Professional Learning Community Implementation and Teacher Perceptions of Participation Influences on Professional Growth

Submitted by

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A Dissertation Proposal Presented in Partial Fulfillment

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September 21, 2016

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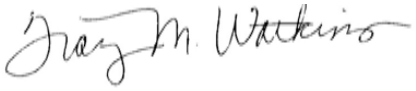

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August 12, 2016
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Abstract

This qualitative case study explored how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning and how educators perceived participation in professional learning communities (PLC) influenced their professional growth and development. The theoretical framework of the transformational learning theory, social cognitive theory and the foundations of PLCs, established the platform for this study. The research questions specified a focus on teacher perceptions of the professional learning community model being implemented, addressed how professional learning communities were structured and implemented to focus on data-based decisions and described how participation in professional learning communities influences professional growth and instructional effectiveness. The sample consisted of at least 30 teachers and 2 administrators in five schools located in a southwestern school district in the United States. Data collection instruments included questionnaires, interviews, and archival data. Data coding procedures determined specific patterns that emerged in the analysis. The results provided that the greatest influence on teacher professional growth were: purposeful meetings, shared responsibility, commitments to common practice and common assessments with ongoing progress monitoring. The implications of this study suggest that school organizations provide an opportunity for purposeful collaboration during the work day. Most importantly, focused conversations must address student data, sharing instructional strategies and committing to common practice and assessment for ongoing student improvement and teacher development.

Key words: Professional learning communities, professional development, data-driven decisions

Dedication

This dissertation is dedicated to my mom, Lillian Rollo. My mom has been my leading cheerleader my entire life, and it is because of her that I have accomplished this ambitious goal. I am encouraged daily by reflecting on her sacrifice to raise such strong children on her own. She has endured many things in her life, but her positive disposition is one that I strive for daily. I am thankful for the struggle, life experiences, and celebrations. I am honored every day to be the daughter of the strongest woman I will ever know.

Acknowledgments

I would like to take this opportunity to express my gratitude towards those who encouraged, inspired and pressed me to accomplish this ambitious, academic milestone.

I would like to begin by thanking the chair of my committee, Dr. Cristie McClendon. Dr. McClendon was always available to answer questions, probe my thinking and her continued support during my frustration was much appreciated. I was fortunate to have her knowledge and dedication to pursue my passion of exploring professional learning communities.

I would like to thank the teachers and administrators that participated in this study. I know that you sacrificed time to participate and time is a precious commodity in education, so thank you. All of you have inspired me by what I have learned in this process to become a more conscientious leader.

I would also like to acknowledge all the students and teachers that I have been so honored to serve as a teacher, principal and director over the last 19 years. I will continue to be a passionate educator because of you! I will never forget what it is like to walk in your shoes and I will always remember why I chose to be an educator because of your continuous dedication.

Most importantly, I would like to express my heartfelt love and appreciation for the best support system, my family. Thank you to my wonderful husband, Marlo. Thank you for your unconditional love, support and encouragement during my times of frustration, defeat and celebration. To my children, thank you for your love and support during my educational journey. I could not have made it through without your continued inspiration!

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Chapter 1: Introduction to the Study

Introduction

Recent reforms in education and calls for increased accountability have caused administrators and teachers to implement a variety of programs and strategies designed to improve student achievement. One concern among stakeholders is that teachers can no longer work in isolation if the staff is collectively responsible for the learning of all students. Therefore, measures have been introduced in school systems designed to increase teacher collaboration. One of these structures is the Professional Learning Community (PLC), which Darling-Hammond and Richardson (2009) touted as the new paradigm of professional development. A PLC is a small team of teachers committed to meeting regularly and working collaboratively on shared goals in order to improve achievement for each individual student they serve (Dufour, Dufour & Eaker, 2008).

Valentin (2014) contributed that the success of PLC models depends on the nature of teacher participation and collaborative efforts. Hence, the accomplishment of the teams depends on the teachers, who need to use their collaborative time to engage one another in critical dialogue. Chong and Kong (2012) added that successful teaching requires that PLCs as a training tool need to be intensive, ongoing, and connected to practice. Yet, how teachers use their time in PLCs and how teachers perceive this collaboration influences their growth as instructors is not well studied.

Valentin (2014) also noted that most studies on PLC models have been on how collaboration impacts student achievement. Few studies have been conducted to explore teacher perspectives on PLC implementation and models. Furthermore, C. Stewart (2014) recommended that further empirical research regarding PLC's as a school reform model should be addressed to gain additional insight into the success and sustainability of

PLC's. Thus, this research effort pursued K-8 teacher perspectives on how PLCs models are implemented with a focus on teaching and learning and how teachers perceived participation in PLCs influenced their professional growth and development.

This chapter provides the background of the study and establishes the problem determined in prior research. Further, the information presented in this chapter highlights the purpose of this endeavor and defines the research questions this researcher sought to answer. In an effort to provide substantial knowledge to advance the work of PLCs, this chapter identified how the information will advance the scientific knowledge and provide significance as well as determine the most effective methodology to seek trustworthy results. The research design will be explained in more detail along with defining the common terms used throughout the study. Finally, the assumptions, limitations and delimitations are clarified and explained in more detail that may challenge the process.

Background of the Study

Reforms in education, including the No Child Left Behind Act, referred to as NCLB (2001), Race to the Top (2011) and most recently, the implementation of the Common Core Standards have required teachers to learn and develop new instructional and collaborative skills. In order to provide more time and opportunities for teachers to develop these needed skills, many schools have implemented collaborative models such as PLCs. Supporters of PLCs indicated that team members should collaborate as a unit to examine student achievement data in order to discuss, design and implement instruction to improve teaching and learning (Bitterman, 2010). However, Thessin (2015) found that obstacles to the successful implementation of the PLCs was a lack of training, administrator support and clarity of PLC components. Schools that implement PLCs must offer teachers time, training, and guidance in order to collaborate and plan instruction

designed to improve student learning. Additionally, a crucial consideration must be that the implementation plans include the professional development framework of a school based PLC, a school culture that supports the collaborative efforts, and a readiness by school leaders to engage and communicate the expectations (Thessin, 2015).

Further, there is a wealth of information that supports the idea that PLCs "provide a framework and process for ongoing learning and professional growth" (Stegall, 2011, p. 9). According to Chong and Kong (2012), teaming and collaboration models require that teachers have time to meet regularly to promote their instructional expertise. More significantly, this type of job-embedded teacher development is a direct result of sustained learning.

Schmoker (2006) maintained that in PLCs, teachers work with experts in education and one another to learn about and discuss instructional techniques that will improve the teacher's skills, but also improve student learning. During this time, team members tap into each other's existing capabilities and potential (Schmoker, 2006) to further develop a common repertoire of instructional skills. These collaborative experiences provide teachers needed opportunities to develop a refined craft and instill good teaching practices into authentic settings, hence change manifests into ongoing student achievement. Further, these critical conversations that teachers engage in often bring about creative conflict that leads to improved instruction. Disagreement and disequilibrium that comes with the critical questioning, debates and discourse about best practices, although difficult, can extend the professional growth of teachers (Owen, 2014). Prior studies have been conducted on the relationship between the implementation of PLCs and student achievement (Scott, 2012) and the impact that collaborative frameworks such as PLCs have on teacher self-efficacy (Romeo, 2012; Stegall, 2011).

Valentin (2014) highlighted the important role that teachers play in the success of PLCs, but also noted that limited research exists on teacher perspectives of how this collaborative structure actually works in terms of improving the instructional skills and development of teachers. In a study of teacher perspectives related to science PLCs, Bitterman (2010) found that in order for teachers to be aware of the latest research on instruction and learning, they needed a structured framework for the PLC process to benefit. That framework allocates time for teachers to plan and develop as professionals. They also needed a growth mindset and focus on inquiry to best support this way of developing. Like Valentin, Bitterman (2010 recommended more study on the topic of how teachers describe they implement PLC structures to not only improve student learning, but to also adopt that "inquiry" mindset as they grow professionally as educators. C. Stewart (2014) also suggested additional empirical research regarding PLCs as a school reform model and how to sustain their effectiveness be addressed.

Therefore, a gap existed related to PLC models and how they extend the growth and development of teachers. These collaborative experiences provide teachers opportunities and are an essential component of school improvement efforts if explicit training is provided to teachers on how they will learn to engage in this process (Thessin, 2015). This study explained the influence of collaborative teaming models for teacher development within professional learning communities in K-8 schools with a focus on teaching and learning, and how educators perceived participation in PLCs influenced their professional growth and development.

Problem Statement

It was not known how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning, and how

educators perceived participation in professional learning communities influenced their professional growth and development. Prior research focused on the relationship between the implementation of PLCs and student achievement, but Valentin (2014) noted that limited research exists on teacher perspectives of how this collaborative structure actually works. Furthermore, Bitterman (2010) found teachers needed a structured framework for the PLC process and also needed a growth mindset and a focus on inquiry. Bitterman (2010) recommended more study on the topic of how teachers describe they implement PLC structures to improve teaching, learning and also how they adopt that "inquiry" mindset. C. Stewart (2014) suggested further empirical research regarding PLCs as a school reform model and how to sustain their effectiveness. Therefore, a gap existed relative to PLC models and how they extend the growth and development of teachers. This study was conducted to address the gap of how teachers perceive PLCs, how the structure fosters an inquiry and growth mindset and how teachers perceived factors and conditions that created sustainable PLCs.

With respect to collaborative teaming structures, there are three conditions that support teacher change or improvement these include: embedded professional development, a focus on learning outcomes, and organized time provided by the school to collaborate (Chong & Kong, 2012). However, these three conditions pose significant challenges and obstacles for many schools as teachers struggle to find time to meet for collaboration; administrators often offer inadequate guidance and expectations for the PLC framework, and teachers lack training on data-based decision making. Therefore, the most important group affected are students, who stand to benefit from teachers who know how to use data to improve learning. Similarily, teachers are also affected as they need time to move from the traditional structure of working in isolation to working as a group

to grow as instructors and educators (Thessin, 2015; Valentin, 2014). Hence, PLC structures, when implemented correctly, offer teachers opportunities to engage one another in insightful, critical, and reflective dialog, engaging in a solution for sustained improvement (Hord, 1997).

Therefore, there are important details that were explored in this case study to determine how collaborative teaming models are perceived by educators to advance professional growth including: addressing poor student performance, acknowledging that not all teachers have the skills to address particular student needs, and addressing the discourse of new content and teaching strategies (Van Lare & Brazer, 2013). The contributions and the results of this study added to the extensive knowledge by determining how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development. Teachers needed to be willing and able to effectively collaborate in PLCs to improve instruction and learning. The results of this study provided information regarding the perceptions of teachers and the ways they collaborate, which could be replicated by other leaders in similar settings. In addition, the impact on teacher development within effective professional learning communities promotes a more authentic way that will ensure sustainable change in education, with the end goal being, improved student achievement.

Purpose of the Study

The purpose of this qualitative case study was to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional

learning communities influenced their professional growth and development. PLCs are designed to respond to the instructional needs of teachers for direct student achievement (Stegall, 2011). Further, the recommendation of the work presented in PLCs have impacted teacher learning that support state and national expectations.

The target population for this study is comprised of public school educators that have been involved in the building, sustaining and implementing of the PLC process in a K-8 school in the southwest. The facilitation of PLCs in schools demand an intentional definition of learning and a framework that support leaders in thinking about what counts as learning within collaborative groups and how organizational leverages that engage instructional learning (Van Lare & Brazer, 2013). Therefore, the involvement of a variety of educators that include: administrators, primary, intermediate and middle school teachers were included to explore the perception of those involved in collaborative teaming. This qualitative study required a rigorous in-depth analysis of transcribed data (Saldana, 2013); therefore, the interviewed public school educators was limited to 16, with questionnaires being collected from at least 30 participants and archival data being used to support the outcome of increased student achievement supporting the results of this study.

