Kennesaw State University

DigitalCommons@Kennesaw State University

Doctor of Education in Teacher Leadership **Dissertations**

Office of Collaborative Graduate Programs

Summer 7-1-2020

Exploring the Perceptions of the Effectiveness of PLCs by Teachers in a Rural Middle/High School

Erin Beasley

Follow this and additional works at: https://digitalcommons.kennesaw.edu/teachleaddoc_etd



Part of the Teacher Education and Professional Development Commons

Recommended Citation

Beasley, Erin, "Exploring the Perceptions of the Effectiveness of PLCs by Teachers in a Rural Middle/High School" (2020). Doctor of Education in Teacher Leadership Dissertations. 42. https://digitalcommons.kennesaw.edu/teachleaddoc_etd/42

This Dissertation is brought to you for free and open access by the Office of Collaborative Graduate Programs at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Doctor of Education in Teacher Leadership Dissertations by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

Running head: EXPLORING PERCEPTIONS OF EFFECTIVENESS OF PLCS		
Exploring the Perceptions of the Effectiveness of PLCs by Teachers in a Rural Middle/High School		
Ву		
Erin Beasley		
Dissertation		
Presented in Partial Fulfillment of the Requirements for		
the Degree of Doctor of Education in Teacher Leadership		
Kennesaw State University		
May 2020		
<i>y</i> = = = =		

Signature Page

Acknowledgements

I would like to start by thanking my family. Without my "village" including my husband and my parents, I would have never had the courage, strength, stamina, and (mostly) time to complete this process. They have supported my decision to continue my education over and over again. I sacrificed many hours from my children, Brayden and Brody, but I hope I am making them proud and instilling an importance of education in them. I need to also thank two of my administrators, Mrs. Couey and Mr. Ford, who encouraged me and assured me that I was not crazy for attempting this degree. I sometimes questioned that, but they always believed in me. For that, I am truly grateful. I would like to thank my committee members, especially Dr. Megan Adams who has been a constant voice of comfort and a steady pool of advice for me since the first day of this process. I am eternally grateful for her. Drs. Gray and Moore have both been very encouraging and provided me with awesome advice on this project. I could not have asked for a more amazing committee. Finally, I must also give credit where it is due to my two partners in crime throughout this journey, Meredith and Carolynn. Without each other, where would we be? Thank you all from the bottom of my heart!

Abstract

This mixed methods study sought to explore how effective teachers perceive their PLCs to be. Of particular interest was the possible effects that the teachers' years of experience and/or the level of certification had on those perceptions. The researcher sought to determine how the teacher population of one rural Georgia school felt about their PLCs as well as get a more candid, in-depth picture from a selective number of those teachers via interviews. The purpose of this study was to then use these findings to improve PLC practices and build a sustainable PLC environment in this particular school.

KEY WORDS

Professional learning communities, teacher experience, teacher certification levels, teacher perceptions, collaboration, PLC effectiveness, shared mission, collective inquiry, action orientation, commitment to improvement, results, evaluation, classroom practices, trust amongst teachers, teacher autonomy, teacher leadership, teacher participation, adult learning, self-efficacy

TABLE OF CONTENTS

Acknowledgements	4
Abstract/Key Words	5
CHAPTER ONE: INTRODUCTION	9
Problem Statement	9
Contextual Framework	11
Research Questions	12
Purpose and Significance of the Study	13
Background	15
Personal Connection to the Research Topic	16
Relevant Terms	17
Professional Learning Communities	17
Collaboration	17
Participation	18
Teacher Leadership	18
Assumptions	18
Limitations	18
Delimitations	19
Summary	19
CHAPTER TWO: LITERATURE REVIEW	20
Andragogy	20
Leadership Theories	25
Effective Professional Learning Communities	28
Importance of Collaboration and Trust	31
Teacher Leadership and Autonomy	36
Role of Experience and Education Level	38
Teachers' Attitudes and Perspectives	41
Summary	46
CHAPTER THREE: METHODOLOGY	47
Theoretical Framework	47
Research Questions	49

Research Design	50
Site/Setting	53
Participants	54
Quantitative Data Collection and Sampling	55
Quantitative Data Analysis	58
Qualitative Data Collection and Sampling	61
Qualititative Data Analysis	63
Trustworthiness	64
Ethical Considerations	65
Advantages/Limitations	67
Role of Researcher and Positionality	68
Conclusion	69
CHAPTER FOUR: RESULTS	72
Introduction	72
Demographics/Participants	72
Findings	76
Shared Mission/Purpose Theme	78
Collaboration Theme	81
Collective Inquiry Theme	83
Action Orientation Theme	85
Commitment to Improvement Theme	87
Results Orientation Theme	89
Perceived Correlation of Variables	92
Conclusion/Summary	94
CHAPTER FIVE: DISCUSSION	96
Introduction	96
Summary of Findings.	96
Conclusions	98
Participation	98
PLC Effectiveness	100
Level of Certification & Years of Experience	102

Discussion/Implications	106
Suggestions for Future Research	110
References	113
Appendices	
Appendix A	123
Appendix B	
List of Figures	
Figure 1: Participants by Certification	74
Figure 2: Participants by Experience	75
Figure 3: Participant Demographics	75
Figure 4: Survey Results by Certification	77
Figure 5: Survey Results by Experience	77
Figure 6: Overall Survey Results	78
Figure 7: Response Means by Variables	78
Figure 8: Shared Mission by Certification	79
Figure 9: Shared Mission by Experience	79
Figure 10: Collaboration by Certification	81
Figure 11: Collaboration by Experience	81
Figure 12: Collective Inquiry by Certification	83
Figure 13: Collective Inquiry by Experience	83
Figure 14: Action Orientation by Certification	86
Figure 15: Action Orientation by Experience	86
Figure 16: Commitment to Improvement by Certification	88
Figure 17: Commitment to Improvement by Experience	88
Figure 18: Results Orientation by Certification	90
Figure 10: Results Orientation by Experience	90

CHAPTER ONE: INTRODUCTION

Analogous to a business, today's public schools function at a more efficacious level when stakeholders are in accord over values, objectives, and methods (Boone, 2010). The power of communication cannot and should not be underestimated. Professional Learning Communities offer an opportunity for teachers to collaborate and build bonds, but more importantly, this form of professional development has proven to bolster teaching skills (East, 2015). Teachers' viewpoints as to the potential effectiveness of PLCs tremendously affect the dynamic of the group and can be critical to the success of PLCs (Mullen & Schunk, 2010). When teachers are receptive and believe in the ability for PLCs to function properly, it makes them even more valuable. And while teachers' perspectives can shape the success of the PLC, the reverse effect can also take place; one's experiences within a PLC can shape his or her perspective of how successful that PLC can be. Certain factors in a teacher's career have potential to shape those perspectives and experiences as well, such as a teacher's degree, level of certification, attitude, and participation. These factors have been proven to influence school performance also (Tettleton, 2003).

Problem Statement

Addressing the more individualized needs of professional learning in today's school system can be challenging. Creating a culture of community where teachers feel their time and energy is being spent effectively can seem like a difficult task, but there are steps that school systems can take to ensure that teachers' feelings and concerns are being taken into

consideration. When this occurs, professional development systems, namely PLCs, can be improved.

In order for students to achieve in today's ever-changing world, teachers must meet certain requirements. These may include the analysis of student assessment data, learning new strategies and technology, and working with fellow teachers to build a strong curriculum that is consistent and research based. Lack of time, communication skills, and other resources often complicate matters even more. School administrators and teacher leaders face the challenge of finding quality professional development that reaches each teacher on a somewhat individual basis and is truly effective in increasing student success. Presenting professional development that is engaging and universally valuable can be even more challenging. However, it is certain that we cannot "expect today's teachers to teach tomorrow's skills using yesterday's training" (Tettleton, 2003, p.24). In the end, the main goal is student success.

One way that school systems across America have attempted to add individualized learning opportunities for teachers is to implement more on-site professional development, and one format of this is the professional learning community (Boone, 2010). Professional learning communities, or PLCs, can provide school faculty with "active learning and participation opportunities", (Wake & Mills, 2018, p. 92). The structure and dynamic of these groups seem to solve many of the problems with today's professional development. In fact, one study on the effectiveness of PLCs on student learning found that seven out of ten schools that utilized PLCs showed an increase in student achievement, five of which were notably significant (Aylesworth, 2012). However, PLCs are not always easy to implement because they take the full cooperation of all stakeholders. They require that these stakeholders participate, collaborate, and transfer new knowledge back to their own classrooms.

Conceptual Framework

PLCs have become the common form of andragogy in schools (Dehdary, 2017). They are based on the premise that together teachers can help each other accomplish more (Akin & Nuemann, 2013). Collaboration is the concept that guides PLCs. Without true collaboration, PLCs are not possible (Akin & Nuemann, 2013). Part of this collaboration involves sharing of experiences and building communities of trust (Hallam, Smith, Hite, Hite, & Wilcox, 2015). Theoretically, teachers who feel they are part of a trustworthy group would agree that it adds to the effectiveness as collaboration is so vital to the overall effectiveness.

There are two learning theories associated with PLCs, and subsequently with this study, The first of the two is Piaget's constructivism which says that as humans, we take our own knowledge and adapt it with new experiences in order to make new knowledge (Clark, 2018). Constructivism offers insight as to how adults learn via PLCs. This can particularly be true when new practices are introduced, teachers take what they know about their own classes and adapt the new knowledge to fit them, and then come back to share those experiences with their peers. This cycle should continue in PLCs that are truly effective (Clark, 2018). The second theory is the social learning theory (Bandura, 2007) which maintains that we learn by observing other's successes, trying it for ourselves, and evaluating (Bickel, 2012). In turn, this provides us with a sense of confidence to motivate us to continue the practice. In PLCs, teachers may observe the practices of other teachers and hear about what has worked or not worked for them. Then, they go back and try these practices for themselves in their own context. As confidence is gained, the teacher may even share his or her own experiences then with the group.

One of the strong points of PLCs for teachers is that it gives them more autonomy (Wake & Mills, 2018). When teachers feel their input is valued, they are more likely to participate and share experiences (Lave & Wenger, 1991). This study aimed to show teachers that they do have the power to express their concerns and offer their input because it is valued. This is especially important (Matherson & Windle, 2017) because, in order for PLCs to be successful and sustainable, all stakeholders need to believe in their ability to improve the student success (East, 2015). That is, they need to have a strong buy-in. This is sometimes referred to as having a shared vision or mission (Dufour & Eaker, 2012). By understanding the status of all of these elements, one can gain a better perspective of effectiveness of the PLCs operating in their school.

Research Questions

The main goal of this study was to explore teachers' perceptions of effectiveness of PLCs and answer the following questions:

- 1. How much are teachers participating in PLCs?
- 2. How effective do they find these PLCs to be?
- 3. Do teachers' personal levels of education and years of experience shape their perspectives on professional learning communities? If so, how?

Findings also included how likely these teachers were to, in turn, take ideas and information from their PLCs and utilize them in the classroom. The study had the potential to reveal which categories of teachers, based on experience and education, were most open to communicating and growing via PLCs and why. Another major aspect of this study aimed to explore how these teachers weigh or define the effectiveness of each of their PLC meetings and how that has shaped their participation/mindset from their own perceptions.

I hypothesized that the years of experience a teacher has would not affect their perspective toward PLCs as much as their level of education. While many do believe that as teachers get older, they tend to be less open to change/growth (Snyder, 2017), one should also consider that the veteran teachers usually have more experience to share and usually the confidence to share it. Novice teachers may be timid to participate greatly until they have multiple years of experience in the classroom (Conderman & Johnston-Rodriguez, 2009). I presumed that the responses provided from all teachers, novice to veteran, would be somewhat varied.

Instead, I believed that a teacher's certification level would have a greater effect on their perspectives of PLCs. When teachers participate in furthering their education, they often participate in more collaboration. This can take place in person or in an online format. Therefore, when it comes to PLCs, these teachers may feel more confident with participating and collaborating as they have had experience in this area. My reasoning also centered on teacher traits. Generally speaking, when teachers re-enroll in graduate school to pursue an advanced degree in their field, they are faced with even more challenges than those of other teachers as mentioned previously. From my perspective, I believed this to show tenacity, and I recognized that it usually involves a desire to better oneself. I felt that teachers who encompass these traits have a strong possibility of increased participation in PLCs. Therefore, in this study, I hypothesized that teachers that hold higher degrees or certification would have higher average scores for questions 3-14 on my survey.

Purpose and Significance of the Study

The purpose of this study is to explore variations of teachers' perceptions of PLCs and to address concerns that may hinder PLCs in the school of study from operating effectively.

Professional learning communities offer an opportunity for teachers to work together toward common goals and a common vision. This often includes improving strategies and practices in the classroom and offering commitment to a culture of lifelong learning (Underwood, 2007). "PLCs allow teachers to take ownership of their own learning, with continued support from a select group of colleagues" (Kelly & Cherkowski, 2015, p. 4). Furthermore, PLCs "ensure that the varied academic disciplines are closely intertwined. Thus, the responsibility for student success becomes shared" (Leclerc, Moreau, Dumouchel, & Sallafranque-St-Louis, 2012, p. 2). Previously, reform via new programs and workshops have not proven to significantly increase overall student achievement. However, the use of professional learning communities is a method of involving all educators in a collaborative effort to ensure the success of such reform programs. "Some reformers have suggested that at least 20 percent of teachers' work time should be given to professional study and collaborative work" (Slick, 2002, p. 200). Therefore, the importance of effective PLCs is becoming increasingly more significant in the field of education.

At "Small County Middle High School" (pseudonym), there has been a vast array of perspectives about PLCs presumably. While many might have believed the stereotype that veteran teachers are usually set in their ways and are not always willing participants where new initiatives and open collaboration are concerned, at SM/HS, the typical informal review has been diverse amongst various groups defined by experience and education level. In other words, there has been a variance of opinions about PLCs across the subgroups defined in this study. For this purpose, the researcher intended to determine which groups at SCM/HS were benefitting most from PLCs and how that has shaped by their own perspectives.

This study had the potential to benefit the school by explaining the variation of perceptions of PLCs. Obtaining teachers' candid perspectives could aid in the guidance of future

decisions about PLCs such as types of participation needed, time allotted, and chosen material. This study also had the potential to help isolate the groups that needed more buy-in with PLCs to hopefully improve participation. I knew it could also shed light on the variables that have improved perceptions for those that think positively of PLCs and thus, provide suggestions to transfer. Expectantly, this should make PLCs more successful/effective for all parties involved. Special attention should be paid to the younger teachers in particular as they will inevitably be responsible for the sustainment of PLCs for SCM/HS.

Once PLCs are operating effectively, another concern on this topic can be addressed: teacher time. This has seemed to be a rather overwhelming complaint in this school setting.

Teachers need to feel that their valuable time is being spent efficiently. When PLCs are operative to the highest level, that time can be preserved, and teachers should feel that none of their valuable time is wasted. It is only spent on practices that are proven to help in the classroom.

On a broader scale, the information obtained from this study can be applied in the future to other likeminded schools who want to gather input from their teachers but need help beginning that process. While surveys served as a general interpretation of the population's perspectives, hearing teachers' specific understandings of and feelings about PLCs may provide other school districts with more insight than they may obtain from a standard quantitative survey.

Background

In order for PLCs to have the optimal effect, all members must be willing and active participants who share a common focus: to improve educational practices for their students. For these reasons, it was imperative that teachers' perspectives of PLCs be known and improved upon if needed.

Personal Connection to the Research Topic

I have taught at the school of study for 15 years. In fact, my entire career has been for SCM/HS (pseudonym). In that time, I have served as not only a classroom teacher, a mentor/buddy teacher, a writing specialist, and a professional learning coordinator. When our superintendent first sat down and discussed what PLCs were and how we would initiate them in this school, it seemed a little idealistic. The idea that all teachers could work in small groups and have equal say-so in decisions seemed like a reach, but I was optimistic that if we all committed, we could have something wonderful. While the school I teach at is very small and personal bonds have been formed amongst all faculty and staff, sharing professional ideas was a more foreign concept.

Over the past few years, our PLC practices have blossomed to the point where we have even adopted a new schedule where students leave 2 hours earlier on Wednesdays to accommodate for collaboration time for teachers. I think this shows our level of commitment to our craft. I feel the results have been wonderful in that our test scores at SCM/HS have increased and teacher strain seems to be at a minimum since time is no longer as much of a factor. Seeing these results and that my system was so dedicated to PLCs, I decided that I wanted to devote my study to finding a better understanding of PLCs in the school and working to improve/sustain them. Since PLCs are about teacher autonomy instead of top-down management, I felt that the best way to accomplish this would be to hear the voices of the teachers themselves which is why their perspectives became the center of my study. While I consider myself an optimist, my role as PLC coordinator did not entirely refrain me from hearing sporadic complaints. These would sometimes consist of PLC topics, work involved outside of meetings, and teachers simply wishing for more "work time". I had always heard the stereotype that "old school" teachers

would not enjoy having to learn new material or strategies, and I found that interesting because the majority of veteran teachers I come in contact with worked really hard in PLCs and seemed to be drawing a great deal from the meetings. I also found it interesting that listening to some of the discussions and observing some of the work sessions in PLCs, participation seemed to be heavy. However, there were times when I would see teachers who I know were using collaboration almost daily in their graduate courses not participating in the meetings. This led me to the two independent variables for the study: years of experience and level of certification/education. I wanted to see if there was any sort of correlation with how they perceived PLCs based on these factors.

Moving forward, I plan to work with my fellow PLC coordinators to find ways to improve PLCs based on what teachers have shared with me in the study. We will look at the weaker areas and discuss with teachers how to improve it. We will also celebrate the positive things we are doing based on the findings and continue those moving forward.

Relevant Terms

Professional Learning Communities. Also, known as PLCs, professional learning communities can be defined as groups of teachers who meet regularly to collaborate, analyze, and reflect upon their practices and their students' needs. This is considered a form of professional learning that proves more engaging and is differentiated to meet teachers' needs as well (Pharis, Wu, Sullivan, & Moore, 2019).

Collaboration. The term "collaboration" refers to an organized group of individuals involving themselves in an interactive process of finding solutions to mutually defined issues (Paulsen, 2008). Collaboration serves as a foundational element to effective PLCs (Aylesworth, 2012).

Participation. For the purpose of this study, participation refers to actively partaking in conversations during PLCs, providing input, and also completing requirements that may take place outside of meetings.

Teacher Leadership. Teacher leadership is practiced by those in various formal and informal roles in a school such as mentors, team leaders, department chairs, etc. These teachers often take on additional professional responsibilities, as well (Shillingstad & McGlamery, 2019).

Assumptions

The following assumptions were made by the researcher:

- Responses were considered fair based on actual experiences and not personal biases towards individuals.
- Teachers remained candid and thoughtful with responses to surveys and interview questions.
- 3. All PLC groups were meeting at the regularly scheduled times set by the school system.
- 4. Accurate attendance and minutes to the PLC meetings were being recorded.

Limitations of the Study

This study did have potential limitations. First of all, while highly encouraged, participants' complete honesty could not be guaranteed. In this small school setting, some may have feared that any negative comments may be linked to their names when made public. This was not the case, however. Related to this is the fact that the research was also conducted at the school where I am employed in the role of PLC coordinator, which had the potential to bias results. Some may feel hesitant to address concerns to the person who is in charge of planning their professional learning. They may feel that I could possibly take offense to any negative feedback. I remained objective in my analysis and reported all biases.

Detailed opinions of every teacher were not identified; only the general survey questions provided insight from the entire population. Qualitative data was collected only from a portion of the population as the interview process involved only one person per subgroup chosen on a volunteer basis. In this way, more insight to the survey responses could be gathered from each group. While it may have provided more information to conduct the research over a longer period of time to determine how these teachers' perceptions may change, this particular study provided a snapshot of the teachers' perceptions of the current state of PLCs. Y67

Delimitations

While this study has held grand potential to aid in the building of a stronger PLC system in this particular school/system, results may or may not be transferable to other schools. Other schools, that have a more diverse group of teachers, may experience more varied results. The small, family atmosphere and isolation of this community, no doubt, proved to be a defining factor in the results. This particular smaller school system seems to have built close relationships, and many teachers have gone through identical trainings or even the same graduate programs which may have shaped their perspectives.

