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Best Practices in Professional Learning Communities That Influence Teacher Self-Efficacy

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This dissertation, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Education in Organizational Leadership

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Dr. Nannette Glenn, Dean of
the College of Graduate and
Professional Studies

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Abilene Christian University

School of Educational Leadership

Best Practices in Professional Learning Communities That Influence Teacher Self-Efficacy

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Silian Molly Hornsby

April 2024

Dedication

I want to dedicate this dissertation to my family, who have supported me in this journey. To my loving husband Thomas, who inspires me daily and constantly supports me in all my wild ideas, thank you for listening to me in times of frustration and doubt and offering an encouraging word. Thomas, thank you for picking up the slack at home and with the boys when I was drowning. You are my hero, and I love you with all my heart! To my two boys T.J., and Tyler, who I hope were encouraged by the work they saw their mom doing in any free moment that she had. My laptop will forever have baseball sand from working at various baseball games and practices. I hope you know how much I love you both, and I hope I have kept home life as usual as possible during these last 3 years. Completing my dissertation would not have been possible without the love and support of these fantastic people. I am so blessed and will forever be grateful for this experience and the support of my loved ones!

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Words cannot express my gratitude to my chair and committee for their invaluable patience and feedback. They generously provided knowledge and expertise in formatting and guided me in my method, to name only a few ways they provided support. This endeavor would not have been possible without their generous support.

Finally, I would like to thank the participants in this study for sharing their personal experiences with me. I appreciate your time and honesty. I hope your words will encourage others to put your suggestions into practice!

Abstract

This qualitative case study examined best practices in professional learning communities (PLCs) that influence teacher self-efficacy. Participants were primary and intermediate teachers and teacher leaders from a large suburban elementary school in Texas. Participants had to have at least 1 year of teaching and PLC experience. The semistructured teacher and teacher-leader interviews were recorded and transcribed in real time using Otter.ai software. After members checked the transcription, the transcription was uploaded into the NVivo software for coding and identifying common themes. The findings were separated into themes based on the study's research questions. Research question 1 explored what teachers and teachers find effective and ineffective in PLCs. The results revealed the perspectives of teachers and teacher leaders aligned into four themes: collaboration/sharing, topics of PLCs, campus expectations, and team expectations for PLCs. The second research question addressed the best practices in PLCs that influence teacher's self-efficacy. The interview results converged to reveal the five most common themes throughout the responses: choice of topics, sharing ideas, understanding everyone, setting expectations, and helping others. The results of this study gain more perspectives of participants by studying what constitutes best practices to increase self-efficacy and student achievement from PLC participants in a suburban elementary school.

Keywords: professional learning community, self-efficacy, best practices, teacher leaders, elementary schools, suburban schools

Table of Contents

List of Tables

Chapter 1: Introduction

Shermukhammadov (2022) explained that pedagogical experience consists of the knowledge a teacher acquires in their educational craft. The teacher's pedagogical skills are the beginning components in the growth of pedagogical science. A teacher believed to be creative cannot only teach and educate but must also possess skills and competencies. The process of education consists of cognitive and management activities. Therefore, according to Shermukhammadov (2022), the teacher takes on the responsibility for these qualities of the student, such as the desire for knowledge, which becomes the student and the teacher's inner need to experience the world through education.

The Texas Education Agency (TEA; 2023a) stated that continuing education is an expectation for all Texas teachers who acquire a standard teaching certificate. The 150 professional development (PD) hours must be completed every 5 years for teacher certification renewal. Documentation is not required during the online renewal process, although it should be available upon request.

Furthermore, DuFour and Reeves (2016) argued that professional development can transpire through professional learning communities (PLCs). When authentically implemented, the PLC process can significantly improve teaching and student learning; however, if followed incorrectly, increased teacher and student success is not achieved when there is no specified opportunity and time to meet to discuss ideas and exchange matters of importance. Liu et al. (2022) explored using PLCs to increase teachers' ability to enhance their innovation levels. Bunnaen et al. (2021) explained that professional development broadens teachers' skills and knowledge and changes beliefs and individual attitudes, positively affecting instructional approaches that improve student learning.

Lee (2020) expressed the causes of increased educator self-efficacy through PLCs and concluded a direct correlation between educators' increase in self-efficacy and PLCs. Educators with self-efficacy have raised expectations for their students' progress and achievement and take accountability for their learning. Moreover, Mingsiritham et al. (2020) detailed that technology can enhance PLCs by elevating teaching and learning opportunities, increasing teacher's ability to influence learners.

According to The Line (2019), the suburban population in the United States increased from 53% to 55% between 2000 and 2016, while the urban population remained constant at 31%, and the rural population shrank from 16% to 14%. Additionally, there is increased economic strain on the suburbs. Compared to rural or urban areas, suburban America's poverty rates are rising more swiftly. About 49% of the poor population in the United States lives in suburbs and small metropolitan counties, while 34% live in cities and 17% in rural areas. Compared to urban and rural areas, suburban areas saw a 51% growth in the number of people in poverty between 2000 and 2016, cities saw a 31% increase, and rural regions saw a 23% increase. Dell'Angela (2017) noted that staff members and school communities in suburban schools are ill-prepared to deal with the increasing poverty rates, cultural hurdles, and family estrangement that have emerged in recent years.

Furthermore, Gill et al. (2016) stated that suburban school districts are less knowledgeable about the difficulties that underprivileged kids encounter. In the 1950s and 1960s, suburban teacher populations grew in response to the needs of a native-born, White, more affluent, and homogeneous student body. New populations provide unprecedented difficulties. Suburban growth requires increased expenditures, from building new facilities to recruiting new teachers and developing innovative programs.

This chapter includes the statement of the problem, the purpose of the study, and the theoretical framework for this study on PLCs. It also contains the research questions and definitions of critical terms that guide the study.

Statement of the Problem

According to Fatimah and Syahrani (2022), education embodies problems such as trust levels, support from the community, curriculum, staffing issues, and student happenings. The Texas Association of School Boards (2022) argued that Texas's urban and rural districts are struggling nationwide. School districts are struggling to retain and hire quality teachers. He et al. (2022) explained that administrators, teachers, teacher leaders, teacher educators, and researchers must collaborate to continue exploring various PLC structures and further build theory and practice connections for improved student learning to sustain and expand these professional communities for teachers from diverse backgrounds. Anderson and Olivier (2022) argued that the need for future research could include a more in-depth study and analyses through qualitative methodology or a mixed methods study to gain in-depth perceptions of school leaders and classroom teachers. It would also be beneficial to include qualitative research to inform district leaders about the support system leaders give, their perceptions of the practices of PLCs, and their influence on teacher self-efficacy and school-level collective efficacy.

Dunn's (2023) findings revealed that conflict management among teacher leaders changed the process for completing tasks, relationship building, and their overall ability to function. Trust is the primary factor determining if the conflicts are destructive or productive. Furthermore, disputes surface from personality differences, views on curriculum, and external pressures that affect the participants. According to Dunn (2023), it would be desirable to ascertain whether PLC conflicts force teachers to abandon their jobs. Avidov-Ungar et al. (2023)

recommended long-term research to determine how and to what extent their work as PLC leaders impacts kindergarten teachers' performance in the classroom, and if they are, whether these impacts are consistent across teachers with different lengths of tenure.

Doğan and Adams (2018) and Knight et al. (2022) researched PLCs. They found that when specified best practices are in place, such as an agreed-upon goal, teacher self-efficacy improvement, and student achievement enhancement can occur through PLCs. Eaker and DuFour (2009) argued that staff participating in PLCs engage in research-based decision making within collaborative teams, constantly seeking best practices. Riggins and Knowles (2020) noted that teachers who collaborate and use research-based strategies can achieve their goals.

Spencer-Johnson (2018) argued the need for future data attainment research in smaller or larger urban schools. According to Mills (2020), there has not been enough research on the perspectives and experiences of PLC participants. To uncover any inconsistencies in findings when looking at a much larger PLC study group, I proposed researching the views and experiences of PLC members regarding the connection between teacher self-efficacy. QISD, a pseudonym for the school district at the center of this study, wants to emphasize retaining teachers and improving community engagement.

Purpose of the Study

The purpose of this study was to explore best practices in PLCs that influence teachers' self-efficacy as perceived by teachers. The data collected can potentially influence the effectiveness of PLCs in improving teachers' self-efficacy in a large suburban public elementary school in North Texas. The study aimed to examine the best practices of PLCs by discovering how members utilize PLCs and learning how individuals benefit from them. This study may offer a thorough understanding and provide a depth of knowledge about how PLCs affect

teachers' self-efficacy. This study identified best practices through questionnaires and individual interviews. This study's data could reveal the best practices of PLCs on a large suburban elementary school campus to increase teachers' self-efficacy to deliver lessons.

Research Questions

The overall research question that focuses the study is the following: What best practices in PLCs influence teachers' self-efficacy? The following research questions guided the study:

RQ1: What constitutes an effective or ineffective PLC from teachers' perspectives in a large suburban school district?

RQ2: What PLC best practices influence teachers' positive self-efficacy from teachers' perspectives in a large suburban school district in Texas?

Theoretical Framework

According to Patton (2016), complexity theory pushes us to pay attention to the erratic, disorganized, messy, ever-changing, and adaptable; in other words, to view and ponder the world as complex. Complexity theory provides explanations for how and why patterns develop. It also highlights the type of information we must gather and arrange to accomplish that, despite how challenging it may be. Complexity theory has been employed for qualitative, case-based research across various phenomena when a straightforward cause-and-effect model cannot adequately capture and account for the event's nonlinear dynamics and emergent qualities.

Anfara and Mertz (2015) explained that for a person to gain identity in their organization and feel safe and fulfilled, they need to align with the organization's goals. Jones (2013) explained that an interconnected learning environment for teachers can lead to an enriched learning environment for students to reach their potential. Furthermore, complexity theory

thinking embraces the idea of a shift in the way academic staff engage with each other and their students to produce better learning outcomes for students.

Jones and Barrett (2016) explained that current U.S. classrooms provide some evidence of complexity from Cartesian and Newtonian foundations; however, more needs to emerge in classrooms to reach students at their individualized level. Developing teacher and administrator pedagogy could assist them with finding best practices for individual learning and exploring current brain research. This study examines how using PLC best practices affects teachers' self-efficacy and student performance outcomes. The research design will include organizational identity and the theoretical identification framework as a more robust evaluation of the campus culture and best practices of participants on the large suburban elementary school campus to allow for aligning the group's overarching PLC goals and influence teacher development.

Walton et al. (2022) argued that complexity theory encompasses PLCs working as a convergence of many combined systems and the potential for change when teacher development happens through the recontextualization of in-depth knowledge and gaining learning across dividing lines. Strom and Viesca (2020) explained that it is possible to trace and investigate the spontaneous formation of social events using the explanatory frameworks provided by complexity theory. Based on complexity theory, human action, such as that involved in learning and teaching, happens at the border of disarray, where there is just enough disequilibrium to encourage growth and knowledge but not enough to result in complete confusion.

Definition of Key Terms

The following definitions make the terms applied in this study's vocabulary more evident.

Collaboration. To help students realize their full potential, members of a learning community work alongside one another on an equitable basis (Friend & Cook, 1992).

Collective Inquiry. Establishing a procedure whereby people collaborate to investigate and evaluate information to advance knowledge (DuFour et al., 2006).

Economically disadvantaged. Based on the student program and special populations reports produced by the Texas Education Agency (2023b), economically disadvantaged in education refers to the number of students recognized with one of the following classifications: qualified for free or reduced-price meals under the national school lunch and child nutrition program. Other conditions include a family with annual earnings at or below the official federal poverty line, approved for Temporary Assistance to Needy Families (TANF) or additional public assistance, received a Pell Grant or similar state program of need-based financial aid, eligible for programs supported under Title II of the Job Training Partnership Act (JTPA), or qualified for assistance under the Food Stamp Act of 1977.

Mission statement. A mission statement urges the institution to contemplate why it is there (DuFour & Eaker, 1998).

Motivation. Motivation is the persistence with which a person attends to a learning endeavor (Bormuth, 1973).

Other central city-suburban district. The district is classified as an other central city-suburban district if it is in a county with a population between 100,000 and 1,049,999 and has at least 15% of its largest district enrollment. A district identifies as a central city-suburban district if all these conditions apply: it is adjacent to another central city district, its enrollment is at least 3% higher than that of the largest adjoining another central city district, and it is equal to or higher than the median district enrollment for the state (Texas Education Agency, 2021).

Parental involvement. Parental involvement results from the parent's commitment to and participation in the student's education and the school (Wages, 2016).

Pedagogical skills. Pedagogy describes connections between teachers and students in education (Hall et al., 2008).

Professional development (PD). Administrators and teachers can enhance their craft, skills, and efficiency in their positions by participating in a range of professional learning or teacher development (Great Schools Partnership, 2013a).

Professional development program. Sjoer and Meirink (2016) explained that professional development programs today frequently include one or more workshops, occasionally followed by coaching in a classroom. These workshops introduce an unfamiliar subject, idea, or teaching technique. They continually seek to advance novel understanding or alter teaching methods.

Professional learning community (PLC). DuFour (2004) explained that a professional learning community describes individuals with an aligned educational goal, such as grade-level teams on campus.

Reading literacy. Reading literacy allows the individual to comprehend and make use of written language forms demanded by civilization and regarded as valuable by the individual (Elley, 1992).

School culture. The term includes more tangible issues like students' physical and emotional safety, the organization of classrooms and public places, or the level to which a school has and acclaims racial, ethnic, linguistic, or cultural diversity. Still, it also broadly refers to the views, opinions, associations, attitudes, and written and unwritten rules that shape and affect every facet of a school's functions (Great Schools Partnership, 2013b).

School reform. The process of changing educational policy or practice, frequently in reaction to problems about student academic progress, is referred to as school reform. Although education reform and school improvement are frequently used interchangeably, school reform is the most prevalent (Zavadsky, 2011).

Self-efficacy. Bandura (1977) defined self-efficacy as the capacity to influence an individual's conduct.

Shared leadership. Shared leadership in education refers to the distribution of leadership responsibilities and decision-making authority across many positions within the institution instead of a single position or individual (DuFour et al., 2021).

Teacher leaders. Teachers who have taken on extra professional obligations, formally and informally, are often called teacher leaders (Shillingstad & McGlamery, 2019).

Texas Academic Performance Reports (TAPR). Every year, the TAPR compile a comprehensive variety of data on children's academic achievement in every Texas school and district. Student groupings, including socioeconomic level and ethnicity, break down performance (Texas Education Agency, 2023c).

Texas Education Agency (TEA). The TEA is the state organization managing public elementary and secondary education. The commissioner of education oversees it. The TEA improves results for all state public school students by offering leadership, direction, and assistance to school systems (TEA, 2022a).