It was essential that a qualitative approach be employed to support this study. School environments offer current experiences in terms of reality, which ultimately will lead the observer to witness the dynamics of a PLC in a natural setting (Baxter & Jack, 2008; Yin, 2014). Case studies often connect to workplace issues (teacher development) and usually connect with something happening in an organization or institution (employing PLCs); therefore, qualitative was the most prominent way to answer the research questions provided by the researcher. In addition, this case study sought to offer

an explanation of the phenomenon on how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

Research Questions

The goal of this case study was to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development. The research questions were developed using the rigorous, previous literature, which elicited researcher recommendations for additional study. This case study provided a solution to the identified problem, how PLC models in one K-8 school are designed and implemented with a focus on teaching and learning and how educators perceived participation influenced teacher development. The questions that guided this research and have assisted with designing the interview questions and questionnaire (Appendix D) are as follows:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

The purpose of Research Question 1 was created to determine how teachers perceive the PLC implementation within the K-8 school district and if there is consistency of the model. Further, this question determined to what degree does the districts PLC model impact teaching and learning. This question was answered by using the interview protocol and questionnaire completed by participants.

The second question lead the researcher to further determine how teaching and learning are the focus of the district's PLC model and if this was true, what data based decisions are being made and more importantly what data supports that the PLC implementation is effective. This question was answered with the interview protocol, questionnaire and archived data; which included school improvement plans aligned with current and past data provided by each school site as well as PLC team minutes.

The purpose of the third question was to provide this researcher with perceptions derived by participating in PLCs. This question captured the essence of professional growth and instructional effectiveness as explained by the participants that have perceived influential change. This question was answered by using the interview protocol and questionnaire completed by the participants.

Bitterman (2010) conducted a study on teacher perspectives and the impact of PLCs on student learning in science, yet the results did not include K-8 teacher perspectives on professional growth and development. This researcher obtained permission from Bitterman to use, modify or add to instruments from that study to further the knowledge (see Appendix C) of PLCs. All teachers from the participating schools that

contributed to PLCs were recruited to complete Bitterman's questionnaire in order to provide specific recommendations to the problem that was being addressed. Additionally, the researcher conducted interviews in order to capture, in detail how teachers perceived the PLC structure being implemented aligns with the three guiding questions and Dufour's (2006) six PLC characteristics:

1. Shared purpose, clear direction, collective commitments and timeline goals all aligned to student learning
2. Collaborative culture focused on teacher development
3. Inquiry best practices and current reality
4. Action oriented with an emphasis on learning by doing
5. A commitment to continued improvement by assessing student learning
6. A results oriented approach.

Finally, the archival documents used in this study were meant to explore the impact, which specifically related to structuring and implementing PLCs with a focus on improved teaching and learning, focused on student results. The archival school achievement data showed the progress and sustainment of growth in one school district over the course of the PLC implementation. The selected school district had been highlighted as a recognized PLC model in the southwest which validated the contributing success. The questionnaire results were provided to explain the perception of teachers as well as provide a more in-depth understanding of the implemented structure of PLCs that support improved teaching and learning. Furthermore, the interviews captured the educators' description of how participation in PLCs influenced their professional growth and instructional effectiveness.

Advancing Scientific Knowledge

Dufour, Dufour and, Eaker (2008) noted that the most effective professional development experiences are those that include opportunities for teachers to collaborate and learn "on-the-job," through observing others and applying what is learned in

workshops and other training experiences. Professional learning communities offer a structured format to facilitate these embedded learning opportunities for teachers. Hord (1997), identified characteristics of PLCs that facilitate improvements in teaching and learning. These include: a collective creativity amongst stakeholders and reflective dialogue that includes current reality and best practice that facilitates decisions about teaching and learning within the culture of the school. Teacher learning that impacts instruction and student learning may not always be focused on one content area or one grade level, but on the skills necessary that support explicit instructional strategies and work in all learning environments. Severage (2008) found that PLCs are viable forums for teacher collaboration, however, PLCs do not always operate as they should.

A major barrier to school reform efforts is the fact that most teachers are accustomed to working alone in their classrooms (Schmoker, 2005; Voelkel, 2011), but, this practice of isolation no longer meets student-learning needs. Increased calls for accountability and higher test scores, coupled with the need to produce graduates who can compete in a global market, have left administrators seeking ways to improve schools, teaching, and learning. Principals "have attempted to redistribute resources, reorganize instructional staff, redesign curricula, restructure the school day, and provide interventions to under-performing students in the hopes of improving student achievement" (Voelkel, 2011, p.4). One reform initiative that many administrators have implemented is professional learning communities.

Working with others in a professional learning community requires a different or new set of skills and attitudes for teachers who are used to working in isolation and with a great deal of autonomy. While the benefits of PLCs are strong, there are often inconsistencies between the way they "should" operate and how they operate in reality.

Additionally, they are not always sustainable over the long term, leaving many administrators and teachers wondering why some are successful and others are not (DuFour, DuFour, & Eaker, 2008). Voelkel (2011) recommended more studies be conducted to determine the reasons behind implementation of PLCs and how to foster their sustainability.

Bitterman (2010) conducted a study to determine teacher perspectives of PLCs in middle school science classrooms. Bitterman used a modified survey initially used by Bolam, McMahon, Stoll, and Thomas (2005). Additionally, interviews were conducted with teachers from three middle schools. Four themes emerged as results. These included identification of learning trends, organizational support for the learning community, an inquiry mindset for teachers and the need for time to plan and more professional development on the topic. Bitterman recommended more research be conducted to determine how professional learning communities are sustained, how they offer professional development for teachers, and how they are implemented to make a difference in curriculum design, lesson delivery and student learning outcomes. Finally, Valentin (2014) recommended more study on teacher perspectives of the PLC process.

This current case study addressed these gaps that remained significant to how professional learning community models in K-8 schools can be implemented in one K-8 school and how they are designed and implemented with a focus on teaching and learning. Most importantly, this study sought to determine how educators' perceived participation in professional learning communities influenced their professional growth and development. Furthermore, this PLC study addressed the nature of collaborative learning, which can significantly impact a positive working relationship amongst school

level colleagues facing challenging reform requirements (Piercy, 2010; Doherty, Walsh, Jacobs & Neuman-Sheldon, 2010).

The researcher used a questionnaire, interviews and archival documents to collect data. The questionnaire results explained the perception of teachers as well as provided an in-depth understanding of the implemented structure of PLCs that support improved teaching and learning in the district. Furthermore, the interviews took into account the educators' description of how participation in PLCs influenced their professional growth and instructional effectiveness. Finally, archival documents were reviewed to show the progress and sustainment of growth in one school district over the course of the PLC implementation process.

Transformative learning theory and the social cognitive theory were ideal conceptual frameworks for this qualitative research design as well as a focus on teacher development (Chong & Kong, 2012). This research utilized the framework for professional learning communities, social cognitive theory and the transformational learning theory to guide the research study. Additionally, the work of researchers and theories that have common frameworks significant to PLCs, the concept of PLCs provided supportive evidence related to the social cognitive theory.

Bandura's social cognitive theory was referenced to gain more understanding on the perception of effectiveness (efficacy) and capability to produce result driven instruction. Bandura (1986) explained that the conditions for learning are a result of social cognition, which addresses the relationships between environmental and individual behavior; one is contingent upon the other. Further, Bandura implied that learning through observation is an occurrence of the impact of the environmental factors relative to indivdiual behavior. Chong and Kong's (2012) lesson study also provided evidence for

successful collaboration that supports teacher efficacy and described processes that specifically improved content knowledge. The authors summarized the process for sustaining effective instructional strategies. This current study extended those results by elaborating on the perception of educators on teacher development, reinforced by organization and structure.

Transformational learning occurs in response to critically examining a current belief or practice and developing a different perspective as a result of discourse, self-reflection and analysis (Mezirow, 1997). Transformational learning is crucial for sustained opportunities to grow professionally and naturally, supported this study as well. Ideally, this type of learning begins with honest dialogue and critical self-reflection. Mezirow determined that there are four processes of learning, which include: elaborate on a current point of view, establish new points of view by encountering the differences of others, and by critically reflecting on biases set by one's own belief. Likewise, intentional conversations and actions that identify instructional strengths and weaknesses are shared through formative experiences in PLCs.

Teachers that engage with colleagues, in the PLC format, clearly participate in transformational learning as they begin to examine their practice critically and develop different perspectives that deepen their understanding (McComish & Parsons, 2013). PLCs offer teachers the structured time to meet and focus solely on use of data to improve teaching and learning. Thus, as teachers collaborate and observe the work of their colleagues, they should or have the opportunity to engage in reflection and transform their instructional practices. Those "aha" moments come through watching others work and identifying practices that one can implement in their own classroom

teaching. These in-depth observations cannot occur in the traditional, isolated format of schools.

Mezirow (2003) indicated that the art of transformational learning is an attitude adjustment based on new knowledge and the application being transformed into autonomous practice. The transformative learning theory supported in Servage (2008) finding's showed a "significant personal and professional growth" (p.69) in the concluding efforts. The author identified that the transformative learning theory supports the following: "enhance our understanding of learning by collaborating and shifts the emphasis to a communicative framework more appropriate for exploring any transformative potential" (p.69). Teachers can see the successes of others in a collaborative format and the collective whole of the group can be leveraged to implement effective teaching and learning strategies that results in improved performance for both teachers and students. If this is so, the results of this study substantially contribute to the transformational learning theory, social cognitive theory and the foundations of PLCs as perceived and applied to adult learning and organizations and structures within collaborative teams focused on result driven instruction.

Significance of the Study

The importance of this study occurred as the researcher explored how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth. Many studies have been conducted on the relationship between the implementation of PLCs and student achievement (Scott, 2012) and the impact that collaborative

frameworks such as PLCs have on teacher self-efficacy (Romeo, 2012; Stegall, 2011), yet the specifics of perception were not explored.

Scott (2012) conducted a study wherein results revealed that participants believed that a PLC can provide opportunities for authentic collaboration, but before student learning can improve, teachers must first improve. This study provided an opportunity to also seek how an organized structure captures the most effective PLC model. Stegall (2011) and Romeo's (2010) research studies showed that teacher efficacy was substantially higher when they were members of a collaborative team in an environment built on trust. In addition, the researchers indicated that PLCs were valuable in the school reform movement. The efforts and results of the experts have provided that more in-depth studies are required to glean perception of educators on how PLC structures support teacher and student learning.

The recent works which investigated PLCs and the viable nature of collaboration remains significant in the efforts of educators as well as the embedded opportunities for professional development to meet the ongoing needs of a range of teachers (Fieldman & Fataar, 2014). More specifically, the results of Scott (2012) concluded the importance of PLC structures that are intentionally designed to support teacher collaboration; providing instructional tools and time promoted lifelong learning and the ability to increase student achievement beyond average acceptance.

Romeo's (2011) findings on relationships between teacher self-efficacy and established PLCs are limited, although the author aligns the findings to the structure of the study the contributing efforts on relationships is crucial. Romeo (2011) highlighted the importance of trusting relationships to create collaboration within school frameworks as a common theme amongst many participants. Further, it can also be concluded that the

importance of establishing opportunities for teachers to develop, initiate change, assume more responsibility and lead beyond the classroom serves as a catalyst for sustaining teacher development. Therefore, the efforts of this study outlined the importance of establishing a specific structure for a functioning PLC. Finally, in a 2010 study conducted by Bitterman (2010), the author provided evidence that supported themes captured in a PLC, which included constant collaboration centralized on effective instruction that impacts student learning. The research also provided that schools must not only focus on improved teaching strategies but improved learning opportunities that are meaningful to teachers.

This study contributed to existing studies by providing more specific details on the influences of collaborative teaming models for teacher development within professional learning communities and teacher perceptions of participation. Further, it remained crucial to determine, how PLCs are structured and implemented to focus on data based decision making that support improved teaching and learning. The investment of time, funding and resources associated with the implementation of PLCs are substantial (Doherty, Jacobs, Neuman-Sheldon, & Walsh, 2010). Therefore, the potential of this study was meant to increase organizing and structuring a PLC working environment that is perceived as meaningful and supportive to teachers and educational professionals, yet data driven.

