and supported (Snow-Gerono, 2005). Collaboration also allows teachers to build relationships and ultimately grow together as a team through discourse. Additionally, through collaboration, teachers can develop and share the knowledge gained from their experiences (Aas, 2017; Little, 1982).

Transformational leaders create learning environments that encourage collaboration, which builds self-efficacy for teachers (Aas & Paulsen, 2019; Rolls, 1996; Shukla, 1999). Teachers can then believe in themselves to learn new concepts and implement the practices efficiently (Dogan, et al., 2016).

Various research has demonstrated a lack of collaboration among colleagues, leading to the building of essential content knowledge (Popp & Goldman, 2016). Teachers and educational leaders struggle with moving from polite conversations to thinking and working critically as a collective whole (McLaughlin & Talbert, 2006; Nelson et al., 2010). Wenger's (1998) social learning theory focuses on the importance of collaboration by emphasizing the key components of collective learning. Through this collective learning, educators can focus on exchanging instructional strategies and analyzing data to promote student success and achievement (Wenger, 2000). Collaboration needs to be present within PLCs to professionally grow educators within their capacity as discourse and discussions are the essential pieces to understanding processes (Carpenter, 2018). However, collaboration cannot be instructed or demanded but is created through a culture of trust within an organization (Carpenter, 2018). Educators must be facilitators of learning and co-learners with colleagues to promote collaboration of new practices that focus on student growth (van der et al., 2018).

The literature surrounding collaboration also discusses five types of discourse: questioning, proposing, elaborating proposals, negotiating, and explaining thinking (Popp & Goldman, 2016). Questioning allows PLC members to develop ideas and gain a deeper understanding of the concepts presented (Hmelo-Silver & Barrows, 2008; Zhang et al., 2011). With proposals comes the assumption that members of the PLC team will have a shared understanding of the organizational issues and develop an action plan to resolve those issues

(Sabourin & Geist, 1990). Elaborating proposals requires examining existing ideas to restructure current processes or proposals (Carroll, 2005; Zhang et al., 2011). Proposals are essential to creating cohesion within a PLC team due to the requirement of proposing ideas before moving forward as a team (Popp & Goldman, 2016). Finally, negotiation is centered around the conflict and resolution model in which members of the PLC team move through each step to include disagreement, challenging ideas, and proposing new ideas (Popp & Goldman, 2016). These steps also require PLC members to think critically and work as a team to agree (Crespo, 2006; Dobie & Anderson, 2015; Males et al., 2010). Lastly, explaining personal thinking gives an individual an opportunity to place a rationale behind the proposal to convince the PLC members that the idea is an essential part of the organization's success (Rochelle et al., 2010). These five types of discourse for successful collaboration stress the importance of collective exploration and reflection to build knowledge as a team (Popp & Goldman, 2016).

Collaboration also provides a sense of community among constituents and is a crucial component for change (Egan & Hopkins, 2009). For many years, teachers have shut their doors to working in isolation without sharing ideas and working with the students in their classrooms (Jones & Thessin, 2015). Through collaboration, educators can focus on their professional growth and the growth of the whole organization. Collaboration that focuses on student learning and teacher practice is essential for professional development. PLCs are valuable for teachers to participate in professional development that leads to student and campus improvement (Prenger et al., 2017; Vanblaere & Devos, 2016). Each member of the organization agrees to support a shared mission and vision and centered each discussion around the determined common goals that the organization would like to accomplish (Stoll et al., 2006). Implementing and supporting

effective PLCs goes beyond personal professional growth and promotes collaboration to create positive trends for change for an organization.

Student Learning Outcomes

Student achievement and success should be the centralized focus for collaboration among educators and is a significant benefit of implementing and supporting PLCs (Stoll et al., 2007). Without the student-centered focus and essential features of a PLC, the gathering of individuals could merely be considered a meeting of colleagues. Teachers need to come together to ask questions and find solutions to increase student achievement and success (Dogan, et al., 2016; Fred et al., 2020). When student achievement and success do not improve, community members can use PLC time to ask questions and determine why. Community members can then make changes to the focus of the PLC and practices within classrooms. Without these reflection practices, teachers could revert to the old teaching practices, and the organization's achievement would stay stagnate (Chauraya & Brodie, 2017; Vanblaere & Devos, 2016).

Collaboration among teachers in PLC teams is essential for guaranteed student achievement and increasing learning outcomes (DuFour et al., 2008; Lieberman & Miller, 2004; Newmann & Wehlage, 1995; Resnick, 2010; Senge, 1990). When student achievement and success increase, the community can take those activities and build towards the next level of work (Newmann & Wehlage, 1995). Discussion among educators provides an opportunity for reflection, and students will then reap the benefits of those essential conversations (Vanblaere & Devos, 2016). Effective PLCs that incorporate collaboration and reflection build the foundation for changing classroom practice systems within an organization and improving student learning and achievement (Harris & Jones, 2010).

Teacher Leadership Capacity

Creating systematic change or educational reform within an organization is an intense undertaking for educational leaders to complete in isolation. For the changes or reform to be successful, teachers within the organization must see the errors in their teaching practices and buy into the changes that need to take place (Luyten & Bazo, 2019). Teachers then work and learn together to adopt new instructional practices individually and collectively and apply them in their classrooms' daily instruction (Luyten & Bazo, 2019). Furthermore, educational leaders also build leadership capacity in teachers and delegate leadership tasks that make organizational improvement as these roles are more likely to increase teacher efficacy (De Neve & Devos, 2017; van der et al., 2018). The processes of collective discussion, decision-making, and exchange of instructional practices describe the primary factors of PLCs and collaborative school culture (Stoll et al., 2006).

Building teacher leadership capacity has increased within education and has led to the reform of the understanding that effective leadership involves many individuals and pushes organizational boundaries (Harris & Jones, 2010; Spillane & Diamond, 2007; Wallace Foundation, 2016; Wilson, 2016). Distributed leadership allows leaders to meet these leadership requirements as distributed leadership is defined as educators working together on similar inquiries and towards common goals while expanding roles for teachers (Harris, 2009; Smylie & Denny, 1990). The collective work of teachers in PLCs provides the foundation for distributed leadership as educators are working together innovatively to create instructional practices that will sustain success for the organization (Harris & Jones, 2010).

Building teacher leadership capacity holds various positive outcomes for an organization and is another positive component of effective PLCs. PLCs involve educational leaders sharing

leadership roles among the members of the PLC team through collaboration regarding professional work, analyzing student data, evaluating student growth, and determining the next level of work (DuFour & Fullan, 2013; Wilson, 2016). Childs-Bowen (2000) and Silva et al. (2000) described teacher leadership within PLCs as inspiring and empowering excellence among the PLC team members, functioning in a way that leads to increased student learning and contributes to organizational change. In addition, when educational leaders distribute leadership and share decision-making capabilities, teachers improve their performance, causing positive change in school improvement (DuFour & Fullan, 2013; Harris, 2009; Stoll and Seashore Louis, 2007). Ultimately, building individual teacher leadership capacity will grow the organization as a collective whole (Oolbekkink et al., 2017).

Teacher Professional Development

Teacher professional development is another significant benefit of PLCs as teachers grow in their practices through learning experiences created by planned activities within these meetings (Day, 1999). These planned activities are developed to benefit each PLC member directly; however, the growth of the individual also directly grows the group and organization (O'Brien, 2020). Various research on teacher professional development has been conducted. The literature points to five critical components for professional development to include the following: focus, active learning, coherence, duration, and collective participation (Desimone, 2009; Jeanpierre et al., 2005; Johnson et al., 2007; Wilson & Berne, 1999; Yoon et al., 2007). Content focus allows the teachers have a deeper understanding of the content and how the students learn the content (Desimone, 2009; O'Brien, 2020). This opportunity increases knowledge for teachers to improve their practices. Active learning provides different approaches to learning through experiences such as observing, feedback, and discussion (Desimone, 2009;

O'Brien, 2020). Finally, coherence ensures that the learning provided to the teachers is based on their knowledge and beliefs (Desimone, 2009; O'Brien, 2020). Duration is another critical component of effective professional development.

Time is invaluable when it comes to education and using the time wisely will be the foundation of learning. Professional development should be planned to allow teachers to truly understand the concepts to positively impact student learning (Yoon et al., 2007). Lastly, collective participation includes learning activities that create discourse and interaction among the organization's teachers (Desimone, 2009; O'Brien, 2020). These five critical professional development components are very similar to the critical characteristics of a PLC team. Each of these components plays a key role in teachers' learning and should be considered when reviewing the experiences of teachers to create change towards a mutual understanding of these communities.

Secondary Teacher Experiences

PLCs that are implemented effectively can bring various benefits to an educational organization. How PLCs are supported within the organization determines the true benefits, and this seems to be different on each campus. There are discrepancies between a consistent schedule, the involvement of cohesive teams, or lecture-driven meetings versus collaboration. Unfortunately, many educational organizations create PLCs without the proper agenda. Additionally, schools vary from one another in terms of innovativeness and learning opportunities as perceived by the teacher (McLaughlin & Talbert, 1993; Talbert, 2010). PLCs are also driven by educational leaders who lack guidance and leadership (DuFour & Reeves, 2015). The inconsistencies create confusion in the proper understanding of the processes of an effective PLC. The discrepancies also cause teachers to lack motivation towards change (Tam, 2015).

Educators and educational leaders then have differentiating experiences with PLCs concepts and fundamentals, which causes a domino effect across campuses or districts. Education organizations will continue to see misconceptions, eventually continuing the discrepancies among current PLCs. With an understanding of the various experiences of secondary teachers of PLCs in each core content, mathematics, science, ELA, and social studies, educational leaders will better understand how to create a foundation towards cohesion among organizations, leading to learning for both teachers and students.