Values. Values assist us in defining our mission and vision, setting goals, and deciding on the nonnegotiables that are crucial to our work, according to DuFour and Eaker (1998).

Vision statement. DuFour and Eaker's (1998) vision statement and declaration of core values ask individuals to specify how they intend to accomplish their shared goal.

Summary

      This chapter included a defense of the value of PLCs in influencing teacher efficacy and how it affects student progress. Moreover, this chapter had several examples of previous research that found students and teachers benefit if PLCs are in place and propel collaboration among individuals. However, there is a need for a study on PLC best practices that influence teachers' self-efficacy. This chapter also highlighted the need for additional research into PLC best practices that influence teacher efficacy. In this study I explored best practices for PLCs in a suburban elementary campus to gain insight from teachers who participate in these PLCs. In Chapter 2, there is an overview of the PLC literature. The literature review provides the effects, benefits, and barriers to PLCs along with the gaps in the literature regarding PLCs.

Chapter 2: Literature Review

The purpose of this study was to explore best practices in PLCs that influence teachers' self-efficacy as perceived by teachers. Sperandio and Kong (2018) and Turner et al. (2018) explained that PLCs offer beneficial learning opportunities when best practices are followed, according to a large body of research. However, Turner et al. (2018) also noted that teachers' motivation for attending these meetings can wane when good practices are not in place for PLCs. Jafar et al. (2022) explained that PLCs elevate teacher professionalism and effectiveness, and continual learning benefits student learning by allowing an enhanced quality of education.

In this chapter, a literature review discusses the research on PLCs, including what makes PLCs successful and unsuccessful. Studies in the review of research note the effects and benefits of PLCs. This chapter also reviews research into barriers to PLCs.

Literature Search Methods

The literature search emerged online using the Brown Library at Abilene Christian University. The inquiry, powered by EBSCOhost, assisted in refining to gather full-text, peer-reviewed journal articles from 2016 to 2023. The search terms included *PLC*, *teacher self-efficacy*, *motivation*, *school culture*, *school reform*, *best practices*, and *parent involvement*. The advanced search method provided a more concise search criterion. In addition, the reference pages of the various journal articles identified additional literature to pursue and review for content.

Theoretical Framework Discussion

The primary theoretical framework for this research revolves around complexity theory (Jones, 2013). Complexity theory encompasses the connection between teachers' learning goals and their impact on students' achievement goals. Patton (2016) noted that complexity theory

encourages educators to consider the world complex by enabling them to pay attention to the unpredictable, disorderly, messy, ever-changing, and adaptable. The theory of complexity explains how and why patterns emerge. It also emphasizes the kind of data that must be compiled and organized to recognize patterns despite potential difficulties. Complexity theory has been used for qualitative, case-based studies across various phenomena when a simple cause-and-effect model cannot effectively capture and account for the event's nonlinear dynamics and emergent features.

Anfara and Mertz (2015) explained that PLC-based PD training may improve teacher efficacy and student progress. Furthermore, employees must meet their goals, allowing heightened willingness to align with organizational objectives such as student achievement. Under the complexity theory framework, teachers could change their relationship with their students to increase teachers' impact on student academic performance.

Research by Jones and Barrett (2016) found evidence of complexity theory approaches, arguing that teachers need more engagement for students to reach their full potential. Enhancing teacher pedagogy by identifying best practices for PLCs could enhance the enhancement required to achieve the highest complexity theory point. Walton et al. (2022) explained that complexity theory in PLCs encompasses the possibility for transformation when teacher development occurs through the recontextualization of in-depth information and acquiring learning beyond dividing lines.

Strom and Viesca's (2020) study suggested that the unforeseen appearance of social phenomena can be achieved using the explanatory frameworks provided by complexity theory. Under complexity theory, human participation in teaching and learning occurs at the boundary of

disorder, where there is just enough instability to encourage growth and understanding but not enough to result in complete chaos.

History of Professional Learning Communities

Solution Tree (2019) stated that the name for PLCs first appeared in the early 1960s, and studies on them intensified in the 1980s. According to Rosenholtz and Simpson (1990), teachers who experience support from learning networks exhibit better levels of self-efficacy and adopt innovative strategies for assisting students. Senge (1990) explored learning organization and its impact on innovation practices. Little and McLaughlin (1993) shared their research findings that collaboration allows for innovative ideas to emerge to increase student outcomes. Hord (1997) explained that PLCs involve the sharing of learning among the administration and teachers. Furthermore, DuFour (2004) demonstrated that school reform emerges by embracing PLCs. Doğan and Adams (2018) researched to uncover a definition for PLCs. A PLC consists of educators who share objectives and collaborate on ideas to advance their education and improve how they offer instruction to help their students accomplish the highest levels of academic performance. The researchers in this study explained that PLCs are complex practices that focus on analyzing data. PLCs are a widespread practice in educational settings to date.

Importance of Professional Learning Communities

According to Eaker and DuFour (2009), PLCs are collaborations among individuals to increase their knowledge and those around them. PLCs are adopted and utilized in many organizations. Some factors cause them to be effective and ineffective. The importance of PLCs aids in the discovery of strategies for PLCs. Teachers participating in PLCs engage in research-based decision making within collaborative teams, constantly seeking best practices. Verdi (2022) explained that PLCs are a well-known type of superior PD that allows teachers to interact,

discuss teaching tactics, consider their teaching methods, and establish collegial and helpful learning environments.

Effects of Professional Learning Communities

The effects of PLCs are explained through the literature in the following sections. PLCs can impact school culture, student achievement, and parental involvement, and also influence the development of teachers participating in them.

School Culture

Sperandio and Kong (2018) explained that PLCs enhance the school's culture and climate and create a better sense of belonging on the campus. In addition, PLCs assist in change that allows for the negotiation of common language and missions. Oakley (2021) stated that PLCs allow for an increase in the culture of center-based schools. Sahin and Yenel's (2021) study also supported the idea that school culture impacts teachers' social networks, allowing the organization to understand the importance of school culture. Participation in PLCs allowed for more vital shared values and vision in the organization. Lee's (2020) research concluded that PLCs could affect self-efficacy and school culture. Organizations with higher levels of school culture also had more increased innovation among their teachers.

Jafar et al. (2022) stated that focusing on school culture enhances PD through PLCs. PLCs encourage the transition to a more productive school culture. Regarding the role of school culture in fostering PD through PLCs, Jafar et al. (2022) found that understanding the influence of shared leadership, shared planning, and transformation leadership is essential. By understanding these influences, the organization's culture that guides the school transformation enables changes in a positive direction in a more orderly manner. PLCs promote a shift in the focus of further beneficial school culture. This change is through the conceptualization of PLCs,

which comprises a group of administrators and teachers who consistently share, explore, and act according to their learning experiences, as the primary goal of PLCs is to heighten teachers' professionalism and effectiveness. By offering a higher standard of education, a cycle of continuous learning can help improve the atmosphere for learning for students. Positive effects of school culture on the PLC are evident in sharing planning and transformational leadership.

Leonard and Woodland (2022) explained that establishing and maintaining strong, efficient school-based PLCs can act as catalysts for personal and organizational development. Strong PLCs combat discrimination, resulting in altered teacher thinking, more equal classroom procedures, and valuable social-emotional learning outcomes. Conventional school reform measures, such as unconnected PD conferences, fail at addressing racist feelings and behavior. PLC involvement impacts teachers' capabilities to change curriculum and teaching to become anti-racist and enhance all students' emotional, social, and academic development.

Khan et al. (2021) concluded that PLC practices enhance a trustworthy school atmosphere and effective teacher PD. PLCs and trust have a significant, favorable, and robust association. The results suggested that PLC should be promoted in all educational settings to improve the standard of teaching and the learning atmosphere for all teachers and students.

Chapman et al. (2021) explored the techniques that enable us to address the disparity between the current practices in our educational institutions and the ideal practices they should be implementing. The cultivation of mindful practice allows the administration to examine and perceive the organization in numerous ways. Cultivating mindful praxis in school leadership promotes adopting an inquiry-based philosophy as the standard approach to utilizing data within the school organization. Engaging in this practice presents a potential for utilizing formative and substantial data essential to problem solving and decision making within educational institutions.

PLCs have the potential to serve as a conducive environment for the cultivation of mindful practice. This research examined the cultivation of individuals within the school community who can actively engage as collaborative contributors in generating shared knowledge. This study theorized that the establishment and comprehension of the contributions of meaningful data use in school settings can increase by fostering synergistic connections between cognitive processes, corresponding actions, and the use of data (Chapman et al., 2021).

Tabak and Sahin (2020) found that instructors valued supportive school environments more and gave high marks to PLC practices and communal learning. Their study also revealed that school culture was a significant predictor of the effects of PLCs, essential to school effectiveness. The findings indicated that senior instructors had a better assessment of the efficacy of their schools.

Student Achievement

Bunnaen et al. (2021) stated that PLCs significantly affected students' critical thinking skills in the classroom. PLCs not only benefit teachers but also have significant impacts on students. Phillips (2003) concluded that administrators and teachers in an urban middle school saw increased student achievement for all students after engaging in PLCs. Meesuk et al. (2021) stated that PLCs significantly affect teachers and students. Teachers changed their teaching styles after participating in PLCs. He et al. (2022) explained that a PLC produced good teaching and learning results by focusing on the learner's development. PLC improved student learning outcomes.

Doğan and Adams (2018) explained that PLCs continue to be a vital component of PD for teachers, and 13 studies have shown that PLC participation benefits both teachers and their students. Verdi (2022) concluded that PLCs are a PD strategy that can help music teachers and

school administrators talk about problems that affect students' learning in a forum that is open, democratic, and created to bring educators together to find the best solutions and outcomes.

Mesa and Pringle (2019) argued that the science education that students receive in middle school is crucial in shaping their future academic and professional paths in the STEM fields. PLCs that prioritize student learning methodically and promptly can transform middle schools from within. PLCs are a potentially effective framework for motivating and enabling middle science instructors to improve students' learning significantly. Within PLCs, educators can collaborate to deepen their understanding of their subjects, implement best practices for middle-school science education, and improve student learning.

Mellroth et al. (2021) validated the importance of PLCs and further teacher PD. PLCs allowed educators to focus on differentiated work for students to reach every student. PLCs allowed time for collective inquiry, impacting the growth of essential lesson designs for student achievement. According to Tucker and Quintero-Ares (2021), the PLC approach allowed faculty to go from merely knowing online teaching technologies to engaging in substantial conversations about online teaching and learning that positively impacted student learning. Furthermore, Oakley (2021) explained that PLCs offer an alternative to sole reliance upon traditional PD to increase student learning outcomes.

According to Khan et al. (2021), all PLC domains and trust show a substantial, positive, and significant association. A trustworthy school culture and effective teacher PD correlate with PLC practices. The study results suggested that PLC should be promoted in all educational settings to improve the standard of instruction and knowledge and the overall learning and teaching proficiency for all students and teachers.

Parental Involvement

Krijnen et al. (2022) clarified that to create a shared vision among teachers and parents, time, parent participation, and a focused approach to the deficient among parent-teacher relationships must be present to increase parent involvement. In PLCs, building educational partnerships is possible among parents and staff that encompass communication, mutual respect, cooperation, and inclusion to enhance student growth with shared visions. PLC participation served the purpose of developing a shared vision as it revealed existing views of parent involvement and detailed steps to facilitate a way to create a campus-shared vision.

According to Huffman et al. (2016), the PLC process can be nourished or deflated by external influences from stakeholders and from cultural and historical events. Stakeholders that make up a school community encompass family members, guardians, parents, and partners in the community, as well as any national, state, city, or district entity. A connection between the PLC's external variables and constructs impacts the other. PLC can evolve cohesively and boost the likelihood of long-term improvement if stakeholders are involved.

Angelov (2022) argued that an effective learning organization is one where information is shared and enhanced by many people to be involved in the benefit and the building of the environment. Collaboration with institutions and parents is crucial for teams to perform more effectively than before and for a faster flow of information. Each team member must show knowledge and develop acceptance, communication, decision making, teamwork, and psycho-social traits.

Hu et al. (2022) explained the sustainable growth of PLCs in multidisciplinary disciplines in Chinese K-12 schools by facilitating five key factors: organizational structure, policies and procedures, leadership, professionalism, learning ability, and feeling of community. In contrast

to conventional subject-based PLCs, PLCs focused on interdisciplinary subjects emphasize three distinct characteristics: the cultivation of an inclusive atmosphere that acknowledges and addresses conflicts, the simultaneous existence of individual and collective visions, and the establishment of emotional bonds that contribute to a shared identity. To a certain extent, these three elements have effectively addressed the issues present in traditional subject-based PLCs in Chinese K-12 schools. Within multidisciplinary PLCs, educators' unique perspectives and aspirations exhibit a higher level of proactivity in engaging in PLC endeavors and fostering communication with colleagues from different disciplines. This initiative-taking approach contributes to advancing teacher professional growth and augments instructional excellence.

Teacher Development

According to Riggins and Knowles (2020), PLCs impact teacher growth and increase teachers' learning. Teachers can improve instruction through targeted PLC opportunities. PLCs are beneficial for teacher-enhanced education. PLCs are essential in developing teachers' knowledge in our education system.

Hagenah et al. (2022) indicated that implementing a 1-year PLC positively impacted teachers, as it facilitated their rejuvenation and aided in developing many forms of capital, including knowledge, skills, and resources. By establishing connections with other physical education (PE) professionals in the PLC, these PE instructors could actively participate in their schools by taking on leadership positions and fostering relationships. This enhanced their interactions with colleagues, students, and administrators, benefiting them.

Tam (2023) aimed to analyze the fundamental attributes of a PLC in supporting early childhood educators in reshaping their perspectives on the implementation strategy of play-based learning. Establishing a PLC fosters an environment that encourages collaboration, effective

communication, and cohesiveness between school principals and teachers. This collaborative approach facilitates the creation of constructive collaboration and the cultivation of collective wisdom within the educational setting. Furthermore, adopting a more expansive perspective on play-based learning increases the probability of implementing a curriculum and instructional approach centered around play. This study provides empirical evidence supporting the effectiveness of a PLC in facilitating teacher growth within the workplace—the enhancement of teachers' skills and knowledge in play-based learning facilitation through teacher development.

Shanks (2016) explained that approximately 80% of the individuals who participated shared that collaborating in the PLC meetings allowed for improved lesson design and felt sessions were helpful. Participation in PLCs improved instruction outcomes and the participants designed highly effective lesson plans and assessments. Using PLCs and action research allowed teacher candidates to flourish and grow in their craft regardless of the pressures of teaching and learning. Barr and Askell-Williams (2020) found that PLCs effectively increase knowledge, and teachers' performance also benefits from participating in PLCs. PLCs can potentially change an individual's beliefs about self-regulated learning.