Therefore, the value of this study was to teachers, local community and society so that one could determine methods to encourage sustained and consistent professional growth for all teachers over time through the structure and implementation of a PLC (Stegall, 2011). The resulting outcomes translated to improved student learning, which in turn, contributed to positive outcomes in the local community and society in general, as

students become more apt to leave school career ready (Dufour 2009). The determinations inclusive of establishing a high functioning PLC are a direct contribution of how organizations are structured and supported, and the most important component of this particular forum is often the teacher. Hence, districts and schools must acknowledge and support the development of those who are significantly influential of student success (Marzano, 2003).

Rationale for Methodology

The qualitative methodology provides tools to study complex phenomena within context (Baxter & Jack, 2008). Punch (2014) stated "qualitative research is empirical research where the data are not in the form of numbers" (p.3), and the opposite is true of quantitative research, which is empirical research where the data examined is that of numbers (Punch, 2014). Further, qualitative research is descriptive, rather than predictive and provides an in depth understanding of the phenomenon being studied. This researcher sought to do just that by capturing an in-depth understanding which was crafted by netting the words and phrases of educators immersed in the work of PLCs and sharing their story. This occurred by exploring the detailed responses of each research question and the descriptive account of the profound concepts explored in the work produced in this case study.

Baxter and Jack (2008) found that observing the action in an authentic setting allows the desired phenomenon to transpire in a natural context and a deeper understanding for the researcher's conclusion may be formed. In this case, PLCs were being conducted on site within school organizations. The dedicated work and outcomes of the PLCs are embedded into the classroom teaching and are contributing to teacher development in a continuous fashion.

Yin (2014) indicated that qualitative studies are most commonly used to understand complex phenomena, allowing the focus to be on a real world occurrence by studying organizational processes and perspective. This researcher entered the natural setting by meeting participants in his/her school environment in the midst of an authentic working environment; the school or classroom. The wealth of information provided in this narrative format captured the magnitude and the significance of perceptions that a quantitative analysis would not support or accurately, respond to the described phenomenon.

Further, exploring a contemporary phenomenon required the investment of this researcher to seek perceptions of participants in his/her daily work, and was essentially, the outcome of this case study. Yin (2014) indicated that a case study is most commonly used to understand complex phenomena, allowing the focus to be on a real world occurrence by studying organizational processes and perspective. In contrast, a quantitative approach uses statistical comparisons and numbers to infer results. A quantitative study would not adequately represent the perception of individuals as accurately as a qualitative format (Yin, 2014).

For the purposes of this study, a qualitative method was the best method due to the fact that the gap being addressed is that the researcher wants to give the teachers a voice regarding their perspectives of how participations in PLCs influences their professional growth. According to Yin (2014), allowing a real world focus on organizational processes and perspectives are most often the work of a case study.

A qualitative method was the best method to address the research questions as they focus on the meaning teachers ascribe to their experiences regarding collaboration, how they use this particular structure to improve their craft and student learning, and how

working with colleagues improves their professional skills. The intent of this case study explored perspectives, according to Baxter and Jack (2008), a qualitative format is the authentic design to capture action in an authentic setting. This data needed to be measured with words as opposed to numbers (Yin, 2014). Additionally, the researcher did not seek to establish a correlation or causation between two or more variables. Therefore, a quantitative method was not appropriate (Golfshani, 2011).

Nature of the Research Design for the Study

A case study design was used for this research study. Yin (2014) stated, "a case study is an empirical inquiry that investigates a contemporary phenomenon (the case) in depth and within a real world context" (p.16). With regard to this study, the phenomenon explored was how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth. A case study provided an approach to research that explored a phenomenon within a context using an array of data sources (Baxter & Jack, 2008; Nobel & Smith, 2015). In alignment with this description, multiple sources of data were used for this case study to explore the phenomenon of collaboration as a form of teacher growth and development.

The rationale for design was the most prominent to support the research questions and support the findings. Other qualitative designs were considered for this study, but were discarded. The qualitative approach described as a phenomenology is further explained by Randies (2012) who determined that the goal of this design is to explore a common lived experience that a group of individuals have in common. Phenomenology is a study of the common lived experience of a group of individuals, such as experiencing

the adoption or infertility process. This study did not really seek to identify the experience as not all teachers due to collaboration practices or reflective practices will have that experience in common. Therefore, this design was discarded. Using a phenomenology does not include the use of various forms of instruments to confirm the trustworthiness of a study (Randies, 2012).

Ethnographic studies cultures of people within the living environment and attempts to make sense of culture being observed. This methodology required the researcher to become situated in the environment to observe the interactions, actions and surroundings of the group (Broussard, 2006). The length of time to study a culture of people is considerable to gather the appropriate findings. An ethnography study may include a specific religious practice or ethnic neighborhood; the results are derived by intense observations. This research conversely pursued to determine perception based on authentic responses of the participants in the work setting, therefore this methodology does not align with the desired solution.

Another qualitative methodology is grounded theory. Grounded theory is comprised of the following: coding of ample and diverse information, continuous comparison of data, and organization into categories and formulating a theory of non-measureable findings. (Mateos-Moreno & Alcaraz-Iborra, 2013). An example of grounded theory might include a derived theory based solely on the literature to support a type of personality that elicits effective management in the work place. The data collection in this study did not involve formulating a theory as a viable method of answering the research questions. Further, the purpose of this case study was to determine how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived

participation in professional learning communities influenced their professional growth. The importance of capturing the different perspectives was crucial to determine the solution and further advance the knowledge of PLCs. Therefore, this researcher considered a case study as the most effective mode of explaining the results.

This researcher determined that a qualitative case study was the best design to address the problem: how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators' perceived participation in professional learning communities influenced their professional growth. More importantly, the intent of this study was to seek the authenticity of perception. In this case, it was significant to explore the details within a context of a school environment that promotes an in-depth explanation of the design and implementation of PLCs that lead to teacher development.

This explanatory case study contributed to the three conditions leading to a strong case study design: the exploration of conditions over time, and an in-depth inquiry of the case and contextual conditions (Yin, 2012; 2014). The most common is the inclusive of conditions over time or beginning and ending within a timeframe, which specifically relates to the condition of events that have created the current state. In this case, the evolving work of PLCs within the school organization over a 4 to 6-week timeframe was used in this study. Next, in-depth inquiry is delved by multiple situations leading to the learning that continues to transpire, in this case the evidence collected in the results of the questionnaires and interviews were rationalized. Finally, the contextual conditions, which encompass data surrounding the case, in this situation the contextual conditions which were the outcomes of the implemented PLCs relative to data provided by the district in archival form were considered.

Finally, the sample, comprised of K-8 school teachers who participated regularly in PLC's were chosen. This single case (one school district) will help the researcher determine how this collaborative structure is implemented within one setting (Yin, 2012). The single case is critical as the researcher sought to determine how the school had implemented PLC structures that had sustained over time and if, or how the collaborative structure contributed to the reflective actions of teachers. It was imperative that the results of this study consider teachers who had a similar experience within a PLC framework. To determine the significance of transformation, required a thorough investigation aligned to qualitative characteristics that maintain importance. Additionally, the recommendations of previous researchers, presented findings in limited formats that suggested using additional methods to further a more complex investigation of the phenomenon embedded into the PLC concept (Chong & Kong, 2012) be selected.

The target population for this study consisted of all K-8 teachers in schools who participate in PLCs. The sample was comprised of no fewer than 30 teachers who gave consent to participate in this study. The sample selected included no more than 16 public educator, interview participants: four administrators, four primary teachers (K-2), four intermediate (3-6), and four middle-school teachers (7-8) in five southwest K-8 public schools. The selected interviewees that particpated in the PLC model transcribed in the district's protocol of particpation to include but not limited to K-8 teachers that teach various subjects or grade. School or district administrators selected had opportunties to oversee and support the PLC models within the organizational framework. The 3-5 schools selected in the study had similar characteristics including student demographics and had established ongoing PLCs.

To collect the data, the researcher used semi-structured interviews, archival data, and a questionnaire to elicit participant responses. An interview is described as a mode of verbal information derived from case study participants, which is usually conversational in nature and guided by the researcher's intent for specific findings (Yin, 2014). Further, the interview data that was collected by the selected, purposeful sample was used to explain how professional learning communities in one K-8 school district structured and implemented to show a primary focus on databased decisions to improve teaching and learning. Additionally, this information was used to further explain how educators explain and describe how participation in professional learning communities influenced their professional growth and instructional effectiveness. Interviews were meant to be no less than 45 minutes and included an open-ended format to glean in-depth understandings.

Questionnaires were provided to the 3-5 schools selected in the study. The participants had an opportunity to respond openly to the questions. The data collected in the questionnaires was used to glean teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest. The data collected was used to explain how professional learning communities in one K-8 school district structured and implemented to show a primary focus on databased decisions to improve teaching and learning. The archival data were used and provided by the selected district to assist with explaining how professional learning communities in one K-8 school district are structured and implemented to show a primary focus on databased decisions to improve teaching and learning.

Definition of Terms

For the purpose of the study, the following key terms are defined to ensure a common understanding was provided throughout this case study:

Common Core Standards. Builds on the existing state standards deemed as the best grade specific goals. The build on the best of existing state standards, the Common Core State Standards consistent learning goals to help prepare students for college, career, and life (Common Core State Standards Initiative, 2015).

Collaborative inquiry. Defined within a professional learning community adheres to collaborating on the same dilemma (Owen, 2014).

Collaboration. A process designed for working together, interdependently, to analyze and strengthen professional practice for student improvement and teacher improvement (Chong & Kong, 2012).

Collective inquiry. Building a shared knowledge base is created by shared knowledge, which is a result of a question answered by the group. PLCs engage in collective inquiry into efficient practices by examining both external and internal evidence. (Dufour, Dufour & Earker, 2008).

Educational reform. The outcome of social and political forums requesting school improvement to increase learning for all students regardless of race, ethnicity or social economic status (Madsen, Schroeder, & Irby, 2014).

NCLB. No Child Left Behind Act of 2001; the intent is to improve achievement among low-achieving students in high-poverty schools supported in school improvement efforts aligned with federal education policy and funding (Forte, 2010).

PLC or Professional Learning Community. Refers to a small team of teachers committed to meeting regularly; working collaboratively on shared goals in order to

improve achievement for each individual student they serve, thus the significance is determining common themes amongst diverse teams of teachers within K-8 schools (Dufour et al., 2008; Hord, 1997).

Race to the Top (RTTT). Funding efforts to support "great teachers and leaders." Funding is achieved through grant applications that design comprehensive and coherent approaches to address data infrastructure, teachers, struggling schools, and standards/assessments (Doherty, Walsh, Jacobs, & Neuman-Sheldon, 2010).

Social cognitive theory. Addresses the relationships between environmental and individual behavior, one is contingent upon the other (Bandura, 1986).

Teaming. "A team that aligns and develops its capacity (willingness or ability) as a team to create the desired results" (Lick, 2006).

Transformational learning theory. Learning which occurs in response to critically examining a current belief or practice and developing a different perspective as a result of discourse, self-reflection and analysis (Mezirow, 1997).

Assumptions, Limitations, Delimitations

Assumptions. The following assumptions may have been present in this study and were fully, considered by the researcher.

1. It was assumed that the selected school district employees had training and were aware of the components of effective PLCs and how they function within a collaborative setting. Therefore, the teachers should have been aware that a PLC may include a level of trust, a willingness of teachers to engage in conflict in open discussion, a commitment to purpose, ability to hold one another accountable and a focus on collective results (Piercy, 2010).

2. It was also assumed that teachers would respond honestly and openly to all questions on the instruments being considered in this study. As educators that are interested in student learning, selected teachers should have a vested interest in providing honest information regarding the status of school and districtwide PLC implementation so as to offer beneficial information to others in a like field of interest.

Limitations. The limitations of such a study could be misguided by previously embedded philosophies on professional learning communities and the identified non-characteristics of those believed by the participants that are included in the study. For instance, "teachers collaborate to analyze their practice and discuss new strategies and tactics, testing them in the classroom and reporting the results to each other" must be a shared belief within the team (Croft, Coggshall, Dolan, Powers & Killion, 2010, p. 7). The idea of collaboration with intention is viewed as rich conversation and a significant learning opportunity if embraced in a transparent fashion. In addition, participants were asked to self-report data, which may limit the accuracy and applicability of the findings as teachers will have different perceptions of PLCs.