Summary

This study was organized in the following way. The first chapter consists of a thorough introduction to the topic including the research problem, questions, purpose, limitations, and important definitions. Chapter Two provides a review of literature to further describe PLCs and address other important elements of the study such as collaboration, teachers' experience, certification, and attitude toward PLCs. Chapter Three further details the methodology of the study. Chapter Four reviews the findings/results. Then, Chapter Five examines those findings in reference to their application and any future studies conducted on this topic.

CHAPTER TWO: LITERATURE REVIEW

There seems to be a stigma or stereotype in the field of education that veteran teachers are unyielding in their classroom approaches while newer teachers are often viewed as more receptive to the defining concepts of PLCs (Snyder, 2017). Perhaps, at least in part, this perception stems from the fact that more novice teachers have recently been trained in collaboration. For many veteran teachers, this method of growth may be somewhat dissimilar from what they have previously been accustomed to (Snyder, 2017). On the basis of furthering education, one may assume that educators who seek to further their own education by pursuing a higher degree would somehow be more responsive to the type of environment PLCs create (Uhlig, 2013). This is because educators who are enrolled in graduate programs often participate more frequently in similar formats to those which PLCs promote (i.e. open communication, sharing of ideas).

Andragogy

There are several theories that venture to explain the complexity of how adults learn best, also known as andragogy. First, it is important to understand that teachers as adult learners are very different from the students that they, themselves, teach. For example, adult learners are usually trying to balance home life with learning taking place in school or the workplace. Finding balance can often prove challenging (Rothes, Lemos, & Gonçalves, 2017). Despite this possible issue, adult learners tend to be more intrinsically motivated to learn and grow. According to Rothes, Lemos, and Goncalves, "adults' maturity and life experiences help them assimilate the noninternalized parts of themselves into a more coherent whole and become more

autonomous and self-determined". Similarly, adult's ability to think cognitively and even metacognitively is generally much greater than those of younger learners.

When considering the very premise of professional learning communities, one cannot cast aside the fact that the success of PLCs centers predominantly around working collaboratively. That is, members learn from each other. To understand theories that entail these social processes, one should first consider the work of Lev Vygotsky and Jean Piaget. Vygotsky believed that we learn best as social beings. That is, learning is a social process where we form new understanding from our environment. Piaget held that as we develop and age, we become capable of learning through our own exploration. Finally, we become able to think more abstractly by our formal operational years (Clark, 2018). Perhaps PLCs can be considered a melting pot of both of these learning theories. PLC members learn through their own experiences and explorations and share those experiences with others to create a form of social learning as well. (Michaud, 2016).

Legitimate Peripheral Participation is another consideration of andragogy in relation to this study. Lave and Wenger (1991) studied the effects of communities of practice. When groups collaborate to accomplish tasks or discuss experiences, legitimate peripheral participation often takes place. In relation to PLCs, this would mean that novice teachers or ones that were new to the PLC, may not participate much in conversations or feel that they have much to input.

Gradually, as the teacher becomes more and more accustomed to the group, the teacher should begin to participate more. Finally, at some point later, that teacher should feel like an established member of the group. This means that he or she feels as if their input is valuable and feels the need to share in experiences and ideas (Lave &Wenger, 1991).

The social learning theory was founded as a combination of two other learning theories, cognitive learning theory and behavioral learning theory (Nabavi, 2012). Both of these accept different ways in which learning occurs, psychological or environmental stimuli (Bickel, 2012). That is, people not only learn directly from reinforcement, but from watching others in their environment as well (Nabavi, 2012). First posited by psychologist Albert Bandura (2007), social learning theory suggests that learners adapt to their surroundings in order to be as successful as their peers around them. This generally occurs in low-confidence situations or environments. Social learning theory requires four factors for learning—observation, retention, reproduction, and motivation (Bickel, 2012). The learner first observes their peers' actions, retains the useful information, tries using it on their own or in their own context, and that eventually adds to their confidence and motivation. These four factors as outlined by Bickel (2012) can easily be mirrored in the actions of members of PLCs.

The aforementioned observations can also be part of a critical friends relationship (Wennergren, 2016). A critical friend relationship can often be initiated in PLCs. The relationship between these individuals is one that requires great trust, like PLCs in general (Wennergren, 2016). A huge benefit of critical friends is that they can observe their colleagues during their actual teaching to provide beneficial feedback. When considering that feedback, a teacher needs to meet his or her colleague at their own zone of proximal development, or ZPD (Vygotsky, 1978). This means that the feedback should neither be too critical or uncritical (Wennergren, 2016). In order to learn from the experience, the observer must be critical enough to provide constructive comments for improvement. However, that observer must also not be so critical as to provide feedback that is so challenging that it is beyond that teacher's ZPD (Wennergren, 2016). A teacher's ZPD involves knowledge that is found between two areas: that

which the teacher can do or solve individually and that which the teacher has the potential to improve upon with the aid of colleagues. In PLCs, teachers work not only on their own reflective practices, but also at helping one another solve real world issues from their classrooms. This follows the notion of the importance of ZPD.

Another common practice in that can be extended upon during PLCs is the use of mentorships. In these types of relationships, one teacher (generally, a novice) learns from the modeling of another (a veteran). Again, the four factors would take place here. While PLCs are generally for a small group, not just two people, discussing observations and learning the process of modeling may take place in meetings. In addition, PLC members learn from each other modeling certain skills or strategies during meetings. Modeling is a more complex process than many may think, and it requires careful observation and reflection that take practice (Horsburgh & Ippolito, 2018).

Through open communication, learners (teachers) can become better equipped to adapt new information or skills to their own classroom. The social learning theory is perhaps one of the strongest in relation to the case of PLCs as participation and collaboration are vital for the effectiveness of the program. Its premise is that we learn through communicating with others which is a major founding principle of PLCs. The social learning theory also provides a rationale for the importance of relationship building and trust within PLC groups because when these trusting bonds are formed, members are more willing to consider the ideas of others and provide their own as well.

Aptly titled, the constructivist theory, which in education is most commonly associated with Piaget's work in the early to mid-twentieth century, focuses on the ways in which learners construct knowledge from their day-to-day experiences (Clark, 2018). That being said, one's

environment plays a huge role in the constructivist theory as it serves as the predominant teaching tool. By definition, this theory calls for the learner to utilize prior knowledge, connect new experiences to that knowledge, and then form new meaning, so that a sort of "building" is actually taking place. Schema could be considered the glue that holds the knowledge together or connects the ideas and information. The schema theory is another derivative model of constructivism. This theory is often used in classrooms as teachers attempt to have students recall on their prior knowledge of a topic before exposing new information so that students can make connections to the new material. The cognitive process of determining how one makes sense of this new information is the foundation of the schema theory (Clark, 2018).

In a very similar fashion, members of PLCs use the constructivist theory when they are involved in discussions about their experiences. Generally, the first step entails a topic or problem being metaphorically "placed on the table". Next, teachers begin to discuss the issue, their past or present concerns on the topic, their experiences with the issue, and how they were or were not successful in solving the issue. Then, they build from each other's conversations in order to problem solve. Sometimes this practice takes place informally and even silently if surveys are employed. Other times, teachers may discuss how that changes their perspective out loud as the thought process is taking place. While both are considered reflective in nature, having these vital discussions aloud is usually considered more beneficial because it models the process of building on their knowledge. For teachers participating in professional development such as the PLC format, talking and writing about their experiences in the classroom brings into play a sense of self- reflection that draws the adult learner in and generally motivates them to continue in the learning process (Tettleton, 2003). In the end, constructivists believe that learners must

make their own meaning of this new information (adapt to their classroom) in order to have truly learned (Clark, 2018).

Teachers who practice these constructivist methods of learning themselves often utilize constructivism in their own classrooms as well. When teachers view the benefits of problem solving, working together, and building on one's past experiences, they tend to promote those types of activities within their own classroom setting. They encourage their students to reflect upon their own experiences and cognitive practices. In this way, teachers are promoting students who are motivated to seek constant improvement of themselves and their groups via ongoing self-evaluation and reflection (Tettleton, 2003).

When discussing teachers' perspectives about PLC, one major facet would be whether they feel that they are being given and properly utilizing these opportunities to construct new knowledge from their peers' experiences as well. This may be related to the level of participation they or their group mates are putting forth. When getting their insight, if teachers have concerns in this area, it may be a flaw within the PLC group, or it may even be that the teacher is having trouble adapting new skills or strategies to their own classroom. Either way, interviewing the teachers provides necessary information to help improve practices and make the PLC conversations more effective.

Leadership Theories

While the very principle behind PLCs is to have mutual leadership, this does not limit the importance of leadership qualities, but increase it. This is because everyone in each PLC group is expected to step up and lead at some point. This may be in the form of an instructor in an area they possess more expertise than others. Leadership may come as members lead certain conversations or suggest and support change. For these reasons, considering the way the

members lead at their own times is significant as it can influence PLC experiences and therefore, it has the potential to shape teachers' perspectives on PLCs.

Situational leadership theory posits that leadership styles are multifaceted and may often need to be adapted in order to account for certain situations (Raza & Sikandar, 2018). In other words, various situations call for various styles of leadership. According to situational learning theory, effective leaders can adapt their leadership styles based on the dynamic of the group and the task at hand, meaning they select the leadership style that best suits the situation (Raza & Sikandar, 2018).

In order for this to occur, the leader must be flexible and insightful in assessing their audience. Since gaining skill in situational leadership involves much practice, PLCs are an excellent outlet for teachers to build these skills. This is because all teachers are expected to be leaders at some point in PLCs. They are expected to step up in areas that may be of their expertise or that they may have more experience with. Each teacher may lead a discussion or teach a skill throughout the year, for example or they may collaborate or coach with a fellow PLC member when they are having difficulty with a job task. These examples require very different styles of leadership. If a PLC member undertakes every chance at leadership as if they are leading a discussion or lecture, resentment on the parts of the other members may emerge. This resentment may be an underlying factor that arises throughout interviewing. Overall, for PLCs to remain effective, leadership must be distributed evenly so that all members can gain the foresight and intuition needed to select the most appropriate styles of leadership for a given situation.

The transformational leadership theory accepts the importance of leadership working with team members to determine a needed change and the best approaches to accomplish the

change (Fernet, Austin, Trépanier, Gagné, & Forest, 2015). The overall defining factor of the actions related to this theory is teamwork. When leaders use transformational leadership, an increase in motivation, morale, and performance are more probable (Fernet et al., 2015) because teachers feel a sense of autonomy in PLCs. They feel as if PLCs are part of their job that they have ownership in. Their PLCs become a territory where they feel safe to speak candidly at times and where they feel that their voice is always important. Basically, transformational leadership alters the common style of leadership making major decisions or the top-down method of leadership (Fernet et al., 2015). Effective PLCs generally do not use top-down or bottom-up forms of leadership. Instead, leadership is shared more evenly. How teachers perceive the leadership style of their PLC was of interest to this study because if teachers believe transformational leadership is occurring, they will more likely feel that their PLC is more effective since they are planning it.

As previously mentioned, the effectiveness of PLCs greatly affects teachers and should be of great concern to them. They must feel as if their time is being spent to the utmost efficiency. In order for this to occur, administration should give teachers as much input in topic discussions and method of delivery as possible via surveys. Whether or not teachers feel this is occurring can also greatly affect their perceptions on effectiveness (Wake & Mills, 2018). If teachers feel they have significant say-so in matters of PLC, they may feel meetings are spent effectively because they may feel their concerns are being addressed (Pearson & Moomaw, 2005). Oftentimes, issues such as time management can be revealed through a simple, anonymous survey. I chose a similar method for my study as the general population of participants completes a survey followed by deeper questioning through the interview process. It is also important to mention that this engagement with teachers should, in itself, be a

demonstration of transformational leadership to some degree because administration for the school of study is concerned with the thoughts and feelings the teachers have about PLCs, so their input is taken into major consideration for future planning.

While transformational leadership seems ideal for PLC situations, there are precautions. Administration must stay in open communication with PLC groups. They should not have a complete closed-door attitude. Administrators should still be actively involved as an equal partner to other members of the groups. Ideally, teachers would feel supported by their administration and feel that they are kept up to date with decisions made or topics discussed in PLCs without their being overbearing and overstepping their role of equal ownership. Overall, when all members understand and respect their roles, the likelihood of effectiveness should increase.

Effective Professional Learning Communities

Professional learning communities are groups of educators who consistently and actively work together to reflect and improve upon their own practices and thus improve student achievement. Effective professional learning includes "active learning methods, collective participation, and collaboration among teachers" (Pharis, Wu, Sullivan, & Moore, 2019, p. 31). Professional learning communities encompass all of these traits. In fact, Horde (1997) listed the five attributes she used to define a PLC as the following: "(1) Supportive and shared leadership, (2) Collective creativity, (3) Shared values and vision, (4) Supportive physical and human conditions, (5) Shared personal practice" (Horde, 1997, p. 6). Dufour and Eaker (2012) found that PLCs have the potential for great impact on a staff. Some of the results they found possible were: less isolation amongst teachers, higher morale, commitment to making changes and to follow a single mission, professional learning that demonstrates effective classroom practices.

The basic structure of PLCs at my school of study has followed what Murphy and Lick (2004) would call Whole-Faculty Study Groups or WFSG. In WFSG, "Each faculty member is a part of a study group that focuses on data-based student instructional needs" (Blankenship & Ruona, 2007, p. 3). In order for these WFSGs to remain successful, the whole faculty must actively participate, so there is equal responsibility. Success, in this case, could be defined by teachers putting forth the effort to gain the knowledge via these PLCs, eventually resulting in an increase in student learning (Blankenship & Ruona, 2007, p. 3). This means that teacher involvement and confidence in PLCs are vital to their success.

When teachers complete the same classroom practices year-in and year-out, they become routine to the teacher (Dehdary, 2017). A cookie-cutter curriculum does not meet the needs of each student, so alternative methods of meeting these needs must be established. Educators have an obligation to evaluate their own practices and seek to constantly improve their teaching in order to better serve their students. "Reflective teachers establish a cycle of proactivity to continuously create an enhanced learning experience," (Akin & Nuemann, 2013, p. 237). By reflecting upon one's personal practices, a teacher can find ways to improve classroom management, student participation, and overall achievement. In my research, I expected to discover teachers' perceptions of how self-reflection has or has not, in their view, helped in their classrooms. I was very interested to hear during interviews how their self-reflection may have affected the students.

Hargraves and Fink (2008) define PLCs as communities of practice which may include teachers of a common group of students such as a specific grade level or those who teach from a common content area. Groups with these commonalities can discuss current needs or issues, share strategies and experiences, or even learn new strategies together. This seems to be a more

valued option than the "sit and get" versions previously used. One type of activity that many PLCs participate in is collaborative planning. "Collaborative planning can aid in teachers anticipating classroom situations, introduce teachers to strategies that create appropriate learning environments, and encourage application of technology in student learning activities," (Aken & Nuemann, 2013, p. 235). Teachers can also analyze data specific to individual students to create a plan for intervention or enrichment. "This transfer of new knowledge into an action plan is the result of the interpretation of student data," (Akin & Nuemann, 2013, p. 237). Likely, these types of activities during meetings are what many may attribute to the effectiveness of the PLC.

Finally, PLCs must also have stakeholders, namely teachers, who are also committed and informed, and they must feel that initiatives are necessary and can yield positive results in order to remain successful. This is what is often referred to as "buy in". Stakeholders must be willing to share leadership roles and responsibilities and participate in practices that demonstrate their commitment to improving student learning. When teachers believe in the effectiveness of their PLC and feel that their voices are significant to their peers and the powers that be, they tend to communicate openly with their other group members. Participation in PLCs can be either an overall strength or a hindering roadblock on the pathway to success. This is, perhaps, the most important aspect of my research because teachers' perspectives affect their investment into PLCs. During my interviews, if teachers deemed PLCs as highly effective, I asked them to then continue by discussing what they have found most helpful about PLCs. This should be useful later in promoting positive attitudes and improvement in effectiveness of PLCs.

The major goal of this research was to gain a better understanding of how effective teachers feel their PLCs are. After seeking out their perceptions, I have and will continue trying to find ways to increase participation in the schools PLCs. Throughout the study, I also

attempted to determine if/how a teacher's experience in the classroom and level of graduate education influenced the way they perceive the effectiveness of their PLCs. All of this information can be used to improve the effectiveness of PLCs in the future.

Importance of Collaboration and Trust

Schools can be successful in PLCs if they are focused on collaboration, not isolation (Aylesworth, 2012). The school must also engage in a cultural shift, where all school community members value collaborative work, which is no easy feat (Charner-Laird, Kirkpatrick, Szczesiul, Watson, and Gordon, 2016). This concept of vital collaboration as a means of improvement is nothing new, however, Aylesworth says. "Traditionally, classroom teaching in the United States has been viewed as a profession to be exercised in privacy behind classroom doors," (Santagata & Guarino, 2012, p. 59). If teacher isolation is not terminated, it can transfer into the classroom and create a feeling of isolation amongst the students as well (Mullen & Schunk, 2010).
"...Collaborative professional development can have an impact on teaching practice, especially in teachers' ability to provide instructional support to children that promotes higher order thinking and cognitive development," (Poekert, 2012, p. 102). A culture of collaboration must exist in order for teachers to be able to effectively address student learning (East, 2015). This has always seemed to occur inconsistently at my school of study which was one basis for the research.

Participation in a PLC also allows teachers to communicate with colleagues and transform their teaching through the reflection of ideas and observations from others" (East, 2015, p. 4). To collaborate, teachers must share their personal practices, including successes and failures (Underwood, 2007). In this respect, today's teachers are not only learning how to evaluate their students, but also to evaluate their own teaching, two topics that are often

interrelated. Cultural norms also has the ability to spawn challenges in PLCs. "Cultural norms exert a powerful influence on how people think, feel, and act, and because educators are so immersed in their cultures, they often find it difficult to step outside of their traditions and assumptions to examine their conventional practices from a critical perspective" (Dufour & Eaker, 2012, p. 90-91).

In a study conducted by Slick (2002), teachers admitted that even though they may have been timid to participate at first, they realized that being part of a collaborative group was beneficial to their practices. In fact, educators who collaborate effectively and consistently with their peers are sometimes referred to as heroes of teaching because it does, seemingly, take courage to look beyond one's classroom door and invoke the help of others (Santagata & Guarino, 2012), In contrast, "knowledge hoarding" is when teachers do not wish to share knowledge or personal experience with their colleagues (Ning et al., 2015). During my research, I wanted to determine if a teacher's years of experience or level of degree have affected whether they are considered a "hero" or a "hoarder". Therefore, I sought to learn more about teachers' experiences with communication within their PLCs.

Teachers are expected to take what they learn in their PLCs, adapt it as necessary, and implement it in their own classrooms (Underwood, 2007). This, again, will require more reflection and discussion afterwards. A commitment to using this cycle is one way that PLCs can contribute to their own success. They may also "observe and provide feedback to one another as new instructional strategies are implemented and revised" (Underwood, 2007, p. 53). This may be outside the comfort zone of many educators who are accustomed to these tasks with students but may find doing so with their peers much more challenging. Observation of various PLC

dynamics and how participation or lack of participation affects the culture of the group has been another inspiration for this research.

In general, the word *collaboration* often pertains to two or more people having informal conversations, yet for the sake of education and more specifically PLCs, collaboration must include those people interactively contributing to problem-solution in the context of the school or classroom (Paulsen, 2008). These deeper discussions involving student needs are sometimes referred to as critical dialogue. "Critical dialogue creates a venue where all voices are valued and where teachers can work together toward shared answers to problems of practice that are relevant to all" (Charner-Laird et al., 2016). The use of critical dialogue during PLC meetings was another interest point of this study.

Collaboration can be both a physical and an intellectual action (Carpenter, 2018). While those participating in PLCs physically communicate and may possibly create something together such as rubrics or data charts, collaboration is more importantly an intellectual process which requires discourse that ensures a common goal is being sufficiently met. Members may be physically present, but without intellectual participation, effective collaboration is not occurring.