Mejang and Suksawas (2021) reviewed the impacts of teacher development through a PLC that assesses the teachers' skills when teaching reading. Teachers developed positive attitudes, improved skills, and better understanding through PLCs. The participants also felt satisfied with the training program. Teachers could design more creative lessons and a positive attitude toward PLCs. Teachers and educators build relationships through PLCs and share information to elevate their students' experiences. PLCs allowed teachers to adjust their teaching as needed. PLCs benefit teachers by serving as training for these English teachers. Campus

personnel can learn and commit to specific tasks in PLCs, which is a great approach to engage in PD.

Ashar et al. (2021) stated that PLCs can congregate through a live streaming-based platform for practical learning that increases learning outcomes. Gonçalves et al. (2022) concluded that PLCs allow teachers to feel empowered to keep learning and provide the space to respect other ways of learning. Long et al. (2021) observed teachers thinking and feelings about learning in PLCs and its connection to the engagement of learning and practice. PLCs enhance one's actions and continuous learning. Live-streaming online training helps build a learning community with flexible teaching styles. Teachers' feelings about learning indirectly affect their participation in practice and engagement in PLCs. Teachers' attention in practice directly affected engagement in learning. An individual's beliefs about teaching positively affect PLCs. PLCs positively impact engaging knowledge and training for the participants.

Barr and Askell-Williams (2020) observed the benefits of PLCs on teachers' knowledge and an opportunity to be a change agent in the belief of knowledge. According to Oakley (2021), PLCs can offer a different approach to traditional PD to improve student learning outcomes and teacher practices. According to Jafar et al. (2022), one of the critical factors influencing PLC is the sharing planning component. Sharing planning is the most crucial component because it could provide PLC participants with an excellent chance to present their lesson plans from the start of their introduction to the completion of their lesson plans. The group members examine the instruction plan's strengths and faults. To accomplish the desired learning objectives, the teachers modify and enhance their pedagogy of instruction and evaluation using the feedback from the sharing process during PLC meetings.

Pan and Cheng (2023) explained that discussions about extensive ideas, crucial questions, and student learning outcomes in the lesson design are more likely to occur when teachers value professional learning and sharing with colleagues, working together to plan lessons, and allowing for peer observation. Implementing teacher-learning communities can be facilitated by developing professional competence, enhancing instructional practice, and studying lessons. Incorporating the teacher-led inquiry approach into daily work lessens the load of additional PD activities while encouraging teacher ownership of the intervention. Additionally, they frequently discussed where and how students learn with colleagues.

Shakhsi Dastgahian and Scull (2022) examined how participation in a collaborative professional learning environment within the context of their school caused tiny changes in the practices of three English language teachers at secondary schools in Iran. The investigation findings showed that despite conflicts, the instructor's cooperation, dialogic participation, and time commitment to the execution and evaluation of their instruction led to changes in their practice. Khan et al. (2021) concluded that trust in all PLC domains shows a significant, positive, and reliable association. Effective PLC practices are associated with a culture of trust among students and teachers and elevated levels of PD. They found that PLCs should be promoted in all educational settings to improve the standard of instruction and the learning environment for all teachers and students. Teachers agree that sharing ideas, observing one another's lessons, exchanging feedback, and practicing shared leadership in a cooperative and trustworthy school atmosphere all contribute to their professional growth.

He et al. (2022) argued that by adopting an opposing viewpoint towards these disparities, administrators, teacher leaders, and teacher educators should provide chances for engagement in PLCs beyond conventional grade-level or school-based frameworks. This facilitates the

exchange of ideas and collaborative efforts among visiting teachers. The cross-school PLC examined in this study demonstrated the capacity for teachers to participate in collaborative discussions and engage in reflective and critical thinking (He et al., 2022). Through this process, teachers were able to enhance their knowledge and skills and build social and decision-making abilities with the assistance of the professional community. The PD of teachers connects to their instructional methods. The study introduced a PLC alternative to conventional school-based PLCs or topic-centered workshops. These traditional approaches sometimes fail to provide educators with diverse teaching experiences or varying PD requirements with a conducive environment for engaging in meaningful reflective conversation. To promote and extend the establishment of professional communities for teachers from diverse backgrounds, administrators, teachers, teacher leaders, teacher educators, and researchers must collaborate to continue investigating different structures for PLCs and to strengthen the relationship between theory and practice, leading to improved student learning outcomes.

Benefits of Professional Learning Communities

Engaging in PLCs offers campuses several advantages, including a shared vision, values, and language among members that influence a school change. Participating in PLCs increases people's motivation and sense of self-efficacy. PLCs improve members' knowledge and pedagogical abilities while enhancing their capacity to participate in learning networks.

Shared Vision, Values, and Language

Krijnen et al. (2022) noted that growth in shared visions using PLCs is a three-stage process of gathering views, narrowing the focus, and developing a planned approach for action. De Keijzer et al. (2022) recognized that teachers participating in PLCs focused on moral learning developed increased ethical awareness and the ability to express their feelings. The innate

understanding of PLCs impacted how they interacted with students. PLCs effectively improved their knowledge of moral education when guided in this learning space. PLCs allowed the area to develop teachers' knowledge about ethical dimensions. With PLCs, teachers can improve their moral awareness and deepen their moral consideration through targeted PLC opportunities (De Keijzer et al., 2022).

Bouchamma et al.'s (2021) results indicated that PLCs allow for data sharing, which allows for the alignment of language among members that impacts student achievement. PLCs allow for an organization's successful and sustained goals, visions, and missions. Riggins and Knowles (2020) argued that schools must have collective commitments to a shared vision of the campus for successful PLCs. Meesuk et al. (2021) acknowledged that the PLCs boosted dedication to the school's mission and objectives due to acquiring a network. Because of the notions of a shared vision, shared values, and a single objective, it generated passion in performance to complete the mission.

Motivation

Findings by Liu et al. (2022) concluded that PLCs relate to teachers' ability to become innovative and creative in learning environments. Teachers increased creative self-efficacy and highly robust learning environments increased the innovation in the teacher and impacted student achievement. This study highlights the insight into what leads to successful ongoing PLC. In addition, the research findings supported that PLCs needed support from the development of the campus culture to aid in the success of PLCs.

Avidov-Ungar et al.'s (2023) study provided insight into the phenomena of PLCs from the perspective of early childhood educators who also held a leadership role in the PLC. The study concentrated on the internal and external drivers that led instructors and educators to take

on the leadership role in PLCs, the practical and emotional demands of the position based on their individual experiences, and the interplay between these demands. Data analysis revealed that participants' decisions were typically influenced by internal motives instead of external motivations like the need for a promotion or raise. The participants mentioned the following internal driving forces: a desire for PD, the desire to mentor and serve as an example for younger colleagues, the willingness to participate in a sharing and supportive community, and a sense of mission and belief in the value of the PLC as applied to the new policy for early childhood professional development. The frequency of change- and innovation-related desires shows that participants increase their ability to leave their comfort zone and pursue innovation.

Angelov (2022) explained that when creating a learning organization, it is essential to remember that pedagogical leaders and staff must continuously participate in education. Leaders ensure that the information, skills, and competencies they learn reach their coworkers and other organization members. Finally, they must inspire staff members to cooperate and share knowledge in the crucial triangle of the teacher, school, and home environments.

Prado et al. (2022) concluded that teachers were nested in PLCs, the PLCs were nested in cohorts, and the cohorts were nested in school districts in this multilayered setting. Through a variety of factors, such as relational mentoring, teachers in this framework were able to achieve higher degree completion rates. According to their findings, higher teacher completion rates are motivators of relational mentoring nestled within the systemic social network of PLCs and cohorts. Teacher engagement in PLCs exemplified how relational mentoring, when fostered through faculty and within cohorts and PLCs, aided teachers in completing an ESL master's degree.

School Reform

Phillips's (2003) study provided evidence of school reform. Administrators and teachers engaged in powerful learning communities in an urban middle school were able to create an innovative curriculum that resulted in increased student achievement for all students. Lee (2020) found that focusing on innovation increased change in a group culture, PLCs, and teacher efficacy. The organization's goal focused on improving teacher efficacy and positively impacting school reform. Research by Bunnaen et al. (2021) explained that for the successful implementation of PLCs, administrators and teachers must be fully committed to impacting school reform. Oakley (2021) stated that leaders meet the challenges of transforming center-based schools into PLCs through a gradual, systematic approach, which requires sensitivity to the nuances of organizational culture and the cognitive habits of individuals. Changing a school into a PLC requires leaders to try it, see how it works, and adjust.

Beddoes et al. (2019) explained that education continually changes. Physical educators can oversee change and take charge of their future. Physical educators need to understand the educational change process in schools, embrace and accept physical education as a public health tool, and know how to manage change through the thoughtful application of PLCs. Physical educators can influence the culture of schools by encouraging students to engage in more physical activity outside of PE class and by providing opportunities for students and teachers to do so throughout the school day. Each physical educator needs to grasp the nature of change in schools and how to successfully impact it because physical education is a part of the more excellent school system. PLCs give physical educators the framework to take charge by influencing systemic change for the better, reshaping culture, and promoting more physical exercise in schools.

Knowledge and Pedagogical Skills

Mejang and Suksawas (2021) concluded that teachers benefit from PLCs as they broaden their knowledge base. They also reaffirmed that PLCs heightened the knowledge and skill of teachers on campus, impacting learning. A person's attitude could improve from the engagement of PLCs. This information supports establishing the value of PLCs and the positive impacts of PD happenings in PLCs. Barr and Askell-Williams (2020) urged PLC opportunities for teachers to explore their epistemic knowledge, which can impact classroom instruction. According to Oakley (2021), learning from one another rather than a trainer from an outside organization or a different discipline may help teachers at center-based schools believe in the validity and relevance of the content.

Mellroth et al. (2021) examined the lesson format for differentiated mathematics instruction in mixed-ability PLCs. This study validates the importance of PLCs and the principals' roles in enhancing teacher PD. The research concluded that the dilemmas teachers face and the importance of this awareness to identify these dilemmas allowed for more content-focused instruction. Through the work in PLCs, teachers can determine the difficulty in differentiating learners' needs from teachers' needs to address them. The work in PLCs allowed this work to be a guide for building student capacity. PLCs allow for the inquiry needed to develop vital lessons. Participation in PLCs can increase teacher knowledge.

Paulus et al. (2020) found that PLCs are appropriate for PD for teachers and that teachers gain increased self-efficacy when using the PLC model. Ashar et al. (2021) also concluded that digital learning networks allow for more collaborative connections among participants. Tucker and Quintero-Ares (2021) further developed the impact of technology training online through PLCs. Furthermore, online PLCs provided a place to learn, share, and support others. In addition,

there was an increase in awareness and communication (Tucker & Quintero-Ares, 2021). When limited to in-person communication and collaboration with online platforms, PLCs could accomplish the goal.

Mingsiritham et al. (2020) described the effects of advanced technology on PLCs. The researchers explained that technology effectively developed teachers' professional knowledge in PLCs. Furthermore, if the community gathers online or in person, PLCs can increase student achievement and teacher agency to impact learning. Moreover, results reflected that PLCs and technology could enhance teacher development to impact student learning. PLCs are helpful not only for conducting business in person but also for using technology. This information establishes the value of PLCs and the necessary components for PLCs' effectiveness.

Angelov (20202) completed research and considered that every learning organization can have an excellent pedagogical leader who is open, can engage in straightforward communication, and include all members in various capacities by planning units and activities based on their proficiency, the work they achieve, and their personal beliefs, cooperation, and readiness. Shim and Thompson (2022) concluded that researching PLCs over time can teach how the culture of PLCs can change, giving teachers new chances to recognize their students as skilled knowledge producers and how students develop as epistemic managers over time. This study makes a case for teams of teachers to advance their collective knowledge and practices with the conviction that students can and do deeply engage in scientific processes, abandoning reductionist thinking about pupils having misunderstandings. Brennan and King's (2022) results supported the claim that PLCs can assist teachers in creating and maintaining inclusive practices over a long duration by demonstrating sustained changes in their individual and collaborative practices.

Learning Networks

Research by Meesuk et al. (2021) evaluated the cause and results of the PD programs of participants from Thailand engaging in PLCs. The factors affecting the positive outcomes of PD include the teacher must fully participate in the PLC process. PLCs' effectiveness involves shared values, norms, and similar perspectives. The impacts affected teachers and students by raising the sense of commitment to campus goals, shared vision, and values and goals among the campus. Teachers and students can improve instruction through PLC PD opportunities. PLCs are beneficial for teacher-enhanced education and student performance.

Prenger et al. (2021) explained that professional learning networks (PLNs) enhance teacher learning. However, the research findings indicated a need for a structured plan and an end goal. Further, the research could evaluate reflective dialogue among teachers from PLNs and its effect on student achievement. The benefits of PLNs, such as out-of-the-box thinking and increased collaboration, evolved from the research study. PLNs enhance the teaching of teachers. He et al. (2022) stated that teachers were given the information they required but also developed a network of support that encouraged them to engage in reflective practice through discussions and collaborations by having a place like the PLC where they could share their problems and worries, reflect on their teaching philosophies and practices, and exchange ideas with coworkers.

Walton et al. (2022) concluded that PLCs increased learning in contextual knowledge and its effect on connections and networking developments. Long et al. (2021) study aligned with previous research that having a learning community eliminated the practice gap by developing understanding and practice among teachers. Bunnaen et al. (2021) stated that participants identified conditions within PLNs of having an aligned focus, feelings of accountability to the group, collaborative inquiry, support, drawing on everyone's expertise, and valuing diversity.

Verdi (2022) explained that music teachers can interact, feel less alone, and exchange ideas in a PLC to become more effective teachers and leaders. PLCs can significantly assist in bringing music educators together for meaningful and beneficial discussions.

Due to the different departmental positions, Tucker and Quintero-Ares (2021) claimed that PLCs allow faculty members to collaborate with coworkers they have never met. Due to this, a strong community formed, which helped to align experiences, advance knowledge of online practices, and improve instructional pedagogies. Implementing PLCs was crucial to supporting teachers professionally during the COVID-19 pandemic. It provided them with a platform to discuss how their duties as teachers have evolved and how to understand better students' concerns, annoyances, and personal changes during the crisis. While creating a friendly and supportive digital environment is feasible, remote PLCs differ from typical worksite learning dialogue.