Teacher participants may be hesitant to disclose honest perceptions related to collaborative efforts as "school leaders must foster an organizational culture of continuous learning and teamwork through venues such as professional learning communities and professional norms, including, for example, an open door policy for observing each other's classroom" (Croft et al., 2010, p. 8). Therefore, revealing the ongoing function may be difficult for some. This study may also have posed time constraints on the part of the teachers willing to participate. In order to avoid this, data collection took place at a time and place convenient for the teachers. Also, the implementation of PLCs will be different at the various school sites, which may limit the reliability or commonality of findings. Similarly, teacher experiences or philosophies on professional learning communities may influence their perceptions regarding how these collaborative structures work and their value. Therefore, the interview and questionnaires used to collect the data may have been perceived as biased due to the perceptions of participants used in this study, this was also considered.

Delimitations. The study was delimited to one school district; therefore, the results of the study may not be applicable to other settings, or other districts. Due to time and available resources, the researcher made the decision to use a sample of teachers who were readily available, who also participate in PLCs on a regular basis.

Summary and Organization of the Remainder of the Study

The current study will present five chapters. This chapter provides the background information to support the magnitude of research to support implementing PLCs. Further, Stegall (2011) delivered an in-depth analysis of how PLCs are designed to respond to the instructional needs of teachers for direct student achievement. The purpose of this chapter was to glean the importance of the contributions of professional learning communities and the power of collaboration relative to teacher learning and student achievement relative to educational reform.

The research was based on the efforts of scholars and authors, including Bandura (1986), Mezirow (1997; 2003), Hord (1997), Dufour (2009), Dufour et al. (2008) and many more. The clarifying evidence built an understanding of the significance of the structure and organization of PLCs in collaborative teams. The results from this study explained how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

Chapter 2 offers a literature review of current studies associated with professional learning communities and identified themes, related to the research questions that guided this study. Chapter 3 outlines the methodology, research design, and procedures that were required to conclude this case study. Chapter 4 will detail how the data was analyzed and

will provide a written summary of the case study results. Chapter 5 will infer the collected data to conclude with processes used to implement effective teaming as well as recommendations for further research.

Chapter 2: Literature Review

Introduction to the Chapter

There is a significant amount of research supporting that professional learning communities (PLC) offer teachers learning and training opportunities aligned with recent reforms in education (Scott, 2012). With these increased accountability mandates, educators have initiated a variety of programs and strategies designed to improve student achievement. One example is the implementation of PLCs within school organizations. A PLC is a small team of teachers committed to meeting regularly and working collaboratively on shared goals in order to improve achievement for each individual student they serve (Dufour et al., 2008). With this embedded approach to professional development that structured PLCs can offer are supportive of best practices focused on student achievement. Furthermore, this forum of teacher and student success is paramount in ongoing collaboration.

Valentin (2014) noted that most studies on PLC models have primarily focused on how collaboration impacts student achievement but noted that limited research exists on teacher perspectives of how this collaborative structure actually works. In the supportive work of Bitterman (2010, the researcher found that teachers needed a structured framework for the PLC process to be effective. The author also indicated that a growth mindset and a focus on inquiry were essential characteristics of high achieving PLCs. Bitterman recommended more study on the topic of how teachers describe the implementation of PLC structures to improve teaching, learning, and also how they adopt that “inquiry” mindset to further understand the process. C. Stewart (2014) suggested further empirical research regarding PLCs as a school reform model and how to sustain their effectiveness would be a benefit to the vast knowledge of PLC organizations.

Therefore, a gap exists with respect to PLC models and how they extend the growth and development of teachers.

To gather pertinent information to support this case study, this researcher reviewed the Expanded Academic Database, using the terminology frequent in PLC studies: “professional learning communities,” “collaboration,” “teacher learning,” “transformational learning,” and “social cognitive theory.” This gave the researcher the opportunity to gather peer-reviewed sources from recognized, academic venues which resulted in the significance of PLCs and provided results of prior studies which are included in this literature review. The conclusion of previous studies established the defined gap in research and enabled a supportive endeavor offered in the current study. Further, the results generated research to provide a foundational understanding of adult learning and specifically the grounded work in transformational learning. The cited work examines two of the scientific theories that support the conceptual framework as described in transformational learning and the social cognitive theory.

The purpose of this study was to explore how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development. Furthermore, this study was conducted to address the gap on how teachers perceive PLCs, how the structure fostered an inquiry and growth mindset, and how teachers perceived factors and conditions that create sustainable PLCs.

The outline of Chapter 1 highlighted that reforms in education, including NCLB (2001), Race to the Top (Doherty, Walsh, Jacobs & Neuman-Sheldon, 2010) and more currently, the implementation of the Common Core Standards (Common Core State

Standards Initiative, 2015) have required teachers to learn and develop new instructional and collaborative skills to engage in high-level learning (Stegall, 2009, & Valentin, 2010) producing gains in student achievement. In order to offer more time and occasions for teachers to develop these necessary skills, many schools have applied collaborative models such as PLCs to support reform expectations (Owen, 2014).

The following review will first provide a historical background of PLCs and the theories significantly, influencing the success of PLCs. Second, this review will offer the concepts that support the framework of the organization and structure of PLCs and outline the necessary components of PLCs to improve teacher development will be explored. Following this examination, the theories that support adult learning will be discussed and supported in detail. Finally, literature relating to the phenomenon will be explored as a supportive venue that contributed to this study.

Background to the Problem

Hord (1997) described that during the 1980s, the term "professional community of learners" evolved as the act of teachers and leaders continuously seeking new learning. The goal of this action was to enhance effectiveness that resulted in student improvement. This has also been touted as "communities of continuous inquiry and improvement." The author listed five attributes of effective professional learning communities: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. Professional learning communities redress teachers' isolation, create shared teacher responsibility for all students, and expose teachers to instructional strategies or knowledge they did not have access to previously. "Such communities can be venues for JEPD (job embedded professional development) as well as other forms of reform based professional development" (Hord, 1997, p.7).

Schools that implement PLCs must offer teachers time, training, and guidance in order to collaborate and plan instruction designed to improve student-learning outcomes. Therefore, school leaders must provide clear expectations and structures in order to allow teachers to accomplish the goals of a PLC.

Additionally, there is significant information that supports the idea that PLCs "provide a framework and process for ongoing learning and professional growth" (Stegall, 2011, p. 9), for example, Chong and Kong (2012) noted that teaming and collaboration models require that teachers have time to meet regularly to promote instructional awareness and job-embedded teacher development, which results in sustained learning (Owen, 2014). Likewise, Schmoker (2006) noted that in PLCs, teachers work with experts in education and one another to learn about and discuss instructional techniques that will improve the teachers' skills, but more importantly, impact student learning. During this time, it is important that team members tap into each other's existing capabilities and potential (Schmoker, 2006). Many times, the kind of disagreement and disequilibrium that comes with critical questioning and debates about best practices in this discourse extends the professional growth of teachers (Owen, 2014).

Several studies have been conducted on the relationship between the implementation of PLCs and student achievement (Scott, 2012) and the impact that collaborative frameworks such as PLCs have on teacher self-efficacy (Romeo, 2012; Stegall, 2011); for instance, Valentin (2014) highlighted the importance of teachers to the success of PLCs, but also noted that limited research exists on teacher perspectives of how this collaboration structure actually works in terms of improving the instructional skills and development of teachers. However, a study was conducted on teacher perspectives of science PLCs, Bitterman (2010), the author found that teachers needed to

be aware of the latest research on instruction and learning, there needed to be support structures in place for PLCs to function, and teachers needed time to plan and develop as professionals. The author indicated the importance of a growth mindset and a focus on inquiry throughout the collaborative dialogue as a significant element to the success.

Like Valentin (2014), Bitterman (2010) recommended more study on the topic of how teachers describe they implement PLC structures to not only improve student learning, but to also adopt that "inquiry" mindset as they grow professionally as educators. Like many, C. Stewart (2014) recommended further empirical research regarding PLCs as a school reform model and how to sustain their effectiveness as an opportunity to invest more effort to understand the process. Yet, despite keen efforts to determine the success of PLCs, it had not yet been determined how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

Conceptual Framework

The conceptual framework of this section provides the foundation for PLCs and teacher development. This current research study was supported by the transformational learning theory, social cognitive theory, and the foundations of professional learning communities. In Bitterman's 2014 research, the author described that a conceptual framework for professional learning communities captured ideas to better support an investigated phenomenon on collaborative learning. Also, Servage (2008), stated that if "properly implemented, the professional learning community represents "transformation" from factory modeled schools" (p.64).

This section of the study is intended to explore the characteristics of PLCs and how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators' perceived participation in professional learning communities influenced their professional growth and development. Each of these concepts were key to further understand professional development, student learning and organizational support.

Transformational learning theory. Mezirow (1997) contended that transformative learning is the act of automaticity of thinking and eventually occurs naturally. In terms of adult learning, the author further explained that livelihood and the actions of being are sometimes a direct result of how we are expected to behave. Yet, the idea of transforming beliefs is contingent on transformative learning and changes are clearly effected by a personal "frame of reference." A frame of reference is grounded in past experiences, associations, new information, conditioned responses, and values. Ideas of others may often be rejected based on the preconceptions one may hold as truth which can challenge a sustained change. Servage (2008) describes that transformation within schools as a fundamental shift relies heavily on the concepts grounded in PLCs. Thus, PLCs if implemented correctly, have a profound way of transforming new truths that better define effective classroom instruction.

The determining factors relevant in transforming a frame of reference is through "critical reflection on the assumptions" based on interpretation, beliefs, and habits of mind. "Self-reflection can lead to significant personal transformations" (Mezirow, 1997, p.7). More importantly, the established belief of one's own ideas are at times so strong that shared or contribution of ideas by others are often rejected based on preconceptions held as truth by the participant. The author clarified that there are four processes of

learning that need to be addressed if new learning is to occur: elaborated on a current point of view, established in a new point of view by encountering the differences of others, experience driven, and by critically reflecting on biases established by one's own belief.

According to authors, McComish and Parsons (2013), transformational learning about teaching occurs when teachers begin to examine their practice critically and develop different perspectives that deepen one's understanding. Furthermore, McCormish and Parson referenced the work of Mezirow (2000) in their study by indicating that the art of transformational learning is an attitude adjustment based on new knowledge and the application being transformed into practice. If this is true, then PLCs are modalities of learning that do not rest on pedagogical skills but rather rely on critical reflection that enables learners to transform beliefs into sustained instruction that become the norm of effective teaching (Servage, 2008). This study occurred in a setting that encouraged teachers to be learners of one another; a direct result of transformation not reformation in terms of evolving and discovering new knowledge that supported transitioning to more effective strategies and sustained learning.

Social cognitive theory. Bandura's (1986) social cognitive theory addresses the relationships involving personal, behavioral, and social/environmental factors influencing individual behavior. The theory implies that capabilities inclusive of processing are vicarious, symbolic, and self-regulatory, all of which play a significant role on acquisition of learning. More specifically, the author maintains that vicariously, individuals acquire skills, behaviors, and cognition by simply, observing others.

Symbolic processes are often used to alter environments that pose obstacles in life. Further, this includes reacting to situations by problem solving, communicating to

enhance learning, and seeking new ways of addressing situations. Finally, self- regulation involves assessing goals and identifying strategies to support achieving the end goal. As the task unfolds, individual learning opportunities are achieved throughout the process by deciding if the strategy requires adjustment and if so why. Hence, as tasks are completed, individual reflection is significant in determining if the progress is correctly justified and if successful, self-efficacy is heightened.

Bandura and Wood (1989) contended that belief in one's own abilities can be strengthened and instilled by the following ways: mastery of experience, modeling, social persuasion, and physiological state of mind. The perceptions of self-efficacy are an essential component in shaping the outcomes of instilled beliefs. Further, as adults learn and observe positive progress, their desire to learn more becomes enhanced.