Secondary Mathematics Teachers

The PLC model for professional learning is commonly used to grow teachers professionally, improve instruction, and foster collaboration that increases student achievement, and the model for mathematics teachers is not any different (Borko et al., 2015; Campbell & Lee, 2017; Brodie, 2014; van Es & Sherin, 2010). Mathematics teachers require a focus on mathematical content and teaching strategies to meet the goals set for all students in mathematical development (Marrongelle et al., 2013). PLCs give teachers the time to plan, review resources, collaborate on mathematics instruction, and analyze student data (Campbell & Lee, 2017; Compen & Schelfhout, 2020). This time allows teachers to reflect on the current practices and determine the next steps for achieving the common goals set by the PLC team. When mathematics teachers can participate in these communities, teachers gain mathematical content knowledge, have a positive attitude towards collaboration, and focus more on student achievement and learning (Brodie, 2014; DuFour, 2014; van Es & Sherin, 2010). Research has continuously demonstrated the importance of educator participation in building the understanding of content knowledge; however, there lies confusion among the understanding of the meaning of content knowledge and how it is supported within PLCs (Campbell & Lee,

2017). Additionally, there is a lack of clarity and irregularity of implementation among PLCs, which affects the processes among mathematics teachers (Campbell & Lee, 2017; Talbert, 2010).

Secondary Science Teachers

Effective processes and implementation for professional development for science teachers are essential for student achievement within science, much like all other content subjects and grade levels (Dogan et al., 2016). With research demonstrating the importance of PLCs for improving teacher knowledge and efficacy, PLCs have become the foundation for supporting science teachers through the systemic form and improving student achievement with science content (Donaldson, 2008; Drago-Severson, 2012; Hord, 1997). So much so that support from the National Science Foundation/Math Science Partnership has created a focus on student learning for the vision for science PLCs, and analyzing student work is the driving focus behind that vision (Hamos et al., 2009; Louis & Kruse, 1995). PLCs built around collaboration, feedback, the examination of teaching practices and student learning, and the analysis of student data are critical for changing the vision for science teaching (Desimone, 2009; Guskey, 2002). Although there is continued support from state and national levels for science education, there lies discrepancies among PLCs across these science programs (Dogan et al., 2016). These discrepancies effects teacher knowledge and practices; therefore, impacting student achievement with science content (Dogan et al., 2016).

Secondary Social Studies Teachers

Professional learning among social studies teachers varies across education, and social studies teachers are faced with the challenges of learning and teaching social studies instruction (Hicks, 2008; Horn et al., 2008; Martell, 2013). The lack of clarity of what social studies education should be among the teachers in social studies education sparks a need for a better

understanding of the purposes and outcomes for student learning (Van Hover & Hicks, 2018). Various research has indicated the importance of social studies teachers moving beyond the focus of program design (Van Hover & Hicks, 2018). Instead, educational leaders should center professional growth on real learning through understanding how the teachers are motivated and engaging teachers in content that will grow them professionally (Hicks, 2008). Opfer and Pedder (2011b) emphasized this theory as their research indicated that much of the professional learning for social studies teachers is centered around programs and activities in isolation instead of focusing on the learning environments that the teachers encounter daily. Professional learning within PLCs should focus on core practices, identify the learning styles of the members of the PLC team, and analyze student outcomes with social studies content (Borko, 2004; Grossman & McDonald, 2008).

Secondary English Language Arts Teachers

Research surrounding the concept of productive PLCs among English Language Arts (ELA) educators is very limited due to the focus of research centered around mathematics and science content (Little & Horn, 2007; Sherin & Han, 2004; van Es, 2009; Zhang et al., 2011). However, what is known is the importance of collaboration among members of the PLC team regardless of the content area. When members of the PLC team focus on making decisions about curriculum and planning for instruction, the ELA teachers consider goals and objectives and the structure for teaching concepts and skills (Kelly, 2006). With the understanding that educational leaders cannot be experts in all content areas, PLCs with insufficient guidance and leadership can be ineffective for ELA teachers (DuFour & Reeves, 2015). Effective PLCs for ELA teachers could require additional external expertise in this content area to improve the quality of the PLC (DuFour & Reeves, 2015; Vescio et al., 2008). For example, a university professor, district ELA

instructional coach, or other educators in the district. With collaboration being one of the critical components for PLCs, additional expertise added to the PLC design can create individualized professional growth and nurture the development of instructional strategies for ELA teachers (Coffey, 2012). Ultimately, these PLC processes can build cohesion and community among the PLC team and create engaging instruction to student success within the ELA content.

Summary

PLCs have historically assisted educational organizations with leading change that creates professional growth and increased student achievement. Educational leaders can work collaboratively with constituents to meet the demands of education. This literature review examined the theoretical framework of Wenger's (1998) social learning theory in connection with PLCs. Studies have shown the importance of collaboration among colleagues to change educational practices. Because PLCs are presented in a different context within each district or campus, educators experience vastly different implementation and support from educational leaders. The conceptual framework focused on these crucial topics to determine the definition, characteristics, key features, non-characteristics, and benefits of PLCs. The vastly different implementation and support can lead to various experiences with PLCs and frustration, confusion, or in some instances, positive reactions. However, little is known about the experiences of secondary teachers with PLCs and collaboration.

The practical significance behind researching the secondary teacher experiences with PLCs includes various purposeful reasons. With this knowledge, educational leaders would have a better understanding, creating cohesion among the organization. A foundation would be designed so that constituents would buy into a shared mission and vision and common student-centered goals. Educators would analyze data, assess, and adjust teaching practices, and apply

new learning within classrooms. Additionally, educators would know to implement and support a change to increase student achievement and success (Borko, 2004; Darling-Hammond, 2010; Stoll et al., 2006; Vescio et al., 2008). Chapter Three provides an overview of the methods used to collect and analyze data on the experiences of secondary teachers with PLCs.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological research study was to understand the impact of collaboration among secondary teachers and their perspectives on the advantages and disadvantages of PLCs based on their experiences. This chapter discusses the research design, setting, participants, researcher positionality, interpretive framework, philosophical assumptions, researcher's role, procedures, permissions, recruitment plan, data collection plan, and data synthesis. Lastly, the trustworthiness and ethical considerations of the research study will be discussed.

Research Design

Creswell and Poth (2018) explain qualitative research as a methodological approach that focuses specifically on a social or human problem. The researcher conducts a study that builds a complex picture by collecting data in a natural setting and establishing patterns or themes when analyzing this data (Creswell & Poth, 2018). The researcher presents the research findings by including the voices of each participant, providing a description of the problem, and expressing how the new research contributes to the literature and the need for a change (Creswell & Poth, 2018). The qualitative methodological approach is appropriate for this research study as the researcher strives to gain first-hand knowledge of Central Texas secondary teacher experiences with PLCs.

Phenomenological research study allows the researcher the opportunity to explore a phenomenon with a group of individuals that have lived experiences of the specific phenomenon (Creswell & Poth, 2018). Phenomenological research emphasizes a detailed examination of "what" the individual has experienced and "how" they have experienced it (Moustakas, 1994).

Validity is essential to determine the stability and quality of the data collected and is improved by analyzing several sources of evidence (Riege, 2003). This study will utilize a qualitative research design focusing on phenomenological research. The phenomenological research study focused on secondary teachers in a Central Texas school district and their experiences and learning from PLCs. Various forms of data were used, including individual interviews; focus group discussions; and observations, the researcher presented valid evidence to support the findings within the phenomenological research study.

Moustakas (1994) declared a transcendental phenomenological research study as a study that consists of identifying a phenomenon and individuals that have experienced the phenomenon. Creswell and Poth (2018) continue the discussion on transcendental phenomenological research by explaining that the key to an accurate phenomenological research study is to collect in-depth data from individuals that have experienced the phenomenon. For example, this transcendental phenomenological research study focused on the experiences of teachers in Central Texas with an emphasis on secondary teachers. This study also utilized interviews, focus groups, and observation for data collection. Additionally, this transcendental phenomenological research study utilized textural and structural descriptions to generate themes and highlight specific commonalities (Creswell & Poth, 2018).

Research Questions

Central Research Question

What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas?

Sub-Question One

What collaborative experiences do secondary teachers have during PLCs?

Sub-Question Two

What professional learning experiences do secondary teachers have during PLCs?

Setting and Participants

Determining the setting and selecting participants are essential to gain the information needed for any particular study. The setting section provides the reader with the necessary details to picture the setting for the study. In this specific study, the setting selected was secondary middle school and high school campuses with grades six through twelfth grade located in a school district in Central Texas. The participants section provides the reader with information regarding the individuals chosen based on the intention of the research (Schtzman & Strauss, 1973). This study included 12 secondary school teachers that teach core content areas (mathematics, science, ELA, and social studies) and participate in PLCs regularly. The teachers were selected for the study using purposeful sampling and have more than one year of teaching experience.

Setting

The setting for this qualitative study was Central Texas. I received approval from the site administration to complete the study on each campus (See Appendix C). The district where the campuses are located serves four communities within Central Texas. Students have various educational opportunities as the school district contains 30 elementary schools, 11 middle schools, 4 high schools, 4 special campuses, Career Center, and an Early College High School. The school district currently serves approximately 45,500 students and employs about 6,800 employees. In the 2018-2019 school year, the 45,500 students included approximately 35% African American, 30% Hispanic, 21% White, less than 1% American Indian, 2% Asian, 2% Pacific Islander, and 7% two or more races (Texas Education Agency, 2020). Approximately

61% of the students within the district are economically disadvantaged (Texas Education Agency, 2020). The student-teacher ratio on secondary campuses is separated by content area. It includes 14.9:1 for English/Language Arts, 21.8:1 for foreign languages, 19.8:1 for mathematics, 19.8:1 for science, and 20.2:1 for social studies (Texas Education Agency, 2020).

Participants

Participants in this study were 12 full-time teachers of core content areas that currently participate in PLCs. The core content areas included mathematics, science, ELA, and social studies. Each teacher also had more than one year of experience teaching as a secondary teacher. The teachers range from 26 to 52 in age and included five males and seven females. The ethnicities of the teachers include White, Black or African American, and Hispanic. For this study, I used purposeful sampling for the research. With purposeful sampling, the researcher must have access to key individuals who can assist in identifying information-rich cases to study in-depth (Coyne, 1997; Suri, 2011). In addition, the study focused on individuals that participate in PLCs in a secondary setting; therefore, purposeful sampling was appropriate.

Researcher Positionality

As I moved into an administrative role from the classroom, I sensed an urgency to develop meaningful and effective PLCs for educators. I often participated in PLCs that I felt were not purposeful or well planned, and I would leave the meetings feeling discouraged. I would often reach out to colleagues because I wanted to learn new educational concepts and strategies. The PLCs that I participated in did not make me feel like I was growing professionally. As I moved from the classroom at the elementary level to a middle school administration position, I recognized that this could occur at each level within education. This concern led me to investigate teachers' experiences with PLCs focusing on secondary teachers.