Burns et al. (2023) explained encouraging outcomes that point to the fact that working together in a professional learning community across state universities is a relationship that is more important than ever. Kentucky institutions are utilizing innovation and collaboration among their colleges of education. The university partners work together to promote quality improvements across all settings to strengthen principal preparation and mentoring programs with the assistance of state education personnel. This PLC identifies problems and generates solutions through discussion and problem-solving techniques. Kentucky's school districts will profit from better-equipped schools and district leaders overall.

Self-Efficacy

Based on the school's culture and the implementation of PLCs, Lee (2020) examined the level of teacher efficacy. PLCs influence the school climate and instructors' sense of competence

in our changing educational system. In addition, Lee (2020) found that school culture significantly impacts and indicates teacher self-efficacy when participating in teachers' PLCs. However, the data revealed teachers' self-efficacy heightened when PLCs and a strong culture remained. Findings in this article concluded that PLCs that include enhanced school culture impact teacher self-efficacy positively.

According to Pan and Cheng (2023), teacher-learning communities' (TLCs) experiences affected teachers' self-efficacy, affecting their professional learning beliefs and practices. Additionally, perspectives affect behaviors strongly, and teacher self-efficacy directly impacts their beliefs and behaviors. Understanding self-efficacy concerning professional learning beliefs and actions also offered valuable insights for effective teacher development practices. Brennan and King (2022) found an improved teacher efficacy for inclusive practice, with teachers reporting feeling competent and having the knowledge and abilities necessary to include all learners. This principle is crucial in implementing inclusive pedagogy and is considered a problem area.

Anderson and Olivier's (2022) results showed that PLCs benefit teacher self-efficacy and group efficacy, that PLC implementation and school-level impact efficacy, and that PLCs contribute to school improvement. PLCs, teacher self-efficacy, and group efficacy at all grade levels (i.e., elementary, middle, and high) and in schools with high and low poverty. Additionally, study results provide district officials, school leaders, and teachers with information on how to apply PLC techniques to raise collective efficacy and self-efficacy among teachers and support school improvement.

Yada et al. (2023) suggested that how teachers learn through experience in PLCs may impact their self-efficacy level. The way teachers see PLCs is critical to boosting their self-

efficacy because if they encounter the same phenomena in PLCs, they would view the experience as merely information or learning opportunities. The findings also suggest several directions for teacher education practices, showing that teachers increase their self-efficacy by using experiences in PLCs as learning opportunities. To do this, teachers must be aware of how to learn from experiences by incorporating concrete experience, reflective observation, abstract conceptualization, and active experimentation. Promoting opportunities for coworkers to share their experiences is essential, especially in lower secondary schools where subject instructors work alone. Education leaders and policymakers should provide materials encouraging teamwork and reflective conversations among colleagues that result in experiential learning. Additionally, experiential learning should be a part of teacher education and in-service training to improve student learning and boost teacher self-efficacy. Active engagement in sharing viewpoints during formal training where teachers are from various topic areas may stimulate their learning and result in high self-efficacy.

Pan's (2023) research demonstrated that an intervention program can stimulate self-efficacy as an outcome. Through observation, a change happens in teaching practice or instructors with ongoing collaborative learning. To get the intended outcome, particularly in learner-centered instruction, the cultivation of self-efficacy is necessary. Educators who possess a greater sense of self-efficacy are more inclined to effectively implement the knowledge and skills obtained from participation in learning communities into their instructional methods within the classroom setting.

Barriers of Professional Learning Communities

Certain behaviors lead to the failure of PLCs on campuses. Weakened PLCs are observed on campuses where PLCs are not given enough time to occur. PLCs are viewed as having less

value on campuses where collaborative or shared leadership is absent. PLCs that do not follow best practices operate poorly.

Time Constraints

Mofield (2020), Wilson (2016), and Zhang et al. (2017) argued that a barrier to PLCs in the study identified teachers included a lack of opportunity to meet and collaborate. Furthermore, Kincaid (2014) explained that lack of time to take ownership of their learning is a barrier to PLCs. Riggins and Knowles (2020) explained that the allotted time for PLCs needs to be scheduled during the teacher's contractual time of the school day, as this shows that the work of PLCs is essential. PLCs during the workday also ensure collective responsibility for the job. Also, Oakley (2021) recognized that PLCs require leaders to provide participants time to reconcile their values, and the implicit assumptions of these values involve new structural conditions in which to make decisions and act.

Pan and Cheng (2023) concluded that the success of TLCs depends on giving teacher groups ample time to meet to experiment with teaching methods and monitor students' thinking. This raises teacher self-efficacy and effectiveness while enhancing student knowledge, pedagogy, and teacher content. School administrators should create a supportive environment to encourage teachers' ongoing research into the curriculum, instruction, and students' thinking and learning. Banjong et al. (2021) found that when using a PLC, the members must have time to schedule meetings, activities, and exchanges that are acceptable for the group environment.

Supportive and Shared Leadership

Wilson (2016) found that teachers may have many different experiences and perceived perceptions that can enhance and even block their growth in PLCs. Riggins and Knowles (2020) stated that secure leaders are vital to providing the proper work in PLCs. If there is not an

elevated level of commitment from all district and campus leadership, teams also end up frustrated in PLCs and struggle to work at efficient levels. Administrators must value the importance of growing a leadership capacity in others to lead to change among others and their campus. Administrators that support teachers and hold them accountable result in high-functioning PLCS. Leaders of campus buildings work with their teams to monitor ongoing progress, know when teams are off track, and provide feedback and support.

According to Antinluoma et al. (2022), teaching assistants (TAs) played a substantial role in assisting individuals, groups, and classes with learning and everyday activities in both regular and special education at the primary and secondary school levels. TAs should be included in PLCs in schools to improve their learning. According to TAs' evaluations of their capacities, collaborative knowledge construction, including shared inquiry with teachers and reflection on one's own and other practices, is seen as a strength. According to perceptions of interpersonal abilities, working together, having a shared vision, and set of values, taking responsibility for students learning as a group, and sharing practices with teachers are strengths. Strengths for the connection and climate dimensions include relationships built on mutual respect and trust. PLC growth depends on the skills of all members. External networks, support, training, and inspiration are required. This is because expertise within schools may not be suitable to address the widespread assortment of unique problems students encounter in their daily activities and learning.

Bouchamma et al. (2021) argued that when the amount of collaboration heightens, collective efficacy is present for individuals and groups. Principals' participation in collaborative practices was crucial to the success of PLCs, and guidelines were provided for that participation. The principal must arrange capital such as time, work area, and resource materials. In a PLC,

experienced team members share their expertise to inspire less experienced teachers. Brodie (2021) explained that PLCs need support from principals, and individuals need a purposeful connection to their campus goals to sustain a campus long-term. Thessin (2021) indicated that educational leaders must plan and set up supportive conditions before PLC work can even begin while supporting and shared leadership and supportive conditions have been identified as essential characteristics for successful PLC work.

Research by Coenen et al. (2021) explored the group processes of PLCs and noted the need for adequate principal preparation. Group development elevates through a PLC foundation. The research findings indicated that a coach or external advisor would aid in developing PLCs; a goal of this research aimed at PLCs' impact on increasing output. The data showed that those principals found PLCs beneficial and enhanced personal growth.

Walton et al. (2022) provided insight into what leads to successful ongoing PLCs, such as support networks and expertise. PLCs needed support for successful outcomes. Teachers needed help and regular communication from administrators for PLC sustainability. Bunnaen et al. (2021) found that PLCs need a total commitment from administrators and teachers to impact reform. A total commitment from administrators and teachers encompasses being willing and active to sustain PLCs. According to Meesuk et al. (2021), school administrators might be extremely helpful in promoting and motivating teachers to start the network.

According to Jafar et al. (2022), transformational leadership is the second component in PLC performance among teachers. The most promising way to enhance teaching methods during PLC may be to concentrate on behaviors such as mutual consultation, knowledge sharing, and group decision-making. Transformational leadership in the campus setting involves sharing values, goals, vision, organizational strategy, and less bureaucratic practice. School

administrators foster the creation of PLCs and enhance the caliber of interpersonal interactions within the school community.

Angelov (2022) stated that to be a part of the learning organization, and each member must consider all participants and organizational undertakings at the school level, inquire about them, recognize them, and then share their thoughts, initiatives, ideas, and occasionally disparagement. Everyone must be involved in planning diverse events, exchanging knowledge, speaking clearly, and working as a team. Each person needs to develop their listening skills, functioning skills, and ability to control the rapid flow of information. Each team member must show knowledge and build their traits in acceptance, communication, decision making, teamwork, and psychosocial domains.

Khan et al. (2021) explained that teachers effectively put the domains of PLCs into practice by exchanging ideas, working together, sharing leadership responsibilities, actively participating in school decisions, observing, exchanging feedback, and taking advantage of meeting and planning time in conducive environments. Teaching staff members to respect and assist one another in their work. As a result, teachers collaborate, appreciate shared leadership, actively make decisions at school, and spend time meeting and planning.

Harvey and Nilsson's (2022) suggested that many educators are willing to self-reflect on their instructional practices, emphasizing recognizing and appreciating their professional expertise. However, it is evident from the interviews that teachers perceive a potential conflict between engaging in inquiry processes and being expected to discuss research findings and implement preestablished methodologies. In instances where preexisting teaching models are employed, teachers assume the position of implementers rather than engaging in an inquiry-based approach to teaching. The prioritization of teachers' needs, and knowledge diminishes as

other entities assume the authority to determine what teachers require and how they should modify their practices. To comprehend this paradox, it is imperative to consider the historical context of teacher professional growth. Educators are accustomed to scenarios wherein an external entity informs them of their instructional requirements and requests their adoption of novel pedagogical approaches. Therefore, our research emphasizes the significance of considering teacher professional development's established practices and customs when strategizing for a PLC initiative. This is crucial in creating an environment where all teachers feel a sense of belonging and are willing to share their teaching methods and challenges openly. Additionally, it is essential to value and utilize teachers' prior teaching experiences to facilitate collaborative exploration and reflection within the collective work of the PLC.

Nyimas et al. (2017) explained that in collaborative groups like PLCs, shared leadership is critical in fostering effective professional learning. Sustainable improvement is made possible by shared leadership. To guarantee that every group collaborator concentrates on shared results of the sustainable improvement cycle, there must be commonality in the things and general group dynamics. By having a clear purpose and set of values, the collaborative group may get past issues that arise with the efficiency of instruction and continue to support student development and school improvement to meet the institution's objectives.

Best Practices

Doğan and Adams (2018) and Knight et al. (2022) argued that when best practices are in place for PLCs, this opportunity for PD can improve teachers' self-efficacy and increase student achievement effectively. Similar findings by Paulus et al. (2020) proposed that PLCs require best practices for PD, including a preplan for PLC success, alignment with content standards, exploitation of community dynamics, maintenance of ongoing collaborative peer relationships,

and recognition that learning is a reflective practice. Thessin (2021) found a best practice in PLCs as the element of allowing for an innovation culture, which includes enticing educators to participate in competitions, enhancing the curriculum through research, and implementing innovation activities based on reflective practices. Vance et al. (2016) concluded that the potential of PLC learning is more likely to be realized with necessary organizational support, a helpful campus principal, and thorough facilitator planning. Doğan and Adams (2018), Knight et al. (2022), and Lee (2020) explained that best practices must be in place to change teacher self-efficacy and student achievement. Best practices are essential to have in place for high-functioning PLCs.

Summary

This chapter presented several effects, benefits, and barriers of PLCs. Districts expect teachers to participate in PLCs as a PD opportunity. Ongoing engagement in professional development often occurs in PLCs. The establishment and success of PLCs depend on the participant's ability to walk away with knowledge from the PLC. PLCs can effectively influence teacher self-efficacy when best practices are in place for participants. Teachers participating in best practice-driven PLCs can influence their self-efficacy.

The goal of the literature review is to give readers a background on PLCs and examine their effects, benefits, barriers, and additional research needs. Future research is needed to identify best practices for PLCs. This study gathered best practices from teachers, providing large suburban school districts with recognized best practices to influence teacher self-efficacy. In the next chapter I discuss the research methods used for the study.

Chapter 3: Research Method

The purpose of this study was to identify best practices for PLCs that influence teacher self-efficacy as perceived by teachers. Due to varying best practices or lack thereof, this study used qualitative research to gather the best practices used by suburban teachers during PLCs on the elementary campus. This qualitative single case study analyzed the insight of teachers and teacher leaders of a large suburban elementary school based on the PLC best practices that influenced their self-efficacy.

This chapter includes the research design and methods that were used in the study. In this chapter I discuss the population, study sample, instruments, data collection, and analysis process and explain the methods for establishing trustworthiness, ethical considerations, researcher role, assumptions, limitations, and delimitations.

Research Questions

The overall research question that focuses the study is the following: What best practices in PLCs influence teachers' self-efficacy? The following research questions guided the study:

RQ1: What constitutes an effective or ineffective PLC from teachers' perspectives in a large suburban school district?

RQ2: What PLC best practices influence teachers' positive self-efficacy from teachers' perspectives in a large suburban school district in Texas?

The research questions created conform to the perspectives of suburban elementary teachers. The single-case study research allowed the participants to be questioned in their environment, enhancing the study's depth.

Research Design and Method

The methodology that I used in this study was a qualitative research design. Miles (2020) explained that qualitative data embodies proximity to the local setting. Furthermore, it allows for immediate access to analysis and processing. The study used qualitative research to uncover suburban teachers' best practices to influence self-efficacy. Merriam and Tisdell (2015) stated that qualitative research moves beyond answering where, when, and what questions. Qualitative research investigates the how and why behind human behavior.

Yin (2017) noted that qualitative data examine daily interactions in their context. This study utilized a case study design by collecting participant insights and learning how and why PLCs are successful when following best practices. The case study was the correct strategy because the data revealed how suburban teachers viewed best practices for PLCs.

Triangulation allowed for accurate data representation from multiple sources (Carter et al., 2014). To add depth to the study and qualify for triangulation, this study achieved triangulation by using individual interviews, PLC agenda obtained from participants, and retention data based on off-campus TAPR reports. The perspectives from individual interviews were transcribed in real time using Otter.ai. I gathered data over several months, then analyzed and coded into themes using the NVivo software.

Before the study began, the Abilene Christian University's (ACU's) Instructional Review Board's (IRB) gave approval, along with permission from the campus principal of a suburban elementary school. Once authorization to perform the research from the principal was granted, I contacted school staff to share about the study and the need to participate in the research. In the email, there was an invitation for teachers to engage in the case study (Appendix D).

Qualitative researchers use purposeful sampling to find and choose participants for research projects that might bring value to the subject (Palinkas et al., 2015). Participation was voluntary for any staff member with more than 1 year of teaching experience, more than 1 year of PLC experience, and positive and negative experiences in PLCs at suburban elementary schools. After gaining approval from participants, I arranged correlated times to meet and informed participants of their option to leave the study at any time.