Bandura and Wood (1989) described that the social cognitive theory is essentially relevant in organizational structure. Thus, the development of peoples' cognitive, social, and behavioral competence through mastery modeling and the belief in ability is paramount in motivation through goal setting. In this case, the theory was further elaborated by a learning environment grounded in discourse and the application of change through embedded opportunities to learn noted in PLC frameworks. Additionally, the social cognitive theory supports that often an opportunity for learning is contingent on supportive environments and shared resposibilities, both components are essential in PLCs. Although, most behaviors are learned intently and are reliant on self-efficacy, this idea is present in terms of a person's belief in his or her own success in both present and future situations that encompass teaching and learning.

Professional learning communities. According to Dufour (2009), the learning from one another is not always centralized in a content area or one grade level but more

importantly, on the skills necessary to support all learning environments that promote student achievement. This foundation is upheld in the structure of functional PLCs. Dufour et al. (2008) contended that there are three ideas that drive professional learning communities; first, members work together to determine what students must learn. Then, teachers commit to progress monitoring the learning on a timely basis. Then, teachers provide support to those students who are struggling, and extend or enrich the learning of those who have mastered the objective. Second, the term isolation is noted as unproductive and calls for collaborative efforts that build on interdependency and collective responsibility of all learning for all students within the school organization.

Teachers must work together to problem solve and seek the expertise within the school team for further development. Finally, there must be evidence based monitoring to ensure that students are learning and to determine if what is being done to support the problem is valid. Hence, this supports the data recommendation to intervene or extend the concepts of individual learning environments and ensure academic success, in order to gain further insight on influencing teacher development.

Significantly, "professional learning communities have been up held as powerful structures for teachers' continuing professional development" (Servage, 2008, p. 74); however, how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development required further exploration. If this was true, then important details needed to be explored to determine how collaborative teaming models were perceived by educators to advance professional growth including: addressing poor student performance, acknowledging that not all teachers have the skills to address particular

student needs, and addressing the discourse of new content and teaching strategies (Van Lare & Brazer, 2013). This is characterized in the social cognitive theory that supports the relationships that involve personal, behavioral, and social/environmental factors that influence behavior.

It is important to address that teachers must be willing and be able to effectively collaborate in PLCs to transform instruction that improves student achievement and personal development. The results of this study extended the theories that support the perceptions of teachers as they participate in collaboration. Further, the influence on teacher development within effective professional learning communities continue to play a significant role in transformational learning and sustained improvement.

Review of the Literature

The intent of PLCs is anchored in collective commitments and a focus on learning (Dufour et al., 2008). Banks and Knuth (2013) argued that public schools repeatedly grapple with restructuring in response to change and new trends, however one reform movement that potentially may be regarded as a true paradigm shift is captured in the concept "professional learning communities." The advantages of these collaborative organizations are the forums of learning opportunities that are offered equally among team members. Thessin (2015) confirmed that the implementation of PLCs is often a route secured to meet reform expectations, yet the author discussed that many districts or schools do not consider the appropriate supports and components required for PLCs to produce instructional effectiveness.

Additionally, Banks and Kurth (2013) explained that PLCs are based on two assumptions. First, is that the knowledge and skills required in educational practice are initiated in the day to day experiences and interactions, therefore profound

understandings are advanced through critical reflection with others who share the same experiences. Secondly, an active, ongoing, and structured professional discussion increases professional learning and abilities that improve student outcomes. However, the supportive conditions necessary for PLCs to function properly are heavily, reliant on logistical conditions, capacities, and relationships developed among colleagues to ensure productivity (Hord, 2007; Gray, Mitchel & Tarter, 2014).

Qualitative PLC research. It is significant to address that prior qualitative studies have been produced that supported this researcher's intent to conduct more exploration on how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

One similar example is Bitterman's (2010) study, which examined how three middle schools engaged in professional learning communities to further develop effectively as science teachers. The findings included an analysis of implementation efforts to support teacher development in a middle school setting, specifically content focused. Professional development was discussed as a major component of success. Further, the collected data determined that professional development aligned to the team and continuous support in embedded effective teaching practices was significant in the results. The researcher determined that teachers benefit the most from continuous dialogue on data and instruction to meet the ongoing needs of students. The researcher also suggested that an elementary study on PLCs be conducted to extend the knowledge on collaborative efforts within professional learning communities.

The following work summarized in C. Stewart's 2014 study, found that learning within a professional learning community is most effective for transforming teaching and learning. The author noted that participants are ideally invested in the work they do day to day and most importantly, contributions of a PLC are best when all members have taken part in the organizational framework. It was also eminent that cohesion be present if honest feedback and improvement are the authentic focus of the team. Thus, the importance of student needs based on data are essentially the driving force of production. The author concluded with the following: "active learning working with content to create lasting change; allows teachers to focus on specific needs" (p.31). The work produced by C. Stewart (2014) offered leverage needed to further the work in qualitative form, ideally the work of a PLC is most certainly, centralized on school improvement. If teacher perception on individual development is a critical component, then it is evident that the best framework to support this endeavor is one that embraces an ongoing dialogue which engages teachers in effective instruction to further the work that must be done.

Another example is found in a study produced by Valentin in 2014; it was designed as a qualitative study to investigate teachers' perspective on math instruction, student learning, and achievement in a vertical alignment process. The researcher sought to interview teachers to better understand teacher perspective. Like most, collaboration was found to be an effective way to connect teachers to district goals. The extent of collaborative efforts was determined to help teachers better understand the curriculum and support student learning. Significantly, the vertical alignment teams or teams that connected each grade level to one another were meant to lead each individual school's math team to address specific content and instructional delivery methods. The participants grappled with topics in each grade level to decrease repetition and provide

transitions with ease for students. The researcher concluded that most participants appeared to have established lasting connections and appreciated knowing who would be teaching his/her student the following year, which is maintained in a supportive culture of trust discussed in PLC settings.

In an additional case study produced by K. Stewart (2012) sought to determine if PLCs do in fact, sustain student achievement. The researcher concluded through interviews and observations that simply relying on organizational factors would not guarantee success. The findings for sustaining student achievement included the following: "sustainable education leadership, student-centered learning, shared values and vision, collective inquiry into best practices, action oriented and a focus on results" (p.157). The researcher determined that the results of this study do support the reform efforts on improving teaching and learning within lower socioeconomic school districts. Significantly, the recommendation for further study included an investigation on the direct relationship of an implemented PLC model and student achievement. It was noted that all participants in this study elaborated on the positive effect that collaboration has on student success, which is also an alignment to this current study.

Chong and Kong (2012) also offered a qualitative approach on a lesson study that identified the conditions most effective in collaborative settings supportive of teacher efficacy. The findings suggested that sustainable change is captured in self-beliefs. Therefore, embedded professional development opportunities and time are necessary components to support sustained change. This study utilized the social cognitive theory to better illustrate psychological constructs related to teacher motivation. The concluding efforts maintain that school PLCs provide influential forces linked to self-efficacy and effective instruction.

Additionally, Lick (2006) included an analysis also using qualitative information to promote defining factors of "learning" teams which are similar to PLCs. The author determined that the potential of learning teams in collaborative structures is vast in terms of, effectively achieving common goals. However, the development of learning teams must be intentional. Notably, an organization with these teams in place is more likely to generate change and new learning, lending itself to school improvement. Therefore, PLCs show great promise if the implementation process is well thought out.

Finally, Owens (2014) contributed a qualitative case study to address the experiences of teachers in one Australian state. This researcher determined that there is ample support and funding for individuals to attend external conferences then bring back that learning to share with their school or team. Yet, how this is delivered is not always the same. For example, when educators are asked to share the material of what was learned at a conference or training, what may be applicable to the educator may not be what the objective of the training was. There were identified indicators that characterized that not all PLCs operate in the same phase of development, however the author determined that as teachers survey various sources of data, co-assess student work, and debate its quality as well as learn from each other, innovation is ongoing. In this case, the one that benefits the most is the student. The researcher also determined that leadership support is crucial in the development of teacher effectiveness; therefore, it is imperative to explore the structure and organization of PLCs that are most prominent to teacher development.

PLC's focus on teaching and learning. The following literature supported the current research effort on the significance of how PLC models are implemented with a focus on teaching and learning. Further, it was intended to provide a foundation on

further information relative to how teachers perceive participation in PLCs influences their professional growth and development through collaboration and professional development. Thus, the importance of determining teacher perception of the development and the structures that are supportive of that learning are crucial indicators to schools and districts seeking PLC models to sustain continuous school improvement.

Attributes of professional learning communities. Thessin (2015) suggested that planning a full implementation of the PLC framework must begin with an assessment of the school's readiness to participate in the work required of high functioning PLCs. The author elaborated that supporting schools is not a "one size fits all" approach. First, schools and districts must identify the purpose of their work and identify school goals. Therefore, identifying the mission and vision is critical to this review.

Recognizably, the impact of a mission statement informs staff and students of the purpose of their journey. More importantly, the vision of an organization inspires action by building on past success and offering a glimpse of the future (Gruenert & Whitaker, 2015). "If a mission clarifies our purpose in the school (why we are we here); a school's vision is an idea of what it hopes to eventually become" (p.30). The mission of professional learning communities, according to Bitterman (2010), is a focused approach on continuous improvement of learning through student assessment. Further, the vision from this perspective is founded in collaboration sought to deepen understandings of teaching and learning that supports school wide improvement.

Particularly, Hord (1997) described that during the 1980s, the term "professional community of learners" evolved as the act of teachers and leaders continuously seeking new learning. The goal of this action is to enhance effectiveness that results in student improvement. This has also been touted as "communities of continuous inquiry and

improvement." The author listed five attributes of effective professional learning communities: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. Professional learning communities redress teachers' isolation, create shared teacher responsibility for all students, and expose teachers to instructional strategies or knowledge they did not have access to previously. Such communities can be venues for JEPD (job embedded professional development) as well as other forms of reform based professional development. (Hord, 1997, p.7).

DuFour et al. (2008) extended this idea by describing in detail a set of six characteristics that illustrate the process of professional learning communities, which include: shared mission, vision, values and goals, collaborative culture, collective inquiry, action oriented and a commitment to continuous improvement. Each recognized characteristic is focused on student achievement. This is a compelling commitment to embrace high levels of learning for what educators within the school or district believe all students should be or become. More importantly, established clarity is best supported when setting expectations that all stakeholders embrace in order to create a learning environment that supports the purpose, way in which it will be achieved, and buy in for all staff and learning goals. In terms of a collaborative culture, this is derived with a focus on learning and by members working in collaboration with one another. The team members work "interdependently" and hold each other mutually accountable for the learning of all students.

Collaboration, in terms of a PLC, means extending the conversation beyond the table and applying the analysis of student data into the instructional practice to impact a more profound result. Hord (1997) added that participants in intentional conversations

apply new ideas to problems and are then able to create new learning conditions for students. Banks and Kurth (2013) determined that effective teaming occurs when dynamics are inclusive of a shared goal of meeting, focusing on the needs of students to increase collective professional knowledge and skills to support teaching. Further, the opportunity to meet and establish the following norms; establishing priorities of time, space, and roles ensued during PLC efforts.

Defining collective inquiry into the best practice and current reality is a level of engagement within a PLC framework that includes best teaching practices, clarifying current practices, and a transparent assessment of their students' current levels of learning (Dufour et al., 2008). Thus, collective inquiry supports that shared knowledge transforms new possibilities to support teaching and learning (Bitterman, 2010). Additionally, action orientation or the concepts of learning by doing is turning the hope of change into a plan of reality. Educators understand that the power of knowledge is met with action. Furthermore, learning by doing creates a catalyst for change.

A PLC recognizes that until all members do something different, there is no indication that a different result will occur (Dufour et al., 2008). Therefore, a commitment to continuous improvement results when PLCs are in search of a better way to achieve the goals and purpose. The requirements of an ambitious outlook include data driven planning based on student learning that requires developing strategies to build on the strengths and weaknesses present in the data. Finally, implementing those strategies into the teaching and learning environment for student success. The team analyzes the impact of the effectiveness of the applied strategies to determine if continuous improvement is occurring. Therefore, the goal is not reliant on learning a new strategy but creating the environment for permanent and lasting results (Dufour, 2009).