This research will support change within PLCs and create learning environments for educators that are more effective and increase student success.

PLCs allow educators to come together as a team and focus on a common purpose. God intended for individuals to follow his words and share his words with others physically and verbally. In PLCs, not only are educators working towards a common goal that will ultimately increase student success, but they are also inspiring each other, sharing ideas, and being individual and team cheerleaders (Little, 2012; Lomos et al., 2011; Stoll et al., 2006; Van Veen et al., 2010; Vescio et al., 2008). Effective PLCs allow educators to create great professional habits that will change education in the future.

Interpretive Framework

The philosophical assumptions utilize the interpretive frameworks when conducting a study for research (Creswell & Poth, 2018). When looking at the interpretive framework of social constructivism, the researcher strives to acknowledge the world in which individual lives or works based on cultural and context understanding (Creswell & Poth, 2018; McMahon, 1997). The researcher relies heavily on the individuals' experiences within the study and truly focuses on what they say and do (Creswell & Poth, 2018). The researcher can develop a theory based on the information collected (Creswell & Poth, 2018). Within social constructivism, the researcher also acknowledges their prior knowledge and how their background can shape their interpretation of the study (Creswell & Poth, 2018; Jackson et al., 2006; Prate & Floden, 1994).

Philosophical Assumptions

There are three philosophical assumptions within research, *ontological, epistemological, and axiological*. Huff (2009) explains that these assumptions are crucial to research because each gives direction to research goals and outcomes, provides a scope of training and research

experiences, and is the basis of evaluative criteria for research-related decisions. The *ontological* philosophical assumption allowed the researcher to incorporate various realities and understand the characteristics of those realities (Creswell & Poth, 2018; Moustakas, 1994). The *epistemological* philosophical assumption insisted on the researcher working closely with the participants as much as possible (Creswell & Poth, 2018; Guba & Lincoln, 1988). Lastly, the *axiological* philosophical assumption clarified the researcher's values (Creswell & Poth, 2018; Denzin, 1989). These three philosophical assumptions will not only guide this research. The philosophical assumptions will provide the reader with an understanding of the researcher's values and how the assumptions are incorporated in the study.

Ontological Assumption

Creswell and Poth (2018) describe the ontological philosophical assumption as the researcher embracing multiple perspectives or realities as they develop throughout the findings within the study. Ontology focuses on truth and asks, "What is the nature of reality?" (Creswell & Poth, 2018, p. 20). I experienced different realities and perspectives on professional learning communities (PLCs) through my qualitative research. I collected information from various individuals, presenting different viewpoints. I embraced each philosophy and reported the multiple realities by creating multiple themes based on the data collected (Creswell & Poth, 2018).

Epistemological Assumption

The epistemological assumption addresses the relationship between the researcher and the participants within the study as connected and not individual (Creswell & Poth, 2018). "Rather than 'distance,' as we call it, a 'closeness' follows between the researcher and that being researched" (Creswell & Poth, 2018, p. 324). I collaborated closely with the participants through

individual interviews and focus group discussions within my research. The data was collected subjectively as the information included their experiences and views on the questions and topics. My PLC experiences remain separated from the individuals in the study as my views or understandings may vary.

Axiological Assumption

The axiological assumption brings the researcher and participant's values to the study along with the theory, paradigm used, and the social and cultural norms (Creswell & Poth, 2018). The researcher must be aware that the individuals involved in the study do not uphold the same values as him or her. As the researcher of this study, I admitted and discussed my values within the study of PLCs. The values included my personal experiences, social position, political beliefs, or professional beliefs (Berger, 2015). However, I remained mindful that my values may not be the same as the of other individuals.

Researcher's Role

I began my educational career as an elementary teacher and worked in the classroom for seven years. After leaving the classroom, I took on the administrative role of campus facilitator for special programs at a middle school for two years before moving to an assistant principal position at an elementary school. Through the changes within my educational career path, I have been able to experience PLCs on various campuses, which sparked an interest in better understanding PLCs on secondary campuses.

I served as the primary data collection instrument in this transcendental phenomenological (Creswell & Poth, 2018) utilizing data collection methods including individual interviews, focus groups, and observations. I have worked in education for eleven years in Central Texas and have held positions such as elementary teacher, elementary

interventionist, campus facilitator for special programs, and assistant principal. I currently work at an elementary school in the Central Texas school district as an assistant principal, where the participants were recruited. Through my experience on the secondary campus as a campus facilitator for special programs, I built relationships with the participants, which allowed for truthfulness and commitment to answer questions. Data from the questions were gathered and examined for the qualitative research study. I am biased in that educators must participate in PLCs that include effective procedures and processes for collaboration.

Procedures

This transcendental phenomenological study followed Moustakas's (1994) procedures for conducting data analysis. The procedures include epoché, transcendental-phenomenological reduction, imaginative variation, and synthesis of composite textural and composite description (Creswell & Poth, 2018). This study consisted of current secondary teachers who have experience with PLCs. The researcher received approval from the IRB from Liberty University (Appendix A) and the Central Texas school district (Appendix B). This district's secondary school principals received a recruitment email to send to secondary school teachers within their campus that teach a core content subject (Appendix D). Each participant completed a survey that determined eligibility for the study. The participants also signed and returned a consent form (Appendix E). Additionally, a detailed description of how the study achieved triangulation is provided.

Permissions

Ethical research requires the researcher to respect the individuals involved in the study and provide those individuals with the ability to choose what will or will not happen to them. Then and only then will informed consent be fulfilled (National Commission for the Protection

of Human Subjects of Biomedical and Behavioral Research). For this phenomenological research study, I obtained approval for the research from the IRB at Liberty University (Appendix A). I also obtained consent from the district administration (Appendix B) and site administration (Appendix C) to gain the participants for the study. The research was examined regularly, and participants were informed of any complications or changes within the study (Blessing & Niebuhr, 2008). Pseudonyms were used to protect the teachers' identity that participated. A letter sent via email was sent to the campus to recruit teachers interested in participating in the study (Appendix D). Once the teachers were identified, another letter was sent to seek their approval for participating in the study (Appendix E). The research was examined regularly, and participants were informed of any complications or changes that occur within the study (Blessing & Niebuhr, 2008).

Recruitment Plan

The purpose of this transcendental phenomenological research study was to understand the impact of collaboration among secondary teachers and their perspectives on the advantages and disadvantages of PLCs based on their experiences. The sample pool included secondary school teachers who taught sixth, seventh, eighth, ninth, tenth, eleventh, or twelfth grades in Killeen Independent School District. The teachers also had more than one year of teaching experience and taught core subjects to include mathematics, science, ELA, and social studies.

The sample size included 12 secondary teachers from secondary schools in Central Texas to ensure data saturation. The sample size of 12 was chosen for various reasons to include the ability to have enough information to duplicate the study, new information has been attained, and there is no longer a need for coding (Guest et al., 2006; O'Reilly & Parker, 2012; Walker; 2012). A sample size of 12 also provided a small group for members to collaborate and share their ideas

and large enough to create a group of diverse members (Lasch et al., 2010; Onwuegbuzie; 2010).

The school district provided the name of each participant as well as their email address for those

that agree to be in the study. A signed consent form was obtained before the research began.

Data Collection Plan

Educators need a place where shared values and vision support individual and group

learning, collaboration, reflective professional inquiry, and is driven by collective responsibility

(Louis et al., 1995; Mason, 2003). These essential pieces cannot be done simply through a

general staff meeting but through a PLC that holds to these characteristics and reinforces

collaboration as a central lever for change (DuFour, 2007; Egan & Hopkins, 2009). PLCs

provide educators with an opportunity to create professional norms and have disagreements that

are perceived as the foundation for school and system improvement (Goldenberg, 2004; Harris &

Chrispeels, 2008; Harris & Jones, 2010; Saunders & Goldberg, 2005; Stoll et al., 2006; Stoll &

Seashore Louis, 2007; Whitehurst, 2002).

Educational leaders must understand the importance of collaboration with PLCs. When

educators can work together as a team, ask questions, and learn from each other, this will lead to

higher levels of student achievement and increase student success (DuFour et al., 2005; Resnick,

2010). Educators can no longer work in isolation and hoard ideas, materials, and strategies but

must begin working together to support all student learning (DuFour et al., 2005). Educators are

expected to create a differentiated classroom while growing within their professional capacity

and adjusting to new developments within education (Mu et al., 2018). PLCs provide both

benefits and drawbacks when implemented within campuses. PLCs can offer a safe place for

educators to ask questions, feel valued, and feel supported (Snow-Gerono, 2005). On the other

hand, ineffective PLCs can be considered a waste of time, and this time can never be reclaimed

(Aqulia, 1992). Educational leaders must evaluate the current PLCs and form a collaborative team that improves student outcomes and cohesive goals (Jones & Thessin, 2015).

Approvals from the IRB, Liberty University, and site administration were required to begin the data collection process. The various site administration granted the researcher access to the campus, campus information, and participants. In addition, the participants agreed to partake in individual interviews, focus group discussions, and observations by signing consent. The interviews, focus group discussions, and observations allowed the researcher to understand the experiences of secondary teachers with PLCs.

Individual Interviews Data Collection Approach

Individual interviews allow the researcher to understand the individual's point of view and experiences participating in the discussion (Creswell & Poth, 2018). Participants tend to discuss more when talking individually with the interviewer (Creswell & Poth, 2018). All interview questions were given in the order listed below and were created in an open-ended format to prompt discussions. Interviews were conducted via video conference and were approximately one hour in length. Each interview began with a review of the consent, which the participant agreed to before. Interviews were only conducted after obtaining approval from the site administration, reviewing the purpose of the study, and obtaining consent from the participants for the discussion. All participants were given a pseudonym to protect their identity. Committee members reviewed interview questions to confirm validity and value. The notes were transcribed, audio/video recordings were used throughout each interview. The interviews were conducted as semi-structured as clarifying questions were asked when needed. The notes and audio/video recordings were reviewed throughout the data analysis phase.