In an opposing view, Hallam, Smith, Hite, Hite, and Wilcox (2015) concluded that while formal communication is necessary for the PLC to accomplish goals, informal communication, such as quick questions or shared experiences, can also build imperative trust within the group. "Networks increase professional interaction and learning across schools, and for those who participate in them, they generate excitement about teaching and learning," (Hargraves & Fink, 2008, p. 233). "Teachers need genuine dialog to open up, exchange ideas, learn collectively, maintain relationships and construct a community" (Dehdary, 2017, p. 647). The bonds that emerge as a result of PLCs also form trust amongst the teachers, making them feel less

vulnerable and the perpetuation of participation more probable. When trust is present, PLC members are more likely to confide in each other and respect the advice given by fellow group members (Hallam et al., 2015). Unbiased, trustworthy teacher dialogue creates a non-threatening environment where teachers can feel free to ask candid, relevant questions.

While both formal and informal interactions aid in the practices of novice teachers, they can actually prove beneficial for teachers of all levels of experience. In addition, some studies show that quality collegial interaction between novice and veteran teachers can form bonds that persuade newer teachers to remain in the field (Charner-Laird et al., 2016). Novice teachers prefer ongoing learning opportunities and support from their colleagues in their first few years of teaching. The potential level of benevolence is heavily dependent on the school climate or culture and it often builds the foundation that in theory impacts the beginning teacher's professional outlook (Charner-Laird et al., 2016). Thus, years of experience was considered a potentially important variable in this study. The study also centered around one school as other school cultures may vary greatly.

The basic foundation of PLCs is based upon a collaborative learning theory.

"Collaborative learning theory itself is based on the conceptual assumption that groups of people who learn together can capitalize on one another's resources and skills" (Aylesworth, 2012, p. 35). For this reason, both novice and experienced teachers can profit from PLCs. "Transforming teachers into thinkers and inquirers who play an active part in knowledge construction can guarantee quality education," (Dehdary, 2017, p. 644).

"Teachers need professional support in today's educational environment to implement new curriculum standards, appropriately integrate new technology, prepare students for both old and new test formats, support diverse learners, and meet the criteria imposed by new teacher evaluation systems" (Wake & Mills, 2018, p. 90). Principals and teacher leaders are some of the most significant inspirations on the level of communication and trust within a school. They can develop trust with teachers by conversing socially, sincerely addressing teachers' matters of concern, enhancing teacher motivation, and emphasizing the significance of whole-school collaboration (Hallam et al., 2015). "Supportive leadership not only contributes to the sustenance of a PLC but also provides the safety a PLC should be built on" (Dehdary, 2017, p. 647). Leaders may provide school data that presents a need for improvement in an honest manner (Zimmerman, 2006). Furthermore, as improvements occur, data and constructive feedback can likewise be provided as encouragement. While principals and teacher leaders can form trust by evaluating their personal weaknesses and exhibiting the drive for improvement (Zimmerman, 2006), it is also important to remember that PLCs are based upon all teachers being leaders in some way. When teachers set a positive example of communication, more than likely, others in the group will see improvement in the dynamic of the PLC.

Realistically, there are several scenarios that could possibly discourage active participation in PLCs such as flawed dialogue, refuting vulnerability, absence of cooperation, and teacher cynicism (Dehdary, 2017). Past negative experiences within PLCs can impact a teacher's perception of PLCs and was also a specific interview focus.

The pressures of time for PLCs can sometimes deter teachers from fully committing to them. While collaboration is beneficial, spending too much time meeting within these groups just for the sake of meeting can affect a teacher's ability to address other responsibilities and can cause skepticism and decrease teacher buy-in of PLCs. As a solution, school leaders should reserve adequate time for teachers to meet regularly, so as not to impede upon their other daily responsibilities (Paulsen, 2008). While all teachers in my study had relatively the same amount

of time devoted to PLCs as is mandated by the school, the teachers' individual perception of the effectiveness of that time was of particular interest.

In their study of novice teacher mentor programs, Teague and Swan (2013) found that while first-year teachers value the support of veterans, they also felt that collaboration or mentorship by those teachers that had only a few years of experience and recently confronted similar challenges were even more advantageous. Those with the higher level of support who were exposed to the new teacher initiative felt better prepared than those who were not (Teague & Swan, 2013). These constructive mentorships can be fashioned and grown through the use of PLCs as well.

Teacher Leadership and Autonomy

As previously mentioned, for PLCs to prove effective, a shift in school culture emphasizing teamwork in the success of all students is essential (Mullen & Schunk, 2010) which is why teachers' overall perceptions are the focus of this study. A cultural shift requires all teachers to practice leadership skills such as fostering positive relationships with co-workers, broadening their own skillsets, and remaining cognizant of their own practices (Tettleton, 2003).

Sometimes inconsistency occurs between material that teachers are exposed to during professional development and what they actually prefer to learn (Matherson & Windle, 2017). Like most learners, teachers crave professional development that is engaging, relevant, teacherdriven, sustainable, and presented in a way that can be practically applied to their classrooms as opposed to the "sit and get" model of the past. "Teachers want a voice in the professional development offered and should be allowed to participate democratically in the planning and delivery of professional development lessons" (Matherson & Windle, p. 31). It is important for

district leaders attend to the needs of educators and, likewise, for teachers to candidly express those needs.

Teachers should have consent in the topics discussed during PLCs. When they sense a level of autonomy, they feel empowered, forming a negative correlation between teacher autonomy and stress (Pearson & Moomaw, 2005). When autonomy is present, teachers are more likely to transfer new ideas into their classrooms. Without that autonomy, animosity towards those who did make the decisions may result (Boone, 2010).

Teachers can also improve their leadership skills in PLCs via the sharing of personal experiences and expertise. While, in most cases, leadership during PLCs is predominately communal, meetings can also be a chance for each individual teacher be a leader. Teachers views of leadership practices during PLCs can vary greatly based on their level of experience and their own prior roles in leadership (Angelle & DeHart, 2011). Again, this can play a role in whether those teachers perceive PLCs to be effective. Gentile (2010) studied the ways PLCs could be more favorable in teachers' perspectives. From his findings, one can conclude that when teachers were given more governance to make decisions, teachers felt more favorable about PLCs (Gentile, 2010). In a similar study, Cooper, Stanulis, Brondyk, Hamilton, Macaluso, and Meier (2016) found that when teachers have more power to initiate and carry out change, success is more probable. In other words, just as learner autonomy can be directly correlated with higher test scores, teacher autonomy can be linked to a more productive use of knowledge and skill (Diao, 2013). In addition, teachers should utilize their autonomy as a team during PLCs to make curriculum decisions, leading to a more unified curriculum chosen by the teachers themselves.

Quite simply put, leaders are proactive. Proactivity, which may include participating in collaboration with other teachers, communicating effectively with parents, and including

technology in lessons, can positively affect the success of students (Akin & Nuemann, 2013). These skills can also be fine-tuned during PLC meetings. This was another predominant reason for my research as I have observed such a contrast between those teachers who are proactive and those who are not, and I have noticed that those people vary in years of experience and education levels. "Teachers that value self-improvement and professional growth are assets to this cycle of climate, culture, and collaboration" (East, 2015, p. 3).

Role of Experience and Education Level

Some research suggests that there is a direct correlation between teachers' professional qualifications, such as level of education (graduate degrees), and their willingness to participate in professional learning communities (Ho, Lee, & Teng, 2016). In a study conducted in China, when elementary teachers advanced their education to at least a bachelor's degree, they gained skills in leadership, communication, knowledge, and confidence (Ho et al., 2016). The more highly qualified the teachers became, the more likely they were to "... perceive or observe more positive instances of the professional learning community" (Ho et al., 2016, p. 37). That study concluded that higher-qualified teachers are more likely to exchange ideas and have daily professional conversations which focus on teaching issues, curriculum development, teaching materials, new methods. However, culture could be a factor in these results. My research was conducted in a rural community in Georgia, so the results were not completely transferable.

Though passive in their resistance to change, disenchanted veteran teachers feel marginalized by enthusiastic young administrators with little memory or respect for the experiences of these teachers (Snyder, 2017). Negative focusers are those veterans who work aggressively to undermine change, thwart any improvements that may threaten them, and use their political power to keep their life easy. While Snyder's results seemed to shine a negative

light on veteran teachers, it is equally important to mention that not all who focus on the negative are veteran teachers and not all veterans resist change. Snyder's study (2017) also found that many of those who oppose a new initiative may feel more accepting once the full details have been adequately explained. In other words, a lack of complete communication on the part of leadership can sometimes be the cause of the resistance.

Teachers commonly learn via constructivism as they regularly make meaning from experience (Tettleton, 2003). This further justifies the need for professional learning communities as they provide opportunities for which those experiences can be shared. New knowledge is often constructed from these types of encounters. The concept of learning by experience also supports the adult learning strategy of utilizing hands-on learning opportunities. Teachers' feelings on the method in which material is presented can also affect their perception of PLCs.

Santagata and Guarino (2012) studied the acquisition of collaboration skills, particularly in pre-service teachers. While some may believe that current pre-service teachers would be exposed to high-quality experiences with collaborative tasks, those included in this study expressed that collaboration, such as that done during college group projects, often resulted in frustration. This could eventually lead to a communication shut down. Likewise, other similar studies imply that pre-service teachers are not being exposed to enough collaboration and self-reflection opportunities (Charner-Laird, Kirkpatrick, Szczesiul, Watson, & Gordon, 2016).

"Because they are held to the same high standards as veteran teachers and expected to produce comparable student achievement results, novice teachers desired to be valued by their colleagues and superiors," (Teague & Swan, 2013, p. 45). Collaboration with the more experienced teachers can prove very beneficial for novice teachers because it guides them in the

actual process of collaboration (Santagata & Guarino, 2012). This type of collaboration in the fieldwork setting can better prepare student teachers, so that they are more equipped to participate in PLCs when they enter the field officially.

Diao (2013) contends that the process of obtaining professional knowledge should indeed be related to the experience of the teacher. Diao later describes the levels of experience including new teachers, those with only a few (2-3) years of experience, and those with many (5 or more) years of experience. Thereby, the first group should be under the guidance of the experienced teachers, the middle group should focus on applying pedagogy, and the more veteran group should be reflective about their teaching. These sorts of roles of the participants in my study were of particular interest to me as they were sorted into similar categories based on years of experience.

Curry, Reeves, McIntyre, and Capps (2018) claim that not only are quality teachers found to influence student achievement much more than curriculums or program initiatives do, but the extent to which this occurs can actually be impacted by the credentials of the teacher. One of the specific types of credentials included in the study was level of education. Their study found that teachers with master's degrees tended to have higher achieving students in the area of reading (Curry, et al., 2018). It is also important to note that this particular study focused primarily on students' reading skills, but the findings were significant as many studies have failed to show any sort of positive correlation between teachers' degree level and student achievement. In contrast, Huang and Moon (2009) found that licensing status or level of education made very little difference in student achievement. Of course, all teachers must have the proper state licensing to teach in the classroom, but many seek additional certifications or licenses. In that same study, however, when they used years of service in that same particular grade level/subject area, they

found a significant correlation (Huang & Moon, 2009). While there have been multiple studies that aimed to find a correlation between an advanced degree and student achievement, very few have related these advanced educations with PLCs or professional perspectives. Also, many of these studies use quantitative data, namely assessment scores to determine progress or effectiveness whereas my study sought a more subjective view, teachers' perspectives.

Teachers' Attitudes and Perspectives

The attitudes, motivation, and perceptions of teachers play a significant role in the effectiveness of any kind of professional development (Wake & Mills, 2018). There is an understated importance on "the practical experience of establishing and sustaining these communities from the perspectives of teachers, learning from them about how PLCs are effective structures for engaging them in more meaningful professional collaboration toward improved teaching practices" (Kelly & Cherkowski, 2015). In fact, staff attitudes along with time constraints, teacher turnover, and other external forces are all associated with the potential to hinder the implementation of a successful professional learning community (Underwood, 2007). Every teacher, whether new or veteran, has something he or she can offer, and these talents should be utilized" (Matherson & Windle, 2017, p. 31). This is why encouraging the successful and effective use of PLCs is critical.

In Poekert's study (2012) on the implementation of school-wide initiatives, more specifically in the form of PLCs, he determined that when teachers believed in the use of PLCs, actively participated in collaborative professional development, and sought feedback from their own teaching, test scores in their content area increased. Conversely, when the teachers in this study only participated or only sought feedback, not both collectively, their lack of action

resulted in ineffective teaching and, thus, a decrease in test scores (Poekert, 2012). Although there were a few outliers, a valid relationship between these two factors was evident.

While Poekert's findings shed light on the importance of teacher participation in PLCs or other professional development opportunities, it is also important to mention that in this study, teachers were offered an external incentive (credit towards recertification). Typically, when teachers are intrinsically motivated to improve their teaching, PLCs can become even more effective. "Attitudes and knowledge are highly correlated", (Dills & Placone, 2008, p. 16). Quite simply stated, we often have a positive attitude towards tasks in which we are successful. This can alter a teacher's attitude about collaboration, and it implies that when a teacher feels less experienced or unskilled in collaboration, that teacher is less likely to respond favorably to professional learning communities. However, for those that are more enthusiastic about PLC activities such as collaborating with peers to make more decisions and problem-solve together, PLCs should more likely be considered a positive experience, contributing to the success and sustainability of PLCs (Dills & Placone, 2008). By determining the reasons behind the positive perspectives of some teachers towards PLCs, hopefully, the school in my study can now continue to encourage others and build their self-efficacy as well.

More than likely, the effectiveness of PLCs depends on certain other factors as well.

Louws, Meirink, Veen, & van Driel (2016) found that a teacher's perception of the environment in which they work can have a definite effect on their professional learning. One study (Louws et al., 2016) followed two educators, one a 34-year veteran, the other having 12 years of experience. The more experienced teacher admitted to being bitter as a result of feeling underappreciated. The other, although more open to professional learning, did not particularly agree with an initiative her school was implementing. When a teacher's personal goals fail to

coincide with those of the school, the effectiveness of the PLC may be in jeopardy. When teachers have respect for their PLC and the process in general, they have higher expectations of their students, pedagogy improves, and student achievement levels are higher (Matherson & Windle, 2017). PLCs have the ability, "... to meet the needs of teachers whose career paths are energy-draining and not rewarding" (Slick, 2002, p. 199). New teachers begin their careers enthusiastic, but the stress involved in the job can quickly change those positive feelings (Slick, 2002, p. 199). Therefore, the professional confidence and personal relationships that PLCs can manifest have the ability to retain novice teachers in the field, a goal that could also greatly benefit the school of study.

Oftentimes teachers are motivated and truly want to do what is best for their students' learning, but other tensions can impede the process and suppress the continuance of that motivation. These tensions might include a lack of student motivation, time and space to develop skills, and time for participation (Schaap, Louws, Meirink, Oolbekkink-Marchand, Van Der Wantb, Zuikera, Zwarta & Meijerc, 2018). Some tensions may involve other members of the PLC, such as unshared visions or unequal participation (Schaap et al., 2018). Some may be long-term tensions presented in the teachers' environment, meaning the PLC may not actually be the true cause of the tension. Instead, a negative perception of any newly presented task would likely be met with opposition. On the contrary, when these tensions are shared and alleviated, a PLC has a greater chance to be effective. Some of these tensions became evident through the interviews in my research and will thereby be addressed accordingly.

Sometimes the deterrent may simply be the fear of change, which is part of our human nature (Pharis et al., 2019). Teachers, like many professionals, can get established in their ways of performing day-to-day tasks and, therefore, tend to resist change (Zimmerman, 2006). Habits

and routines become the easy thing to do and they feel safer. Similarly, trying new strategies in the classroom can feel unsafe and perhaps threaten their knowledge and abilities (Zimmerman, 2006). "Change is messy, filled with ambiguities and challenges" (Wells & Feun, 2012). Therefore, when teachers feel inadequate in an unfamiliar strategy or initiative, they may resist the change. This may include PLCs as a mode of professional development or any new initiative or strategy addressed during PLCs. One way to face this obstacle is by building the teachers' self-efficacy (Zimmerman, 2006). When teachers have a higher self-efficacy, they are less likely to see change as threatening and instead, see it as a challenge they can and will meet.

Monitoring and evaluating the effectiveness of PLCs is necessary in order to increase teacher learning satisfaction (Boone, 2010). This has proven challenging in the past because no proper common system of evaluation has existed. One way to address this is to have teachers address what they feel makes professional learning effective. In a similar fashion, Tettleton's research (2003), which was conducted in very similar setting as that of my study, used surveys to conclude that teachers wanted professional development in the area of technology, confirming that teachers usually have a knowledge of the areas they should improve. In that same survey, however, approximately 75% of teachers said that they do not consistently use knowledge gained during professional development in their own classrooms. Motivation is key to the successful usage of new knowledge being transferred to the classroom (Kiemer, Groschner, Kunter, & Seidel, 2016). General satisfaction with the learning opportunities provided during professional development in the participating school was split at nearly 50% which further supports the need for teacher input in choosing topics for PLCs to discuss.

Teachers' values, goals, and visions shape the way they feel about implementing new initiatives including whether they value advancement for the whole or for themselves (Ning et

al., 2015). When a shared vision is not a reality, a PLC environment can become hostile (Boone, 2010). In particular, the level to which they value professionalism can be a major factor in how they perceive PLCs. Pearson and Moomaw describe teacher professionalism as "the movement to upgrade the status, training, and working condition of teachers" (2005, p. 39). "These requirements reflect the belief that teachers are life-long learners and promote a perceived level of professionalism in the field commensurate with professionals in other disciplines" (Wake & Mills, 2018, p. 91). Unfortunately, not all teachers realistically crave new knowledge. As previously stated, sometimes doing what one has always done is just an easy alternative. Veteran teachers in particular present unique challenges, and stereotypically the greatest resistance, for effective implementation of change. Some teachers may view PLCs as another task to check off their to-do list. This attitude is not only harmful to the PLC, but it also presents a substandard example for students. If this had been shown to be a common occurrence during my study, it would have subsequently been addressed as a whole-school issue. When professional attitudes are exhibited, PLCs have the potential to "stimulate the professional fulfillment and motivation that comes from learning and interacting with colleagues" (Hargraves & Fink, 2008, p. 233). This was, of course, the overall objective for the study.

PLCs can become much more successful when there is a clear, shared picture of what should be accomplished and teachers willingly self-reflect to foster growth (Wells & Feun, 2012). With the multitude of challenges educators face today, a lack of consistency in PLCs can simply add frustration. Therefore, agendas should be created by the teachers themselves prior to the meetings. In the case of Wells and Feun's study (2012), ambiguity and vagueness of desired outcomes resulted in a negative light being shed on PLCs which can carry over for years to come.

Professional development that is offered to teachers sometimes lacks meaning as well.

Wake and Mills (2018) point out that professional development at times can be considered
"lackluster". Like all learners, teachers will not willingly participate in tasks or discussions when
the material or deliverance is boring or repetitive. When this occurs, it has the potential to lower
motivation for further teacher professional development (Tettleton, 2013). Again, this is another
possible PLC issue that can be easily corrected.

Summary

As professional learning communities become increasingly popular, it is vital that schools consider the aspects that help maintain effectiveness within these groups. Amongst these are communication, teacher autonomy/shared leadership, reflection, and participation. Without these four factors, a PLC would not be able to function on a level that would deem beneficial. When these groups do function effectively, they have the potential to serve as professional development that is differentiated for each teacher and that provides a support system where teachers can rely on each other to better their own practices. This, in turn, provides advantages to students' success in the classroom. There is the possibility that other factors may play a role, as well, including a teacher's years of experience or level of continued education. Undoubtedly however, teachers tend to base their level on participation on their prior experiences within professional learning communities and other forms of professional development.

CHAPTER THREE: METHODOLOGY

While there have been multiple studies conducted on professional learning communities, often those studies have been quantitative in nature, primarily concentrating on the numerical results in the classrooms (i.e. student test data). Of the qualitative studies that have been performed in this area, many have questioned how teachers transfer the new information into their teaching such as Kelly's study in Canada (Kelly & Cherkowski, 2015), but they have concentrated less on the teachers' feelings about PLC practices or their motivation to participate. Some studies have incorporated qualitative techniques, such as the one conducted by Louws, Meirink, Veen, and van Driel (2016), but the focus is not on newer teachers, but those that are more experienced or nearing retirement.