A focus on this process significantly impacts professional learning communities and contributes to effective teaching and student achievement. Stegall (2011) added that the caviate of successful PLC's is that a supportive and shared leadership are present in a manner that is believed and accepted by staff, the school. The author noted that various collaborative PLC teams that work together must begin by developing a shared core vision and set of value. Hence, collective commitments clarify how individual roles of all members contribute to the goal (Eaker & Keating, 2008). PLCs must also include collective values and common language, which significantly contributes to effective teaching and learning aligned to high levels of student achievement for all students.

Gray, Mitchell, and Turner (2014) contributed that trust, collective efficacy, and enabling school structures elicit keen characteristics of the environment that promotes the success of PLCs. The authors further argued that trust is the most important component of functioning PLCs. Colleagues must maintain transparency of student results and identify instructional weaknesses to gain improvement. The most substantial concepts embraced in authentic PLCs is also identified as a challenge: "PLC concept is convincing educators to shift from a focus on teaching to focus on learning- to move beyond the question, (was it taught?) and to the far more relevant question, (was it learned?)" (Dufour et al., 2008, p.19).

Van Lare and Brazer (2013) found that schools and districts that establish enforcement of specific protocols can be a means of improving the fidelity of implementation, however "applying routines is problematized because learning suggests inquiry rather than compliance" (p. 391). Further, the research of PLCs suggested that exploring gaps between theories and student results and recreating the delivery of content through new strategies implies that autonomy and decision-making creates conditions for

innovation that promotes the authenticity of PLCs (Van Lare & Brazer, 2013). Linder, Post, and Calabrese (2012) contributed that teachers participating in PLCs are appreciative of the supports administration can provide to secure time and space for meeting, materials, and expertise that all contribute to classroom efforts.

In summary, the success of PLCs is based on the structure of the community, the goals, and the collaboration that exists regularly throughout the school year or day (Bitterman, 2010). The ideas presented in this work indicated that a connectivity among teachers to invest in the mission and vision of a PLC framework must be present if sustained change is to occur. If the concepts are tangible and embedded in the philosophical understandings, then the ability to extend that knowledge into action is possible with commitment.

Common practices for PLCs and teacher development. In the study conducted by Thessin (2015), the author highlighted a comparison among high-functioning PLCs and struggling PLCs. This included the presence or absence of the following conditions, which played significant roles towards the effectiveness of the organizations, which included: "the provision of school based professional development on PLCs; existing school practices; and a school culture focused on collaboration and the readiness of school leaders and the communication of expectations by school leaders for PLC work" (p.18). Further, the identifying that high functioning PLCs are often more productive and adhere to the characteristics supported in a PLC framework. Thus, the results are ongoing improvement of instructional effectiveness and teacher development.

Setting up a PLC requires that a safe space that encourages teachers to participate in developing conceptual capacity and skills to justify effective approaches in their classroom pedagogy be present in each collaborative exchange (Feldman & Fataar,

2014). Additionally, Eaker and Keating (2008) found that professional learning communities must be embedded into the day-to-day routines of a school culture. The structure is not enough to transform a school into a professional learning community. The term "professional learning community" travels easy but the requirements are more than organizing staff into teams, changing schedules, developing a new organizational chart, or organizational structure. Hence, the heart of practicing as a PLC is engaging in an intentional process that impacts the culture of the organization (Van Lare & Brazer, 2012). More than ever, this requires a shift in fundamental purpose from teaching to learning, ensuring that the mission elicits the high levels of achievement for ALL students.

In PLCs, teachers are significantly driven to ask hard questions and address the needs of students in changed ways. Ultimately, without fixating on results, a guarantee of student results is not applicable. Teachers must use student learning to drive the change that prompts sustained improvement. Scott (2012) added that directional clarity must overplay good intentions if a PLC is to succeed. Communities of practice are significant in terms of promoting change, encouraging teacher leadership, and ultimately ensuring student success. A practicing PLC participates in solution driven dialogue that encourages and expects pedagogical change (Fieldman & Fataar, 2014).

Furthermore, Croft, Coggshall, Dolan, Powers, and Killion (2010) elicited that teachers benefit from multiple opportunities to learn in a collaborative setting. Colleagues must rely on each other's expertise to dissect the current instructional delivery and extend focus on individual needs. In the contributions by Gray, Mitchell, and Tarter (2014) the authors demonstrated the importance of collective efficacy as being a significant component of collaboration. Collective efficacy implies that the individuals in the group

believe in each other's abilities so that opportunity to produce results is heightened. The authors also maintained that the more efficacious the group of teachers are, the more likely they will sustain the purpose of PLCs.

Likewise, a focus on learning prompts the importance of transparency among teachers that fosters a learning forum that is purposeful. PLC participants must focus and engage in discussions with colleagues from their team around crucial questions (Dufour et al., 2008). Collegial trust is an essential component of transparent forums that elicit honest feedback and difficult conversations. Gray, Mitchell, and Tarter (2014) determined that although colleagues believing they can rely on each other is important, it is equally important that the faculty also have the confidence that the leader or administrator maintains their best interest in decision making efforts. Fieldman and Fataar (2014) outlined that most significant PLC structures are focused on opportunities for teachers to learn. A PLC plays a unique role in encouraging teachers to reflect continually on current practice and the impact of that on student learning. Therefore, optimal learning is achieved when deliberate and supportive conversations are centralized on critical reflection and an inquiry mindset prevails in terms of a pedagogical shift.

Relative to student success, Marzano (2003) found that the most significant factor that affects student learning is the teacher. The author clarified that effective teachers are useful to various learners in a variety of settings. If the teacher is ineffective, the students under that teacher's direction will achieve inadequate progress. In a study produced by the author, the results elicited that effective teachers produced 53 percentage points in student achievement over one year, whereas the ineffective teacher production is merely 14 percentage points in that same year. Significantly, the author maintained that if teacher's master three factors which include: instructional strategies, classroom

management, and classroom curriculum design, then the teacher would see at least an average academic growth score. Furthermore, the author discussed that although each are identified separately, they are not isolated factors in terms of student success or application. This is evidenced by the crucial importance of teacher development and sustained growth.

Finally, Stegall (2011) contributed that long lasting reform and transitioning to a PLC is not about a memorized mission statement by all stakeholders but more importantly, it is about the ownership of the day to day work that is contingent on student achievement and changed practices. The art of teaching is a culmination of balancing all the factors to employ great classroom success and achievement. Conley (2011) also found that the ability of a teacher to develop cognitive strategies is essential in the 21st century classroom. Further, the kind of community required to change teachers' beliefs about student support opportunities is a direct result of relationships amongst staff that not only encourage deep collaboration but the teaching craft needed in meeting the needs of all students. Dufour (2009) added that the quality of teaching remains paramount in student learning, and the PLC concept is ultimately the best strategy for creating the systems that ensure good teaching in the classroom.

Collaborative teaming models that support teacher development. According to the contributed efforts of researchers, there is a cross-over in skills used by both general and special educators. Thus, this shared expertise is essentially the framework and mission of collaborative teaming (Banks & Kurth, 2013). This idea significantly involves the work of many to support the learning goals of all students. In the work outlined by the authors, the role of specialist educators is profound in a collaborative team setting. The requirement of all participants is not to just go beyond supporting the students' learning

but to be mutually accountable for the professional learning of all team members. The idea of this shared responsibility ensures that the competencies of experts are shared with other members.

Collaborative learning structures involve teachers meeting on a regular basis to develop shared responsibility for students' success. It is important that this time include a cycle that begins with examining student needs and identifying the teaching strategies and approaches to best support the student, along with following up on student results (Chong & Kong, 2012). Piercy (2010) also contends that there are six conditions for necessary change to occur: mutual goals, equality among participants, shared responsibility for participation and decision making, shared responsibility for outcomes, sharing of resources, and voluntary. Further, the author determined that if collaboration is expected, then shared understandings must be developed.

Collaboration can be an essential part of creating a team of transparent learners that entrust one another with success and obstacles. Contributing authors, Silva and Contreras (2011) noted in a school wide study that included a collaborative coaching and learning model, found that 96% of the participants supported that an improved teaching practice is aligned to collaborative teaching. The model fostered an in-depth opportunity to work as an accountable professional learning community focused on student learning. Additionally, in the work of Linder, Post, and Calabrese (2012), the authors determined that collaboration within PLCs that support teacher development is inclusive of opportunities that select a topic and produce knowledgeable facilitation that further professional development. This is because most opportunities presented in a collaborative team provide an openness for teachers to exchange instructional strategies and monitor the success of students within the implementation process. Significantly, the presence and

support of colleagues venturing the same approach and the accountability to one another can contribute to profound and more importantly, positive change.

More recently, with mandated requirements such as those presented in NCLB, the notion that lower achieving students in economically challenged areas are a crucial component of providing equality for all students, however the efforts of this reform initiative are still unclear, however, it is relevant that school improvement has become a focus for improved education (Forte, 2010). Madsen, Schroeder and Irby (2014) indicated that increasing expectations of schools have encouraged organizational development required to bring about change.

In an example included in the Race to the Top (RTT) report (Doherty et al., 2010) discussed that the success of any plan is dependent on communicating the expectations for the process to occur. If this is true, then the embedded use of a collaborative organizations will assist with identifying unbiased evidence supported by student learning and articulating a process for determining further action as an essential recommendation for sustained improvement (Doherty, Walsh, Jacobson, & Neuman-Sheldon, 2010).

Notably, in the study by Croft, Coggshall, Dolan, Powers, and Killion (2010), the authors stated that collaboration is the art of analysis. The authors determined that many collaborative opportunities for teachers to extend learning should include: action research, case discussions, coaching, critical friends group, data teams, lesson study, mentoring, professional learning communities, study groups, and examination of student work, concluding that teachers learn from multiple collaborative opportunities. These occasions are sought when time, space, structure, and support are provided by the individual school or district. It is suggested that with the elimination of excessive

paperwork and non-instructional teacher duties, along with aligning teacher schedules and the clarification of goals and outcomes, collaboration will be met with more success.

Owen (2014) contended that examination from various sources of data about student learning requires debate to implement innovative practices (teacher development) to support their teams and more importantly, student learning. Specific examples of change are highlighted throughout the study focused on influential efforts of collaborative teams being the guiding source of both teacher development and student learning. Additionally, Jao (2015) found that endeavors for improving "on-the job" collaborative opportunities are comprehensive of professional learning communities, co-teaching, and peer coaching. The study revealed that working together enabled teacher experience and reflection on lesson delivery to authentically extend teaching knowledge and improvement. The teachers reported that collaboration is an investment of time and resources. However, opportunities to share ideas is reassuring when teaching like subjects, as well as discussing, trading, and sharing resources.

Leading and expecting collaboration can be challenging, but the results offset the obstacles. Dufour (2009) concluded that positive peer pressure during collaboration fosters improvements. This occurs when educators are open to seeking new practices rather than preventing the team from achieving set goals as a result of poor student performance from individuals or groups. Yet, it is not realistic to believe that all members will be inspired to do what they say or that positive peer pressure will always work. Therefore, there are instances that leaders must address in order to resolve these problems. The collective commitments held up by the group afford the leader a platform to address discrepancies by providing the evidence that supports the commitment.

However, in C. Stewart's (2014) work, the author maintained that motivation is impacted by the ownership of goals. Resistance to constructive criticism is moderated if groups attend the principles of group learning which include: equality (teachers have added value in the outline of professional development), choice (teachers chose how and what they will learn), voice (respect is given to teacher's voice), reflection (reflection is significant in learning), praxis (learning is authentic and applied to practice), and reciprocity (all participants offer and receive feedback).

Teacher development is often achieved if the group commits to working together for a semester or longer for professional improvement to occur. More importantly, the process of development that include dialogue about student work and identifying the gaps that should be addressed in the learning environment. C. Stewart (2014) contended that teams should consider the learning objective and address an in-depth understanding of how students learn, active learning that includes ongoing review of student work, and observing others teach as well as being observed with feedback, coherence of expectations within the group, duration or a commitment of time, and collective participation. Teacher practice was most impacted when teaching the same content or grade level as other members.