Individual Interview Questions

    1. Introduce yourself to me as if for the first time.

    2. Why did you choose this career?

Interview questions 1-2 are ice-breaker questions and are included to make the participant feel more comfortable with the researcher. In addition, the ice-breaker questions allowed the participant to speak freely and openly about the information for each interview question.

    3. How do you describe the intention of a PLC? CRQ

    4. What activities or discussions occur during the PLCs you attend? CRQ

    5. What are the essential processes to a successful PLC? CRQ

    6. Describe a valuable PLC that you have attended. CRQ

Interview questions 3-6 relate to the central research question: "What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas?". The participants provided more background information about their knowledge and perspective of PLCs. These questions also examined the processes and procedures of the PLCs that the participants experienced.

    7. How do you describe collaboration? SQ1

    8. What contributes to effective communication within a PLC? SQ1

    9. What processes are needed to collaborate successfully within a PLC? SQ1

    10. How can collaboration be improved in your current PLCs? SQ1

Interview questions 7-10 relate to sub-question one: "What collaborative experiences do secondary teachers have during PLCs?". Collaboration is a crucial component of PLCs, and these questions allowed for more understanding of the participants' experiences with collaboration.

11. How do you describe professional learning practices? SQ2

12. How do educational leaders effectively use time within a PLC? SQ2

13. Describe a PLC where you have experienced observing, modeling, or imitating with colleagues. SQ2

14. What else can you tell me about PLCs? SQ2

Interview questions 11-14 relate to sub-question two: "What professional learning experiences do secondary teachers have during PLCs?". The interview participants reflected on their knowledge and experiences of professional learning practices in PLCs.

Individual Interview Data Analysis Plan

Each of the individual interviews were transcribed verbatim, and all data were categorized by each participant using Otter.ai. The transcripts were checked for accuracy, and corrections were made as needed. Member checking was also used as participants received the interview via email checked for accuracy. Using Moustakas's (1994) data analysis process, the researcher began with epoché. After the researcher entered epoché, bracketing occurred where the researcher focused on the interview transcriptions (Moustakas, 1994). Next, the researcher viewed the interview transcriptions with equality which Moustakas (1994) proclaimed as horizontalizing. From there, the researcher eliminated any irrelevant or repetitive statements (Moustakas, 1994). Next, the horizons or codes were categorized into themes and arranged in textural descriptions of the phenomenon (Moustakas, 1994). The next step, imaginative variation, allowed the researcher to view the phenomenon in various ways to develop structural qualities, themes, and descriptions (Moustakas, 1994). Synthesizing the composite textural and composite structural descriptions was the final step in Moustakas's (1994) data analysis process.

This last step provided the researcher with complete knowledge of the phenomenon; however, this can only occur after all data collection methods were analyzed.

Focus Groups Data Collection Approach

For the second data collection approach, focus group discussions were used. Focus groups involve a small group of participants that come together to discuss specific topics with the guidance of a moderator (Wibeck et al., 2007). Focus group discussions allowed the researcher to utilize elements from observations and individual interviews to gain unique information and data (Colucci, 2007). In addition, giving the teachers involved with the study an opportunity to talk to other secondary teachers about this topic can intrigue the participants by sharing their opinions that may not have been expressed in the individual interviews.

The focus group discussions for this study were scheduled, and the participants confirmed each date and time. Each focus group discussion contained two to three participants; therefore, this data collection approach included four focus group discussions. The participants were grouped for the focus group based on the core subject taught (mathematics, science, ELA, and social studies). Participants were reminded of their participation consent before the beginning of the discussions. Each focus group was held via video conference and lasted approximately one hour in length. Open-ended questions from the researcher were used to guide the discussions. Participants were able to ask clarifying questions when needed and talked with each other during the discussion process. Much like the individual interviews, notes were transcribed, and audio/video recordings were used. The notes and audio/video recordings were reviewed throughout the data analysis phase.

Focus Group Questions

1. How do teachers have the autonomy to make decisions regarding their work? CRQ

2. What are the formal processes in place that provide teachers with regularly scheduled blocks of time for ongoing reflection and self-growth? CRQ

3. How do PLC members talk with each other about the specific challenges they face? SQ1

4. Within your school, what are the formal methods for sharing expertise among teams so that struggling teachers can improve? SQ1

5. What are the opportunities teachers have to exchange ideas as a subject department team? SQ1

6. How do teachers work together to develop shared understandings of students, curriculum, and instructional methods and produce activities that improve instruction, curriculum, and assessment? SQ2

7. How are teachers supported with their expertise within the school, district, and the parent community? SQ2

8. How does the school leadership team focus on shared purpose, continuous improvement, and collaboration? SQ2

9. How do teachers share, observe, and discuss teaching methods and philosophies? SQ2

10. How do teachers take risks in trying new instructional methods and learn more about their profession? SQ2

Focus Group Data Analysis Plan

Each of the focus group discussions were transcribed verbatim, and all data were categorized by each participant using Otter.ai. The transcripts were checked for accuracy, and corrections were made as needed. Member checking was also used as participants received the interview via email to check for accuracy. Using Moustakas's (1994) data analysis process, the

researcher began with epoché. After the researcher entered epoché, bracketing occurred where the researcher focused on the focus group transcriptions (Moustakas, 1994). Next, the researcher viewed the focus group transcriptions with equality which Moustakas (1994) proclaimed as horizontalizing. From there, the researcher eliminated any irrelevant or repetitive statements (Moustakas, 1994). Next, the horizons or codes were categorized into themes and arranged in textural descriptions of the phenomenon (Moustakas, 1994). The next step, imaginative variation, allowed the researcher to view the phenomenon in various ways to develop structural qualities, themes, and descriptions (Moustakas, 1994). Synthesizing the composite textural and composite structural descriptions was the final step in Moustakas's (1994) data analysis process. This last step provided the researcher with complete knowledge of the phenomenon; however, this can only occur after all data collection methods were analyzed.

Observation Data Collection Approach

For the third data collection approach, observations of secondary mathematics, science, ELA, and social studies PLC meetings were used. Observations allowed the researcher to note a phenomenon within a setting using the five senses (Creswell & Poth, 2018). The researcher acted as a non-participant during the PLC meetings by taking field notes from a distance and without involvement in the activity or with the members of the PLC (Creswell & Poth, 2018). Additionally, the researcher utilized an observation protocol (See Appendix F) to record notes about the experiences and learnings from the observation (Creswell & Poth, 2018).

The observations for this study were scheduled, and the participants confirmed each date and time. The participants were grouped based on the core subjects taught (mathematics, science, ELA, and social studies). Each participant of the observation signed consent and were reminded of their participation consent before the beginning of the observations. Each observation was

held via teleconference and lasted approximately one hour in length. The notes were reviewed throughout the data analysis phase.

Observations Data Analysis Plan

Each of the observations were transcribed using the observation protocol, and all data were categorized by each core-content subject. If necessary, the observation protocols were checked for accuracy, and corrections were made as needed. Using Moustakas's (1994) data analysis process, the researcher began with epoché. Epoché allowed the researcher to enter the focus group data analysis process without judgment or bias (Moustakas, 1994). After the researcher entered epoché, bracketing occurred where the researcher focused on the observation protocol transcriptions (Moustakas, 1994). Next, the researcher viewed the observation protocol transcriptions with equality which Moustakas (1994) proclaimed as horizontalizing. From there, the researcher eliminated any irrelevant or repetitive statements (Moustakas, 1994). Next, the horizons or codes were categorized into themes and arranged in textural descriptions of the phenomenon (Moustakas, 1994). The next step, imaginative variation, allowed the researcher to view the phenomenon in various ways to develop structural qualities, themes, and descriptions (Moustakas, 1994). Synthesizing the composite textural and composite structural descriptions was the final step in Moustakas's (1994) data analysis process. This last step provided the researcher with complete knowledge of the phenomenon; however, this can only occur after all data collection methods were analyzed.

Data Synthesis

Once the data were collected and analyzed, Moustakas's (1994) method for synthesizing data was used. The data synthesis model defined by Moustakas (1994) includes epoché, transcendental-phenomenological reduction, imaginative variation, and synthesis of composite

textural and composite descriptions (Creswell & Poth, 2018). Epoché allowed the researcher to enter the interview data analysis process without judgment or bias (Moustakas, 1994). When a researcher can set aside their preconceptions and experiences, epoché can occur; however, this process is not quick as it requires time and effort (Moustakas, 1994). Although this process is challenging to achieve flawlessly, epoché can diminish any possible biases from the researcher (Moustakas, 1994).

Transcendental-phenomenological reduction was the second step in the data analysis and involved horizontalization. Horizontalization began with the researcher viewing all discussions and statements with a new perspective and equality (Moustakas, 1994). From there, the researcher determined any irrelevant or repetitive statements (Moustakas, 1994). Eliminating irrelevant or repetitious statements left the researcher with the horizons from the interviews (Moustakas, 1994). Lastly, the researcher clustered the horizons into themes to create a textural description of the phenomenon (Moustakas, 1994).

The third step in Moustakas's (1994) data analysis process was imaginative variation. This process involved varying perspectives, determining a list of structural qualities, building structural themes, and creating a structural description (Moustakas, 1994). The researcher examined the phenomenon in various ways through these processes to include lenses, vantage points, and angles (Moustakas, 1994). Overall, the imaginative variation process emphasized the "how" and "what" of the phenomenon (Moustakas, 1994).

The last and final step of Moustakas's (1994) data analysis process was the synthesis of composite textural and composite descriptions. The synthesis of composite textural and composite descriptions explained the phenomenon's essence (Moustakas, 1994). This step in the data analysis process is never complete as the essence of the phenomenon is based on the

viewpoint of the current researcher (Moustakas, 1994). As research on the phenomenon continues in the future, the composite textural and composite descriptions could change with the research (Moustakas, 1994).

Trustworthiness

Trustworthiness is an essential piece of qualitative research; however, some researchers argue regarding the characteristics of trustworthiness (Leung, 2015). Pilot and Beck (2014) deemed trustworthiness as the degree to which a study shows confidence in the data, interpretation, and methods used to confirm the value of the study. Researchers must determine the procedures and criteria needed for the research and convey each piece to the reader in a way that proves worth (Amankwaa, 2016; Connelly, 2016). Lincoln and Guba (1985) declared trustworthiness within credibility, dependability, confirmability, and transferability criteria. These pieces of standards and procedures are reviewed within this phenomenological research study to provide the trustworthiness needed for purposeful qualitative research.