Theoretical Framework

When it comes to PLCs, teachers play the most vital role. This means that teachers' perceptions and participation are key to the success of PLCs. To understand the importance of effective PLCs and their operation, one must first consider the constructivist theory, social learning theory, and the transformational leadership theory. Of equal importance are the themes that form an effective PLC as defined by Dufour and Eaker (2012). These include: a shared vision/mission, collaboration, collective inquiry, action orientation, commitment to improvement, and results orientation.

The core belief system of PLCs centers on the constructivist theory. Piaget's constructivist theory (Clark, 2018) states that learning itself is achieved by building new knowledge from one's prior knowledge and own experiences. In essence, PLCs are largely based upon teachers sharing classroom experiences with each other and building new knowledge and

making decisions for themselves from what they have learned. Bandura's social learning theory recognizes that we learn from watching our peers and their successes in order to work towards our own. We observe our peers, adapt, and try new practices on our own, and gain motivation and confidence from succeeding in that. Finally, transformational leadership involves assessing a situation to determine needs and adapting leadership practices in order to best solve problems based on the situation. All of these theories form a basis for this study and also shape a need for the six themes involved in this study.

The first of Dufour and Eaker's (2012) six themes is having a shared mission/vision. In order for all PLC members to have a shared vision for what they would accomplish, they must be willing to work closely together and learn from one another. This fits along with the social learning theory because teachers depend on each other to accomplish tasks and improve the school as a whole. Similarly, the next theme, collaboration, can also be closely linked with the social learning theory, but it can also be associated with the constructivist theory. Without teachers sharing their own personal knowledge and experiences with each other, new knowledge might not be built. The next three themes, collective inquiry, action orientation, and commitment to improvement all fit along with the transformational leadership theory as well. During PLCs, all teachers/members have a chance to become a teacher leader based on their own comfort level and personal expertise. With the transformational leadership theory, these teachers must assess to decide what improvements are needed and adapt by stepping up to help each other solve those problems. In that way, they are all acting as leaders because they all have major input in discussions and decisions. Finally, the last theme is results orientation. The results theme of PLCs can be attributed to all 3 of the mentioned theories. That is because in order to identify results, one must be reflective of the actions of themselves and others (constructivist and social

learning) and they must evaluate how to sustain those results as a group (transformational leadership).

In planning this study, I decided I wanted to learn how teachers feel their PLCs are doing in these areas of effectiveness. The school of study is very small, but the diversity in teachers' experience and education is vast. I was interested in the role their backgrounds could play in their perceptions of how effective their PLCs are. For this reason, I chose years of experience and level of certification both as independent variables for the study to see if or how they affected the outcome. The responses given to questions surrounding these perspectives became the dependent variable.

Based on Dufour and Eaker's (2012) ideas of an effective PLC, I felt that this school did a good job of planning and participating in effective professional development. However, my opinion is considered biased because I am the PLC coordinator. My role is to be very involved in the planning of PLCs, so my opinion may be swayed more positively than others. Also, my role could potentially alter responses of others if they question the anonymity of their candid thoughts and opinions. I decided that since this study was being conducted to improve PLCs in the school and eventually support more student success, it was worth studying despite those possible limitations.

Research Questions

The intent of this study was to explore the way teachers feel about the effectiveness of PLCs. I aimed to answer the following questions:

- 1. To what extent do these teachers feel that they and others have been participating in PLCs?
- 2. How effective do teachers find PLCs to be, and what defines this effectiveness?

3. How have teachers' personal levels of education and years of experience shaped their perspectives on professional learning communities?

Research Design

I conducted my research using a mixed methods approach. A mixed methods approach allows for strong comparison between perspectives obtained from both quantitative and qualitative data (Creswell, 2002). While I did gain a broad view of teachers' perspectives based on the survey, we could only know the specific reasons for those results by interviewing some of the teachers. From those who volunteered to participate, one teacher was chosen at random from each subgroup to be interviewed. I gained an in-depth look at how those particular teachers feel about PLCs and why, but without the surveys, that was simply the opinion of seven individuals, not the school as a whole. Both the quantitative and qualitative processes were necessary in order to obtain not only a picture of the perspectives of the general population of teachers (quantitative), but also to get a deeper understanding of how some of those perspectives are shaped (qualitative). Therefore, using both phases as a mixed methods approach was the logical choice of methods because it allows the researcher to draw inferences based on both phases of the study.

"Qualitative research has much to contribute to mixed methods research..." (Creswell, Shope, Plano Clark, and Green, 2006, p. 2). "...Mixed methods explanations can be driven by qualitative research, and, indeed, qualitative research has much to add to mixed methods explanations" (Creswell et.al, 2006, p. 2). This research study utilized a sequential explanatory design. That is, the second phase of the study, the interview process (qualitative) attempted to further explain the results from the first phase, the survey (quantitative) (Ivankova, Creswell, & Stick, 2009). The study sought a more in-depth explanation for the survey data results by

incorporating interviews. This method, unlike surveys, allowed for further elaboration and clarification on certain questions. "Qualitative research can help develop quantitative measures...because qualitative research is holistic... and makes context explicit in explanations" (Creswell et. al, 2006, p. 2).

The quantitative measure of the study involved general surveys being distributed to each teacher belonging to a PLC within the two-school setting. Following the collection of the surveys, the qualitative measure entailed selection of a sample population being identified with one teacher from each of the four categories of experience and one from each of the three specified levels of education. Interviews were conducted with these teachers to get a deeper understanding of their perspectives on the topic of PLCs. Collecting the quantitative data first, permitted a clearer picture of the types of questions that would be used during the interview because questions directed toward participants expanded upon the survey questions. The qualitative portion of the study was used to further explain the results that were found in the quantitative portion.

The design of my study could also have been categorized as multi-factorial or complex as the effects of more than one variable (experience and education) on one factor (perceived effectiveness of PLC) were studied. According to Rossi, Wright, and Anderson (2013), it is often difficult to choose only one sample design. My sampling also fell between the categories of within-subject and between-subject designs since some of the participants from phase I participated in phase II but not all.

Data collection took place over the course of one full school semester. During the same semester, interview transcripts were analyzed and coded for themes and all results were recorded in order to be shared with leaders or other stakeholders (ex: curriculum directors, teacher leaders,

professional learning coordinators) who make decisions about future PLCs. Each phase was analyzed separately and sequentially as the former aided in planning of the latter.

In a study conducted by Wake and Mills (2018), a similar design was adopted. In their study, Wake and Mills sought the perspectives of teachers on one particular professional development model called EdCamp. The researchers used an explanatory sequential mixed methods approach by beginning with a survey to gain a general perspective of the staff. Once that data was analyzed, interview questions were formed based on the information gained from the survey for the purpose of expanding upon the information they gathered from the survey. This study had a similar purpose, both seeking teachers' perspectives on PLC.

A study by East (2015) also centered around perspectives of the effectiveness of PLCs. This study, however, involved administrators and school improvement specialists as well. East employed a larger population for her study with over 100 respondents. Only administrators and school improvement specialists were interviewed while teachers partook in the survey. The two methods of data collection were done in sequence, similar in fashion to my own research. The quantitative (survey) results were utilized in the qualitative process, however, this was done for different reasons. In both my survey and East's, the results of a survey guided the creation of the interview questions. However, East sought a correlation/comparison between the results of two different groups (teachers vs. administration and improvement specialists). I, on the other hand, used a sample of the whole group that participated in the survey.

Finally, in a study by Gentile (2010), a similar beginning phase was used. Gentile announced, distributed, and collected surveys in much the same way as I did. His survey was also pertaining to PLCs, and his study had multiple phases. One major difference, however, is that Gentile combined both the close-ended (quantitative) and the more open-ended questions

(qualitative) all in his one survey during phase I. After change was implemented (phase II), a more formal interview process took place in phase III. Another major similarity between Gentile's study and my own is that both used the survey responses to help shape later parts of the research. While Gentile's technique worked best because he was measuring change within the PLC system, my study considered the perception of the current state of PLCs. Therefore, all three phases were not necessary.

Site/Setting

The site of the study was Small County Middle/High School, a rural Georgia middle and high school that are combined. This school system had recently placed more emphasis and importance on PLCs. For example, in the 2018-2019 school year, the Small County School system adopted an altered schedule by which students were dismissed two hours early on Wednesdays to allow for teacher collaboration via PLCs. This continued for the 2019-2020 school year. The approximately 40 teachers at this school, which encompasses grades 6-12, all participated in professional learning communities together. For this reason, it seemed more fitting to combine the two schools for this research as well. Instead of being defined by grade level, most PLCs were defined by content area although there are certain times when there has been flexibility for grade levels or other defined groups to meet. Because of the unusually small size of this district (approximately 1,000 students K-12), most of the PLCs, which may include, for example, all the science teachers for grades 6-12, still only had approximately 6 members. PLC meetings took place each Wednesday afternoon in various classrooms across the campus.

This school district, which also consists of one other school, a pre-Kindergarten-5th grade elementary school, is located in an extremely rural and economically disadvantaged community.

Small County presently has less than 8,000 total residents and the average per capita income is

just under \$9,000.00, making it one of the poorest counties, not only in Georgia, but in all of the United States of America (Georgia.gov, 2019). The unemployment rate, at nearly double the US average, is also problematic for the community.

The economic challenges this system faces only compound the need for quality education which was one major reason that they have been investing strongly in PLCs to improve teaching practices thus, improving the education system as a whole. The school system wanted to ensure that, despite a lack of monetary resources, their students receive the best education possible. Hopefully, as the system continues to move toward improvement, the students will be more likely to advance in their pursuit of a higher education, obtain well-paying jobs, and bring more industry to the area, thus, improving the economic state of the district.

Participants

The study aimed to include all certified teachers who are considered full-day teachers in the school of study. This would have been a total of 33 participants for the survey (phase I). However, 2 teachers were exempt due to one's being brand new to the school and another absent for an extended illness. This totaled 31 survey participants.

These participants were categorized by their level of certification and their years of teaching experience. One teacher from each subcategory of these classifications, 7 in total, were chosen to participate in the interview process (phase II). Because a small portion of the survey participants were the only interview participants, a hybrid of within-subject and between-subject designs of sampling were used. It is important to note that there were no teachers who held a T-7 certification, so that level was purposely left out of the study. Multiple races, both male and female genders, and all content areas and grade levels were represented although none of these categorizations were identified as a factor in the study.

Quantitative Data Collection and Sampling

For the quantitative portion of this mixed methods study, a paper copy survey was distributed to all 40 certified teachers at Small County Middle /High School as they were all members of various PLCs throughout the middle and high schools. Therefore, total population sampling was used. A similar method of sampling took place in Brucker's study (2013) where surveys of opinion were also distributed. However, in Brucker's study there were 66 schools and nearly 1,800 teachers included. The setting of the school in my study was much smaller in size/population. This meant that each participant's opinion weighed heavier on the outcome of the survey.

A survey was the preferred method of quantitative data collection for my study because it was economical and had a quick turnaround of data. The survey implemented in this study was entitled *Professional Learning Communities' Effectiveness* and was specifically designed for this study. After I spoke in person with each participant and obtained consent forms from them, I handed them a copy of the *Professional Learning Communities' Effectiveness* survey.

Completion of the survey was also encouraged during all regularly scheduled PLC meetings on the particular week of implementation. These self-administered surveys remained anonymous so that teachers felt confident in expressing their sincere opinions. Completed surveys were placed in an envelope in the front office, so again, they could remain anonymous. Teachers were asked to check their names off the list on the front of the envelope stating that they had completed and submitted their responses. A one-week deadline was set. This ensured participation from all but sustained anonymity as no surveys were read until they were all collected in the envelope. A reminder email was also sent out two days prior to the due date of the survey. I was willing to expand the official open window for data collection to two weeks as needed to obtain surveys

from those who had not yet completed them on the original deadline, but this was not necessary. Also, the office of the school is a central location that all teachers must enter daily to sign in and out of work, so by placing the envelope in this location, teachers were more likely to see it and participate due to convenience.

The survey that I used resembles one used in a study by Tettleton (2003) which looked at how teachers' attitudes might affect forms of professional development. In Tettleton's survey, participants were asked to choose a number to correspond with their response to questions about their beliefs and participation in professional development at their school. Participants chose their level of agreeance with certain statements on that topic. Likewise, my survey included a corresponding number scale to similar statements, however, I was attempting to find how often certain statements about their beliefs and participation in PLCs were true. While Tettleton used a scale of numbers 1-7 (strongly disagree to strongly agree), my survey utilized a scale of 0-3 (never occurs to always occurs). When defining how often a statement is true, these four categories of answers were sufficient as various categorical scales are often used in surveys (Creswell, 2002).

In an effort to encourage more participation, participants received full disclosure on the purpose of the study, to improve our PLCs, so that overall teacher perception was stronger. In a study conducted by Miller, Kuykendall, and Thomas (2013), the format of online surveys was utilized. At the conclusion of their data collection, the researchers only had a 20% response rate. Without knowing the specific people who had not yet participated, it would be difficult to increase the response rate after such a low turnout. Teachers are also inundated with many emails daily which may be why they sometimes overlook requests such as this. Another potential reason for the low participation rate is the length of their survey, 65 questions. This has the potential to

be very time-consuming and as I mentioned in my review of literature, teachers' time is precious and should be preserved. Therefore, I chose to use a paper format that teachers could simply and quickly mark their answers and put responses in an envelope. My survey also took much less time away from teachers' busy routines. I feel these choices increased my participation rate much higher than that used in the study by Miller et. al (2013).

In reference to time, my survey was considered cross-sectional. This means that the implementation of the survey occurred only once during the study (Creswell, 2002). There were multiple variables presented in the survey. Years of experience was included as one variable and aimed to identify the correlation between this variable and perceptions of PLC by the teachers of this category. Another variable, level of education, was presented to determine how perceptions may have been shaped by the certification level or degree of these teachers.

The survey consisted of 14 total, close-ended questions, two of which categorized the teacher by years of experience (0-5 novice, 6-15 experienced, 16-25 established veterans, 26-30 near retirees) and by level of education/certification level (T-4, T-5, T-6). For the purpose of this study, a T-7 degree, which is the terminology for an Ed. D degree, was not included as no other teachers at this school presently held this degree. The last 12 questions asked teachers to identify the frequency or extent to which certain factors of effective PLCs occur from their perspective. Each survey question formed a theme for analysis based on Dufour and Eaker's six characteristics of a PLC (2012). Each question was formulated based on the characteristics of each predetermined theme outlined by Dufour and Eaker (2012). The explanations of each of their themes was changed into a question to see if these positive behaviors were actually occurring in the PLCs based on the teacher's perception. For example, one of Dufour and Eaker's (2012) themes is collaboration. Collaboration is defined as teachers working

interdependently in order to improve results for their students, their team and/or the entire school (Dufour & Eaker, 20012). Therefore, the two survey questions that I formulated related to Dufour and Eaker's explanation of this theme were: (1) I find the collaboration aspect of PLCs beneficial to my professional practice. (2) I participate in collaboration with my colleagues during PLC meetings. Again, respondents were to identify how often they felt these statements were true in relation to their own PLC group. An explanation has been included in the analysis section. A copy of the projected survey is included as Appendix A.

Responses of frequency to the survey questions met the primary objectives of the study. In the construction of the opinion questionnaire, Gallup's "Quintamensional" technique was considered (Rossi, Wright, & Anderson, 2013). Gallup held that there are five indicators to determine a participant's opinion based on a survey. The first, knowledge, should be fairly consistent as all teachers have spent equal amounts of time in very similarly structured PLC groups. The second indicator, interest, had the potential to vary from participant to participant, as did attitude (the third). Hopefully, the topic was, and will remain, of great concern to all teachers. Finally, Gallup's last two indicators are why and strength of opinion. While a basic picture of these two may be possible on a survey, they were more accurately measured with the use of interviews in phase two of my research.

Quantitative Data Analysis

In analyzing the data from the quantitative measure, the first step was to assure that all teachers had completed and returned the survey so that the total population was represented. A spreadsheet had been provided on the envelope for participants to check their names off when they returned their survey. Names were not added to the spreadsheet unless they had signed and handed back their letter of consent. Before data was analyzed, the number of names checked, and

the number of surveys completed were counted to ensure they matched. All teachers' names had been checked off the attached list and the correct number of surveys was included (31). Next, a photocopy of each survey was made in order to easily sort the results by the two variables/categories. One copy was sorted into one of four categories based on the teacher's years of experience (question 1). The first question determined each participant's experience level and categorized them as either: a novice (0-5 years of experience), experienced (6-15 years), established veterans (16-25 years) and near retirees (26-30+ years). For the purpose of the previous literature and background included, one can assume that the term "veteran" could apply to either of the latter two groups, particularly to the last. "Novice" would most likely be used to describe those that are in the first category for the most part. The other copy of each survey was placed into one of three categories by level of education (question 2). The second question determined each participant's certification level as shown in the T-scale used by the Georgia Department of Education. In this scale, a qualified teacher is identified as either a T-4 (bachelor's degree), a T-5 (master's degree) or a T-6 (specialist's degree). As previously mentioned, there were no teachers in the population who were at a level T-7 at the time of data collection, so no separate category for T-7 was created.

Once the survey copies were divided by those factors, analysis of their individual answers to questions 3-14 was possible. Those were categorized based on Dufour and Eaker's (2012) six components of an effective PLC (shared mission/purpose, collaboration, collective inquiry, action orientation, commitment to improvement, and results orientation). There were two questions created to reflect each of these six components. Then, each question was answered based on frequency of occurrence. This was identified in numerical terms to represent the frequency. If an occurrence was "never" true, a 0 was used to represent that. If the occurrence

was "sometimes" true, it was represented by a 1, "often" by a 2, and "always" by a 3. This means, the higher the average score for each individual question (3-14), the more likely teachers perceived it to occur. Surveys were divided three different times: once by years of experience, once by level of certification, and once as a whole group. Then, individual scores for each item on the survey were added and averaged based on the number of participants in each category. This provided an average for each question. These questions were then linked together by theme, and the mean for both questions for each theme were then averaged together to provide an overall interpretation of how each subgroup felt about each particular theme. Scores were distributed by each level of teaching experience and then by each level of certification, each category representing a different population. Once those were recorded for each group, the total replies for all groups, regardless of the first two categorization questions, were also averaged and recorded to illustrate the perception of the entire teaching staff. This also showed distribution of the groups. This data organized in these ways provided a clearer picture of how each group felt and if/how the subgroup variables affected the outcome of responses.

As mentioned previously, Brucker (2013) conducted a similar study which involved the use of a similar survey. Just as in that study, I analyzed the data to determine if there was a significant difference in mean between each of the groups by finding the standard deviation for each theme by both variables. Therefore, of particular interest was the difference between each demographic group from both categories.

Upon the recording of all of the quantitative data, two charts were made for each theme, one for certification level and one for years of experience. Each showed the theme on the Y-axis and each individual stratum on the X-axis. This was comparable to one used by Boone (2010) to

show survey results in a similar study. I also prepared a descriptive analysis in an attempt to explain teachers' perceptions of PLCs.

Qualitative Data Collection and Sampling

For the qualitative portion of this mixed methods study, interviews were conducted with only seven of the teachers from various groupings, again, based on experience and certification. The survey in phase I involved whole group sampling, but sampling in phase II (qualitative) was more purposeful. The interview participants were chosen from the whole group that completed the survey. Therefore, those that were interviewed, participated in both the qualitative and the quantitative phases of this study. No regard for gender or race was shown during the selection process.

When I asked teachers for their participation and obtained their consent forms, I also went ahead and discussed the interview process. All but one teacher, who was overwhelmed by the multiple positions she was serving, expressed that they would be fine with being interviewed if necessary. One participant from each of the categories (each of the four levels of experience and the three of certification level) was chosen to be interviewed. It is important to note that the sampling may not be considered proportional due to the variations in number of possible participants in each group. For example, there was a larger group of teachers with T-4 certification and only a few with T-6 certification. Once these participants were chosen, I then went to each individually to make sure they were still willing to be interviewed.

I utilized stratified sampling in which the total population was divided into subgroups or strata based on similar characteristics (Kothari, 2004). In the case of my study, this included the four subgroups of experience and the three subgroups of certification. Each subgroup became a stratum from which to pull participants.