This case study aimed to analyze best practices that influence teacher self-efficacy. Qualitative research emerged as the correct design method, an inquiry method to explore human feelings (Creswell & Poth, 2016). The case study approach uplifts a process or event through a collection of multiple points of data (Adu, 2019). The participant's perspectives were adequately presented and thoroughly analyzed using a case study methodology.

Population

The teaching location of the participants was a suburban elementary campus named Benton Elementary, a pseudonym, in North Texas at QISD, a pseudonym. QISD is considered a central city-suburban school district as defined by the TEA (2017). QISD has a total population of approximately 30,000 students at over 30 schools.

This study's convenience population consisted of teachers and teacher leaders from a suburban elementary school. According to the 2022 TAPR (TEA, 2022a), Benton Elementary is pre-kindergarten through fifth grade with approximately 750 students. The student-teacher ratio is less than 20:1, and more than 75% of the teachers have upward of 5 years of teaching experience. The campus has approximately 45 teachers, two administrators, one librarian, and one counselor. The approximate experience of the teachers is as follows: 10 teachers have less than five years of experience, 25 teachers have between 5–20 years of experience, and ten

teachers have more than 20 years of experience. All participants have more than 1 year of experience teaching, more than 1 year participating in PLCs, and have positive and negative experiences with PLCs in an elementary school. I gave all participants pseudonyms and referred to them by their pseudonyms throughout the research study.

Study Sample

The data in this research came from suburban teachers from one district and one campus. Forty-three teachers, two administrators, one librarian, and one counselor have utilized PLCs at Benton Elementary. After gaining approval from the campus principal, the campus staff was contacted for voluntary participation in the study. With purposeful sampling, a researcher can select individuals carefully based on their traits (Etikan et al., 2016). The participants in the study have traits that include more than 1 year of teaching and PLC participation experience. This study used partial purposeful sampling to identify participants based on the questionnaire to qualify them in Appendix A criteria, including multiple levels of professionals and multiple grade levels. After participants agreed to participate, I utilized a questionnaire (Appendix A) to determine the participant's qualifications to participate. I chose participants based on having more than 1 year of teaching experience and participation in PLCs based on positive and negative experiences in PLCs and who wanted to contribute to the study to share their experiences to affect the quality of PLCs. Benton Elementary campus is a pre-K through fifth-grade campus with approximately five teachers on a team. The study included primary and intermediate-grade participants. This number of participants was a representative sample of the teachers participating in PLCs that met the qualifications.

The study included individual interviews. The individual interviews included teachers and teacher leaders to allow individuals to openly share their experiences in PLCs from different

perspectives among levels of professionalism. All individual interviews were voluntary and in-person on their suburban elementary campus.

Materials/Instruments

The data collected came from multiple sources. Triangulation gathers information from different data sources to allow for several participants' perspectives to be collected to validate the study (Carter et al., 2014). This study achieved triangulation by using individual interviews, PLC agendas obtained from participants, and retention data based on off-campus TAPR reports. A panel of PLC experts reviewed the questionnaire and interview questions before participant participation. I then field-tested the questionnaire and interview questions. Participants completed the questionnaires before individual interviews to obtain a purposeful sample. I developed the questionnaire questions, which were then reviewed by experts in PLCs. Questionnaires may guide the participant selection process and are often used in qualitative research, mainly when topics produce strong opinions (McGuirk & O'Neill, 2016). I then conducted individual interviews (Appendix B). PLC experts reviewed the questionnaire and interview questions before being utilized in the study. I recorded these interviews and had them transcribed using Otter.ai software. I then utilized NVivo software to code data into themes.

Questionaries

A PLC-background questionnaire was dispensed to participants before individual interviews. The questionnaires aimed to obtain information about participants to ensure they had at least 1 year of PLC participation and teaching experience. The questionnaire also helped qualify participants by reviewing whether they had positive or negative experiences with PLCs. This questionnaire consisted of four questions. This data from the questionaries allowed me to select participants with varying experiences.

Individual Interviews

These involved eight individual semistructured interviews of teachers and teacher leaders. The interviews gathered data from participants on their perspectives and experience of PLCs. I asked a set of open-ended questions in the interviews to promote natural discussion and gather as much data as possible to uncover fresh perspectives on the subject (Cohen & Crabtree, 2006). I utilized Otter.ai for real-time transcription to transcribe the approximately 15-minute interviews.

Data Collection and Analysis Procedures

The background questionnaire and individual interviews served as the foundation for the data gathering of the study. The participants' availability and schedules determined how long data collection took, which I collected over a month span. I expected to collect data from 25% of staff members to provide a sizable volume of data.

Otter.ai software recorded and transcribed the individual semistructured interviews. Otter.ai allowed for real-time transcription so interviewees could review their answers in a written format after the interview. This allowed for accuracy in the interview process. The semistructured interview results yielded the information required to thoroughly examine each research question in the study.

The data collection and analysis for this study were coded into themes using the NVivo software. This platform compared text from the interviews against each other, looking for similar content. This provided data to be analyzed more deeply after discovering what words participants used most often in response to the interview questions that addressed the research questions.

In stage 1, A panel of PLC experts reviewed the questionnaire and interview questions before conducting individual interviews. The study included a field test of the questionnaire and

interview questions prior to gathering questionnaire data. Explanatory emails about the research and purpose led to gathering participants to be involved in the study (Appendix C). After each participant agreed to participate in the study, I hand-delivered the background questionnaire to participants (Appendix A).

In stage 2, I hand-delivered the background questionnaires to all participants to cross-check them for the purposeful sample that allowed for proper research in this study (Appendix A). After participants volunteered to participate in the study, they signed the informed consent document before proceeding with the questionnaire and interview questions. Then, data collection of the in-person individual interviews began.

In stage 3, I briefly explained the focus of this study before beginning the interviews. The discussions were approximately 15 minutes in length. The interviews were semistructured; therefore, the questions were open ended. The questions were followed up by more questions to determine the participant's knowledge of what influenced their self-efficacy through best practices in PLCs. After transcription of the interviews, the participants reviewed their answers for accuracy in representation to ensure validity. Member-checking helps to ensure validity in qualitative research (Motulsky, 2021).

In stage 4, after transcription and member-checking, an acquaintance with the interview materials involved a thorough review of the interview transcriptions and any of my hand-written notes. I then gathered analytical comments, reflections, and assessment impressions about the documents in a notebook for review.

Stage 5 was to code the interview data. I input the data into the NVivo software to code the data from the interview into themes to identify best practices that influence teacher self-efficacy. Coding is a qualitative research method that uncovers themes in the collected data

(Williams & Moser, 2019). I grouped the codes to form themes and gave a code of *other* if the data did not address the research questions.

Stage 6 was dedicated to interpreting the data focusing on the research questions. I took notes throughout the interviews and utilized direct quotes from participants to reveal their perspectives. The notes allowed me to thoroughly analyze the data and identify connections as an additional layer to the digital coding software. These stages allowed for an in-depth investigation into the participation perspectives to identify conclusions and relevant data.

Methods for Establishing Trustworthiness

The achievement of trustworthiness occurs through four criteria: credibility, transferability, dependability, and confirmability (Shenton, 2004). To gain credibility, triangulation was gained by using individual interviews, PLC agenda obtained from participants, and retention data based on the campus TAPR report. Participation in the study was voluntary; they could withdraw at any time to give credibility to the study. To further achieve credibility, participants were allowed to review transcriptions of their interviews to check for errors. To achieve transferability, the disclosure of the characteristics of the study site explain the study's boundaries. I reported the research design and implementation in detail to allow for dependability and the study's replication by others. Digital collection through Otter.ai and analysis with NVivo balanced human error or bias to achieve confirmability in the study (Shenton, 2004).

Ethical Considerations

I completed the IRB training through ACU and upheld the best interest of the human participants under the ethical rights of research subjects. Approval was obtained from the IRB before conducting research. The Benton campus principal approved the research to access the

staff before the study began. In alignment with ethical considerations, a consent form was given to participants asking them to participate in which they voluntarily agreed to participate. Participants could have withdrawn from the study at any time if they chose to remove themselves. Participants' confidentiality was ensured by numbers assigned to protect their identity. A password preserves digital data, while all paper data were kept in a locked cabinet. In-person, individual interviews were held in an isolated room after school.

Researcher's Role

I am a teacher leader on a large suburban elementary campus in Texas. Being a teacher leader, I am responsible for my classroom role, my campus leadership role of leading PLCs within my team, and my district role of writing the English Language Arts curriculum. This study includes current and prior research on the effects, benefits, barriers, and history of PLCs.

In this study, I provided participants with numerous opportunities to ask questions or even withdraw from the study. I strived to uphold positive, concise, and clear communication about the purpose of the study. Teachers and administrators in the school district had access to the finished report on the data gathered for this study. I used pseudonyms to protect the campus, district, and participants.

Assumptions

The first assumption was that the campus principal would approve access to the campus staff to solicit volunteers for the study. The second assumption was that participants would volunteer to join the pilot and research studies. The third assumption was that the number of volunteering participants would be enough to allow an in-depth study to qualify under saturation expectations for an investigation. The assumption is that participants would be experienced with PLCs and provide honest answers.

Limitations

Ochieng (2009) stated that a limitation is a weakness that may occur in a proposed study. Limitations in the qualitative study analysis focus on the weaknesses in the data. Furthermore, Simon and Goes (2013) explained that a limitation is beyond the researcher's control.

A potential limitation of the study was that I am a campus member and a participant in PLCs. I mitigated these biases by using member-checked, digitally transcribed interviews. A potential limitation was the lack of participants. Another potential limitation was the ability of participants to answer honestly. However, this was mitigated by conducting individual interviews and using pseudonyms to protect the participants.

Delimitations

Simon and Goes (2013) stated that delimitations arise from the research choices. These choices may include the selection of the research problem, participants, or questions chosen when the researcher had other options to choose from and make the study different. Delimitation is the choice of location, campus, and participants that were selected.

I was in control of delimitations in this study. This case study was limited to one large suburban campus. The school's location was suburban and did not include private and rural schools. The data collected only reflected the views of purposefully selected teachers and teacher leaders on this campus. One campus was chosen so that in-depth research could be collected to discover best practices in PLCs that influence teacher self-efficacy. I selected only teachers with positive and negative experiences with PLCs and at least 1 year of experience teaching.

Summary

I this chapter I presented an overview of this case study's problem and questions. This chapter describes the research design and methods for the case study. This chapter offers a

narrative overview of the population, study sample, instruments, and data collection and analysis process. This chapter explained the methods for establishing trustworthiness, ethical considerations, the researcher's role, assumptions, limitations, and delimitations. Chapter 4 focuses on the research that I conducted and the analysis of the findings.

Chapter 4: Results

The purpose of this study was to explore best practices in PLCs that influence teachers' self-efficacy as perceived by teachers. The results of the data gathered from the one-on-one interviews are reviewed in this chapter. The interviews included five teachers and three teacher leaders in a suburban elementary campus. The qualitative study examined the best practices in PLCs that influence teachers' self-efficacy as perceived by teachers.

The examination of the findings starts with a quick synopsis of the data gathering and analysis, followed by participants' profiles and detailed descriptions of each participant. Next, the chapter includes the most common themes that emerged from the participant responses as they relate to each research question.

Data Collection and Analysis

The previous chapter's data collection and analysis protocols were followed per IRB guidelines (Appendix D), including eight interviews conducted with five teachers and three teacher leaders. Before one-on-one interviews, all consent forms were signed. A questionnaire was used to qualify participants for the study after consent. The interviews included real-time transcription utilizing Otter.ai software. This software stored the audio and transcription files that were password-protected. Fictional numbers were assigned to participants' transcription to protect the participant's identities. Participants could check the transcription for validity at the end of the interview. After the interviews, the transcripts were exported from Otter.ai and imported into the NVivo software. The NVivo software allowed for line-by-line transcription coding. The coding in NVivo revealed the most common themes that emerged from the participant responses and those findings are outlined in this chapter.

Table 1 illustrates the analysis procedure used in the NVivo software to code participant responses that are layered into determining common themes for each research question. Other codes emerged from the participant interviews, although these were the most common themes based on layering the participants' responses. Table 1 illustrates the top four themes for an effective or ineffective PLC that emerged from the participants' responses. Furthermore, Table 1 displays the top five shared themes that were revealed by the interviewed participants as the best practices in PLCs that influence teacher self-efficacy.

Table 1

Analysis Process of Interviews

Research question	Examples of evidence	Codes	Themes
RQ1: Effective or Ineffective PLCs			
	"Our ideas are shared equally. I think that everyone's opinions are seen as valid within our PLCs. We just kind of have an open discussion. We have that ability as a team to freely talk amongst ourselves when needed." "We try to have one person talking at a time instead of small conversation side conversations. We try to make sure that everyone feels heard or that everybody has participated, and everybody has shared their feelings, and then we all agree upon the decision at the very end."	Respect, discussion, discuss altogether, everyone has the opportunity to share, all voice our opinions, sharing openly	Theme 1: Collaboration/ Sharing
	"In general, with our PLC, we come together and know the task or the topic ahead of time. So that when we do come into the PLC, we are aware of what we are going to be talking about and discussing, and then from there we get into any of the necessary discussion and look over any data that is necessary as well." "So, the topics that are chosen for our meetings typically come from administration unless they do not have anything for us. Then we get to pick based off what we are currently teaching or assessing as our topic for PLC."	Who is choosing the topic? Understanding the topic, staying on topic, having a topic ahead of time	Theme 2: Topics of PLCs

Research question	Examples of evidence	Codes	Themes
	"PLC is it's student-centered. It is usually related to data. It is usually related to behaviors or what we are going to need to use look at to plan for whether it is classroom instruction, or whether it is events we have at the school community events, or classroom events. It is all student-centered."	Student-centered, data-driven, clear expectations	Theme 3: Campus Expectations
	"I mean, we are expected to meet frequently to PLC and look over data. But it does not always happen. as frequent as it should."		
	"So, our team expectations are like limited distractions, that you are not working on something else while we are together PLCing. Phones are not a distraction, that everybody is listening and being respectful of each other, sharing ideas and being a part of the conversations."	Limited distractions, timekeeper, start on time, roles of participants	Theme 4: Team Expectations for PLCs
	"Lately, we have used a timer like a timekeeper. So, kind of keeps us on track with our time. Someone that kind of keeps us on track with the topic because, you know, as teachers, we can kind of get off topic and then a note taker, so someone that's kind of the note taker and then at the end, someone is the speaker, it voices our opinions to a group."		
RQ2 Best Practices that Influence Teacher Self-Efficacy	"I think more choice in PLC topics because again, if I am forced to talk about a certain topic that I do not feel like is timely for my team, then it is not going to be beneficial for us. But if it is a topic that we feel like is something we need and something that we have decided to talk about, it benefits us more, and we all get more out of it."	Good topic, choice, timely topic	Theme 1: Choice in Topics
	"Yes, so I am growing professionally when we have a good one on a good topic. If it is not a topic that we feel like is what we need right, then in there then. No, I do not feel like I am growing professionally."		
	"Therefore, making me feel like I am a better teacher when everybody's being collaborative, good ideas, more good ideas come from it and we all bounce each other ideas off of each other, which lead to better lessons and just overall. Better outcomes for everyone."	Good ideas, seeing other's ideas, getting ideas	Theme 2: Sharing Ideas