Credibility

Credibility is the beginning of trustworthiness within a qualitative study. Credibility builds trust in the truth and findings behind the study (Polit & Beck, 2014). The reader may ask whether the research conducted study using standard procedures; therefore, emphasizing the importance of conducting a technique within research as others have done in the past (Connelly, 2016). Triangulation was the technique used for this study. Creswell and Poth (2018) described triangulation as, "Researchers make use of multiple and different sources, methods, investigators, and theories to provide corroborating evidence for validating the accuracy of their study" (p. 328). Through the multiple sources of information and data for this study as well as member checking, the triangulation process increased the credibility of the research presented.

Transferability

Transferability shows that the findings may have applicability in other contexts (Lincoln & Guba, 1985), which is largely achieved through the use of thick descriptions when describing research findings (Geertz, 2008). Transferability refers to the ability for findings from the context of your study to be applied to another context or within the same context at another time (Lincoln & Guba, 1985). It is important to acknowledge that the researcher can only create the conditions for transferability but cannot assure transferability: this judgment can only be made by the reader of the research.

Dependability

Dependability is comparable to the reliability in quantitative research as it refers to the steadiness of the information and data from the study over time (Connelly, 2016; Polit & Beck, 2014). The researcher reports the processes and procedures of the analysis in detail to allow other researchers to achieve similar results; however, the stability of the conditions depends on the actual study (Connelly, 2016). This study achieved dependability by archiving all interview or focus group discussion documents and any other notes made throughout the study (Connelly, 2016). This study also provided a detailed report of the step-by-step processes for the procedures.

Confirmability

Confirmability is the degree to which the information gained from the research is consistent and could be repeated (Connelly, 2016). Through confirmability, the researcher keeps detailed notes throughout their study, including any decisions or analyses (Connelly, 2016). In some cases, these notes are reviewed by colleagues to prevent biases in the research (Connelly, 2016). This study used the confirmability technique of an audit trail to determine and present how or why each decision was made throughout each step. Triangulation was also used to fulfill

confirmability, by using multiple data collection methods including interviews, focus groups, and observations to eliminate researcher bias (Creswell & Poth, 2018).

Ethical Considerations

With values and roles continuously changing within society comes the complications of ethical issues and the importance of ethical considerations within research (Rogers, 1987). With ethical research comes the moral principles of guiding conduct and precise procedures outlined concisely for the participants involved (Govil, 2015; Drew, Hardman, & Hosp, 2008). For this phenomenological research study, I protected the human participants and their identities by assigning pseudonyms and obtaining informed consent. Only I accessed the information collected through individual interviews, focus groups, and observations. Data and information collected was only shared with administration at the district level. All ethical guidelines required by Liberty University and the IRB were followed, and no actions were given to participants that withdrew or declined participation in the study.

Summary

Chapter Three provided a detailed analysis of the framework for this qualitative study. This study aimed to determine the experiences of secondary teachers with PLCs. The phenomenological research study strived to resolve the answers to the following research questions: What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? The sub-questions included: What collaborative experiences do secondary teachers have during PLCs? What professional learning experiences do secondary teachers have during PLCs? The setting for the phenomenological research study included middle school and high school secondary school campuses in Central Texas, and participants were selected through purposeful sampling. I provided detailed

procedures for collecting data through individual interviews, focus group discussions, and observations. I also provided a detailed analysis of data through the triangulation method. Permission and approval for the study were obtained from the IRB as well as the site administration. Lastly, credibility, dependability, confirmability, transferability, as well as ethical considerations were discussed to demonstrate the trustworthiness of the phenomenological research study. Chapter Four contains the research study's findings, and Chapter Five will discuss the interpretations of these findings.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological research study was to describe secondary mathematics, science, English language arts (ELA), and social studies teachers' experiences with PLCs in Central Texas. The purpose of Chapter Four is to present the results of the study. The chapter provides a table (Table 1) containing screening information for each participant. The chapter also provides another table (Table 2) containing descriptions for each of the individual 12 participants that were involved in the study. The results section consists of two themes with two subthemes. Lastly, the chapter addresses the responses to the central research question and the two sub-questions.

Participants

Twelve secondary public-school teachers involved in PLCs participated in this study, and purposeful sampling was used. Participants were selected from two middle schools and one high school in KISD. Email addresses were located on the schools' websites, and recruitment emails were sent to 39 potential participants. However, only six teachers completed the Teacher Interest Survey and signed consent, and follow-up emails were sent a few weeks later. After only receiving ten surveys and consents, more follow-up emails were sent, and two more participants joined the study. The 12 participants ranged in ages from 26 to 52; seven were female, and five were male. A detailed description of the participants in this study is located in the table below (Table 2). All 12 participants teach in secondary schools and teach either mathematics, social studies, science, or ELA.

Table 1

Teacher Screening Questions and Responses

Do you teach 6th grade or above?	Do you teach mathematics, social studies, science, or ELA?	Do you have more than 1 year of teaching experience?
Yes-12	Yes-12	Yes-12
No-0	No-0	No-0

Table 2

Teacher Participants

Teacher	Age	Gender	Race	Ethnicity	Highest Level of Education	Grade Level (Currently Teaching)	Teaching Subject	Years of Teaching Experience
James	27	Male	White	Not Hispanic or Latino	Master's	Ninth	Mathematics	4
Samuel	26	Male	Black or African American	Not Hispanic or Latino	Bachelor's	Ninth	English Language Arts	4
Michael	47	Male	White	Not Hispanic or Latino	Master's	Eleventh	Social Studies	9
Melissa	42	Female	White	Hispanic or Latino	Bachelor's	Twelfth	Science	14
Michelle	40	Female	Black or African American	Hispanic or Latino	Master's	Eighth	Mathematics	7
Thomas	52	Male	White	Not Hispanic or Latino	Master's	Eighth	Social Studies	3
Christina	30	Female	White	Not Hispanic or Latino	Bachelor's	Ninth	English Language Arts	8
Steven	33	Male	White	Hispanic or Latino	Bachelor's	Eleventh	Social Studies	10
Madison	41	Female	White	Not Hispanic or Latino	Bachelor's	Tenth	Social Studies	6
Rebecca	32	Female	Black or African American	Not Hispanic or Latino	Master's	Seventh	English Language Arts	4
Carol	48	Female	White	Not Hispanic or Latino	Master's	Tenth	Mathematics	15
Cassandra	33	Female	Black or African American	Not Hispanic or Latino	Bachelor's	Eighth	Science	5

James

James was a 27-year-old male that had taught mathematics for four years. He taught ninth-grade algebra classes and was a varsity football and track coach. He also had experience teaching tenth grade. He earned a bachelor's degree in education and a master's degree in sports management. James chose this career to impact kids, especially in math. He felt that math is a complex subject for students and that he could significantly impact that particular area in school. James expressed the importance of roles within a PLC. Additionally, he felt that understanding these roles would allow PLC members to accomplish set goals.

Samuel

Samuel was a 26-year-old male who taught English language arts for four years. He taught ninth-grade English classes and was a football and track coach. Before teaching English at the high school level, Samuel also taught middle school English for two years. He chose this career because he enjoyed coaching. He knew he could reach kids before they became adults and wanted to help. Samuel believes that PLC allows colleagues to catch up on how things are going in the classroom and discuss instruction that is working and not working. In addition, PLC will enable colleagues to fix any issues they are having and make any necessary corrections. Samuel also believes that PLC must be a group effort where everyone contributes to the conversations and ideas. Individuals cannot take control of the group, and everyone must participate.

Michael

Michael was a 47-year-old male that had taught social studies for nine years. In addition, he had experience teaching sociology and psychology, world geography, and world history. He had taught eleventh grade and was the head girls soccer coach, head boys cross country coach, and head swim coach. Prior to working in education, Michael worked in the professional sector

for 14 years. Michael chose this career to try and have a significant impact on the lives of students. He felt he could provide guidance, be a support figure, and give students a unique perspective on life. Michael expressed that PLCs are a valuable part of the educational process and vastly differ from elementary, middle, and high school. He shared that elementary school PLCs focus more on instruction, while the instructional focus is the responsibility of the teachers in secondary schools.

Melissa

Melissa was a 42-year-old female who had taught for fourteen years. She taught twelfth-grade science, including biology, anatomy and physiology, forensic science, and aquatic science. She chose this career to help students understand the material. School was difficult for her, and she wanted to help students understand different concepts by teaching the material differently. Melissa shared that the intention of a PLC is for the team to come together to discuss the content that needs to be taught and ways to engage or motivate students. The main goal for a PLC should be for the team to work together to determine ways for the students to be more successful. She also expressed that PLCs allow new teachers to gain knowledge of teaching practices and keeps veteran teachers informed of new research and teaching strategies.

Michelle

Michelle was a 40-year-old female who had taught for seven years. She taught sixth, seventh, and eighth-grade mathematics in a special education resource setting. Additionally, she had taught in the Positive Behavior Support classroom with special education students that need support with behavior. Before working in education, Michelle worked in the corporate sector and never felt as though she belonged in that career. She became a substitute teacher and determined that teaching was where she belonged. Michelle shared that PLCs should be a community of

colleagues where they can discuss students' progress. PLCs should focus on what needs to be done differently and create small goals that can be accomplished.

Thomas

Thomas was a 52-year-old male who had taught social studies for four years. He taught eighth-grade United States history and seventh-grade Texas history. Prior to becoming a teacher, Thomas was a human resources manager and served 25 years in the United States Army. Thomas chose this career because of his experience in the military. He was an instructor and found the environment, classroom, and small group very rewarding. When he retired, he wanted to challenge himself and took the opportunity to become a teacher. Thomas expressed that PLCs must be data and results-driven to be effective. PLC members should focus on what the students will gain from the instruction.

Christina

Christina was a 30-year-old female who had taught English language arts for eight years. She has taught ninth and tenth-grade English language arts and twelfth-grade British literature. She became a teacher because she loved how teachers made her feel when she was in school, and she wanted to make other people feel that way. Christina shared that PLCs should be a lifestyle of collaboration and help build each other up. Members of the PLCs should share skills and combine powers to give students the best experience they can get. Christina also expressed that the most challenging part of building a PLC culture in an organization is the protected time needed to implement the processes with fidelity. It is difficult for teachers to receive protected and uninterrupted time with one another.