If there were no volunteers from each and every stratum, I was prepared to then send out an email to only those that fit the criteria of that particular group. For example, if there were no volunteers from the T-5 (master's degree) stratum, I would then send an email out to all teachers who hold a master's degree in their field to ask, on a more personal note, for their assistance in my study. Finding cooperative participants from this school was never a true concern as almost all agreed that they would participate in the interview process if needed when they signed the consent form in my presence.

Interviews were arranged during the participants' planning time over the course of a two-week period. These interviews usually took place in the teachers' classrooms so that they could remain private. The only exception was one teacher who shared a classroom. For that interview, we moved to my empty classroom. Each interview took approximately 15 minutes. Interview questions allotted for more in-depth responses to the questions from the survey. For example, instead of simply asking a participant to rate an occurrence such as participation in their PLC, the interviewee may have been asked to explain what participation looks like in their PLC. Instead of asking how often the participant utilizes material from PLCs, I may have asked them to explain how they use the new knowledge in their classroom.

Before beginning the interviews, I asked each participant for permission to record our conversation for my records. I still took notes with the understanding that if I missed a detail, I would have the audio to refer to. I began by reminding them of the purpose of my study and that their names would not be specified when any information is shared with administration. Then, I proceeded with the main "why" and "how" questions being careful not to lead them. Each conversation veered in slightly different directions because each participant has unique experiences in their classroom and with PLCs. Creswell (2002) defines true qualitative

interviews as somewhat unstructured. He also adds that these are typically made up of just a few open-ended questions that should elicit participants' views on a topic (Creswell, 2002). My interviews (Appendix B) encompassed all of these characteristics. While the initial questions were identical among interviewees, created and organized based on Dufour and Eaker's (2012) six components of an effective PLC, there was leeway for flexibility based on the responses given (Kothari, 2004). In order to determine my next question, I had to listen to what my participant was saying and do a preliminary form of internal analysis. Once I felt I had sufficient information from each participant, I thanked them and explained that I should have more information to share with them soon.

Qualitative Data Analysis

Interviews were recorded, transcribed, and coded to find/form themes or trends in thought. To analyze my data, I decided to use a thematic analysis similar to that of Boone (2010). In Boone's study, the key characteristics of a successful PLC as defined by Dufour and Eaker (2012) were used as themes for analysis. Those include: (1) a shared mission and purpose, (2) collaboration, (3) collective inquiry, (4) action orientation, (5) commitment to improvement, (6) results orientation. In other words, the themes that guide the interview questioning were predetermined. Each one of these themes was represented by a new overarching question in the interview (Appendix B) aiding in the analysis process. The actions that define these themes as determined Eaker (2012) were used to create the original line of questioning for the survey. Then, the survey questions were each changed into a "why" or "how" type of interview question to prompt more in-depth explanation. As necessary, each of these six themes was then sorted by positive and negative responses. It is important to mention that the potential for additional themes to emerge during questioning remained a possibility. Findings were coded based on each

question from the interview, sorted by positive and negative responses. The data was also organized by each interviewee to show the positive and negative comments of each participant for each respective question. Once findings were hand coded, an analysis could be provided for each individual theme using a similar technique to that in the quantitative analysis (categories). Then, findings were compared to those of the quantitative analysis (survey) for consistency and to draw more informed conclusions on the possible effects that these teachers' levels of experience and education have on their perceptions of PLCs. To do this, I recorded coding for each individual participant representing each group to look for consistency with the survey data from that same group. I also created a narrative for each theme and one for each stratum based on the qualitative findings. Again, this was similar to the method used by Boone in a comparable study. I looked at each theme very carefully to analyze not only the number of positive and negative responses, but the quality as well. The negative comments being much less frequent, they tended to be more noticeable. Finally, conclusions were drawn based on these similarities such as what veteran teachers think of collaboration or the certification group that utilizes material learned in PLCs more in their classes. A narrative for each theme was created noting certain participants and their responses that were notable.

Trustworthiness

As previously stated, the surveys used in the beginning of this study remained anonymous to promote more candid responses. On the contrary, when conducting interviews, it became more difficult to protect the identity of the participant, but every effort to do so was taken in this study. If the participant(s) responded inconsistently between the survey and the interview, the validity of the study could be called into question.

Another way of ensuring the trustworthiness of the study was to recognize and cast aside any biases that I, the researcher, may have had prior to the interview process. While I currently serve as the PLC coordinator for the school, my primary focus has always been to improve the PLCs. Therefore, I was seeking complete honesty from the participants. I also vowed not to use my position as an area to judge the responses of the participants.

This study simply focused on a small, rural, impoverished school in South Georgia with its own set of limitations and setbacks. The findings may not be as transferable to other schools, especially those that do not share these traits. In addition, PLCs were conducted differently at times (i.e. members, resources, nature of meetings, material planning, etc.) which would greatly affect the teachers' perspectives of them.

While the study has great potential to provide insight into what motivates teachers to participate and buy-in to PLCs in this school, in order for it to remain valid over time, the study would need to be replicated. This is due to teacher turnover and the variation of PLC factors from year to year (i.e. when and where meetings occur, who the facilitator is). Fortunately, the study does have the benefit of being easily replicated from year to year with different participants.

Triangulation was used by implementing multiple methods of research to obtain information about this one topic (Creswell, 2002). The triangulation in my study only used two methods, but the fact that there was more than one method, to some extent, still added to the reliability of the study.

Ethical Considerations

The following decalogue was adhered to in addressing ethical considerations throughout the research study.

- I, as the researcher, have met the requirements for Collaborative Institutional Training
 Initiative (Citi Program) certification to ensure that I maintained an ethical stance
 throughout the study.
- 2. Use of human subjects was required in this study. However, there was no physical threat/risk to the subjects.
- 3. Subjects were notified of the intent of this research in its entirety before they committed to participating.
- 4. As confidentiality was practiced, the subjects had no other threats such as job security or fear of offending anyone. Participants could choose not to mention names of others as they participated if it made them feel more comfortable.
- 5. Participants were capable of opting out of the study at any time during the research period.
- 6. Final data will be shared publicly. However, any data that may compromise the confidentiality of a participant, such as names associated with negative experiences, would only be reported in the form of pseudonyms or by representing a generalized population.
- All information shared has/will be used with the sole purpose of the study in mind, maintaining and increasing the effectiveness of the PLCs.
- No parental consent was required as there were no minor participants used within this study.
- 9. Participants were not required to answer every question during the survey or the interview. Any questions that made them feel uncomfortable could be left undiscussed.

10. Data was not manipulated to suit any certain need. All data was/will be reported accurately as provided by the participants.

Advantages and Limitations

There were definite advantages of using the mixed method approach in this study. While the quantitative research served to provide a more generalized overview of the perceptions of the teaching staff, the interview process allowed the researcher to get a clearer idea of the reasoning behind this data. Interviews helped to answer the "why" of the findings, in other words. They provided an outlet for the participants to explain their own experiences when necessary as prior occurrences have been proven to shape present and future participation in these professional development opportunities. Individually, each method of data collection, both the quantitative (survey) and the qualitative (interviews), had their own limitations. However, when used in unison and rigorously performed, the validity of the results was strengthened (Creswell, 2002). By using explanatory sequential mixed methods approach, the data collection process was not as overwhelming in that the qualitative and quantitative data collections were not conducted simultaneously.

Another advantage to this study has been its two-factor classification. One could conduct the study with only the consideration of only one variable, years of experience or the level of education (not both), however, the methodology chosen here allowed for a broader determination of viewpoints. The results have given us more information than only using one of these variables would have given. Although each variable could be handled separately, determining both factors was of the greatest benefit to this particular school.

One limitation of the study was that it only represented the teacher population at SCM/HS. However, paraprofessionals continue to be active members of the PLC groups. This

decision was due to the ability to generalize and categorize teachers' certification levels/levels of education. Paraprofessionals also have a somewhat different experience in PLCs because of their role in the classroom. Ideally speaking, a more informed analysis or perceptions could and should include the responses of all members, including paraprofessionals. One concern would be that the paraprofessionals may not feel their opinions are of equal importance if they were not represented in the study, but logistics rule that out to some extent. Likewise, the level of education variable could be deemed as inconsiderate toward those without degrees at all which is the case with most of the paraprofessionals in this school. In order to be accommodating to paraprofessionals, a similar survey or only questions three through six could be administered at a later date. That data can then be added to the general teacher data if warranted.

Another limitation to using a survey or questionnaire, according to Rossi, Wright, and Anderson (2013), is that the participants may read and interpret the questions differently. This means, that they may not make the same understanding from the same question.

The number of participants in this study could have possibly been considered a limitation. A detailed comparison could best be made if an individual from each combination of categories could be used, not just one per category without consideration of the other. However, that would have been nearly impossible due to the nature of the grouping (i.e. not many novices have a T-6 degree already) and the participant population at the small school. One could, in other schools, also include T-7 degrees as a subgroup, which again there were none.

Role of Researcher and Positionality

It is highly possible that the responses that were given to both the surveys and the interviews were subject to bias. This could be due to my personal role as a PLC coordinator for my school. Despite the fact that the participants were reminded multiple times of the anonymity

of the study, some may have felt inclined to respond in a more favorable manner than they actually feel. Another factor in this possible bias is the small size of the school system and participant pool. There are so few teachers in this system, that sometimes teachers may feel it is somewhat easy to determine whose responses belong to who. In a system of this size, where everyone knows everyone by name, it is also likely that participants may have not wanted to offend people they are close to, in this case, me as the researcher.

Likewise, my feelings towards the topic in general, are possibly more positive and less critical given my role in the PLCs of this school. There are obvious biases based on my position that I have acknowledged prior to the collection of data. For this reason, I have also excluded myself from participating in the research as well.

Conclusion

There were several practices within this study that have prepared me to be a better, more effective teacher leader. First, the ability to identify needs within my school and then design and conduct research to improve the issue is a skill that all teacher leaders should possess. Teacher leaders are observant of the school setting and stay informed on school data in order to make these decisions of need. They are able to enact a plan to study and improve upon the issue or, at the very least, inform administration of their ideas for improvement in a tactful manner. The process of developing and conducting this study has provided me with practice in this area. My study being comprised of mixed methods also provided me with experience in both qualitative and quantitative forms of methodology.

Perhaps even more importantly, teacher leaders show genuine concern about constant improvement while also recognizing the strengths of the school/staff. I have always been concerned with helping my school improve, but as the PLC coordinator for my school, the topic

of my study involved me to an even greater extent. I do, however, recognize that we have so many wonderful staff members who participate in and have a healthy attitude toward PLCs. I realize we can take advantage of this by determining what makes PLCs effective to these teachers as well, so that we can conclude how to try to transfer this positivity to the school as a whole. That was the general foundation behind the crafting of this study.

When conducting research in this manner, teacher leaders, who are often still active in the classroom on a daily basis, are generally understanding of the shortage of time that teachers are faced with. This results in an importance placed on the protection of teacher time during the study. For this reason, I chose to design my survey as simply as possible by using closed questioning while still providing me with the data I was seeking. I also made every effort to keep the interviews around 15-20 minutes so that teachers' planning time was not completely jeopardized. What is more, one of the purposes of the study was to ensure that PLC time continues to be spent as effectively as possible.

As a teacher leader, I did not partake in this study single-handedly. While I was researching, collecting data, and analyzing results alone, I wanted the teachers/participants to realize that they were also an active and vital piece of it. While I did offer my thoughts on the matter as an active participant, I had to also remember that an effective teacher leader does not dominate all plans but invokes the help of others when necessary. Even in the selection process of this study, I sought input from my co-workers because I value their opinions. A reliable teacher leader presents the notion that everyone's opinions are essential. That was another goal of this study, to demonstrate that teachers' opinions and feelings are very much valued and adhered to.

Finally, a teacher leader not only uses knowledge to their benefit but shares it with all stakeholders. For this purpose, the results of this study were/will be disclosed with school and system leaders as well as the entire staff. The results were/will be communicated tactfully so as not to offend any particular group represented in the study. Instead, it has been presented in terms of what participants feel does or does not make the PLCs effective. That has a strong potential to open conversation to how we can improve our PLCs. In addition, the very act of presenting the findings can be considered an asset for teacher leaders. Teacher leaders are often called upon to communicate information with other groups of teachers. While many people outside of the education field may reason that presenting in front of one's peers is the equivalent to teaching in front of a class of students, the two are vastly unique. Oftentimes, we may fear judgment by our peers more so than children, resulting in nervousness. Presenting my findings has provided me with practice in this area as well.

CHAPTER FOUR: RESULTS

Introduction

During the quantitative portion of this study, a general overview of teachers' perceptions about their PLCs was obtained via a survey. The survey served to answer the following research questions: To what extent do these teachers participate in PLCs, and how effective do those teachers perceive their PLC groups to be? During the qualitative portion, focus was geared towards finding the reasoning behind the responses to the survey. In particular, I aimed to find out how they define the term "effective" and whether or not their own personal background, including their levels of education and their years of experience influenced these feelings toward effectiveness. In this chapter, I will elaborate on my findings of both portions of the study in order to form a deeper understanding of these teachers' views.

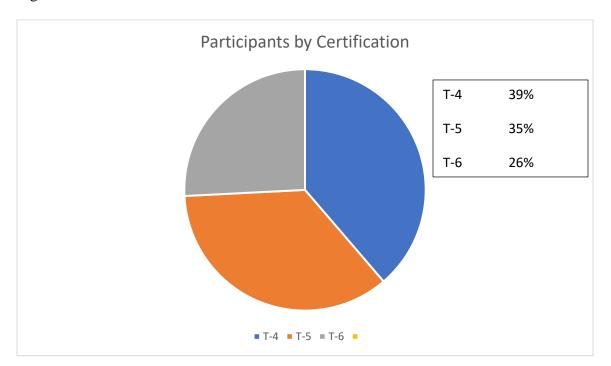
Demographics/Participants

After submitting my proposal and being approved by the IRB, I obtained permission from my superintendent/board to begin my research. Within the middle/high school in the study, there are 33 certified teachers, excluding myself. Of those 33, 31 participated in the survey and two did not. One of the those two was a replacement for a teacher who resigned suddenly, and this particular teacher had been retired since long before PLCs existed in the system. Therefore, she was not able to answer the questions associated with the study. The other teacher was on leave due to an illness throughout the time frame of the study. Of the survey respondents, there were nine with 0-5 years of teaching experience, six with 6-15 years, nine with 16-25 years, and seven with 26-30 years. Therefore, while there is slight symmetry amongst the experience levels, the majority lies within the 0-5 and 16-25 year groups. When respondents are considered by their

level of certification/education level, there are 12 with a T-4 degree/certification level, 11 with a T-5, and 8 with a T-6. There are currently no teachers at this particular school holding a level T-7 certification. Therefore, that level of certification was blended with the T-6 category. Although it was not a defining factor, there were 13 males and 18 females who responded to the survey. The African American, Caucasian, and Hispanic races were represented within the pool of participants. Four of the participants were new to the school system this year. All PLC groups within the middle/high school received multi-member representation for the survey as well. Procedures for anonymity throughout my study are described at length in chapter 3. Of the 31 survey participants, all but one said that they would consent to be interviewed as well. I chose one from each subgroup (years of experience and level of certification), seven in total. I was able to attain one per group based on the number of volunteers. All seven interview participants also participated in the quantitative study earlier, so they were aware of the study's purpose prior to volunteering. This sampling is a hybrid of within-subject and between-subject designs since a portion, but not all, of the participants from phase I also participated in phase II. Of those seven participants, there were four from the various levels of experience and three from the different certification levels. The representative from the YE 0-5 group (participant 4) is a male teacher with only two years of experience who teaches at the high school level and currently holds a T-4 degree. Participant 5 from the YE 6-15 group is in her 14th year, and she also teaches at the high school level. This is her first year working in this school system, and she holds a T-6 degree. The YE 16-25 participant, who currently holds a T-4 certification, is a middle school teacher in her 18th year. Participant 6 (YE18) has worked in this system almost all of her career. Finally, the YE 26-30 representative, participant 7, is a female teacher who holds a T-4 certification and has taught at both the middle and high school levels, although she is currently teaching middle

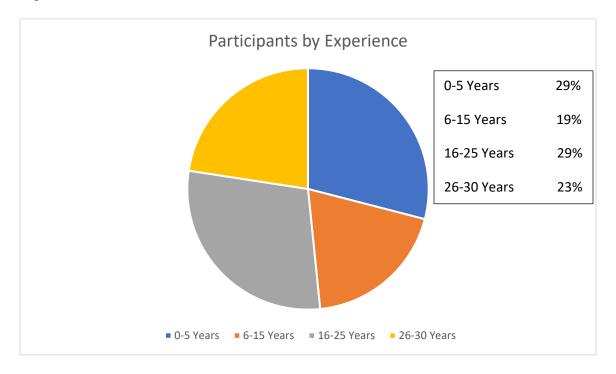
school. Participant 7 has been teaching for 26 years, all of which have been in this school system. Of the three certification levels represented, participant 1 has also taught at the middle and high school levels (18 years), currently teaches at the middle school level, and in addition to her T-4 degree, she has various certifications such as foreign languages. The T-5 teacher, participant 2, who has 13 years of experience, is currently at the middle school level. His bachelor's and master's degrees are in education-related fields. Finally, the T-6 participant, participant 3, (24 years of experience) also has experience at many grade levels including college and various school systems. Her degrees are in various education-related fields and her specialist is in leadership.

Figure 1



This chart shows the percentage of survey respondents from each certification category.

Figure 2



This chart shows the percentage of survey respondents from each years of experience category.

Figure 3

	Certification	Years of Experience	Gender	Subject/Level		
Participant 1 (T4)	T-4	18	Female	Reading/ MS		
Participant 2 (T5)	T-5	13	Male	Elective/MS		
Participant 3 (T6)	T-6	24	Female	Math/MS		
Participant 4 (YE2)	T-4	2	Male	ELA/HS		
Participant 5 (YE14)	T-6	14	Female	ELA/HS		
Participant 6 (YE18)	T-4	18	Female	Elective/MS		
Participant 7 (YE26)	T-4	26	Female	Science/MS		

This table shows the demographic information for each interview participant.

Findings

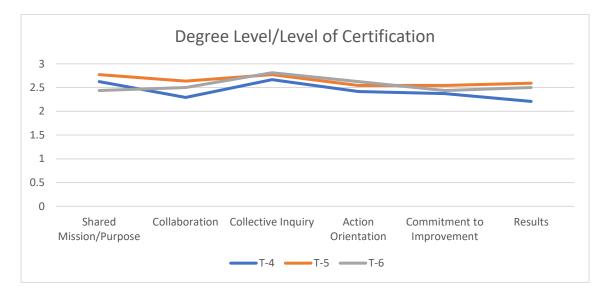
In order for educational PLCs to achieve and maintain success, Dufour and Eaker (2012) explain that there are six themes that must exist individually. Questions for both the survey and the interviews in this study are organized by these six themes: Shared mission/purpose, collaboration, collective inquiry, action orientation, commitment to improvement, and results orientation. For the purpose of reporting the findings, results from both the surveys and the interviews have been categorized by these six themes. I have also categorized those results by phase I (survey) and phase II (interview) as the findings for the first consisted of all 31 participants, and the findings from phase II only included those participants that were interviewed individually.

As stated in chapter 3, I employed a tape recorder for these interviews to ensure accuracy between their responses and my notes. All interview participants were aware of the tape recorder usage before the interview began, and I assured them that the tapes were for my own use and would not be shared. The tapes will be secured and destroyed in three years as outlined by the IRB. All interviews lasted from approximately 7 minutes to 21 minutes depending on how thorough the responses were. I transcribed each interview soon after their completion.

When reporting the findings of the survey, it is essential to note that the score (0-3) represented how frequently teachers felt that certain positive attributes of an effective PLC occurred within their own group (0=Never, 1=Sometimes, 2=Often, and 3=Always). When reporting on level of certification, there are 3 groups identified as they are by the Georgia Professional Standards Commission (GaPSC, n.d.): T-4 (bachelor's degree), T-5 (master's degree) and T-6/T-7 (specialist's/doctorate degree). To report on years of experience, there are

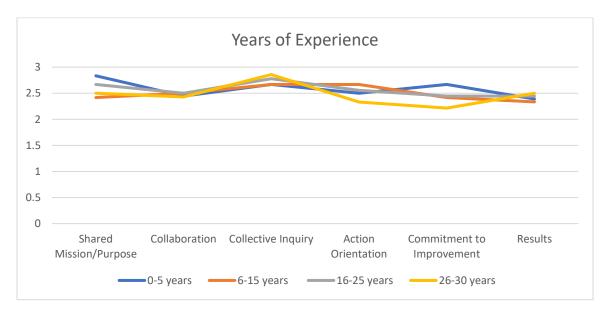
four groups including: 0-5 years, 6-15 years, 16-25 years, and 26-30 years. Throughout the findings, the years of experience a participant holds may be abbreviated as YE.