Research question	Examples of evidence	Codes	Themes
	"Because we, in addition to adding to my own understanding, I can sometimes, especially people are new to your team, helping other people and seeing things through other people's eyes and not just how we have always done it at our campus. So that does make you grow."		
	"Because we, in addition to adding to my own understanding, I can sometimes, especially people are new to your team, helping other people and seeing things through other people's eyes and not just how we have always done it at our campus. So that does make you grow. Usually, it just kind of gives me some just better understanding of am I doing the right thing."	Adding to own understanding, better understanding	Theme 3: Understanding for Everyone
	"Maybe establishing expectations, when you first come together as a team, establishing expectations of here is what it is going to look like. Here is what we are going to do every time so that people know, and then if you have to tighten up a little bit, it is not because you are being harsh; it is because, you know, we all are short on time." "So, I think just kind of restructuring what they look like the time that we have to work with, and then also really just having expectations."	Establish team expectations, time for them, and campus expectations	Theme 4: Setting Expectations
	"Because we, in addition to adding to my own understanding, I can sometimes, especially people are new to your team, helping other people and seeing things through other people's eyes and not just how we have always done it at our campus. So that does make you grow." "And it improved how I was able to contribute to any future PLC and help teachers grow. It really has helped me to help other teachers, which I think that is the whole point. And then, of course, helps students as well. So, it is like, I know where students are going. I know what they need. Here is what we can do. So, I think it is made me a better teacher, and it is helped improve my craft overall in every level."	Helping other people, learning through others	Theme 5: Helping Others

Participant Profiles

The participants in this study were given pseudonyms to protect their confidentiality. The participants all teach on a suburban elementary campus in Texas. The terms for primary and intermediate grades are included in the profiles. In this study, grades Kindergarten through second grade are referred to as primary, while third to fifth grade are referred to as intermediate.

The teacher's and teacher leaders' subject matter knowledge had no bearing on the results. The precise subject matter and grade levels are not disclosed to preserve the participants' privacy. The participants' years of teaching and PLC experience are summarized in the following sections.

Teacher 1: Olivia

Olivia teaches a primary grade on the campus. She has taught for over 10 years with 5 years of PLC experience. She emphasizes the benefits of small-group collaboration among teachers within the same grade level by explaining that teachers can foster idea-sharing, professional growth, and increased self-efficacy by working together.

Teacher Leader 2: Emma

Emma is currently an intermediate teacher at the suburban elementary campus with more than 10 years of teaching experience and 8 years of PLC experience. She emphasized the influence of clear expectations and open communication in PLCs to enhance self-efficacy. Emma also discussed the impact of PLCs on their self-efficacy, highlighting collaboration and idea-sharing among teachers as crucial for boosting confidence in teaching abilities.

Teacher Leader 3: Charlotte

Charlotte has more than 10 years of teaching experience and 10 years of working in PLCs. She emphasized that teacher self-efficacy is crucial in PLCs. She highlighted the

importance of questioning ideas and thoughts in PLCs to drive instruction and increase self-efficacy. She also stressed the influence of a good PLC in making teachers feel more confident and influencing their self-efficacy positively. Furthermore, Charlotte suggested that giving teachers more choice in PLC topics can lead to more beneficial discussions and increased professional growth.

Teacher Leader 4: Amelia

Amelia has been a teacher for over 10 years. Since beginning her work, she has consistently participated in a PLC. She is an intermediate teacher on the campus. Throughout the interview, she emphasized the influence of setting norms, respecting them, and spending efficient time during PLC meetings. She stressed the importance of being organized, contributing equally, and fostering a collaborative team environment. Amelia underscored the need for dedicated time and space to ensure the effectiveness of PLCs.

Teacher 5: Sophia

Sophia has more than 5 years of teaching experience with 3 years of PLC experience. She brought a valuable perspective to the study as she began her PLC experience journey. In a conversation about the impact of PLCs on teacher self-efficacy, Sophia shared her experience in a school with a less-structured PLC format. She explained that the team openly shared ideas and valued each other's perspectives, which has increased their confidence. She explained that the shared understanding and support among team members makes her feel more confident. Sophia suggested that establishing expectations at the beginning of the year can help increase teacher self-efficacy in PLCs.

Teacher 6: Isabella

Isabella has taught for over 10 years and participated in PLCs for 14 years. She explained the importance of solid leadership and effective facilitation in making PLCs productive and influential in improving teacher self-efficacy. She shared her experiences with PLCs and emphasized the need for proper training and support in running PLCs, while highlighting the importance of collaboration among peers and sharing ideas in enhancing teacher self-efficacy.

Teacher 7: Ava

Ava has been a teacher for more than 10 years and has always participated in PLCs in those years. She stressed creating a safe and inclusive environment where all ideas are valued and heard. She highlighted the importance of effective communication and collaboration and the need to stay focused on the task at hand. Ava shared strategies for facilitating PLCs, such as designating one person to speak at a time and ensuring everyone has an opportunity to participate.

Teacher 8: Mia

Mia has taught for more than 5 years and participated in PLCs all the years she has taught. Facilitating productive PLCs can be challenging, according to Mia, who discussed time constraints, lack of buy-in from administrators, and difficulty in interpreting data. Despite using strategies like protocols, data analysis, and interpreting data, she expressed frustration with the limited impact of PLCs on her self-efficacy, feeling that these meetings did not always lead to meaningful changes in teaching practices or student outcomes.

Findings

Teachers and teacher leaders had all participated in PLCs. These teachers and teacher leaders shared their personal experiences on what constitutes an effective or ineffective PLC and

what best practices they felt are needed for a PLC to influence a teacher's self-efficacy. The participant's PLC experiences allowed for their perspectives to benefit this study. All participants served as either a teacher or teacher leader in either primary or intermediate grades. They all had more than 1 year of teaching and PLC experience.

Research Question 1

RQ1 asks about what constitutes an effective or ineffective PLC from teachers' perspectives in a large suburban school district. The perspectives of teachers and teacher leaders aligned into four themes: Collaboration/Sharing, PLC Topics, Campus Expectations, and Team Expectations for PLCs. Collaboration and Sharing had 26 references, PLC Topics had 16 references, Campus Expectations had eight references, and Team Expectations had seven references. The themes emerged from the topics multiple participants mentioned during the interviews, reflecting on what constituted an effective or ineffective PLC. Other topics were mentioned by participants during the interviews, although they did not consistently come up among participants. Other references that only one participant mentioned included aligning learning to students, using protocols, backward designing assessments, analyzing data, and building trust among participants.

Collaboration/Sharing. Teachers and teacher leaders shared that collaboration and sharing among the members are needed for a PLC to be effective. Participants shared their experiences of sharing respectfully and being able to voice their opinions openly. Participants also emphasized that everyone could share.

When Charlotte shared about her experience, she explained the following:

So, the topic will be brought up, and then we will discuss it all together. Everybody has

the opportunity to share their ideas and thoughts. Usually, the leader will make sure that

everyone has had a chance to give their thoughts if they want to or not. They're not forced to talk, but they are because everybody has an option to their second part to that question.

Amelia described her view of collaboration and sharing in PLCs:

I think we have this this attitude of respect for everybody, regardless of whether we agree with their opinions. And I think we all know each other well enough that we know how to respectfully comment or give feedback to each other without it being offensive. Also, if we are ever offended, we go directly to the source. So, I think that ultimately, if we are taking care of kids, there is no reason to feel like you do not have value to the group, and I think everybody feels that way in us in on our team. So yes, I would say I think my feedback is valuable, but not any more valuable than anybody else in the group. We all contribute equally.

Additionally, Isabella stated, "We all take turns sharing what or how we interpret data and what we think is best for kids. I am not sure that all ideas are valued. But we all at least have a turn at sharing those things."

Olivia also mentioned that "I think when we meet as a team, it is a little bit more intimate where we can all voice our opinions." Sophia also stated, "Our team just openly shares, and all ideas are valued."

Emma expanded on sharing:

Our ideas are shared equally. I think that everyone's opinions are seen as valid within our PLCs. And that we just kind of have an open discussion. We have that ability as a team to freely talk amongst ourselves when needed.

Ava further explained that "I do believe that everyone has a say in what they feel. And then we collaborate and talk over as a team and decide what is best for the team." Mia stated, "Um, like I said we'd have a pretty collaborative group. I think it probably depends on your team. But I definitely do feel heard by my teammates."

Topics of PLCs. According to teachers and teacher leaders, the subject matter for PLCs is crucial to their efficacy. Discussing their personal experiences, participants talked about how PLC topics are chosen. Based on their statements, sometimes the topics are chosen by the team and other times by the administration. A couple of participants shared their PLC agenda with me, and in these agendas, there is evidence of planned-out topics.

Charlotte explained the following:

Topics for the meetings are chosen by our principals over information that they want us to go over together as a team, and then sometimes we are able to decide what we feel like our team needs to talk about and discuss.

Isabella further stated that

the topics that are chosen for our meetings typically come from administration. Unless they do not have anything for us. Then we get to pick based off what we are currently teaching or assessing as our topic for PLC.

Olivia stated the following:

I think the topics for the meetings are chosen through admin and possibly discuss with team leaders before we discuss it as a team. I think my PLC structures would be understanding the topic of what we are going to be discussing. Second, having valuable questions on what we're going to discuss in getting everybody's in the group's opinion to form our common goal for the PLC.

Ava concurred with Olivia by stating, "More than more times than not, they are either something that is from the ILT or the OLT or from the principal that needs to be discussed."

Mia noted her experiences on how topics are chosen:

Our principal or admin typically will tell our ILT or team lead, and then our team lead will come to us and help facilitate that conversation. There have been times that it is kind of an open choice, and we can pick what we PLC about, but for the most part, when we are PLC, it is something that our admin has chosen for us.

Furthermore, Amelia provided her perspective on PLC topics:

So, the topics usually depend on what has happened recently and what is coming up. So, we are either looking at data, or if we are meeting as a department, we are usually looking at data, recent tests or assessments, or future tests and assessments, and we are using the backward design to plan. When it comes to our team PLCs, we are usually looking forward into what is coming up and what needs that our students need that are necessary for us to discuss whole team.

Sophia also mentioned, "The topics for our meetings are chosen by what we are teaching the next week, the following week." Emma stated, "Topics for different PLCs are chosen based on need and sometimes are given by admin depending on what the time of year is."

Campus Expectations. Participants shared the need for campus expectations. They felt campus expectations were student-centered and data driven. The need for clear expectations was essential in PLC effectiveness.

Speaking from her experiences in PLCs, Amelia stated:

It is student-centered. It is usually related to data. It is usually related to behaviors or what we are going to need to use look at to plan for whether it is classroom instruction, or

whether it is events we have at the school community events, classroom events. It is all

student-centered.

Sophia explained, "Just that we are meeting weekly. I really think that the only thing I know is a campus that we are supposed to be meeting weekly." Furthermore, Isabella stated, "I mean, we are expected to meet frequently to PLC and look over data. But it does not always happen as frequently as it should." Emma mentioned, "Our campus's expectations are not fully clear. On how often or how frequently PLCs have to take place. And especially in the upper grades, whether it is meeting as an entire team or just subject area." In conclusion, Mia shared, "I feel like right now that is a little bit undefined. I know that our team happens to meet once a week to discuss plans, but as far as PLC goes."

Ava stated the following:

The campuses expectations, we set norms to start with to make sure that we all were on the same page and we had the same expectations whenever we were in PLC on our campus. And the as far as the PLC whenever we do whole school is really just make sure your Chromebook is closed, make sure your laptop is closed, and that you're participating as much as possible.

Team Expectations for PLCs. As teachers and teacher leaders shared their experiences, they shared information about limiting distractions while meeting. They shared insight into using a timekeeper and setting expectations, such as starting on time. They even went on to share that having a role for participants should be utilized for effective PLCs. A few participants gave me access to their PLC agenda, which contained examples of team expectations and norms.

Charlotte supported the idea of utilizing team expectations in PLCs to have an effective PLC:

So, our team expectations are like limited distractions, that you are not working on something else while we are together PLCing, phones are not a distraction, that everybody is listening and being respectful of each other, sharing ideas and being a part of the conversations. I think holding each other accountable, leaders would make sure that people are not distracted by technology or other work or projects, giving everybody the opportunity to share if they want. I also think a good leader is questioning ideas and thoughts and trying to push the discussion further and deeper.

Amelia stated the following:

Well, we set norms at the beginning of the year, and so we don't revisit them every single time that we PLC because then it's a time waster. I feel like we do a pretty good job of respecting them and we walk in and we're pretty efficient. I usually will send an agenda to the team based off or department based off of what they've given me feedback on what we need to meet about. And then we go through the agenda in order so that there's no time wasted or sometimes there is time wasting because you need that. That time with your team. You don't get to spend a lot of time together. But yeah, and we'll go through the agenda items and then we'll usually bring up what needs to be discussed in the future PLC.

Furthermore, Sophia stated the following:

I do not know, maybe trick, maybe organization keeping us on track. Whenever we get off on a path bringing us back so, keeping us focused. Well, we had one today. So, we had an agenda and went through our agenda. Sometimes they are a little bit more structured like today, where there's a lot of to do's to get through or a lot of things to make sure we're doing or if there's campus-wide things we need to make sure that we're

paying attention, otherwise it's a little bit more less structured. And we all just go around talk about whatever content we're planning and explain what we're doing for the next week and see if anybody has any questions and understands what we're doing.

Olivia shared the following:

Lately, we have used a timer like a timekeeper. So, it kind of keeps us on track with our time. Someone that kind of keeps us on track with the topic because, you know, as teachers, we can kind of get off topic and then a note taker, so someone that's kind of the note taker and then at the end, someone is the speaker who voices our opinions to the group.

Emma mentioned that "the team expectations for us to be able to accomplish our goal during our PLCs are to start on time to stay focused, to stay on topic, and share openly about what is being discussed." In addition, Ava explained that

trying to stay on task that it is kind of really hard. We try to have one person talking at a time instead of small conversation side conversations. We try to make sure that everyone feels heard or that everybody has participated, and everybody has shared their feelings, and then we all agree upon the decision at the very end.