Steven

Steven was a 33-year-old male who had taught social studies for ten years. He taught United States history, world history, psychology, and sociology. Along with being an eleventh-grade teacher, he was also a track and football coach. He decided to become a teacher to invest in the future. He shared that being a teacher is a calling, and it is wonderful how impactful you can be. Steven expressed that PLCs can be effective when everyone is on common ground. The common ground allows for relationships to between colleagues. He also expressed that PLCs are often used as a tool for administration to ensure that teachers are doing their jobs.

Madison

Madison was a 41-year-old female who had taught social studies for six years. In addition, she has taught tenth-grade honors world history and general world history. Before being a teacher, Madison was a paramedic a bank teller, and worked at the call center for emergencies. She chose this career based on her experience of teaching as a paramedic. Madison taught at new hire orientation about the importance of documentation and truly enjoyed it. At that point, she decided to become a teacher and eventually would like to teach in higher education. Madison shared that the intention of a PLC is for the content area to work together to understand the curriculum, assist each other with activities, and analyze data to determine strengths and weaknesses. PLC members need to work as a collective group, have buy-in from all members, keep each other on track, and support team goals in order to support students to be successful with the content.

Rebecca

Rebecca was a 32-year-old female who had taught English language arts for four years. She currently teaches seventh-grade students but has taught third, sixth, and eighth grades. She

also taught a resource special education course for English language arts. Before working in education, Rebecca worked at a bank. She decided to work in the district because she was having difficulty working around her children's school schedule. Rebecca worked as a paraprofessional and fell in love with the profession, so she decided to become a teacher. She expressed that PLCs allow each content group to share advice and help each other. Members of the PLC should also celebrate with each other when they have succeeded. Rebecca also shared that PLCs are much needed in a school organization but are often overlooked. New teachers and veteran teachers alike need PLCs to develop new ideas to succeed in the classroom.

Carol

Carol was a 48-year-old female who had taught mathematics for fifteen years. She has taught sixth and seventh-grade general education and inclusion mathematics, algebra, geometry, and honors geometry. She has also taught fourth-grade mathematics and science. She has also taught mathematics interventions for students that did not successfully complete the mathematics state assessment. Carol has always wanted to be an educator and knew from sixth grade that she wanted to teach mathematics. She discussed that PLCs provide intentional time for educators to discuss students and their work. Carol also expressed the importance of respect among PLC members and how mutual respect contributes to collaboration within the team.

Cassandra

Cassandra was a 33-year-old female who had taught science for five years. She has taught sixth, seventh, and eighth-grade science, including life science, physical science, space science, and chemistry. Cassandra originally wanted to be a monologist or zoologist; however, there was not much of a market for those careers. She chose to be a teacher because she is good with kids and her mother was a teacher. She loves it when a student can understand a concept she

taught and take it further. Cassandra expressed that PLCs are truly a community where teachers can discuss matters within the grade level or department and instructional strategies. She shared that PLCs must have processes to use time effectively, such as an agenda and a timekeeper. Additionally, she would like to see more cross-curricular collaboration to gain insight into instructional practices of other subject departments or grade levels.

Results

The results of this study stemmed from the analysis of three data collection methods, including individual interviews, focus group discussions, and observations. For the individual interviews and focus group discussions, I uploaded the recordings into Otter.ai for the transcriptions. Next, I sent each transcription to the participants for review to ensure accuracy. For the third data collection method, observations, I used observation protocols, and each protocol was categorized by core-content subject. I then printed out all transcripts for the individual interviews and focus group discussions. I utilized the printed transcripts for the data analysis process.

I began the data analysis process by bracketing out my own experiences and bias of secondary PLCs to ensure that I only focused on the participants' experiences of the study. Next, I reviewed each transcript and observation protocol multiple times and highlighted common themes and concepts using a specific color-coded method. The color-coded method aligned with the research questions to ensure that each question was addressed. I then attached an initial code to frequent statements that I wrote down. Finally, I reviewed the initial codes to determine similar codes to cluster together that I also wrote down. After reviewing the cluster codes multiple times, two themes became apparent from the cluster codes: PLC processes and PLC components with each theme containing two subthemes (Table 3).

Table 3

Themes and Subthemes

PLC Processes	PLC Components
Time	Collaboration
Shared Goals	Professional Practices

PLC Processes

The processes of PLCs were created to build effective teams that are able to accomplish the components needed to move an organization to success. Observations using the observation protocol confirmed that PLC teams discuss shared goals, and teachers are given a structured time for PLCs. Teachers also agreed that processes needed for PLCs included time and shared goals. Carol shared, "I think the intention of a PLC is to have a collaborative piece that we need as teachers to give us time and space to genuinely get together." Rebecca added, "PLCs is a follow up for planning and making sure we are reaching our goals."

Time

Time was determined as an essential process to a successful PLC. Teachers experienced various time management practices throughout their PLC experiences, including using an agenda, timekeeper, and PLC leader. Thomas stated, "There is no time to get sidetracked if you have an agenda; then you need to stick to your agenda." Rebecca added, "It is easier to plan with a framework set up and having uninterrupted time. It is so valuable." However, teachers have expressed a lack of time consideration within their PLC experiences. Christina expressed, "I think a big issue we are having in education is teachers are overstretched. Teachers are being split between so many different tasks all the time." Additionally, Steven mentioned, "The PLCs

that provide professional development that we are doing anyway is not an effective use of our time. You often hear the phrase, 'It could have been an email.'"

Shared Goals

Shared goals were the second process that teachers commonly shared when discussing effective PLCs. Teachers agreed that PLC teams thrive when creating and meeting shared goals in order to maintain a positive direction. Madison stated, "Having goals allows the PLC team to move in the direction they need it to. The PLC team must determine whether the goals are being met and if not, the team must meet extra to meet those goals." Michelle provided a different perspective when discussing shared goals as her PLC team often focuses too heavily on big goals. She expressed, "We tend to think of big goals for PLCs; however, we must also focus on small goals or small steps to be successful."

PLC Components

When the processes of time and shared goals are present, the components of a successful PLC are then able to move into place. Teachers described components of PLCs as collaboration and professional learning practices. Rebecca shared, "With collaboration, we are able to bring our own ideas to the table and allow everyone to share their thoughts and ideas. We determine which idea is more successful and we run with it." Carol added, "Through our large group PLC, we go through professional development to help hone in on your craft more." Christina expressed, "PLCs gives us a change to collaborate with other subject matters." Additionally, observations provided evidence that PLCs allow teachers to analyze data, plan lessons and resources, discuss strengths and areas of concern, review assessments, and collaborate about student progress.

Collaboration

Teachers agreed that collaboration was a pivotal component of PLCs. Collaboration allows teachers to build relationships, voice their opinions, and have a shared purpose for what the PLC team would accomplish. Samuel said, "Without collaboration, it is really one person doing all the talking, and everybody else just kind of going along with what they have, and there is nothing else to really hit upon." Thomas added, "The intention of a PLC is to get your team together to discuss challenges, what is working, what is not working, and determine what kind of construction to do." Lastly, Christina affirmed that collaboration was an essential component of the PLC process and shared,

> In collaboration, like the word co-laboring, we work together so we do not just split tasks. It is like a group project where we check on one another's work, we make sure that everything fits the vision of the group, and we make sure that it is democratic at all times.

Professional Practices

Professional practices are the second component that teachers agreed are fundamental to a PLC. The professional practices that teachers discussed most frequently included planning, data analysis, and professional development. James expressed, "A valuable PLC involves a good mix of data and lesson building with our planning time." Michael shared a different perspective when discussing professional practices. He stated,

> At times, I think we put professional development as a check-the-box scenario. You can tell as an educator when you are going through professional development where the instructor has put a lot of time and energy into the presentation, and you know you are going to gain something tangible from the information. Other times, you are disengaged, and it becomes a check-the-box scenario.

Research Question Responses

This transcendental phenomenological research study was driven by one central research question and two sub-research questions to better understand secondary mathematics, science, ELA, and social studies teachers' experiences with PLCs at Central Texas secondary schools.

Central Research Question

What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? All participants shared their experiences with PLCs on their current secondary campuses. These secondary campuses utilize two PLC frameworks identified as large and small group PLCs. The small group PLC is teacher led and focuses on content area planning. Michael stated, "From a small group PLC standpoint, we discuss material that needs to be covered, what strategies have been successful in the past, and areas of concern." The administration team leads the large group PLC. The large group PLC focuses more on information and professional practices. Christina shared a unique perspective for large group PLCs. She expressed, "Honestly, the large group PLCs end up feeling like one big sit and get of sessions that we may have already been to in the past. It ends up feeling like focused professional development."

Within the two frameworks, teachers agreed that successful PLCs are comprised of processes including time and shared goals. Christina confirmed, "Building a PLC culture with fidelity takes time and I mean protected time." Rebecca added, "We have autonomy when it comes to our work; however, we have to make sure we are reaching our goals." The teachers also agreed that successful PLCs are comprised of components including collaboration and professional practices. The two sub-research questions also address the two PLC components. Christina stated,

I think kids can see that we have camaraderie with our colleagues, and it really creates a

stronger bond environment for the students as well. They know we are all on the same

page and they take our credibility more seriously.

Samuel added, "We have the opportunity to look at our data, and anything that we need to work

on as far as growth."

Sub-Question One

What collaborative experiences do secondary teachers have during PLCs? Teachers that

attend PLC in secondary schools in Central Texas experience collaboration through small group

and large group PLCs. Through the small group PLC framework, teachers experience

collaboration with teachers that teach similar content. In the large group PLC framework,

teachers experience collaboration with teachers of the same grade level. Michelle stated, "In

terms of communication within a PLC, letting everyone's voice be heard is what contributes to

effective communication. Not everybody is going say something that we necessarily agree with,

but at least give them the opportunity to be heard." Michael added, "The large group PLC gives

us an opportunity to talk with other core subject teachers to discuss the students that we share."

Lastly, Melissa expressed, "PLCs allow us to collaborate with each other. We talk and discuss

what we could do on the next unit, because everything we talk about build on top of each other in

every unit."