Figure 4



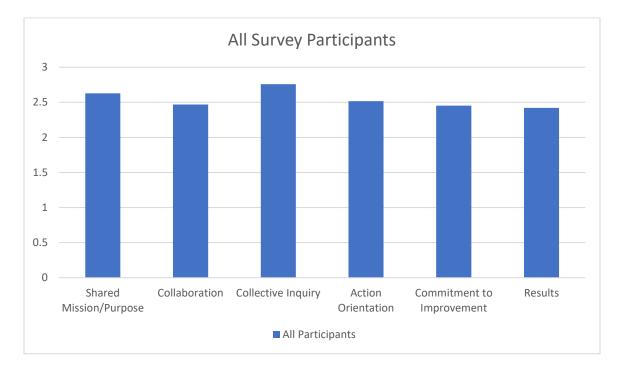
This chart shows the survey responses from each certification group categorized by the themes of an effective PLC.

Figure 5



This chart shows the survey responses from each years of experience group categorized by the themes of an effective PLC.

Figure 6



This chart indicates the overall averages for each theme of an effective PLC as reported by the survey.

Figure 7

Table showing mean responses for each theme by variable category

Variables	Years of Experience				Certification Level				
	0-5	6-15	16-25	26-30	SD	T-4	T-5	T-6	SD
Shared Mission	2.834	2.417	2.667	2.5	σ0.16	2.625	2.773	2.438	σ0.137
Collaboration	2.445	2.5	2.5	2.429	σ0.032	2.292	2.637	2.5	$\sigma 0.142$
Collective Inquiry	2.667	2.667	2.778	2.857	$\sigma 0.08$	2.667	2.773	2.813	$\sigma 0.062$
Action Orientation	2.5	2.667	2.556	2.33	σ0.122	2.417	2.546	2.625	$\sigma 0.086$
Commit. To Improvement	2.667	2.417	2.445	2.215	σ0.16	2.375	2.545	2.438	$\sigma 0.070$
Results	2.389	2.334	2.445	2.5	$\sigma 0.062$	2.209	2.591	2.5	σ0.163

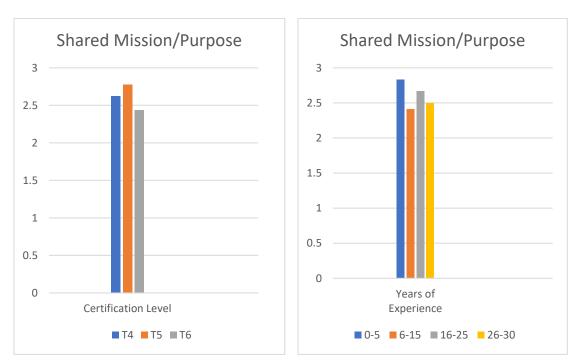
Shared Mission/Purpose Theme

The first PLC theme that was explored involved having a shared mission and purpose.

That means that members of the PLC have a common awareness and appreciation for the

priorities and goals that the group has mutually adopted (Dufour and Eaker, 2012). When this shared mission is evident, every member considers this goal and strives to achieve it during each meeting. The questions on the survey (#3 and #4) and interview for this theme indicate that the PLC members should maintain education as their top priority and keep their purpose at the forefront of each meeting both when planning and participating. In an ideal setting, that of an effective PLC environment, all members would always focus on their shared mission and purpose to ensure the success of the group as a whole.

Figures 8 & 9



These charts show average responses for the theme of shared mission/purpose when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the shared mission/purpose theme:

My PLC group truly puts our students' education first in importance.

When I meet with my PLC, we seem to keep our purpose in mind.

The overall average for this first theme was a 2.629, meaning most participants felt this category's effective qualities existed or occurred "always". When the variable of experience was considered, those with the fewest years of experience (YE 0-5) actually had the highest average in this area. The group with the lowest average here was the group YE 6-15. When certification/education level was reflected, T-5 was the highest, and T-6 was actually the lowest mean. Each of the averages in this phase, however, throughout all groups remained consistently well above a 2. Again, a score of 2 means that the participant perceives the actions in the area of this theme, shared mission/purpose, to occur often. The standard deviation for the shared mission theme in reference to the experience variable was σ0.16, which in relation to the variables of other themes, was relatively high. In reference to certification levels, the standard deviation was σ0.137. This was on the lower end of standard deviation when comparing it to the other themes.

Phase II. Results in the interviews mirrored those from the survey in that all participants seemed to feel very favorably about their PLC groups having a shared mission/vision. They each spoke positively about how their group has a singular focus and all members seem to have the desire to improve. Participant 4 stated that he sees great participation which is needed to meet our goals. He does feel, however, that his group sees more participation within the meetings and that when responsibilities are asked of group members beyond the meeting time, participation may dwindle slightly. He attributes this to the load of responsibilities and that teachers face daily, though. He does not feel that this is solely a reflection of noncommitment to the vision. While in the survey, the YE 6-15 group seemed to feel less favorable as the other groups, during the interviews, participant 5 was very complimentary of her PLC group's common vision. She stated that because we use PLC time to set individual goals, as well, it helps everyone in the PLC to keep the vision of improvement in mind. Participant 2 felt that his group members all truly

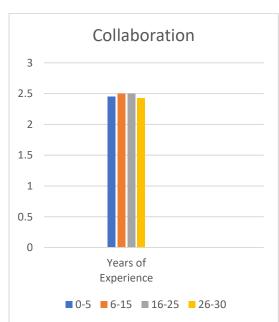
wanted to do what was best for their students and had a common understanding of how to go about that. He added that members "...keep a positive attitude and are pretty optimistic about what we can do. I think that is what really frames that shared vision...when everyone agrees to think positively on the changes we can make."

Collaboration Theme

Collaboration is the second key theme to an effective PLC. To clarify how important this is to PLCs, one could consider the "C" in PLC which stands for community. In order for this group, or community, to function effectively and remain sustainable, all members must be willing and open to collaboration. As previously stated, sometimes teachers seemingly tend to become isolated, but with the onset of PLCs, teachers are expected to communicate suggestions and experiences to learn from one other (Dufour and Eaker, 2012). Questions (#5 and #6 on the survey) about collaboration refer to the level of participation within the PLC.

Figures 10 & 11





These charts show average responses for the theme of collaboration when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the collaboration theme:

I find the collaboration aspect of PLCs beneficial to my professional practice.

I participate in collaboration with my colleagues during PLC meetings.

The overall average for collaboration, containing all 31 participants' surveys, was a 2.468. While this happens to be slightly lower than the previous theme, it is still beyond the "often" category. In years of experience, averages for this theme were extremely comparable. All YE groups averaged between a 2.4 and a 2.5. In certification levels, there was more variation involving this theme. The T-5 group claimed that these positive attributes of collaboration occurred much more often (2.637) than the T-4 group (2.292), with the T-6 group resting in the middle. The standard deviation for YE groups was σ0.032 here. This was the lowest deviation of any of the themes. Standard deviation for certification groups was higher at σ0.142.

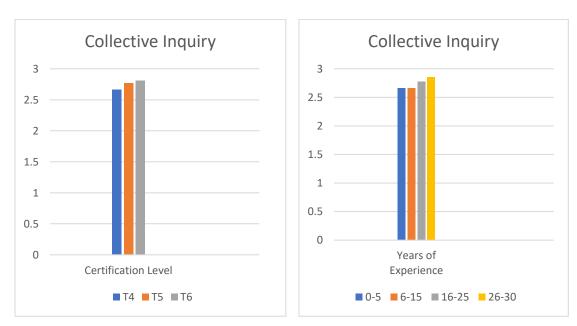
Phase II. When asked about collaboration, Participant 4 discussed support. Being a new teacher can be challenging, but he says he relies on the aid he receives from his fellow PLC members to provide him with guidance. All of the other participants mentioned that their group has great collaboration where they bounce ideas off of each other and share their experiences. Participant 6 said that one thing in particular that she enjoys about collaborating with her PLC group is that they can discuss how to reach their students since, due to the small school setting, the students she has now will have another teacher from her same PLC next year. They can offer suggestions on how to reach specific students. Participant 7 also said, "I think what I like most is that we all come from different levels. Like, I teach middle school, but some of the others in my group are high school, so we all have different things we can bring to the table, different experiences. I think that makes our collaboration even stronger." Participant 1 said that she really admires the fact that everyone in her PLC feels free to be candid without fear of scrutiny or

judgement. Participants 2 and 3 both mentioned some of the great ideas that they have gotten from their peers in her PLC that they have used in her class. Overall, the feedback on the topic of collaboration was positive. However, when all six themes of an effective PLC are compared per the survey results, collaboration was not one of the higher scores overall.

Collective Inquiry Theme

Without collaboration, it would not be possible for the third theme to exist, collective inquiry. As the name implies, this entails teachers having equal authority to answer questions or resolve matters that arise and delve into new strategies (Dufour and Eaker, 2012). In order to attain a better grasp for this theme, the survey (#7 and #8) and interview ask the participants about being honest about their faults and flaws and cooperating to obtain the solution that best fits the scenario for all stakeholders. This may require a sort of normed process by which that specific PLC uses to reach these solutions. This would serve as a best practice of sorts.

Figures 12 & 13



These charts show average responses for the theme of collective inquiry when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the collective inquiry theme:

When there is a problem in the school, my PLC works well together to try to solve it.

My group is open and honest about our needs.

For the third theme, collective inquiry, the whole staff generally ranked this very high with an average of 2.758. That is the greatest overall average amongst all themes. When grouping by YE and/or certification, all groupings retained a 2.667 or higher. Individually, the YE 26-30 rated this theme the highest with both the YE 0-5 and YE 6-15 groups having the exact same lowest averages (2.667). While this score is definitely the lowest of the YE groups, it is essential to recognize that this is still in close proximity to the "always occurring" range, meaning this is still a favorable score. The T-6 group considered this theme to be stronger for the school (2.813) than did the other two groups. According to the survey data between the subgroups, there is a correlation between experience and certification level on the topic of collective inquiry: the more years of experience and the higher the certification level, the more positively the subgroup feels about this theme. The years of experience groups had a standard deviation of σ0.08 while the certification group's deviation was σ0.062. This was the lowest standard deviation for the certification groups.

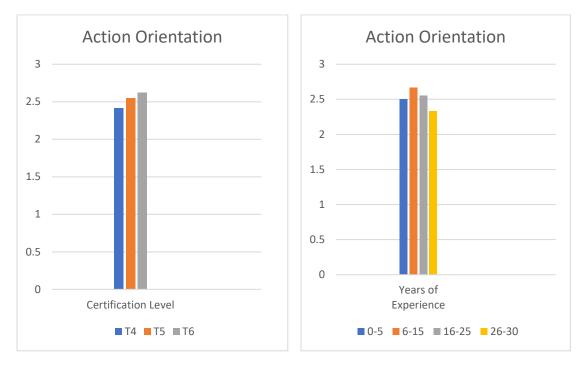
Phase II. Most interview participants spoke highly of the manner in which their PLC works together to solve issues and make situations better. Most mentioned that they have an informal way of just bouncing ideas off each other and reaching a consensus. Participant 6 added that they had not had a single discrepancy to try to overcome. Participant 4 liked the fact that sometimes these issues that arise can be addressed even outside of the PLC group meetings. He feels comfortable going to any of his groupmates and having open conversations to address issues. Participant 7 said that at first she was a little skeptical about her group working together

effectively, but over the course of the school year, she has grown to trust in the process that she and her PLC have built together. They seem to be very capable of working as a team now. While T-4 was partially complimentary on this theme, she did mention that the problem solving would be better suited for her if it were done as grade-levels instead of content areas. She sometimes becomes frustrated when a meeting may involve more griping. Her policy is always to have a possible solution anytime you offer a complaint. Interview feedback seemed to mirror the survey data somewhat in that the only comments from the interviews that were not clearly positive were those of the T-4 group. In survey data, T-4 had one of the lower scores for the theme of collective inquiry.

Action Orientation Theme

Teachers both exploring the new initiatives and experimenting with them in their classrooms correspond with the fourth theme, action orientation. Without action, the collaboration is simply conversation (Dufour and Eaker, 2012). Another crucial aspect of this is engagement. Therefore, participants are questioned (#9 and #10 on survey) about the level of engagement during meetings of both themselves and the other members and how their invaluable meeting time is spent. An effective PLC has members that put their solutions or practices into action as a form or trial and error system.

Figures 14 & 15



These charts show average responses for the theme of action orientation when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the action orientation theme:

I am engaged during PLC meetings and discussions.

All of my group members are engaged during PLCs.

The overall score for this theme was a 2.516. Again, this includes all 31 participants. The YE 26-30 group averaged a 2.33 on the theme of action orientation. The other YE groups all rated it at a 2.5 or higher. The T-6 group perceived this as a stronger category with an average of 2.625, while the T-4 group scored it the lowest at a 2.417. Standard deviation for the experience variable was $\sigma 0.122$. For the certification variable, deviation was $\sigma 0.0856$.

Phase II. All participants mentioned that they believe their groups use their time efficiently during meetings. Participant 4 did say that they have time to communicate more informally at times as well which is nice. It builds community and forms trusting relationships.

In order to do this, however, he added that his group makes sure they have covered the topics at hand first. In other words, they discuss business first, then make time to socialize as a group when possible. Participant 2 felt that his group always uses its time wisely because they respect how valuable each other's time actually is. He said, "I mean, we don't rush through, really, what we are covering that day, but we also don't waste time. We all feel like there's never enough time to get everything done, so we stick to what we need to accomplish first." In that way, they have found a balance of sorts that works for them.

Commitment to Improvement Theme

In order for PLCs to remain successful, members need to be dedicated to progression.

One component of this theme is a mindset that all teachers continuously have room to improve at their craft. Reflection is a vital element of this as well. In order to succeed in this way, teachers are expected to devote adequate time aggregating and analyzing student data and devising a procedure to implement and reflect upon new initiatives (Dufour and Eaker, 2012), so the participants are asked (#11 and #12 on survey) about these actions. In a truly effective PLC, group members should constantly strive to find ways to grow from their experiences and make necessary changes along the way.

Figures 16 & 17



These charts show average responses for the theme of commitment to improvement when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the commitment to improvement theme:

My PLC spends adequate time discussing student data.

There is a process by which we present, try, and analyze new techniques through our PLC.

The whole group average for the theme of commitment to improvement was a 2.452. Indeed, this was on the lower end for overall averages. The YE 26-30 group had only an average of 2.215 which is one of the lowest averages throughout all categories. The YE 0-5 group rated this theme an average of 2.667. All certification levels were within close range of each other with approximately a 0.1 difference for each group, T-5 (2.545) being the highest of the three. Standard deviation was σ 0.16 for the years of experience variable and σ 0.07 for the certification level variable. This standard deviation was one of the lowest for the certification groups.

Phase II. All participants reported to be using different material from PLC meetings in their classroom in various ways. Participant 6 said that she uses technology quite a bit in her class and her group discusses this topic in their meetings often. Their PL here comes in the form of helping each other via their experience. Participants 5 and 7 both mentioned the ways they use differentiation in their classrooms. Differentiation has been a major needs area that has been covered in PLC's all year. Participant 5 also said that she really appreciates the fact that PL material is based on teacher survey results. She found that the survey results at the beginning of the school year really fit well with her own personal needs. Participants 1 and 4 both added, though, that there are times in which they are not as sure that all of the material they cover in whole-group professional learning is as useful to their own classrooms. Participant 4 said, "At first, I thought 'Oh, this isn't going to help me at all", but then I started recognizing ways I could adapt the material, at times, to help me in certain situations in my class. I think that is the key, really. Find a way to make the most of what you are learning and make it fit you and your content. Sometimes you can and sometimes you can't, you know?" Participant 4 is learning how to adapt material and has learned the lesson that sometimes the material is useful and sometimes it is not. He is learning to decipher which is which along the way. While the survey results clearly show that beginning teachers, YE 0-5, feel more positively about the commitment to improvement than the other certification levels, the T-4 participant did not seem to be as favorable to this theme.

Results Orientation Theme

The sixth and final theme for effective PLCs involves results. Teachers should be capable of evaluating themselves and, at times, their peers and reflecting on those practices. This may take place formally or informally. When teachers are reflecting, they are considering various

factors, depending on the objective of the lesson or the skill that they are focusing on improving. Examining data can also be included in the commitment to improve. Determining the effects of new techniques and practices and employing that to guide further actions are components of the results orientation theme (Dufour and Eaker, 2012). For this theme, participants are asked (#13 and #14 on survey) about the extent to which they transfer newfound knowledge into their own classroom and what they perceive the results to be.

Figures 18 & 19



These charts show average responses for the theme of results orientation when participants are categorized by both their certification level and their years of experience.

Phase I. Survey Questions related to the results orientation theme:

When using information learned in my PLC, I can see improvement in my students' learning.

I use the content that I am exposed to during PLCs, whether from my colleagues or from other professional development, to improve my classroom teaching.

Of all whole total averages from the survey, this theme, results orientation, had the lowest at a 2.42. Despite being the lowest, it is only fair to mention that the difference between this theme and that of collaboration and commitment to improvement was very marginal. All YE groups rated this theme a 2.5 average or lower, meaning most of them fell much closer to the "often occurring" category than the "always". Both the YE 0-5 (2.389) and the YE 6-15 (2.334) gave this theme the lower of the scores. The lowest average seen within any of the themes occurred when categorizing by certification level. The T-4 group averaged only a 2.209 on the results orientation theme. T-5 had the highest at a 2.519. Standard deviations for this theme were a σ 0.062 for the experience groups and σ 0.163 for the certification groups. This theme showed the highest variation between the certification subgroups.

Phase II. All survey participants were able to share the positive results they had seen from their PLCs this year. Participants 1 and 5, being in the same PLC group, both mentioned that they had been trying out lit circles and had found ways to make those work. That is a suggestion that was offered and introduced/reviewed in one of their PLC meetings. Participants 4 and 7 both mentioned formative assessment is something that they have seen positive results within their classes. Formative assessment is another system-wide needs area that is covered often in PLC meetings. They both said they have found various new methods of formative assessment from their peers to try that have engaged their students and that allowed them to see what their students knew without taking a long test or quiz. Participant 7 said, "I have really grown in the formative assessment department this year, I think. I have learned so many new ways to assess my kids' knowledge without boring them and without me having to grade for hours on end. I like switching things up too and making the kids think in different ways every day." Participants 3 and 6 both mentioned that technology was a topic their PLC groups had

discussed at length throughout the year. They have both used the new methods of technology in their classrooms with much success. Again, it engages students and makes teaching and grading much easier for the teacher as well. Participant 2 admitted that this was his group's weakness. They use observation as a method of evaluating the effectiveness of their techniques, but with a PLC made up of such a diverse group, he stated, it makes a common form of evaluation more difficult. This is an area they are working on improving. Therefore, the T-5 group participant was the only one who felt this was an area of struggle, but the survey results do not indicate the same. In fact, the T-5 group answered more in favor of this theme than all of the other subgroups.