The contributions of Lick (2006) are practical learning team design processes that include the following: build group synergy, foster co-mentoring, utilize educational resources, integrate knowledge and create potential solutions, apply possible outcomes, recheck group synergy and co-mentoring. More specifically, the author maintains that building group synergy "is the foundation for being self-directed, setting and focusing on challenging new goals, having collaboration and reflection, and dialoguing and thinking insightfully together about complex issues" (Lick, 2006, p.93). The author defended that

supporting co-mentoring in the group offers support and encouragement to everyone else, which in turn provides a safe environment to expand the thinking and application of new learning. Hence, using learning resources to promote and enhance understandings affords an increased awareness and potential for more creative solutions to problems. The results indicated that staff are encouraged to use all relevant resources as the group integrates into one or more possible solutions for desired outcomes.

Lafifi and Touli (2010) studied collaboration among teachers and determined that participation has a positive effect on cognitive abilities of learners and on teacher's skills that support in-depth discussion. Valentin (2014) additionally concluded that teachers participating in collaboration felt less alone and more connected to goals. Further, this study highlighted the significance of vertical alignment and empowered teachers to have better understandings of connecting grade level expectations, strategies used, and becoming familiar with student backgrounds. However, ongoing examination of student results with an agreed upon measure and outcome is always the driving force of professional learning communities in collaborative teams. Banks and Kurth (2013) endorsed that collaborative efforts of PLCs is the most effective process that moves from isolation to improved learning for all students. All members must maintain inquiry, continuous learning, and efforts to seek more profound instructional practices to sustain improvement.

Professional development. Educational funding efforts identify a "need" to strengthen schools as aligned to the concepts in Race to the Top (RTT) that awarded a significant amount of educational funding to states by competition (Doherty, Walsh, Jacobs & Neuman-Sheldon, 2010; Jones & Dexter, 2014). Doherty et al. (2010) specified that one important component that states must consider is teacher quality; "having made

human capital one pillar, the Department has made clear that it believes all states have considerable work to do on improving teacher quality" (p.9). Further, the report found that a successful system should provide educators the tools to be successful. This included supports for development, rewarding accomplishments and ensuring that accountability of results is maintained. Additionally, as with all reform proposals the goal is that students achieve at their highest potential.

Considerations of effective professional development remain unclear and depend on the content of which the development is focused on. For example, Jones and Dexter (2014) discussed how teachers learn and the facilitation of learning that is most valuable to them. The authors determined that recommendations of training classes would be better suited if teachers were provided more choice. The informal learning defined in the study included observations of one another, email, and conversations with several different educators, and appeared to compliment the formal professional development. However, time is an obstacle faced by teachers and educators. Yet, ongoing, reflective dialogue is an essential component of authentic professional development that is meaningful and transforms practice to expertise.

Stegall (2011) provided that the intent of professional development is to improve the quality of classroom instruction. In an effort to maintain a competitive role, educators are continuously seeking improved ways to impact student achievement. The challenge noted by the author is improved school wide instruction. Most often, improvement is focused on isolated teacher change versus a more profound, school wide change. Patton, Parker, and Pratt (2013) argued that by investing and putting teachers at the forefront of change, professional capital is met with teachers making complex decisions in a collective setting, being transparent, and open to feedback which in turn provides

teachers and schools the ability to reach full potential. Further, it can be assumed that professional capital is one of the most prominent resources, schools can and should invest in. The idea of sustained change is achieved when shifts in thinking are transformed into practice which leads to student achievement.

Servage (2008) found that PLCs have been a powerful structure for continued teacher development. Therefore, this embedded professional development model is a framework that many PLCs employ as an opportunity to advance teacher knowledge and encourage teacher change (Chong & Kong, 2012). The dynamics of collaborative efforts by teachers and the purpose of professional learning communities has eliminated teacher solation that was once common amongst teacher instruction (Servage, 2008). The authors continued that the core beliefs outlined by Dufour et al. (2008) included: professional development which is critical to student improvement, professional development which is most effective when it is collaborative and collegial, and collaborative work should involve inquiry and problem solving in authentic settings supportive of classroom practices. Significantly, the work of Patton et al. (2013) defined that professional learning environments are not just places to construct new knowledge with colleagues, but require building trusting relationships that promote a vulnerability to address what isn't working. In addition, the authors contend that "a collaborative culture of empowerment and student learning transforms teaching" (Patton et al., 2013, p.442). The idea of empowerment is certainly regarded as important in order to maintain reform expectations.

Chong and Kong (2012) stated that "for teacher professional development to be successful, training programs need to be intensive, ongoing, and connected to practices, focused on specific subject content, and need to foster strong working relationships among teachers" (p. 263). Further it is noted in this study, that teachers expressed that

professional development was more conducive when a limited number of clearly defined goals were the main focus. Hence, the occasion to learn beyond the surface was likely achieved. This includes deepening teachers' content knowledge and addressing effective instructional practices. This also requires an intent opportunity focused on reflective dialogue on the instructional practice as an independent occurrence of the teacher in the classroom. The findings of this study suggested that for professional development to be successful, it required that working conditions and attending to teacher self-beliefs be fostered to observe sustainable change. In addition, embedding professional development in the classroom where the new learning is to take place is an example of contextual conditions that schools can employ to promote change.

Job embedded and not job embedded professional development were further defined most accurately in the work of Croft, Coggshall, Dolan, Powers, and Killion (2010). The authors defined that job-embedded professional development takes place in the classroom with "current students, in real time, and is centered on issues of actual practice." It may take place in the school before or after instruction, "away from students and focused on issues of actual practice" (p.3). Examples include a mentor or instructional coach that may observe, interact, or plan with the teacher. This opportunity allows for dialogue to include clarifications prior and after the lesson delivery. Furthermore, it may also include the teacher applying a new strategy based on an article from a professional journal, blog, or journals about the experience. More significantly, the authors discussed in detail the dynamics of teams of teachers engaging in interactive and result driven work. The teams could include departmental, cross departments, grade level, or cross grade level teams seeking discourse. The closer the work is with current students the more job embedded the approach is.

Non job-embedded professional development takes place outside the school, removed from instructions, away from students, and is focused on likely practices in the classroom. Examples of this include no application of a read journal article as the teacher may not find it of any value. Additionally, a mentor and teacher could review a case study together, identifying similarities and differences between the schools, however it does not provide specific feedback on the observed action nor is it applicable to current reality.

Facilitation of effective professional development is a balancing act that requires challenging the learners with new information, while also providing an opportunity to make meaning for themselves (Patton, Parker, & Pruitt, 2013). Additionally, the authors contended that the requirements must also acknowledge teachers' prior knowledge and experience in context, hearing their voices, and identifying their strengths, as well as addressing deficiencies in a non-judgmental way. Therefore, the strategies identified in this study promoted effective professional development and are identified as: social and active learning opportunities, monitoring discussion, and interjecting in opportune times, thoughtful and critical questioning to prompt reflection, and guiding and redirecting. Each strategy is more explicitly defined in the following:

First, social and active learning opportunities occurred as a result of interacting with one another outside of formal settings. This included collaboration at various times throughout the year in unrelated venues. Many times, reflective opportunities extended knowledge and provided solutions to difficult problems in a collective sense that teachers applied immediately. This study also explored structured professional development times that included monitoring discussion and interjecting in opportune times. Ideally, this referred to the facilitator's input, which supports the art of knowing when to be silent and

turn over the reins for further exploring by the learners is a concept that requires a great deal of intuition. Teachers appreciate being heard and many times are experts themselves. Facilitators must maintain an appropriate level of support and pressure all at the same time to ensure that the learning opportunities are self-directed.

Purposeful questioning with the appropriate amount of wait time prompts the reflection needed to glean problem-based solutions. This strategy is an effective way to encourage critical thinking and reflection that extends teacher knowledge in a non-threatening way. Thus, the demonstration of questioning not only assists with teacher knowledge but models exemplary classroom practice. Teachers are exposed to what students experience when purposeful questioning is embedded into instruction. Facilitation of discussion is essential to assist teachers with their thinking and refocusing efforts. This is met by "revisiting professional development goals, emphasizing essential information and refocusing their efforts" (Patton et al., 2013, p.451). Guiding and fostering independence creates an environment of autonomy (Patton et al., 2013).

Professional development is a holistic approach that must include formal professional development activities that bring teachers together to set the stage for further collaboration throughout a specific time period. However, an informal collaboration most certainly provides the ongoing support for the originated professional development to manifest into implementation and reflection. Finally, independent activities can contribute to informal collaboration or provide foundations for extending the learning in authentic work environments (Jones & Dexter, 2014). Silva and Contreras (2011) found that often times one time workshops, study groups and traditional faculty trainings fail to produce the collaboration and innovative practices required to impact change. Jao (2015) discussed that overcoming barriers to reform can be achieved through quality

professional development. The author specifically stated that one-shot sessions are often "fragmented and disconnected from classroom practice" (p.4).

Jones and Dexter (2014) maintained that focusing solely on formal professional development activities limits the leverage of teachers' expertise and experience to build on knowledge that will benefit the organization as a whole. Stegall (2011) added that when PLCs are rooted correctly, the opportunity to seamlessly shift from focusing on teaching to focusing on learning prevails. Finally, it is important to consider that extensive knowledge is required to support all learners, manage behavior, and master content to deliver high quality instruction. Hence, to meet the needs of curriculum changes and educational evolvement, a teacher must not only master the art of teaching but maintain a willingness to change as evidenced by research and data. Jao (2015) concluded that professional development must be grounded in teachers' work, feelings and experiences. The efforts focused on teaching and learning will certainly outweigh training a specific skill or isolated skill, if transformation is sustained and school improvement is the goal.

Teacher perceptions of PLCs. Peppers (2015) conducted an ethnographic study of teacher perceptions of PLCs in a suburban high school, the teachers noted that PLCs offer an opportunity to not just collaborate on academic topics, but create positive relationships amongst colleagues that share the same experience. Many teachers maintained that time was a factor that hindered the work of PLCs. Additionally, the interviewed participants determined that the support of campus leadership was an essential component of productive PLCs. In addition, the author concluded that the results of this study extended that PLCs "do influence the schools' learning environment" (Peppers, 2015, p.29). The themes that emerged in this analysis of sustainable PLCs

included a profound characteristic of empowerment amongst teachers. The empowerment of teachers encompassed owning the learning that is provided in the PLC framework.

Similarly, McConnell, Parker, Eberhardt, Koehler, and Lundeberg, (2013) conducted a phenomenological perspective and comparative case study to compare the experiences of teacher participants in a virtual PLC group to members of the other groups (face to face). The results of this study emerged themes that included positive teacher perceptions. These experiences provided a positive perspective overall. Many participants included that sharing articles or information found by others assisted with the current and agreed upon focus. Group members also reported that opportunities to contribute a new perspective on evidence was essential in making instructional plans to support all learners. In addition, it was conveyed that "hearing practical solutions others have tried" (Parker et al., 2013, p. 272) was incredibly useful and authentic. Also, many reported that having accountability to do a particular task or read an agreed upon article assisted with ongoing learning. Similarly, a "focus on professional discourse" (Parker et al., 2013, p.272) was discussed.

Likewise, in the study of Peppers (2015) the perception of developing professional friendships beyond the classroom and with colleagues in other schools was a substantially, positive factor in participating in PLCs. In both virtual and face to face focus groups, accountability to one another was viewed as a valuable aspect of participating in PLCs. Teachers discussed the importance of having regular, scheduled meetings that incorporated agreed upon tasks to complete prior to the meeting. It was shared that being mindful of other members ensured that teachers did their part in contributing articles, student work or personal teaching dilemmas that posed thoughtful reflection and a solution generated dialogue.

The studies of Peppers (2015) and McConnell et al., (2013) revealed the importance of sustained PLCs. More importantly, these studies asked participants to share the experience. Each study focused on the perception of teachers that included collegial relationships and the significance. There are opportunities presented in PLCS that ensure an accountability to one another naturally enhance learning. The expectation that is presented allows one to reflect deeply about instruction and student learning to determine best practices can be a profound realization. More importantly, the details in the analysis of each study infers a commitment to ongoing learning and school improvement.