Sub-Question Two

What professional learning experiences do secondary teachers have during PLCs?

Teachers shared various professional learning practices when describing their experiences with

PLCs in secondary schools in Central Texas (Table 4).

Table 4

Professional Learning Experiences

Data Analysis	Lesson Planning	Professional Development	Instructional Strategies
Gradual Release of Responsibility (GRR)	Instructional Rounds	Curriculum Unit Assessments	End-of-Course Exams
Scheduling	Lesson Targets	Standards Breakdown	Success Criteria
Advancement Via Individual Determination (AVID)	Behavior Strategies		

PLC observations confirmed that teachers discuss various professional learning practices including the discussion of instructional strategies, data analysis, and assessments. Madison expressed, "We must come together as a collective group to determine what our kids need to ensure we are on the same page and the plan what we are going to do." Rebecca added, "In large group PLC, we look at the previous year's data to see how the students' progress from year to year."

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Summary

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The 12 participants of this study taught core-subjects: mathematics, science, ELA, or social studies. Each participant shared their experiences with PLCs in secondary schools. The first theme was PLC processes with two sub-themes: time and shared goals. The second theme was PLC components with two sub-themes: collaboration and professional practices. The data collected from individual interviews, focus group discussions, and observations were utilized to answer the central research question: What are the lived experiences of secondary mathematics, science, ELA, and social studies teachers involved in PLCs in Central Texas? and the two sub-research questions: What collaborative experiences do secondary teachers have during PLCs? and What professional learning experiences do secondary teachers have during PLCs?

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological research study was to understand the experiences of mathematics, science, ELA, and social studies teachers with PLCs in secondary schools in Central Texas. Chapter Five begins with the interpretation of findings from the study and is followed by the implications for policy and practice. Next, the theoretical and empirical implications will be discussed along with the limitations and delimitations. Lastly, recommendations for future research and a summary of the study will conclude the chapter.

Discussion

This study sought to determine the understandings of PLCs through the lens of a secondary teacher. A phenomenological research study was chosen because I wanted to explore the lived experiences of secondary mathematics, science, ELA, and social studies teachers with PLCs in Central Texas schools (Creswell & Poth, 2018). The theoretical framework that guided this research was Wenger's (1998) theory of social learning. I chose to focus on the social learning theory as this theory emphasizes the importance of interactions and collaboration among a team (Wenger, 2000). The discussion section of this study highlights the interpretation of findings, implications for policy or practice, theoretical and empirical implications, limitations and delimitations, and recommendations for future research.

Interpretation of Findings

To collect data for this transcendental phenomenological study, I utilized three data collection methods including individual interviews, focus group discussions, and observations. Although the teachers experienced various PLC practices, the data analysis process revealed two common themes that were essential for a successful PLC: PLC processes and PLC components.

Additionally, each theme contained two subthemes. The theme, PLC processes, included time and shared goals, and the theme, PLC components, included collaboration and professional practices.

Summary of Thematic Findings

The data analysis process identified two themes and two subthemes for each of the themes within the study. The first theme identified was PLC processes, and under PLC processes were the subthemes time and shared goals. The second theme that was identified was PLC components, and under PLC components were the subthemes collaboration and professional practices.

PLC Processes. Through the data collection methods, it was apparent that teachers agreed that there are specific processes needed to build a successful PLC. The processes of PLCs that were discussed the most frequently included time and shared goals. All teachers experienced a specific time and place for scheduled PLC times. Teachers meet at least once per week for small group PLC and bi-weekly for large group PLC. Carol expressed that PLC time is needed to give teachers a time and place to meet and collaborate. However, Steven believed that time in PLCs is not always used effectively. Teachers also experienced shared goals among their PLC teams and indicated the importance of knowing the direction the PLC is headed. Madison explained that the PLC team must determine how they meet their goals and whether the goals are being met. Michelle added that the PLC team must also consider small steps or goals along with the large overarching goal. Overall, the PLC processes are put into place to assist the components of the PLC with moving the organization in the direction of success.

PLC Components. With the PLC processes in place, the teachers agreed that the components of the PLC would be established. The two components that teachers determined

were essential for a successful PLC included collaboration and professional practices. Thomas shared that PLCs allow a team to come together to discuss challenges and changes needed. Christina also expressed that an important piece of collaboration is the effort of the entire group and everyone working together. Teachers also experienced various professional learning practices when participating in PLCs. Teachers participated in lesson planning, data analysis, and professional development to name a few. James shared that a successful PLC involves a good mixture of data analysis and lesson planning. Carol affirmed that her experience with PLCs included professional development that assisted her with growing in her craft. Essentially, the components of collaboration and professional practices create purposeful PLCs.

Implications for Policy or Practice

The findings of this study emphasized the experiences of mathematics, science, ELA, and social studies teachers with PLCs in secondary schools in Central Texas. The findings of this transcendental phenomenological study have implications for policy and practice as well as theoretical and empirical significance for educational organizations. The administration teams in school districts including superintendents, principals, and other educational leaders can utilize the findings from this study to review the PLC frameworks within their organizations.

Implications for Policy

Research has stressed the importance and benefits of PLCs (DuFour et al., 2005). Teacher experience has confirmed the processes and components needed for PLCs to be successful. With the knowledge of the importance of the processes and components of PLCs, school districts and district and campus leadership teams should consider leveling the PLC processes across their organizations. Teachers should experience the same essential processes and components on each of the campuses that they encounter. Leveling the PLC processes would involve the school

district or organization to commit to a change process that could include professional development, observations, and involvement in campus level PLCs. The change process would also need the buy-in from all constituents involved on campuses including the principals, assistant principals, curriculum and instructional specialists, and teachers. Districts and organizations could determine a company to partner with make the change process.

Implications for Practice

District and campus administration should evaluate the current PLC framework that campuses in their district are currently utilizing. During the evaluation, they must determine if key processes and components are in place. The evaluation should also include the district and campus administration team observing PLCs and collaborating with teachers. Additionally, if the processes and components are not in place, the administration team should take the incentive to change the framework to include them.

Teachers should ensure that there is a specific time scheduled to collaborate with colleagues in a PLC team. The team must work closely together to create shared goals. Teachers should also take the incentive to immerse themselves in collaboration with their colleagues including being an active participant by asking questions, sharing ideas, being an active listener, and respecting ideas of others. Additionally, teachers should share their needs for professional development and be an active participant in growing themselves professionally.

Theoretical and Empirical Implications

The 12 participants and their experiences also confirmed the research surrounding the processes of PLCs. Various research has emphasized the importance of teachers having a structured time to discuss student learning, organizational improvement and reform, and instructional concerns (Alberta Education, 2006; Fulton et al., 2010; Little, 2002; Morrissey,

2000; Vescio et al., 2008). The teachers shared experiences where the PLCs within their campuses were scheduled and structured. Additionally, the research indicates PLC elements that include the team having shared goals and visions (Kruse et al., 1994; Solution Tree, 2021). Teachers also shared their experiences with understanding the goals of the PLC and the direction the team or organization was headed.

The 12 participants confirmed Wenger's (1998) social learning theory was a suitable theoretical framework for this study. Wenger's (1998) social learning theory focuses on the significance of shared goals and collaboration within a team of individuals. Each participant experienced collaboration in various ways among their small group PLC with their core-content subject area, grade-level, and campus colleagues. Additionally, the PLCs are centered around social unity to achieve goals, build relationships, and grow professionally (DuFour et al., 2005). Through PLCs and collaboration, teachers were able to experience professional development, data analysis, and accomplish shared goals. These experiences increased the efficiency of teachers and organizations as a whole.

Limitations and Delimitations

Limitations of this study are considered unmanageable weaknesses that may be connected to events, the sample, technology issues, or participants. Although the gender representation for this study was considerably close with seven females and five males, the ethnically diversity was uneven. The participants of this study identified as White (67%) and African American (33%) with American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander not being represented. Additionally, this study was only able to obtain participants from three secondary schools (one high school and two middle schools) as I was unable to receive site participation from other principals. With the data collection process

primarily in the first semester of school, it is possible that more schools and teachers did not participate because of the stress of the beginning of the school year.

Delimitations of this study included years of experience and grade-level and subject taught. Teachers that participated in this study needed more than one year of teaching experience, taught in either middle or high school, and taught one core-content subject including mathematics, science, ELA, or social studies. Teachers that taught middle or high school (6th-12th grade) mathematics, science, ELA, or social studies were selected because I wanted to determine the experiences of secondary mathematics, science, ELA, or social studies teachers with PLCs in Central Texas. Teachers needed more than one year of teaching experience for various reasons. New teachers were less likely to participate considering the other tasks that new teachers must complete the first year of teaching including new teacher induction, observations, and multiple trainings. Additionally, teachers needed to understand the framework of PLCs. New teachers would be less likely to have this knowledge.

Recommendations for Future Research

The recommendations for future research were determined based on the limitations and delimitations of this study. The participants from this study were selected from middle and high schools in Central Texas; however, only two middle schools and one high school provided site approval. Future research may focus on recruiting participants from other middle and high schools in the Central Texas areas to include other school districts. Next, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander were not represented in this study. Future research may expand to increase the involvement of participants within these ethnic groups.

Conclusion

With the continuous changes within our society and the world of education, educators are continuously attempting to meet these demands (Bhopal & Sleeter, 2013). The demands are consequently decreasing collaboration with colleagues and causing educators to at times work individually in isolation (Coenen et el., 2012; Wheelan, 2005). Through PLCs, educators are able to not only meet the demands of teachers but also discuss student achievement and grow professional (Johannesson, 2020; Mu et al., 2018).

The current research shows a slight understanding of the elementary teacher experiences with PLCs. This study focused on the experiences of secondary mathematics, science, ELA, and social studies teachers with PLCs in Central Texas. The data collection methods of individual interview, focus group discussions, and observations provided a comprehensive understanding of secondary teacher experiences of PLCs and determined two themes. The first theme, PLC processes, contained two subthemes: time and shared goals and the second theme, PLC components, contained two subthemes: collaboration and professional practices.