Perceived Correlation of Variables

The last question during the interview process asked participants to explain whether or not they felt that their years of experience and/or level of certification have affected their perceptions of the effectiveness of PLCs, and if so, how. The responses to this question varied greatly by participant. Participant 4, being a novice teacher, said that he is learning to adapt new information into his classroom. He also commented that he appreciated the help and support he receives from his fellow PLC group members. He recognizes the importance of this aid as a newer teacher. Participant 5 explained that she has fostered more positive relationships over the years in her PLC groups. She feels her experiences with PLCs at other schools have changed her perceptions of the effectiveness of PLCs more so than just her years or teaching or level of certification. She detailed experiences at previous schools where the communication was not as open as it is in the current school. Seeing the differences between the two schools has shown her what an effective PLC can actually look like and just how helpful they can be. Participant 6 felt that her level of certification or years of experience haven't really changed her perception of PLCs at all. This is because she feels like everyone, no matter what their level of experience, can

benefit from the relationships fostered and the knowledge gained within PLCs. She feels that this should be a universal gain when PLCs are utilized properly, and everyone is actively engaged. Participant 7 explained that one aspect of PLCs that she feels has been affected by her years of experience is the ability to help novice teachers or those simply seeking guidance. She was cognizant of the stereotype of more experienced teachers being set in their ways and resistant of change, but she commented that she does not believe she fits in that mold. In fact, she considers herself a lifelong learner who always wants to grow in her craft. T-4, who also happens to be near the middle years of her career, said that she wishes she had PLC groups when she was a newer teacher. She felt she lacked guidance towards the beginning of her career and really would have appreciated the support she feels within her PLCs now. Participant 2 revealed that he does not feel that his years of experience or level of certification have really changed his perception of PLCs. One reason for this, he claims, is that when he did receive his T-5 certification, PLCs were not practiced. Therefore, he does not have a reference from a time prior to his T-5 certification to compare. Also, he believes that he still has the desire to grow his repertoire of teaching techniques no matter his level of experience. This is because, as he mentioned, teaching is an ever-evolving practice that requires educators to evolve with it. For this reason, he knows the significance of effective PLCs. His involvement with former modes of professional learning has somewhat altered his take on the effectiveness of current PLCs, however. Now that he recognizes the importance of collaboration and teacher autonomy, he finds the current method much more valuable, he claims. Finally, T-6 had a similar opinion with participant 5. This is because participant 3 is also new to the school system and felt her prior experiences with PLCs at other schools changes her perception. She actually stated that one of the main reasons she wanted to change school systems was the way her old system conducted PLCs. Her old school did not

have enough time set aside for PLC meetings. Instead, they took three planning periods per week for meetings. This only left her with two hours of planning per week. While she did not downplay the importance of PLC meetings, she also realized that this was not enough time to plan. After all, in order to engage in the changes set forth during PLCs, a teacher needs time to effectively plan for them. She commented that the PLC meetings planned for each week were rigidly planned as well, meaning that they had a set amount of time to cover topics such as data or grade-level meetings. While this may seem like an orderly planning technique, she saw it as a negative at her old school because this did not leave time for what was really important at the time. For example, if her grade-level group really needed more time to meet, they could still only have the one hour per week even though there may not be a need for the other meeting topics that week. She has come to appreciate the way this school plans the agenda as needed and has flexibility to cover what is most important. She also feels there is more autonomy within the teacher population at the current school.

Conclusion/Summary

Findings from the survey showed that average scores remained at a minimum of a two or higher. In all but one of the six areas of concentration, all averages fell in the "often occurs" category or higher. This was the case whether participants were categorized by years of experience or level of certification. The one outlying score was marginally lower at 1.91 (results orientation category, T-6 certification). The areas of shared vision/purpose and collective inquiry received the highest ratings of occurrence on both as well. Lower ratings fluctuated when participants were categorized by both variables. When participants were identified by their level of certification, the areas of results orientation and collaboration were found to occur less often. In contrast, when participants were identified by their years of experience, the responses proved

somewhat diverse in the categories of shared vision/purpose, action orientation, and commitment to improvement while the areas of collaboration and results orientation were very similar despite years of experience. When all participants were considered as a whole, regardless of their subgroup, shared purpose and collective inquiry averaged highest, and the area of results orientation was the lowest. Most of the feedback from the interview participants was very positive. Even in areas that the participants may not have felt as strongly about, the comments were only neutral at worst. There were mixed responses when interview participants were asked individually if they think their years of experience or level of certification affect their overall perception of the effectiveness of these PLCs.

CHAPTER FIVE: DISCUSSION

Introduction

As one of the two PLC coordinators at the middle/high school in this study, I have a desire to improve our PLCs as much as possible which is the overarching intent with this study. I have analyzed data of two types, surveys and interviews, to determine what teachers' perceptions currently are, and in turn, I hope to provide our school with ways to improve our current PLCs. In order to achieve this, I have sought to determine to what extent these teachers participate in PLCs and how effective they believe them to be. I also have been studying if/how a teacher's own years of experience and/or levels of education may affect these perceptions.

Summary of Findings

After administering a survey for teachers, I analyzed results by forming subcategories based on teachers' years of experience and their level of certification. Afterwards, to get a more in-depth understanding of teachers' perceptions, I administered interviews from teachers, one per the aforementioned subcategories. I analyzed these qualitative results by organizing responses into the six themes of an effective PLC (Dufour & Eaker, 2012), all of which were discussed in each interview.

By and large, the results from both the surveys and the interviews were positive. Teachers expressed an overall appreciation for their own PLCs and their effectiveness. Even so, the results, particularly from the survey, did show some variation by theme. For example, results orientation and commitment to improvement were two themes that scored lowest (least occurring) by the participants. Collective inquiry, or the PLC members' abilities to form a plan to solve issues that arise within the school, was the theme that participants scored the highest

(most frequently occurring). There were also themes that showed a greater contrast in perceptions by certain subgroups of years of experience and levels of certification. One example of this is shown in the theme of shared mission/purpose for which the YE 0-5 group perceives this to be much more of a strength than the YE 6-15 group. Likewise, in that same theme, those with a T-6 certification did not find having a shared mission/purpose to be as much of a strength as the group who held T-5 certificates. This theme is also very significant because a person's expectations shape their perceptions of how effective a structure like PLCs is. Without these teachers having similar expectations for what they should gain from PLCs, the perceptions might not correlate as well (Muñoz, M. & Branham, 2016). This would not be a fair comparison especially when this study centered around those perceptions. Some teachers may have had higher expectations of what they should gain in PLCs than others and this could alter the responses. A teacher who may not have high expectations of what they should gain from PLCs may have commented much more positively than someone who has really high expectations despite their having the same experiences. If someone has really high expectations for their PLC, they may see some of the positive behaviors of PLCs occurring often, but they may not feel that they occur quite enough and therefore, they may have scored those questions lower than their fellow group members. This may be more prominent in the survey portion of the study because there is a lack of rigidity when you take out the numerical responses.

Lastly, when individual participants were interviewed about these same themes, there was variation in the responses, but again, most remained very positive. When asked whether or not they believed that their years of experience and/or their level of certification have some sort of an effect on how they view PLCs, again, the results were varied. Out of the seven participants, three believed these factors definitely have had an effect on their perceptions. Two said they did

not. Finally, two said that it is more the type of experiences, particularly those from other school districts, that have shaped their perception.

Conclusions

Throughout this study, the goal has been to explore the perspectives of teachers where PLCs are concerned. In doing so, there were two variables in particular that were being considered as possible aspects that could shape these perspectives, years of experience and level of certification. Some of the major areas of concern were levels of participation in PLCs, teachers' perceptions of effectiveness, and if the two variables, years of experience and level of certification have affected these perceptions.

Participation

Determining the level of participation in PLCs via this study can most effectively be determined by looking at the results from the themes of collaboration, action orientation, and commitment to improvement. This is because each of these themes discuss how the participant or others by their opinion participate in PLCs and the incorporate the knowledge into their classrooms.

Strengthening collaborative skills of teachers can have a progressive effect on student learning (Akin & Nuemann, 2013), so it is vital that effective collaboration be observed in PLCs. On the survey, the collaboration theme showed that most of the participants felt that participation in PLCs was strong at the school of study. When comparing themes, collaboration was not necessarily one of the highest scoring themes, but when one considers the overall average, it shows that most felt that the positive behaviors associated with collaboration in PLCs occurred "often" or "always". Similarly, when participants were interviewed, their responses reflected a common opinion. That is, all of the interview participants spoke highly of the collaboration that

was taking place in their PLC groups. In particular, they commented on the diversity of members and how that attributes to the overall collaboration and how collaboration is not confined to the walls of the PLC meetings.

Secondly, the action orientation theme centered around participation in a slightly different manner. The theme of action orientation dealt with staying engaged during meetings and using the time as effectively as possible. While, again, this was not one of the highest scoring themes overall, the scores still reflected the idea that the participants themselves and their colleagues, in their views, are participating appropriately in meetings. Interview results reflected the same basic perception. Interview participants claimed that the meeting time was spent effectively as all material or topics at hand were covered before socialization occurred. This indicates that members are participating in a way that preserves as much of their time as possible. If members were not participating, meetings would more than likely not run as smoothly and efficiently.

Finally, the commitment to improvement theme can also be coupled with the level of participation. This theme, in general, pertained to utilizing the knowledge gained during PLCs in one's classroom and trying new techniques and transferring new knowledge to the classrooms. In this way, this level of participation takes place outside of the actual PLC meetings. Participants could only answer this line of questioning for themselves and not their peers unless they had observed their teaching. Results showed that there is a high level of transfer taking place according to the survey. Interview participants agreed, elaborating on certain areas or topics that they have found to be most helpful during the current school year as they adapted these to their classrooms.

Overall, it seems that the teachers in this study feel that participation is a positive attribute to their PLCs. Again, participation takes place not only in the meetings themselves, but it also involves utilizing that knowledge in one's own classroom. Participating means that the PLC members are collaborating in meetings and using time effectively in order to make the most of PLC meetings. Poekert (2012) contended that positive, healthy collaboration is not only helpful but vital in the implementation of school initiatives. PLCs are a perfect example of that. The positive views of participation in this school indicate a healthy environment that have, undoubtedly, led to the overall success of the PLCs.

PLC Effectiveness

How teachers perceive PLCs can play an important part in the PLCs success and sustainability (Gentile, 2010). The results of this study show promise and praise towards this school's PLC. There was no real negative feedback provided. All results on the survey averaged between the "often" and "always" responses. This means that participants/teachers feel that these effective qualities of PLCs are often or always present in their current groups, which is very encouraging. Having such positive feedback can be promising, it does not prove as beneficial when trying to improve a program. In other words, if we do not get feedback on what to fix, it is more difficult to improve even more. To some degree, a little more candid critique may have been more advantageous in the long run.

As discussed in findings, there was variation in how each subgroup perceived each of the six themes of an effective PLC. Different groups felt that certain aspects of these PLCs were larger strengths than others. Before identifying the feedback of individual groups, however, one must look at the bigger picture by exploring how the whole population of participants responded. In order to determine how the general population felt, the results of the survey were analyzed

with the participants all listed as a whole group. When this was done, it was evident that the participants felt that the school's strengths were collective inquiry which explains that the teachers felt that their PLCs had a proven process by which they confronted an issue.

Furthermore, this indicated that most members of the teaching staff felt that their peers were willing to do whatever it took to solve these issues or improve practice in some way. I think this proves that this staff has confidence in each other and their ability to work together for the common good of all students. This seems to show camaraderie or collegiality and that the teachers in this school truly fit the mold of a team. These encouraging relationships set the foundation for a more effective PLC (Hallam, Smith, Hite, Hite, & Wilcox, 2015). They are not just beneficial; they are vital to the PLCs function. Without these positive perceptions, the overall results would have been much lower as indicated by the importance of teacher perception found by Underwood (2007).

While collective inquiry was a strength, the results orientation theme was proven to be the weakest area as identified by all survey participants. This implies that even though the groups are working together and trying to solve problems, their plans do not always yield the results they want. It could also suggest that they feel there needs to be a better way of evaluating the results of initiatives or plans devised within PLCs as this is also a factor of the results orientation category.

In the end, while results seemed to be mostly positive in both the quantitative and the qualitative phases of this study, it was somewhat evident that the results from the interview process were even more positive than the survey. For this reason, the openness of the participants might be in question. This seems to be a fair concern considering that I am a PLC coordinator, and some participants may have felt more guarded with exposing negative feelings. However,

one cannot discredit the survey which was also very positive. The survey was completely anonymous, therefore, there should be less of a concern with stating grievances

Levels of Certification and Years of Experience

Before collecting data for the study, I hypothesized that a teacher's level of certification would affect their perspective towards the effectiveness of PLCs more so than their years of experience. This was due to the stereotype that those teachers with many years of experience tend to be less flexible or open to new ideas such as those introduced within PLCs (Snyder, 2017). I presumed this notion of inflexibility to be untrue based on my experience in this school setting. This did not seem to be consistent with what I had observed. When formulating this hypothesis, I also considered that teachers who have recently pursued higher degrees often participate in collaborative cultures such as that of the PLC format. Studies have also concluded that teachers with higher degrees often show more student growth or success (Curry, et al., 2018). Therefore, I believed the process of using PLCs to improve practice would be more familiar or comfortable with these individuals. In order for my hypothesis to be proven correct, participants with higher certification levels would need to score higher on the survey. This would mean that they feel more positively about PLCs and their confidence in its effectiveness.

There was one instance where there seemed to be a slight correlation between years of experience, level of certification, and the perceptions these teachers have with the effectiveness of their PLCs. In the collective inquiry theme, which as already stated was the highest scoring theme on the survey, the higher the level of certification, the higher the average score for this theme. The same is true with the years of experience variable. The more years of experience, the higher the average response to the theme of collective inquiry as well. This could possibly imply that the experience gained through years of teaching and through furthering one's education

increases their assurance in the collective inquiry process. Brody and Hadar (2015) call this "the function of intuitive pedagogic knowledge" (p. 261) and state can influence teachers' roles, levels of participation, and possible perceptions of PLCs. This can be very important in the path to improvement of PLCs because of "the potential impact that collaborative inquiry could have on sustaining changes in practice and ultimately achieving greater success for all students" (Donohoo, 2013, p. 3). Donohoo also states that many seem to assume that collective inquiry as very systematic research techniques when really it is much more contextual in nature and has the ability to adapt to the school's needs (2013). Perhaps this is a concept that is best learned through more experience as well.

Again, I predicted that when teachers were grouped by their years of experience, responses would be more similar to each other. In other words, there would not be as strong of a variation between scores when participants were grouped by years of experience. Variations between the subgroups' responses for each theme, as shown by the standard deviations included in Figure 6, showed that years of experience seemed to make more of a difference in the commitment to improvement and shared mission themes which both had a standard deviation of σ 0.16. Experience seemed to provide less variation, and therefore was not as much of a defining factor in the theme of collaboration. This theme had the lowest standard deviation in relation to how experienced a teacher is. This does not seem to mirror results found by Angelle & DeHart (2011) who determined that a teacher's years of experience and level of leadership the teacher perceives themselves to have greatly affect how they perceive PLCs. When considering the level of certification or degree, there was a higher variation in the area of results. Therefore, one could conclude that if there were any area in which a person's level of certification was a factor in how they perceive PLCs, it would be in the results that they felt they and others were seeing based on

what they gain from PLCs. To be more specific, those with a T-4 certification perceived results as a weaker area than the others. In contrast, a person's certification level seemed to make the least difference in the collective inquiry theme. In general, this theme was perceived as the greatest strength by the teacher population, so therefore a smaller deviation can be contributed to the more positive responses.

After all data was analyzed, the hypothesis of this study was neither decisively proven correct nor incorrect. It seemed somewhat inconclusive because there was not enough of a variation in results in any one theme. However, one may argue that there was one subgroup that showed a trend of scoring more negatively amongst many of the theme, and that would be the T-4 groups. To further explain, if any one group were to be seen as having the lowest scores on the survey, it would be the ones with a T-4 certification level. That group did not score any of the themes higher than the other groups. Some may say that is consistent with the findings of Conderman & Johnston-Rodriguez (2009) who concluded that a lack of experience sometimes causes novice teachers to be more reluctant to participate or to become more stressed about trying new initiatives. They were not always the lowest but never the highest score on any theme. If that is taken into consideration, then one may argue that the hypothesis was, at least to some degree, proven correct. No one subgroup in particular showed they felt much more positively across the variables than the other subgroups, however, and there was not enough of a clear variation to conclude the hypothesis correct confidently. Overall, a fair conclusion may be that the T-4 group does not quite have as much certainty in the PLC process as the other two groups.

Another fact that was noted was that there were certain themes that may not have shown great variation by one variable, but they did by another. An example of this was found in the collaboration theme. When observing the subgroups based on years of experience for this theme,

these groups all rated this theme very similarly. However, there was greater variation in the collaboration theme when responses were categorized by certification groups. In that case, the T-4 group did not prove as confident in the collaboration of their group than the T-5 and T-6 groups did. Perhaps this could be attributed to the collaboration that those teachers pursuing further degrees are accustomed to doing. This may provide a higher level of comfort in their ability to collaborate. When the years of experience variable is studied, it becomes evident that the YE 0-5 group feels that their PLC groups have a stronger hold on a shared mission and are highly committed to improvement. Some may attribute this to their fresh outlook on their new career. Perhaps, they are being more optimistic whereas some of the other groups may have had experiences that dropped their score in these two themes slightly. Again, the scores are still, in general, significantly positive.

Beyond the survey results, interview participants for the qualitative phase (II) of this study served to further explain data or provide rationales for the responses of the general population and each subgroup. Again, based on the positive feedback, it would be difficult to conclusively determine what has shaped these participants' perceptions of PLC. One interesting comment that emerged throughout the interview process was an outlying response in the area of collective inquiry. As previously stated, collective inquiry was clearly the strong suit of the PLCs in this school as determined by the survey. However, amongst all of the positive comments heard during the interviews, one of the only somewhat negative response was given on the topic of collective inquiry. Incidentally, it was given by the T-4 participant, participant 1. She stated that she felt that sometimes she would rather meet with grade level groups and that she would like to experience less complaining and more problem solving in her meetings. While mentioning grouping might not have been considered a negative comment as much as a request, the latter

comment about problem solving was more telling. While the theme was surprising considering the positive response in the survey, the fact that the comment came from the T-4 participant seemed to slightly correlate with the hypothesis and findings from the comparisons between certification levels.

After interview participants were asked to elaborate on questions from each of the six themes of an effective PLC, they were also asked for their personal opinions on what has shaped these perceptions. In other words, they were asked if they feel that their own years of experience and/or level of certification have played a role in their feelings of how effective they find their PLCs to be. What stood out with this interview question were the responses provided by participants 3 and 5, the latter holding a T-6 level of certification. Both of these participants explained that they felt that their perceptions of PLCs were not really shaped simply by their years of experience or their pursuit of a higher certification level. Instead, they expressed that it was their experiences with PLCs from outside of this school district that shaped their positive views of the PLCs in this district. In other words, it wasn't the number of years but the poor quality of the experiences they had in other schools in which they taught. To this extent, it was not necessarily the teaching experiences but the PLC experiences that shaped their perceptions.

Discussion/Implications

Although my study focused on PLCs in one particular rural middle/high school, the implications of the study can be somewhat transferable to other schools. While it is true that each school has its own dynamic, especially where PLCs are concerned, there are several elements to this study that should be similar in many other schools. For example, the basic needs of PLCs should be uniform (e.g. collegiality, participation, etc.). Oftentimes, PLCs may be organized similarly across schools such as creating content groups or grade-level groups. However, the nature of this study and its concentration on this one school made it unique from all others as

well. Teachers in various schools, or even states or countries, have different experiences with PLCs. Simply put, the findings are unique to this school, but a study of this nature could certainly be conducted in any school where PLCs are established.

If a school wished to obtain a similar set of data, they could seek information via surveys as I did in phase I. I opted to base my survey and interview questions on six themes of a successful and sustainable PLC, but there are additional ways of executing this. For example, some schools may center a survey on specific grievances that have surfaced in PLCs. These questions would likely be limited to the precise issues that need to be resolved. This could also be the case with interview questions. Another option would be to have the participants explain what they feel makes an effective PLC and then rate their own based on their findings.

Additionally, some schools may only see issues within select PLC groups in which case they may prefer to use the interview process to define the underlying issues and how to improve them. When interviews are incorporated into the study, there is additional in-depth information gathered, but that information pertains to only that single individual.

For the school of study, the implications have the potential to even more purposeful as they are specific to the population. Immediately, administrators and PLC coordinators should be able to conclude that PLCs in this particular school must be doing well. The survey data and comments provided during interviews were overwhelmingly positive. This should inspire them to improve but also remember that they are already on the right track. The foundations of an effective PLC seem to already be in place. Obtaining teachers' candid perspectives can aid in the guidance of future decisions about PLCs such as types of participation needed, time allotted, and chosen material. Martin-Kniep & Lane (2020) offer several key steps for school improvement based on PLCs. These key steps include making sure data is shared and thoroughly unpacked to

facilitate conversations that will guide positive change. Another suggestion they make is "instead of dwelling on explanations as to why there are differences, we ask the principal to consider what actions he/she could take to change teachers' perceptions" (p. 27). This is because dwelling on determining the "why" may drudge up negative, defensive conversations while concentrating on possible solutions is more proactive.