Mia supported the idea of having team expectations by saying:

The expectation is that and tell me if I am not answering this correctly, but that we are focused and locked in and that we are not distracted, and that if someone you know if there is a point where you are feeling any disagreement that is okay, but that that is obviously handled with respect because most of the time it is a misunderstanding. But the expectation is that everyone is fully engaged in participating.

Research Question 2

The second research question addressed what PLC best practices influence teachers' positive self-efficacy from teachers' perspectives in a large suburban school district in Texas. The teacher and teacher leader responses in their interviews converged into the five most common themes throughout the responses: Choice of Topics, Sharing Ideas, Understanding Everyone, Setting Expectations, and Helping Others. Choice in Topics was referenced six times; Sharing Ideas was referenced three times; theme 3, Understanding Everyone was referenced three times; Setting Expectations was referenced two times; and Helping Others was referenced two times. The participant responses are not all included, only those with a common overlapping theme that revealed itself in the data multiple times. These themes demonstrate the best practices needed to influence a teacher's self-efficacy in PLCs. Other topics were mentioned by participants during the interviews, although they did not consistently come up among participants. Other references that only one participant mentioned included participants wanting training to run a PLC, vertical alignment, and participants needing more time to meet.

Choice in Topics. Participants' responses stated the importance of timely topics for PLCs to influence teacher self-efficacy. The data addressed the need for a good topic. There is also a connection in the data that there is a desire to choose their own PLC topics to influence teacher self-efficacy.

Charlotte shared her experiences with PLC topics:

Again, it kind of goes back to if it was a good PLC or not. If it was a PLC that we felt like we needed or one that was more forced on us that we did not feel like benefited us. So, if it is a good PLC with a good discussion, a good topic then I definitely feel like it benefits all of us. Yes, so I am growing professionally when we have a good one on a

good topic. If it is not a topic that we feel like is what we need right, then and there, no, I

do not feel like I am growing professionally. I think more choice in PLC topics because

again, if I am forced to talk about a certain topic that I do not feel is timely for my team,

then it is not going to be beneficial for us. But if it is a topic that we feel is something we

need and something that we have decided to talk about, it benefits us more, and we all get

more out of it.

Furthermore, Ava stated, "I think as a campus I think that it would be beneficial if a

questionnaire was sent out after the PLC if there were any concerns that were not addressed at

the PLC." Mia shared the following:

But most of the time when I walk away from a PLC it feels like this was not necessarily

what we needed to be PLC and about, and it feels like we get to them maybe interpret

part. But then there's just never time for the okay now what? And then it's hard to follow

up with that because curriculum keeps moving, life keeps moving, and so I don't always

feel like the PLC has done what it needs to.

Sharing Ideas. Participants in their interviews shared that best practices in PLCs that

increase teacher self-efficacy involved PLC members sharing ideas. They expressed the

importance of seeing and valuing each other's ideas. The data aligned during participant

responses to support that if, during PLCs, getting ideas is obtained, then teacher self-efficacy was

influenced in PLCs.

Charlotte discussed her perspective on sharing ideas:

I guess I would say that I have been a part of good PLCs and I have been a part of not so

good PLCs, and it is pretty obvious when there is a successful PLC because it drives

instruction. Therefore, making me feel like I am a better teacher when everybody's being

collaborative, good ideas, more good ideas come from it and we all bounce ideas off of each other, which lead to better lessons and just overall better outcomes for everyone.

Furthermore, Sophia provided insight about sharing ideas:

Because we, in addition to adding to my own understanding, I can sometimes, especially people are new to your team, help other people and seeing things through other people's eyes and not just how we have always done it at our campus. So that does make you grow.

Understanding for Everyone. A theme that was revealed in the data was the need for everyone to have understanding after the PLC. The participants shared that PLCs helped their own understanding. The teachers and teacher leaders also expressed that a best practice for PLCs that influence teacher self-efficacy is when an understanding is achieved following the PLC.

Sophia shared her experiences with gaining understanding:

Because we, in addition to adding to my own understanding, I can sometimes especially with people who are new to your team, helping other people and seeing things through other people's eyes and not just how we have always done it at our campus. So that does make you grow.

Additionally, Emma reflected on her experience in PLCs:

I think that the PLCs really give you that opportunity to see, like, what else other teachers are doing. While we are all supposed to be doing the same thing, everyone does it a little bit differently, and students are, you know, react differently to different teaching. And just to see how other teachers, other students respond to how their teachers teaching a topic or how they are performing on assessments and what they did to teach versus what I

do to teach. Usually, it just kind of gives me some just better understanding of am I doing

the right thing.

Furthermore, Ava expressed her perspectives regarding gaining understanding from

PLCs:

> As far as helping me grow, I feel as though I have become a better teacher. So, I think
>
> that it has made me a better teacher and being able to make sure that I am also allowing
>
> that to happen in my classroom as well.

Setting Expectations. The participants shared their experiences in PLCs, and a common

theme between the interviews aligned with teams establishing expectations. A best practice that

influences teacher self-efficacy in PLCs is the team's ability to have team expectations and be

clear on campus expectations. There was also a need for time for them, which would follow

under clear campus and team expectations. The TEA's (2022a, 2023c) TAPRs reveal that

teachers with 21 to 30 years of experience have remained on the campus from the 2021–2022

school year to the 2022–2023 school year. There could be many factors for the retention of this

staff, although it could also be linked to teachers influencing self-efficacy through the utilization

of PLCs on campus.

Sophia discussed her experiences with setting expectations:

> To structure agenda. Maybe establishing expectations, when you first come together as a
>
> team, establishing expectations of here is what it is going to look like. Here is what we
>
> are going to do every time so that people know, and then if you have to tighten up a little
>
> bit, it is not because you are being harsh; it is because, you know, we all are short on time
>
> and so, right well.

Additionally, Ava discussed her experiences with setting expectations:

Probably time, I think maybe if I know we have ours scheduled Thursdays, but I think

that could be an opportunity for team time I think if that was that is a perfect window

right there to have a PLC. I think if they were, if there is a coach that's available, that

needs to be part of that conversation. I think that could be helpful. I think vertical PLCs

are not used nearly enough. I think PLCs across campuses are not used nearly enough. I

see things all the time on social media that other campuses are doing in our same unit,

and I think if we had spent our time in PLC or even at professional development about

that like, that would enrich my students and my toolbox as a teacher. So, I think just kind

of restructuring what they look like the time that we have to work with, and then also

really just having expectations because right now I could not tell you what the

expectations for a PLC are on this campus.

Helping Others. The participant interviews had a common theme of best practice of

helping others in PLCs. Participants explained that PLCs need to help others to influence teacher

self-efficacy. Participants shared their experiences in helping others to influence their own self-

efficacy.

Sophia shared similar such experiences:

Because we, in addition to adding to my own understanding, I can sometimes, especially

with people who are new to your team, helping other people and seeing things through

other people's eyes and not just how we have always done it at our campus. So that does

make you grow.

Furthermore, Isabella described her experience:

I feel like it made me a better educator and improved my craft in what I know. It was in

my grade level. And it improved how I was able to contribute to any future PLC and help

teachers grow. Sometimes, it is not always my perspective that is always received as well. Not sure exactly why. But I do feel like in past PLCs it really has helped me to help other teachers, which I think that is the whole point. And then, of course, helps students as well. So, it is like, I know where students are going. I know what they need. Here is what we can do. So, I think it is made me a better teacher, and it is helped improve my craft overall in every level.

Summary

Chapter 4 provided an outline of the data gathering and analysis processes before delving into the data collection outcomes. After presenting their extensive PLC experience through their participant profiles, certain background information about the participants was supplied. Subsequently, the themes that surfaced from the data addressed the research questions.

Participants were asked to respond to the first research question by sharing what they felt made up for an effective or ineffective PLC based on their own personal experiences. The themes of Collaboration/Sharing, Topics of PLCs, Campus Expectations, and Team Expectations for PLCs were the most common response by participants. Next, participants responded to the second research question on what they felt were best practices in PLCs that influenced their teacher self-efficacy. Participants expressed experiences that revealed five common themes: Choice in Topics, Sharing Ideas, Understanding for Everyone, Setting Expectations, and Helping Others. These themes surfaced by layering participants' responses to discover best practices in PLCs to influence teacher self-efficacy.

Chapter 5 begins with an introductory summary of the study's problem statement, purpose, and method. Chapter 5 also covers connections between the study findings and past literature before revealing limitations and implications. Then, I share recommendations for

application and future research.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to explore best practices in PLCs that influence teachers' self-efficacy as perceived by teachers. PLCs are a means through which PD can occur (DuFour & Reeves, 2016). The PLC process has the potential to significantly enhance teaching and student learning when it is applied authentically. If, on the other hand, it is misapplied, there is no opportunity or time for teachers and students to meet and discuss ideas and important issues. The use of PLCs to raise teachers' capacity for innovation was investigated by Liu et al. (2022).

According to Bunnaen et al. (2021), PD broadens instructors' knowledge and skill sets and modifies their personal beliefs and attitudes, all of which have a favorable impact on instructional strategies that enhance student learning. Lee (2020) articulated the reasons behind the rise in educator self-efficacy via PLCs and concluded that there was a direct relationship between the PLCs and the educators' enhanced self-efficacy. Teachers who possess self-efficacy have elevated standards for their student's advancement and accomplishment, and they assume responsibility for their education.

Education embodies concerns including trust levels, community support, curriculum, personnel issues, and student events (Fatimah & Syahrani, 2022). According to the Texas Association of School Boards (2022), both urban and rural school districts in Texas have difficulty finding and hiring qualified instructors. According to He et al. (2022), to maintain and grow these professional communities for teachers from a variety of backgrounds, administrators, teachers, teacher leaders, teacher educators, and researchers must work together to keep investigating different PLC structures and further develop theory and practice connections for improved student learning.

The purpose of this research was to investigate how PLC best practices influenced teachers' perceived levels of self-efficacy. The information gathered may influence teachers' self-efficacy on PLC effectiveness in big suburban public primary schools. The study concentrated on a sizable North Texas public elementary school in a suburban area. This study investigated PLC best practices by studying how members use PLCs and how people gain from them. It helped to explain the relationship between PLC and teachers' self-efficacy and deepened understanding of how PLCs can influence teachers' sense of self-efficacy.

This chapter connects the results and pertinent PLC literature by drawing on the participants' experiences. The findings show best practices that influenced teacher self-efficacy. The study findings show related themes in the participants' responses that show the following best practices: collaboration/sharing, choice in topics of PLCs, sharing ideas, understanding for everyone, setting expectations, and helping others. Next, I discuss the limitations. Then, I suggest some recommendations that connect past literature and best practices that influence teacher self-efficacy in PLCs. At the end of Chapter 5, I discuss recommendations for practical application and possible future research, along with closing remarks that connect to past literature on PLCs.

Discussion and Conclusions in Relation to Past Literature

In the existing literature, Lee (2020) expressed the causes of increased educator self-efficacy through PLCs and concluded a direct correlation between educators' increase in self-efficacy and PLCs. Educators with self-efficacy have raised expectations for their students' progress and achievement and take accountability for their learning. Furthermore, Doğan and Adams (2018) and Knight et al. (2022) found that when specified best practices are in place in PLCs, such as an agreed-upon goal, teacher self-efficacy and student achievement are enhanced.

Riggins and Knowles (2020) explained that the allotted time for PLCs needs to be scheduled during the teacher's contractual time of the school day, as this shows that the work of PLCs is essential. Riggins and Knowles (2020) stated that if there is not an elevated level of commitment from all district and campus leadership, teams can become frustrated in PLCs and struggle to work efficiently.

Research Question 1

In this study I collected data from participants on teachers and teacher leaders in a large suburban elementary school, who shared their experiences in PLCs based on the following research questions. Research question 1 focuses on what constitutes an effective or ineffective PLC from teachers' perspectives in a large suburban school district. The study concluded that these common best practices are collaboration/sharing, topics of PLCs, campus expectations, and team expectations for PLCs. Alignment of these themes emerged, although participant experiences varied. Past literature supports these four themes that were revealed in this study.

Participants stated that effective PLCs happened when team members could share openly, and everyone had an opportunity to share. According to Pan and Cheng (2023), teachers who value PD and sharing with colleagues, collaborate with colleagues to plan lessons, and allow for peer observation are more likely to discuss complex ideas, essential questions, and student learning outcomes in the lesson design.

Teachers' self-efficacy may be impacted by how they learn via experience in PLCs (Yada et al., 2023). Teachers' perceptions of PLCs are crucial to increasing their self-efficacy because, should they experience similar events there, they would perceive the interaction as a purely informational or educational opportunity. Active participation in exchanging perspectives among educators during formal training might enhance students' learning and lead to high self-efficacy.

Participants shared that the topics chosen in PLCs lead to PLCs being effective or ineffective. The PLCs chosen needed to be timely and relevant to current needs.

According to participants, having campus and team expectations leads to PLCs being effective or ineffective. Participants shared their team expectations, and even though they may be different, just having expectations seemed to cause a feeling of PLCs being effective. Literature does not directly correlate to having team expectations, although literature reinforces the need for campus expectations. According to Riggins and Knowles (2020), strong leaders ensure that PLCs carry out the right tasks. PLC teams struggle to function efficiently and become irritated if district and campus leadership do not demonstrate increased engagement. To bring about change on their campus and among others, administrators must recognize the significance of developing others' leadership potential. A high-functioning PLC is the product of administrators who hold teachers accountable and support them. Campus building leaders collaborate with their teams to measure continuous development, identify team deviations, and offer constructive criticism and assistance.

Research Question 2

The second research question focuses on what best practices influence teachers' positive self-efficacy from teachers' perspectives in a large suburban school district in Texas. The study concluded, based on the participant's experiences, these widely accepted best practices: choice of topics, sharing ideas, understanding everyone, setting expectations, and helping others. Despite the differences in participant experiences, the emergence of these best practices was evident. These five themes that this study identified are supported by previous literature.

A pattern emerged from research questions 1 and 2: they had a choice of topics and setting expectations as a common theme. Through examination of the participant's interview

responses, self-efficacy was influenced when campus and team expectations for PLCs were in place and discussed prior to PLCs. The team and campus expectations also led to the participants' responses regarding PLC topics, as participants wanted to choose and be informed of topics before the meeting. The need for campus expectations aligns with previous literature. According to Bouchamma et al. (2021), individuals and groups experience collective efficacy as levels of collaboration increase. The success of PLCs depended on the involvement of principals in collaborative practices, and criteria were given for that participation. The principal must organize capital, including time, workspace, and resource materials. Within a PLC, more seasoned team members impart their knowledge to motivate instructors with less experience. According to Brodie (2021), PLCs require principal support to maintain a campus over the long run, and individuals need a clear, purposeful relationship to their campus goals.