The findings aligned with Wenger's (1998) social learning theory that emphasizes the importance of collaboration among a team of individuals in order to achieve collective learning and accomplish shared goals. The findings of this study demonstrated the importance of establishing a scheduled and structured time for teachers to participate in PLCs. Additionally, the findings of this study emphasized the importance of shared goals professional learning practices within PLCs. Lastly, district and campus administration teams should concentrate on leveling PLC processes and components among campuses within the district.

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Appendix A

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

September 2, 2022

Tiphani Morris
Matthew Ozolnieks

Re: IRB Exemption - IRB-FY22-23-43 Secondary Teacher Perspectives on Professional Learning Communities: A Phenomenological Research Study

Dear Tiphani Morris, Matthew Ozolnieks,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix B

KISD RRB Approval

September 21, 2022

Tiphani Morris
Doctoral Candidate
Liberty University
1971 University Blvd
Lynchburg, VA 24515

RE: SECONDARY TEACHER PERSPECTIVES ON PROFESSIONAL LEARNING
COMMUNITIES: A PHENOMENOLOGICAL RESEARCH STUDY

Dear Tiphani Morris:

The Research Review Committee of the ⬛⬛⬛⬛⬛⬛⬛⬛ has reviewed and approved
your proposal to conduct the about referenced research study. Please note that all school and district
information should remain confidential. Any data collected from the ⬛⬛⬛⬛⬛⬛⬛
may be used solely for the purposes of the approved study.

Please provide the Research Review Committee with a copy of methodology and findings section of your
dissertation following the completion of the study. On behalf of the Research Review Committee, I wish
you the best of luck on your research study.

Sincerely,

Appendix C

Principal/Site Approval

September 21, 2022

Tiphani Morris
Doctoral Candidate
Liberty University
1971 University Blvd
Lynchburg, VA 24515

Dear Tiphani Morris:

After careful review of your research proposal entitled Secondary Teacher Perspectives on Professional Learning Communities: A Phenomenological Research Study, I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

☐ I will provide our membership list to Tiphani Morris, and Tiphani Morris may use the list to contact our members to invite them to participate in her research study.

☑ I grant permission for Tiphani Morris to contact secondary teachers at ████████████ School District to invite them to participate in her research study.

☐ I will not provide potential participant information to Tiphani Morris, but we agree to send her study information to secondary school teachers on her behalf.

☐ I am requesting a copy of the results upon study completion and/or publication.

Sincerely,

█████████████████████

September 23, 2022

Tiphani Morris
Doctoral Candidate
Liberty University
1971 University Blvd
Lynchburg, VA 24515

Dear Tiphani Morris:

After careful review of your research proposal entitled Secondary Teacher Perspectives on Professional Learning Communities: A Phenomenological Research Study, I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

☐ I will provide our membership list to Tiphani Morris, and Tiphani Morris may use the list to contact our members to invite them to participate in her research study.

☒ I grant permission for Tiphani Morris to contact secondary teachers at ███████████ ████████ to invite them to participate in her research study. ██████████

☐ I will not provide potential participant information to Tiphani Morris, but we agree to send her study information to secondary school teachers on her behalf.

☒ I am requesting a copy of the results upon study completion and/or publication.

███████████████████████

September 23, 2022

Tiphani Morris
Doctoral Candidate
Liberty University
1971 University Blvd
Lynchburg, VA 24515

Dear Tiphani Morris:

After careful review of your research proposal entitled Secondary Teacher Perspectives on Professional Learning Communities: A Phenomenological Research Study, I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

☐ I will provide our membership list to Tiphani Morris, and Tiphani Morris may use the list to contact our members to invite them to participate in her research study.

☒ I grant permission for Tiphani Morris to contact secondary teachers at ████████████ School District to invite them to participate in her research study.

☐ I will not provide potential participant information to Tiphani Morris, but we agree to send her study information to secondary school teachers on her behalf.

☐ I am requesting a copy of the results upon study completion and/or publication.

Sincerely,

██████████

Appendix D

Participant Recruitment Email

[Date]

[Recipient]
[Title]
[Company]
[Address 1]
[Address 2]
[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctorate degree. The purpose of my research is to understand secondary teacher perspectives of professional learning communities (PLCs) based on their experiences in Central Texas Schools, and I am writing to invite eligible participants to join my study.

Participants must be current secondary public-school teachers in Killeen Independent School district who teach sixth through twelfth grade students in the core subjects of mathematics, science, social studies, or English Language Arts, and with more than one year of teaching experience. Participants, if willing, will be asked to participate in an individual virtual interview, virtual focus group with other participants, and an observation of a professional learning community. Participants will also be asked to review interview and focus group transcripts for accuracy. These procedures will take approximately three hours to complete entirely. Names and other identifying information will be requested as part of this study, but the information will remain confidential using pseudonyms.

To participate, please click here, https://forms.gle/4CTEEpUpTdrRqTPc6, and complete the screening survey. If you have any questions, please contact me at ██████████ or ██████████████████ .

A consent document will be emailed to you after you complete the online survey. The consent document contains additional information about my research. If you choose to participate, you will need to sign the consent document and return it to me at the time of the interview.

Sincerely,

Tiphani Morris
Doctoral Candidate
██████████████

Appendix E

Participant Consent Form

Consent

Title of the Project: Secondary Teacher Perspectives on Professional Learning Communities: A Phenomenological Research Study

Principal Investigator: Tiphani Morris, Doctoral Candidate, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a public-school teacher with more than one year of experience, teach a core subject (Mathematics, Science, Social Studies, or English Language Arts), and teach in grades 6-12. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to understand secondary teacher perspectives of professional learning communities (PLCs) based on their experiences in Central Texas Schools.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Participate in an individual interview. The interview will last approximately one hour and will include experiences with professional learning communities (PLCs). Interviews will be audio and video recorded for transcription. Notes will also be taken. You will be given the opportunity to review your interview transcript for accuracy.
2. Participate in a focus group with other participants. Participants will be grouped based on core subject. The focus group will last approximately one hour. The focus group will be audio and video recorded for transcription. Notes will also be taken.
3. Participate in an observation of a professional learning community (PLC). The research will observe a professional learning community at work. The observation will last approximately one hour. Participants will be grouped based on core subject. The observation will be audio and video recorded for transcription. Notes will also be taken.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society may include that the results of this study will provide educational leaders with insight on effective collaboration and successful implementation of professional learning communities (PLCs). Additionally, organizations outside of education may use the information to adjust the current collaborative structure among their constituents.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential through the use of pseudonyms.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews, focus groups, and observations will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Tiphani Morris. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ███████████ or ████████████████████ You may also contact the researcher's faculty sponsor, Dr. Matthew Ozolnieks, at ████████████████

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record and video-record me as part of my participation in this study.

_____

Printed Subject Name

_____

Signature & Date

Appendix F

Observation Protocol

Date:	Time:
Duration of the meeting:	Site:
Participants:	
Documents discussed:	
Notes	
Descriptive Observations:	Reflection:

Appendix G

Audit Trail

Date	Task	Notes
September 2, 2022	IRB Approval	I received IRB approval.
September 21, 2022	KISD Research Review Committee Approval	I received approval from the KISD Research Review Committee.
September 21, 2022	Emailed Principals for Site Approval	I emailed two potential campuses for site approval.
September 21, 2022	Site approval	I received site approval from the HHHS principal.
September 23, 2022	Site approval	I received site approval from the AMMS principal.
September 24, 2022	Began recruitment	I began emailing teachers for recruitment.
September 27, 2022	Continued recruitment	I sent follow up emails to potential teachers for recruitment.
September 28, 2022	Sent consents	I sent consents for teachers that completed the Teacher Interest Survey and met criteria.
October 1, 2022	Continued recruitment	I sent another follow up email to potential teachers for recruitment.
October 10, 2022	Individual Interview	I held the first individual interview for the research study. I sent the transcript from the interview to the participant. I also continued to schedule other individual interviews.
October 11, 2022	Site approval	I received site approval from the UGMS principal.
October 11, 2022	Continued recruitment	I sent recruitment emails to teachers at UGMS.
October 13, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
October 16, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.

October 23, 2022	Follow-up	I sent an email to a few participants to follow-up on scheduling individual interviews.
October 23, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
October 27, 2022	PLC Observation	I observed a PLC using the PLC observation protocol.
October 29, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
November 3, 2022	Follow-up	I sent a few reminder emails for completing the Teacher Interest Survey and consent.
November 8, 2022	PLC Observation/Individual Interview	I observed another PLC using the PLC observation protocol. I also conducted another individual interview. I sent the transcript from the interview to the participant.
November 22, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
November 27, 2022	Follow-up	Emailed the principal at HHHS to inquire about more participants.
November 30, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
December 1, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
December 5, 2022	PLC Observation	I observed another PLC using the PLC observation protocol.
December 7, 2022	PLC Observation	I observed a PLC using the PLC observation protocol.
December 11, 2022	Focus Group Discussion	I conducted my first focus group discussion. I sent the transcript from the discussion to the participants.

December 15, 2022	PLC Observation	I observed a PLC using the PLC observation protocol.
December 22, 2022	Individual Interview	I conducted another individual interview. I sent the transcript from the interview to the participant.
December 29, 2022	Focus Group Discussion	I conducted my second focus group discussion. I sent the transcript from the discussion to the participants.
January 8, 2023	Individual Interview	I conducted my last individual interview. I sent the transcript from the interview to the participant.
January 9, 2023	Focus Group Discussion	I conducted my third focus group discussion. I sent the transcript from the discussion to the participants.
January 11, 2023	PLC Observation	I observed a PLC using the PLC observation protocol.
January 18, 2023	PLC Observation	I observed a PLC using the PLC observation protocol.
January 15, 2023	Focus Group Discussion	I conducted my last focus group discussion. I sent the transcript from the discussion to the participants.
January 16, 2023	Coding Individual Interviews	I began to code individual interviews.
January 18, 2023	Coding Individual Interviews	I finished coding individual interviews.
January 22, 2023	Coding Focus Group Discussions	I began to code focus group discussions.
January 28, 2023	Coding Focus Group Discussions	I finished coding focus group discussions.
February 1, 2023	PLC Observation	I observed my last PLC using the PLC observation protocol.
February 1, 2023	Coding PLC observations	I began to code the PLC observation protocols.
February 3, 2023	Coding PLC observations	I finished coding the PLC observation protocols.