The results of this study will prove very beneficial for the school of study. School administrators and PLC coordinators will take the data about perceived weaker areas and focus on improving them. When looking at these areas, it can be even more useful to concentrate on the groups which may have seen a grander issue within that theme/area. For example, if the veteran YE 26-30 group sees somewhat of an issue with the action orientation theme, administrators and PLC coordinators can conference with that subgroup on what we can do to improve. They can also get specific feedback from the YE 6-15 group on what strengths they are seeing specifically in that category that we could show more of for the others. Since the T-4 group scored slightly lower in general, again, some may conclude that activities that teachers participate in while pursuing a higher degree may be aiding in their confidence level of their participation in PLCs. Therefore, one possible method of improvement might center around determining what types of activities these teachers have participated in during their graduate work that may have better prepared them for their performance in PLCs. Some form of those activities being incorporated into PLCs may aid in the effectiveness of this school's PLCs.

Results from some of the themes can be used individually as well. The findings from the survey on action orientation can show if PLC meetings are perceived as engaging. If not, more effort can be put into providing more engaging meetings or professional learning opportunities. While this school predominately concluded that PLCs are engaging, there was room for

improvement. Therefore, the school will continue to seek teacher feedback on all topics related to PLC both before and after the PLC meetings or professional development. Seeking more information via another, more specific survey can also prove beneficial. They could ask what the YE 6-15 group is seeing that seems so much more engaging than the YE 26-30 group is experiencing. Likewise, the T-5 group reporting that they perceived collaboration to be a strongpoint of their PLCs to a higher extent than the T-4 group. They could ask more structured questions to the T-4 group to determine what they feel may be missing. Could it be that they do not feel they are being heard? Might they feel more timid in verbal collaboration considering the other certification groups have more experience with a similar format when pursuing their higher degrees? Would that make the T-5's and T-6's more confident in collaborating? A similar set of questions could be applied to the area of collective inquiry since the more experienced teachers and those with higher certification levels felt more comfortable with their PLC's ability to solve problems. Again, does this come with more experience? If so, how can the needs of the other groups be met so that they feel as confident in helping solve school issues as their more experienced colleagues?

While some of these implications may require further study, this study served a well-rounded catalyst for questioning and improvement. It provided both general feedback as well as a more precise direction that could/should be taken to seek more effective PLC groups as perceived by the teachers in this school. It showed that the school is on a very positive track in implementing successful PLCs in the eyes of its teachers, but certain areas (themes) as shown by the data can and will be worked on. When considering improvement of PLCs in a school, one must remember that "there is always room for growth because this is a journey more than a destination" (Munoz & Branham, 2016, p. 45).

Suggestions for Future Research

Upon reflection, there are possible ways to improve this study or aspects I could have changed. To begin with, the method of data gathering could have been altered to allow for observations of the PLC meetings. This way, instead of hearing about teachers' experiences, the researcher could see it for herself. There are times when I would wonder if things are really as wonderful as the teachers were portraying or was this a way of sugar-coating underlying issues. Observation may be an alternate method of collecting data that would reveal a clearer picture of the true situation. Of course, there is also the possibility that the group may function more productively in the case of an observation simply because they are being watched. Martin-Kniep & Lane (2020) also recommend having the principal or other administrators include their own perceptions as well. Comparing the data from both their perceptions and those of the teachers could possibly give a unique perspective and has the potential to provide a more rounded picture of PLCs in that school. Also, both teachers and principals being honest about their school or even personal weaknesses can be an effective start to improvement (Zimmerman, 2006).

While I preferred the perceived sense of consistency and organization that using the six themes provided for me, to truly allow the conversations during interviews to move in the direction that the participant chose, those could be omitted. While follow-up questions did tend to vary between interview participants, I could have decided to eliminate the set of questions that supplied the "backbone" that I felt I needed. If I were conducting a case study, this would certainly have been my more preferred approach. Another possible change I would make is the method by which I obtained my survey results. The technique that I used, paper survey copies, worked best for my study because I needed to confirm that I received a signed consent form as well. Another primary rationale for this is the question of anonymity. I have witnessed conversations in the past in which the anonymity of online surveys was questioned. This is

particularly a concern when the online surveys are completed on campus under the school system's server. However, if I were managing a study "in house", so to speak, for which I did not require consent forms, the online method would be a much more efficient way to record data. If I could commit more time to this study, I would try making it a longitudinal study. In order to do this, I would pinpoint strengths and weaknesses collected from survey data and/or interviews, initiate change based on the needs, and re-evaluate every month or so. Through this process, I could identify which changes yielded the most positive results. Of course, for this to occur, I would have to determine a more consistent approach to evaluating. The surveys would probably be a more pragmatic approach to that. Yet again, if time were not a factor, it would have benefitted this study to add a "how so" or "why" type of follow up for each of the survey questions. There are two advantages: for one, it would give me a more accurate depiction of these positive actions occurring in the PLC groups and two, it would involve the survey participants to explain or illustrate which they would not be able to do if they were sugar-coating their responses. In other words, they would be required to verify their responses by providing examples. These can be compiled into a list to celebrate the positive occurrences in our PLCs. The disadvantage of adding these questions is that it is more time consuming, so participation may not be as high. The final thing I would do differently is taking a less active role in my own, personal school setting. I feel that my role as the PLC coordinator has the potential to influence responses. I enacted every precautionary measure in my power to ensure anonymity and express that to the participants of my study, but there is always the risk that this may have altered the outcomes. That being said, I would aim to partner with someone from a neighboring school and each conduct the survey at the other's campus. That modification should eradicate any sort of influence my role may have generated.

Although I feel the previously mentioned changes had the potential to alter or improve my study, I was generally quite pleased with the abundance of information I could obtain by applying a mixed methods approach. I always seem to be compelled to explore topics such as this a little further. This study and its approach were no exception. I hope that it can elicit more progress in my school's PLCs in the near future.

References

- Akin, I. & Nuemann, C. (2013). Identifying proactive collaboration strategies for teacher readiness for marginalized students. *Journal of College Teaching & Learning*. 10(4), 235-244.
- Angelle, P. & DeHart, C. (2011). Teacher perceptions of teacher leadership: examining differences by experience, degree, and position. *NASSP*, *95*(2), 141-160.
- Aylesworth, A. (2012). Professional learning communities: An analysis of teacher participation in a PLC and the relationship with student academic achievement. *Iowa State University Digital Repository*.
- Bandura, A. (2007). Social cognitive theory. *Encyclopedia of Industrial and Organizational Psychology*, 2, (729-733).
- Bickel, R. (2012). Classical Social Theory in Use: Interpretation and Application for Educators and Other Non-specialists. Charlotte, NC: Information Age Publishing.
- Blankenship, S. & Ruona, W. (2007). Professional learning communities and communities of practice: a comparison of models, literature review. Retrieved from https://files.eric.ed.gov/fulltext/ED504776.pdf
- Boone, S. (2010). Professional learning communities' impact: a case study investigating teachers' perceptions and professional learning satisfaction at one urban middle school. Walden University. Minneapolis, Minnesota. USA.
- Brody, D. & Hadar, L. (2015). Personal professional trajectories of novice and experienced teacher educators in a professional development community. *Teacher Development*, 19(2), 246-266.

- Brucker, E. (2013). Implementation and perceived effectiveness of professional learning communities in the Kanawha County school district in West Virginia. *Marshall University: Marshall Digital Scholar*. Retrieved from https://pdfs.semanticscholar.org/3bed/4a51d1a56a1ebcc019751cbdda2457659673.pdf
- Carpenter, D. (2018). Intellectual and physical shared workspace: Professional learning communities and the collaborative culture. *International Journal of Educational Management*. 32(1), 121-140.
- Charner-Laird, M., Kirkpatrick, C., Szczesiul, S., Watson, D. & Gordon, P. (2016). From collegial support to critical dialogue: including new teachers' voices in collaborative work. *The Professional Educator*, 40(2).
- Clark, K. R. (2018). Learning Theories: Constructivism. *Radiologic Technology*, 90(2), 180–182.
- Conderman, G. & Johnston-Rodriguez, S. (2009). Beginning teachers' views of their collaborative roles. *Preventing School Failure*. 53(4), 235-244.
- Cooper, K., Stanulis, R., Brondy, S., Hamilton, E., Macaluso, M., & Meier, J. (2016). The teacher leadership process: attempting change within embedded systems. *Journal of Educational Change*, 17, 85–113.
- Creswell, J. W. (2002). Research design: qualitative, quantitative, and mixed methods approaches (2nd Ed.). Thousand Oaks, CA: Sage Publications. Retrieved from file:///C:/Users/erin.beasley/Downloads/Creswell-ResearchDesign.pdf
- Creswell, J. W., Shope, R., Plano, V. L., Green, C., & Green, D. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools*, 13(1), 1-11.

- Curry, D., Reeves, E., McIntyre, C., & Capps, M. (2018). Do teacher credentials matter? An examination of teacher quality. *Curriculum and Teaching Dialogue*, 20(1-2), 9-18.
- Dehdary, N. (2017). A look into a professional learning community. *Journal of Language Teaching and Research*, 8(4), 645-654.
- Diao, L. (2013). On relationship between teacher autonomy and learner autonomy. *Applied Mechanics and Materials* 411-414, 2781-2785.
- Dills, A. & Placone, D. (2008). Teacher characteristics and student learning. Journal of Economics and Economic Education Research, 9(3), 15-28.
- Donohoo, J. (2013). Collaborative inquiry for educators: A facilitator's guide to school improvement. Thousand Oaks, CA: Corwin.
- Dufour, R. & Eaker, R. (2012). Revisiting professional learning communities at work.

 Bloomington, Indiana: Learning Tree Press.
- East, K. (2015). A study of professional learning communities: characteristics of implementation and perceived effectiveness in improvement schools in West Virginia. *Marshall University: Marshall Digital Scholar*. Retrieved from http://mds.marshall.edu/cgi/viewcontent.cgi?article=1942&context=etd
- Fernet, C., Austin, S., Trépanier, S. G., Gagné, M., & Forest, J. (2015). Transformational leadership and optimal functioning at work: On the mediating role of employees' perceived job characteristics and motivation. *Work and Stress*, 29(1), 11–31.
- Gentile, D. (2010). Professional learning communities: a middle school model. *Rowan University*. Glassboro, New Jersey. USA.
- Georgia Professional Standards Commission (n.d.). https://www.gapsc.com/

- Hallam, P., Smith, H., Hite, J., Hite, S. & Wilcox, B. (2015). Trust and collaboration in PLC teams: teacher relationships, principal support, and collaborative benefits. *NASSP Bulletin*, *99*(3) 193-216.
- Hargraves, A. & Fink, D. (2008). Distributed leadership: democracy or delivery? *Journal of Educational Administration*, 46(2), 229-240.
- Ho, D., Lee, M., & Teng, Y. (2016). Exploring the relationship between school-level teacher qualifications and teachers' perceptions of school-based professional learning community practices. *Teaching and Teacher Education*. *54*, 32-43 doi:10.1016/j.tate.2015.11.005
- Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement.* Austin, TX: Southwest Educational Development Laboratory.
- Horsburgh, J., & Ippolito, K. (2018). A skill to be worked at: using social learning theory to explore the process of learning from role models in clinical settings. *BMC Medical Education*, 18(1), 156.
- Huang, F. & Moon, T. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. Educational Assessment, Evaluation and Accountability, 21(3), 209-234.
- Ivankova, N., Creswell, J., & Stick, S. (2009). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, *18*(1).
- Karimi, M. (2011). The effects of professional development initiatives on EFL teachers' degree of self-efficacy. *Australian Journal of Teacher Education*, 36(6), 50-62.

- Kelly, J. & Cherkowski, S. (2015). Collaboration, collegiality, and collective reflection:
 A case study of professional development for teachers. *Canadian Journal of Educational Administration and Policy*. Retrieved from
 https://files.eric.ed.gov/fulltext/EJ1063374.pdf
- Kiemer, K., Gröschner, A., Kunter, M. & Seidel, T. (2016). Instructional and motivational classroom discourse and their relationship with teacher autonomy and competence support—findings from teacher professional development. *European Journal of Psychology Education*, 30, 377-402.
- Kothari, C. R. (2004). Research methodologies: methods and techniques. New Delhi: New Age.
- Lave, J. & Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation.

 Cambridge, Mass.: Cambridge University Press.
- Leclerc, M., Moreau, A. C., Dumouchel, C., & Sallafranque-St-Louis, F. (2012). Factors that promote progression in schools functioning as professional learning community.

 *International Journal of Education Policy & Leadership, 7(7), 1–14.
- Louws, M., Meirink, J., Veen, K., & van Driel, J. (2017). Exploring the relation between teachers' perceptions of workplace conditions and their professional learning goals.

 Professional Development in Education, 43(5), 770-788.
- Martin-Kniep, G. O. & Lane, B. (2020). Using parallel surveys and reflective conversations to tap perspectives and promote improvement. *AASA Journal of Scholarship & Practice*, 17(1), 16–30.
- Matherson, L. & Windle, T. (2017). What do teachers want from their professional development? four emerging themes the delta kappa gamma bulletin. *International Journal for Professional Educators*, 28-32.

- Michaud, R. (2016). The nature of teacher learning in collaborative data teams. *The Qualitative Report 21(3)*, 529-545.
- Miller, W. J., Kuykendall, A. J., & Thomas, A. S. (2013). Are we in this together? An analysis of the impact of individual and institutional characteristics on teachers' perceptions. *School Community Journal*, 23(2), 137–159.
- Mullen, C. & Schunk, D. (2010). A view of professional learning communities through three frames: leadership, organization, and culture. *McGill Journal of Education*, 45(2), 185-203.
- Muñoz, M. & Branham, K. (2016). Professional learning communities focusing on results and data-use to improve student learning: The right implementation matters. *Planning and Changing*, 47(½), 37-46.
- Murphy, C. & Lick, D. (2004). Whole-faculty study groups: Creating professional learning communities that target student learning, 3rd edition. Thousand Oaks, CA: Corwin Press.
- Nabavi, R. T. (2012). Bandura's social learning theory & social cognitive learning theory.

 Theories of Developmental Psychology.
- Paulsen, K. (2008). School-based collaboration: an introduction to the collaboration column.

 Intervention in School and Clinic, 43(5), 313-315.
- Pearson, L.C. & Moomaw, M. (2005). The Relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 37-53.

- Pharis, T., Wu, E., Sullivan, S., & Moore, L. (2019). Improving teacher quality: professional development implications from teacher professional growth and effectiveness system implementation in rural Kentucky high schools. *Educational Research Quarterly*, 42(3), 29-48.
- Poekert, P. (2012). Examining the impact of collaborative professional development on teacher practice. *Teacher Education Quarterly*. (VOLUME?)
- Raza, S. & Sikandar, A. (2018). Impact of leadership style of teacher on the performance of students: an application of Hersey and Blanchard situational model. *Bulletin of Education* & *Research*, 40(3), 73–94.
- Rossi, P., Wright, J., & Anderson, A. (2013). Handbook of survey research. New York, NY: Academic Press.
- Salem Press. (2014). Sociology Reference Guide. Pasadena, Calif: Salem Press.
- Santagata, R. & Guarino, J. (2012). Preparing future teachers to collaborate. *Issues in Teacher Education*, 21(1), 59-69.
- Schaap, H., Louws, M., Meirink, J., Oolbekkink Marchand, H., Van Der Want, A., Zuiker, I., Zwart, R., & Meijer, P. (2018). Tensions experienced by teachers when participating in a professional learning community. *Professional Development in Education*.
- Shillingstad, S. & McGlamery, S. (2019). Teachers as leaders: navigating multiple roles. *Delta Kappa Gamma Bulletin*, 86(1), 25-38.
- Slick, S. (2002). Teachers are enthusiastic participants in a learning community. *The Clearing House*, 75(4), 198-201.

- Snyder, R. (2017). Resistance to change among veteran teachers: Providing voice for more effective engagement. NCPEA International Journal of Educational Leadership Preparation, 12(1).
- Teague, D. & Swan, J. (2013). Enhancing the future of education by actively supporting novice teachers. *Future of Education*, 41-52.
- Tettleton, K. (2003). The influence of teacher attitude about professional development, master's degree training, and teacher certification on school performance scores in selected Louisiana parishes. *Louisiana University*. Baton Rouge, Louisiana. USA.
- Uhlig, K. (2013). Do master's degrees make master teachers? Wausau Daily Herald; Wausau, Wis.
- Underwood, J. (2007). Study of the implementation of a professional learning community in one middle school in Georgia. *Georgia Southern University*. Retrieved from https://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1286&context=e td
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*.

 Cambridge, Mass.: Harvard University Press.
- Wake, D. & Mills, M. (2018). Listening to the voices of teachers. *Issues in Teacher Education*, 27(2), 90-106.
- Wells, C. & Feun, L. (2012). Educational change and professional learning communities: A study of two districts. *Journal of Educational Change*, *14*, 233-257.
- Wennergren, A. (2016). Teachers as learners with a little help from a critical friend. *Educational Action Research*, 24(2), 260-279.
- Wheeler County. (2019). *Georgia Gov*. Retrieved from https://georgia.gov/cities-counties/wheeler-county

Zimmerman, J. (2006). Why some teachers resist change and what principals can do about it.

National Association of Secondary School Principals, 90(3), 238-249.

Appendices

Appendix A

Professional Learning Communities' Effectiveness Survey

1.	How many ye	ears of teaching exp	erience do you curr	ience do you currently have? Please circle.		
	0-5		6-15	16-25	26-30	
2.	What is the highest level of education you have completed? Please circle. T-4 (Bachelor's degree) T-5 (Master's degree) T-6/T-7 (Specialist or higher)					
Answer the following by selecting the appropriate number and writing it in the corresponding box.						
	0-Never	1-Sometimes	2-Often	3-Always		
3. 4.	My PLC group truly puts our students' education first in importance. When I meet with my PLC, we seem to keep our purpose in mind.					
 5.	I find the collaboration aspect of PLCs beneficial to my professional practice.					
6.	I participate in collaboration with my colleagues during PLC meetings.					
7.	When there is a problem in the school, my PLC works well together to try to solve it.					
8.	My group is open and honest about our needs.					
9.	I am engaged during PLC meetings and discussions.					
10.	All of my group members are engaged during PLCs.					
11.	My PLC spends adequate time discussing student data.					
12.	There is a pro	there is a process by which we present, try, and analyze new techniques through our PLC.				
13.	When using information learned in my PLC, I can see improvement in my students' learning.					
14. from o	I use the content that I am exposed to during PLCs, whether from my colleagues or other professional development, to improve my classroom teaching.					

***Thanks so much for your input. When you finish this survey, please place it in the envelope in the front office marked "PLC Effectiveness Survey". Then, check/initial next your name to indicate that you have completed it. All responses will be kept confidential. Names will not be placed on the hard copy of the survey.

Appendix B

*Note: These are guiding questions for the researcher.

PLC Interview Questions

- 1. How many years of teaching experience do you currently have?
- 2. What is the highest level of education you have completed? What specific degree(s) in education do you have? Are you currently enrolled in a graduate program?
- 3. What is the collaboration like in your current PLC, both as a whole group and your own personal input? Do you find the collaboration aspect to be beneficial? Why or why not?
- 4. When faced with an issue, does your PLC group come together to try to fix the situation? If so, how? If not, why?
- 5. How well do you think your PLC uses their time during meetings? Explain.
- 6. Do you find the content presented/shared during your PLC meetings to be useful to your constant growth as a teacher? Why or why not? Feel free to specify what types of content/material you find the most helpful and why.
- Discuss a specific way that you have used content from a PLC recently in your classroom.
- 8. What variations of participation do you see in your PLC meetings? Do any sorts of tasks or activities seem to spawn more participation than others? If so, why do you think that is?
- 9. Do you feel your years of experience or level of education have affected your perception of PLCs at all? Why or why not?