According to Khan et al. (2021), trust in all PLC domains has a substantial, positive, and consistent correlation. High levels of PD and a culture of trust between instructors and students are linked to practical PLC activities. They discovered that to raise the bar for instruction and enhance the learning environment for teachers and students, PLC had to be supported in all educational settings. Teachers concur that exercising shared leadership in a trustworthy and cooperative school environment, monitoring one another's lessons, sharing ideas, and exchanging feedback all support their PD. Participants shared that their self-efficacy was influenced in PLCs when there was collaboration and sharing of ideas among the team members.

Participants shared that PLCs influenced their self-efficacy when understanding for everyone was reached. When they walked away from the PLC, they felt if they had a better understanding and others did, it influenced their self-efficacy. This thinking is correlated with previous literature. According to Mesa and Pringle (2019), middle school science instruction can

significantly impact middle-school students' future academic and career prospects in STEM sectors. PLCs offer a potentially helpful framework for empowering middle science teachers to enhance their students' learning greatly. Teachers can work together in PLCs to enhance student learning, use best practices for teaching science in middle schools, and broaden their knowledge of respective topics.

In participant interviews, they shared that helping others influenced their self-efficacy in PLCs. Teachers and teacher leaders explained that they were growing by helping others. In this multilayered scenario, Prado et al. (2022) found that teachers were nested within PLCs, which were nested within cohorts and school districts. Teachers in this framework attained higher degree completion rates through several means, including relational mentorship. Their findings indicate that better teacher completion rates serve as motivators for relational mentorship within the systemic social network of PLCs and cohorts. Participation of teachers in PLCs demonstrated how relational mentorship supported teachers in obtaining an ESL master's degree when provided by faculty and within cohorts and PLCs.

Limitations

The study included teachers and teacher leaders from a large suburban elementary school in Texas with at least 1 year of teaching and PLC experience. The study design allowed for Otter.ai real-time recording and member-checking of transcriptions to accurately capture participant responses, circumventing the limitation that, as the researcher, I am a campus and PLC member. Transcriptions were entirely loaded to the NVivo software, allowing accurate responses to be utilized.

Eight participants served in this study. They are a representative sample of primary and intermediate grades. They also qualified for the study based on the questionnaire, which allowed

for an accurate representative sample to be obtained. Eight participants are a representative sample for qualitative research, although further examination of more participants could be explored.

The study's main limitation is the participant's potential lack of honesty in their responses. This was somewhat mitigated by allowing pseudonyms for the district, campus, and participants. Participants were given fictional numbers in their digital transcription to protect their identities. Participants were also placed in one-on-one interviews so that they had a private space to share their PLC experiences openly and honestly.

Recommendations

Nine themes emerged based on the participant's responses during the one-on-one interviews. These nine themes are their perceived best practices that influence teacher self-efficacy in PLCs. These recommended nine themes include collaboration/sharing, topics of PLCs, campus expectations, team expectations for PLCs, choice of topics, sharing ideas, understanding everyone, setting expectations, and helping others.

Recommendations for Practice

First, PLCs must include open sharing among participants. If teachers are to benefit from participating in PLCs, there must be open dialogue that is happening that is not harnessed. All ideas must be welcomed and heard. There must be a level of trust among members to share and be listened to.

Next, teachers should have a choice in the topics in their PLCs. Sometimes, the administration may have directives regarding what needs to be discussed in PLCs. Most of the time, participants should be able to choose topics that are timely and relevant to their practice at that time.

Another practical application would be setting campus and team expectations for PLCs. These will probably gain more support if they are agreed upon and set with all participants present. The desire for guidelines and expectations is valuable and needed for the success of PLCs.

Additionally, participants' understanding of the goals and topics of the PLCs is vital. Participants shared the importance of knowing what will be discussed ahead so that they felt understood before attending the meetings. There was also a sense of wanting everyone to leave with a shared understanding of the following steps and implementation expectations.

Last, a practical application based on this study's findings is the best practice of helping each other. Participants who were interviewed shared the desire to be able to help each other. This helps others improve their self-efficacy. Allowing opportunities for shared leadership, modeling, or peer-to-peer observations allows for a collaborative learning environment.

Recommendations for Research

Providing opportunities for best practices such as collaboration, sharing of ideas, participant-selected topics, campus and team expectations, agree-upon understanding, and opportunities to help each other would allow the opportunity for PLCs to influence teacher self-efficacy based on suburban elementary teachers and teacher leaders.

The current study utilized participants from a suburban elementary school. Future research could consider participants from a rural school district to examine if students in a different location need the same best practices to influence their self-efficacy. The potential that their needs are different than teachers in a suburban area is possible.

Future studies could also investigate whether these best practices affect students' academic performance. The study's participants considered their level of self-efficacy. Decisions

about education are made using student data. Thus, further research on how best practices affect students' achievement may be necessary.

This study had only female participants. A future study could research if the gender of the participant affects the outcomes of what participants reveal as best practices in PLCs to influence teacher self-efficacy. Another idea for future research is to study if vertical alignment is a best practice to influence teacher self-efficacy.

Closing Remarks

The study examined participant's responses on best practices that influence teacher self-efficacy. The first research question asked participants about their effective and ineffective PLC best practices. Participant responses included collaboration/sharing, PLC topics, campus expectations, and team expectations for PLCs. The study found that teachers find PLCs compelling when these best practices are in place. This conclusion is consistent with PLCs, which are individual collaborations to expand one's and others' knowledge, according to Eaker and DuFour (2009). Verdi (2022) stated that many organizations have adopted and used PLCs. They might be both effective and ineffective due to specific reasons. Finding PLC strategies is made more accessible by the influence of PLCs. Educators participating in PLCs make decisions based on research in cooperative groups, continuously searching for optimal methods. This study supports the idea that PLCs are a well-known form of excellent PD that enables teachers to collaborate, think through their teaching strategies, share techniques, and create supportive learning environments.

The second research question asked what best practices influence teacher self-efficacy. Participants shared the following responses: choice of topics, sharing ideas, understanding for everyone, setting expectations, and helping others. Participants felt their self-efficacy was

influenced when these best practices were in place to support the work in PLCs. This research concluded that when these best practices are in place, teacher self-efficacy is influenced by PLCs. According to Anfara and Mertz (2015), this study supported the idea that PLC-based PD training may increase teacher efficacy and student advancement. Employees who reach their goals are more willing to connect with organizational goals like student achievement. Within the context of complexity theory, educators could modify their interactions with students to significantly influence their academic achievement.

Creating best practices in PLCs leads to participant experiences of influenced self-efficacy in PLCs. All participant perceptions indicated a need for best practices to be in place. All participants shared a need and desire for PLC. The results of this study align with previous literature. According to Jones (2013), an enhanced learning environment for students to realize their potential can result from an integrated learning environment for teachers. To improve student learning outcomes, complexity theory thinking also welcomes the notion of a change in how academic staff members interact with one another and their students.

Reviewing relevant PLC literature and examining the participant interviews with active PLC participants allowed me to spend much thought on my personal experiences with PLCs. When I look at my personal experiences from a teacher and teacher leader perspective, I see the connection in the best practices revealed in this study as relevant to their influence on my self-efficacy. As a result, I plan to implement the best practices revealed in this study that are within my teacher leader's control with my team.

Summary

In this qualitative case study I aimed to understand what best practices influence teacher self-efficacy in PLCs. PLCs have become an expectation for teachers and teacher leaders to

participate on their campuses. As a result, teachers need to be afforded influential PLCs. PLCs can become ineffective when they do not have the appropriate best practices.

The findings revealed standard best practices among participants, including collaboration, sharing ideas, chosen topics, expectations, understanding for everyone, and the ability to help each other, which influence teacher self-efficacy. The findings show shared best practices to ensure effective PLCs. The themes emerged from the two research questions in this study. The themes of sharing ideas, chosen topics, and expectations were shared from the two research questions. Finally, the findings revealed that there are specific best practices that participants serve as best practices for PLCs that influence teacher self-efficacy.

As mentioned in the closing remarks, teachers could afford PLCs that influence their self-efficacy by helping administrators and teachers utilize these specified best practices. Implementing these best practices allows for the potential to create PLCs that are needed for teachers to feel supported in PLCs. When PLCS function at adequate levels, the potential for teachers' self-efficacy is influenced. The study's findings and applications could be a start to best practices needed in effective PLCs. A significant barrier to PLCs could be utilizing these agreed-upon best practices in PLCs.

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Appendix A: Professional Learning Community Background Questionnaire Questions

Your time and participation in this study are appreciated. Before we begin the interview process, this questionnaire gathers information about your involvement in working in professional learning communities (PLCs).

Q1. How many years have you taught?

Q2. How many years have you participated in PLCs?

Q3. In thinking about PLCs, choose your experience with PLCs.

    a.   positive

    b.   not positive

    c.   neither positive nor negative

Q4. What interests you most about taking part in this study?

    a.   Desire to influence PLCs.

    b.   I am interested in sharing my experiences.

    c.   Eager for the opportunity to participate in a study.

Appendix B: Professional Learning Community Individual Interview Questions

Thank you for taking part in this one-on-one interview. This study explores the best practices that influence teacher self-efficacy.

This interview aims to collect information about your experiences working in PLCs. All the questions should be answered according to your own experiences. Never assume that there is a correct or wrong response. All information is valuable to the study. Your comments will only be used to collect qualitative information for my research; they will not be used to evaluate you, your team, your campus, or your district.

Real-time recording and transcription of the interview will be done. This will make it possible to record your comments accurately. You will be able to review the transcription for accuracy before leaving today. Only the voice recording will be kept, safeguarding your privacy. Your identity will not be revealed by the transcribed data. As the findings are analyzed, your identity will be kept private. Your real identification will be changed to a fictitious number. Pseudonyms will be included for your name, school, and district. Every recording will be stored in a lockable cabinet with no identifying markings. The ACU committee members will be the only ones with access to the recording. Please keep in mind that your participation is voluntary, and you can withdraw anytime.

Before we begin, are there any questions currently?

Research Question	Interview Question
RQ1: What constitutes an effective or ineffective PLC from teachers' perspectives in a large suburban school district?	IQ1: Describe how the topics for the meetings are chosen?
	IQ2: What are the campus expectations for meeting to collaborate in PLCs?
	IQ3: Please describe your PLC structure in general.

	IQ4: Describe how ideas are shared in PLCs and if you feel your ideas are valued in the group?
	IQ5: What are the team expectations for you to accomplish in these meetings?
	IQ6: Please describe strategies/best practices teacher leaders use to facilitate the PLC.
	IQ7: Is there anything else you would like to share about your experiences in PLCs that influence your self-efficacy?
RQ2: What PLC best practices influence teachers' positive self-efficacy from teachers' perspectives in a large suburban school district in Texas?	IQ8: Please describe the effects of the PLC on your self-efficacy.
	IQ9: Do you feel you are growing professionally from participating in PLCs? Why or why not?
	IQ10: What needs to be implemented for a PLC to increase teacher-self efficacy?

Thank you for participating in this interview!

Appendix C: Email to Potential Participants

Dear Staff,

I am conducting a study at Abilene Christian University to fulfill a requirement for my doctoral degree. The study will gather experiences from participants to identify best practices in professional learning communities (PLCs) that influence teacher self-efficacy. The goal is to identify themes of best practices to have data helpful to campuses to improve their PLCs.

Eight to 10 teachers with at least 1 year of teaching and PLC experience will be chosen to participate in this case study. The participants will also be chosen based on positive and negative experiences in PLCs and those wanting to contribute to the study to share their experiences to impact the quality of PLCs.

I would like you to consider participating in the study. After volunteering to participate, you will sign the consent form in person. Then participants will complete a 4-question questionnaire through email to qualify them for the study. Then, the participants selected will be asked to take part in an interview of approximately 45 minutes. All interviews will be conducted in person and on campus at a convenient time. All interviews will be transcribed in real time and available for you to review. The risk to participants will be minimal as the district, campus, and your identity will all be anonymous.

Your participation in this study is entirely voluntary, and you have the freedom to choose not to participate or withdraw at any point. Before engaging in this study, you will receive an informed consent that requires your signature. This document will clearly outline the study's purpose, your rights as a participant, and your ability to withdraw from this case study at any moment.

Please contact me via email at xxxxxx@acu.edu or by phone at (xxx-xxx-xxxx) if you wish to view the Consent Form.

Thank you for your consideration. I look forward to learning about your experiences in PLCs.

All the Best,

Molly Hornsby

EdD Candidate

Abilene Christian University

Appendix D: Abilene Christian University IRB Approval Letter

Date: January 9, 2024
PI: Silian Hornsby
Department: ONL-Online Student, 17250-EdD Online
Re: Initial - IRB-2023-327
Best Practices in Professional Learning Communities that Influence Teacher Self-Efficacy
The Abilene Christian University Institutional Review Board has rendered the decision below for
Best Practices in Professional Learning Communities that Influence Teacher Self-Efficacy. The
administrative check-in date is --.
Decision: Exempt
Category: Category 2.(i). 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 cannot readily be ascertained directly or through identifiers linked to the
subjects;
Research Notes: There is a note from Karla on the cover page section that needs to be addressed
by the PI. Approved Exempt 2a.
Additional Approvals/Instructions: There is a note from Karla on the cover page section that
needs to be addressed by the PI. Approved Exempt 2a.
If at any time the details of this project change, please resubmit to the IRB so the committee can
determine whether or not the exempt status is still applicable. All approval letters and study
documents are located within the Study Details in Cayuse IRB.
The following are all responsibilities of the Primary Investigator (PI). Violation of these
responsibilities may result in suspension or termination of research by the Institutional Review
Board. If the Primary Investigator is a student and fails to fulfill any of these responsibilities, the
Faculty Advisor then becomes responsible for completing or upholding any and all of the
following:
• When the research is completed, inform the Office of Research and Sponsored Programs. If
your study is Exempt, Non-Research, or Non-Human Research, email orsp@acu.edu to indicate
that the research has finished.
• According to ACU policy, research data must be stored on ACU campus (or electronically) for
3 years from inactivation of the study, in a manner that is secure but accessible should the IRB
request access.
• It is the Investigator's responsibility to maintain a general environment of safety for all research
participants and all members of the research team. All risks to physical, mental, and emotional
well-being, as well as any risks to confidentiality, should be minimized.
For additional information on the policies and procedures above, please visit the IRB website:
http://www.acu.edu/community/offices/academic/orsp...
or email orsp@acu.edu with your questions.
Sincerely,
Abilene Christian University Institutional Review Board