Transformational learning. Mezirow (1997) vied that transformative learning is the act of automaticity in thinking. "Transformative learning is learning that transforms problematic frames of reference – sets of fixed assumptions and exceptions (habits of mind, meaning perspectives, mindsets) to make them more open and reflective" (Mezirow, 2003, p.58). In terms of adult learning, the author further explained that livelihood and the actions of being are sometimes a direct result of how we are expected to behave. Additionally, this is dependent on ideal conditions for quality of knowledge and the sociopolitical conditions that either facilitate or stifle the learning process. Significantly, the idea of transforming beliefs is contingent on transformative learning and change, affected by an individual's frame of reference. Mezirow (2003) maintained that frame of reference is composed of two dimensions: habits of mind and point of view. Habits of mind are more ethnocentric and often are durable grounded in broad, abstract habitual ways of thinking or feeling based on assumptions influenced by a set of codes. "These codes are often cultural, social, educational, economic, political, or psychological" (Mezirow, 2003, p.6).

In contrast, points of view are seemingly more flexible in terms of the influence of feelings, beliefs, judgments, and attitudes. Points of view are often more accessible to feedback and awareness. For example, in a 2008 study conducted by Servage, the author discussed the transforming or reformation of professional learning communities in school settings. The author determined that professional learning communities cause individuals to embrace a new of way of thinking. Transformative learning theory in this case can serve as a catalyst; however, in doing so, a safe and conducive learning environment must be present. It is not without consideration that PLCs must also address those members who hold tight to established beliefs. The author concluded that using collaborative time to engage in critical dialogue may be the missing element in school reform.

The application of a frame of reference is grounded in several factors including: past experience, associations, conception information, conditioned responses, and values. The established belief of one's own ideas are often so strong that shared or contributed ideas by others are often rejected based on preconceptions held as truth. The determining factors relevant to transforming a frame of reference is through "critical reflection on the assumptions" based on interpretation, beliefs, and habits of mind. Mezirow (1997) also described that self-reflection can inspire real transformation and significantly impact the application of new learning.

Malkki (2010) extended self-reflection in terms of defining how the frame of reference can be interpreted as reflection. The author stated that meaning perspective as well as meaning perspective and emotion are digested differently. The author defended that there are two interpretations relevant to reflection. First, meaning perspective is the frame of meaning taking place. This is referred to as critically thinking about assumptions and applying that independent thinking, feelings, and action to concrete meaning.

Furthermore, the extensive emotions required to critically self-reflect and impose reflective judgement occurs differently in individuals. Often learners are strongly rooted in beliefs, and unpleasant emotions often interfere with the stability of thought. Thus, it remains critical that learning to participate fully is extended through discourse.

According to Kumi-Yeboah and James (2012), making meaning in terms of perspective is vital to learning. This operates as a perceptual filter that basis organization of past experiences on the new setting. Furthermore, reinforcement or extending boundaries will subsequently occur. Transformed meaning is developed into new meaning with moments to reflect on standards and princples. As adults partake in the learning process, determination of how this new learning fits into existing configurations occurs. As a 21st century educator, the transformation of practice is essential to maintain new and innovative practices that encourage self-reflective thinking.

Adult learners must view learning as autonomous and become open to critical self-examination of assumptions. Autonomy refers to the understanding, skills, and disposition necessary to become critically reflective of one's own assumptions and to engage effectively in discourse to validate one's beliefs through the experiences of others who share universal values (Mezirow, 1997). The way facilitation of such learning occurs involves discourse. Effective discourse is dependent on ensuring that participants have adequate information. That they are provided equal access to assume roles in discourse and assumptions are critically examined. Learners must maintain an inquiry mindset and be willing to listen and seek common ground. Finally, adult learners must have a willingness to make the best judgment to further guide the action (Mezirow, 2003).

Transformation for educators includes all aspects of discourse that can add to established beliefs. Significantly, to evaluate arguments, educators must contest, secure,

describe, and assess evidence that is supportive or not supportive of the argument. This is met with valuing the effort of others and seeking commonality to conduct further action. Ideally, transformative learning fosters critical reflection on self-livelihood and application through practice, resulting in automaticity of thought and action. Transformation is about becoming more complex in thinking to deal with levels of demand and uncertainties (Poutiatine & Conners, 2012).

In a recent study, Sammut (2014), explored the transformative learning theory in a coaching-coachee relationship. Participant coaches discussed the opportunity to foster the learning process, this included elements of critical reflection and dialogue. The reflection focused on intentional and powerful questions that promoted coachee participants to think and examine in a more profound way. The transformation is not prompted by the coach but is supported in a clarifying way to the coachee. Significantly, the author defined 10 strategies that foster transformation which include: "creating a safe environment, acceptance, presence, no-judgment, asking through provoking questions, deep inquiry for critical reflection, challenging false beliefs and assumptions, accountability, active listening and modeling behavior" (p. 48). The study included that experience drives the transformation.

In an effort to understand Mezirow's disorienting dilemma, Sammut (2014) noted that when adult learners experience an event that is not productive, revisiting and revising is a natural occurrence in the learning experience. Reflection is often a questioning mechanism that lends itself to critical examination. Critical reflection includes content, process, and premise. Content is what we already perceive or think, process upholds the elements of how "we perform the functions we are perceiving" and the premise is the

awareness of why it occurs. The coaching process employs strategies that support and facilitate the reflective cycle.

For transformative learning to occur the components of self-reflection, recognizing frames of reference, and allowing for discourse are critical elements that must be explored in learning forums (McComish & Parsons, 2013). There are four processes of learning: elaborate on a current point of view, establish new points of view by encountering the differences of others, experience driven, and by critically reflecting on biases set by one's own belief (Mezirow, 1997). Transformational learning involves the critical examination of assumptions in a group or individual setting. Further, the term "critical reflection" requires understanding the nature of reasonableness and justification (Meizrow, 2003). Additionally, critical reasoning is supportive of evidence as it relates to significance, suitability, and consequences explored during the learning process.

Generally, transformative learning does not occur easily. The process of providing solutions to challenging episodes is only a framework to develop a growing understanding (Kumi-Yeboah & James, 2012). For example, the study conducted by Poutiatine and Conners (2012) described the process of transformational in the perspective of a learner as a process of vital change that begins with formational work. Participants in the study contributed that profound changes of who they are or who they are becoming is a "result of deep engagement with their own identity and integrity" (p. 70). This can be further understood in the disorientation process. The dilemmas are presented to the learners in authenticity; the learner can either ignore the consciousness presented or explore the process to further emerge as an improved learner.

Adult learning requires that learners realize capabilities by developing skills, insights and dispositions essential for improved practice (Meizrow, 2003). Therefore,

fostering organizational environments that support discourse and reflection must establish norms for acceptance, justifying responses, supporting the learning of one another, and providing an equal forum of responsibility and respect for the contributions of all stakeholders (McComish & Parsons, 2013). The foundation and establishment of authentic relationships are the essential content of establishing trusting environments that promote the necessary basis to support adult learning and transformational learning. "Authentic relationships allow individuals to have questioning discussions, share information openly, and achieve mutual and consensual understanding" (Sammut, 2014, p.51).

Designing programs that have profound effect on how participants maintain and transform beliefs and mindsets is multifaceted and comes with difficult challenges. Often times, individuals are content with the way things are and maintain that this is how things have always been. Yet, the most powerful learning forum is built on extending and challenging those beliefs to achieve a more effective practice and transformed practitioner (Poutiatine & Conners, 2012). Significantly, the work of Patton et al. (2013) contributed that professional learning environments are not just a place to construct new knowledge with colleagues, but require building trusting relationships. Further, the authors contend that "a collaborative culture of empowerment and student learning transforms teaching" (p.442). The idea of empowerment is certainly regarded as important to maintain reform expectations. The importance of sustained change is significant in school improvement, therefore the theory present in transformational learning and the structure and organization of a PLC were ideal and considered in the results of this study.

Social cognitive theory. Bandura's (1986) social cognitive theory addresses the relationships that involve personal, behavioral, and social/environmental factors influencing individual behavior. The theory suggested that capabilities inclusive of processing are vicarious, symbolic, and self-regulatory, all of which play a significant role in the learning process. More specifically, the author maintained that vicariously, individuals acquire skills, behaviors, and cognition by observing others. Bandura and Wood (1989) described that observational learning is directed by four processes: attentional, representational, behavioral production, and motivation.

Attentional process is self-selected based on the observation of the modeling. Individuals are influenced by extracted activities. Representational process is reliant on determining the rules and concepts that are symbolically transferred into memory. Behavioral production process is comparing the concepts matched with the process. Thus, people are guided by patterns of behavior aligned and compared to a conceptual model. Motivational processes are determined by success and failure of others similar to the individual. Self-evaluation and personal standards are factors that regulate and determine if the behavior is successful or not (Bandura, 2001). Yet, to explain this process more, it is significant to acknowledge that not all learning is applied by the individual immediately or sometimes ever. The importance of an individual establishing "goals rooted in a value system and sense of personal identity, invest activities with meaning and purpose" (Bandura, 2001, p.8) are viewed as essential components that impact motivation and foster the application of learning.

Chong and Kong (2012) conducted a study on conditions of effective collaborative learning structures to support teacher self-efficacy. The direct relationship between teacher self-efficacy and a teacher's ability to influence student outcomes is

significant to consider. This study highlighted that teacher efficacy beliefs play an important role in teacher instructional change. The results of this study included collaborative efforts which added to individual schema by engaging in idea exchanges to increase effective instruction. The authors concluded that professional learning recommendations must include attention to self-beliefs.

Embedding professional development into the classroom and protecting time to do so are essential elements of teacher-development. Self-efficacy is significant in the social cognitive theory and heavily relies on the ability to feel successful in terms of applying new learning. Although, self-efficacy is effective by positive encouragement; and it is mostly influenced by the outcomes (Bandura, 1986; Schnuk, 2012). Some of the influential factors included are progress towards a goal and learning environments that are conducive to creativity. Satisfactory performance will naturally heightened self-efficacy, whereas a failed attempt will lower it.

However, it is not uncommon for emotion to play a fundamental role in self-efficacy. Stress and negative thinking about individual ability will lower self-efficacy. When individuals are less stressed they experience self-efficacy in an elevated state. Schnuk (2012) extended by elaborating on the factors that play a unique role in one's perceived abilities for performing or learning. The author coined these as enactive and vicarious learning opportunities. Schnuk (2012) maintained that enactive learning is actualized by doing what is observed. Thus, by observing the behavior of others and learning from consequences a behavior will either be repeated or diminished by the learner.

People are motivated to learn and repeat behaviors that they believe are followed by positive results. Typically, a behavior that would lead to punishment will not be tried

or tested by others. The author continued that this type of learning is grounded in consequences, thus behaviors that are validated in success are maintained while failed actions are discarded. However, vicarious learning is not performing while the learning is taking place; this would be described as reading what and how to construct or perform something safely. Like that of enactive learning, much learning is achieved through perceived consequences.

Schnuk (2012) also described that human learning is intrinsically complex in nature. The author defined examples of student learning that included learning by observing an explanation and vicariously modeling the skills or strategies in the demonstration. The concepts are then practiced at an alternate time. Through practice and specific feedback, students learn the skills more efficiently and skillfully with careful direction and coaching. Symbolic processes are often used to alter environments that pose obstacles in life. This process would include reacting to situations by problem solving and communicating to enrich learning opportunities and seek new ways of addressing situations.

Additionally, in the study conducted by Romeo (2010), the researcher sought to determine the relationship between self-efficacy and contributions of a PLC. The evidence supported that efforts of self-efficacy and self-belief play a significant role in student success aligned to teacher instruction. More importantly, teachers that had access to PLCs were more likely to feel less stressed, more supported, and "have a positive impact on the learning environment" (Romeo, 2010, p.99). This study aligns to self-regulation, which involves assessing goals and determining strategies to support achieving the end goal. As the task unfolds, individual learning opportunities are achieved throughout the process by deciding if the strategy requires adjustment. Hence,

as tasks are completed, personal reflection is significant in determining if the progress is justified and meets the goal.

If successful, self-efficacy is heightened. Further, the perceptions of self-efficacy are an essential component in shaping the outcomes of an individual. As adults learn and observe progress, their desire to learn more is enhanced. Similar to student learning, adult learning is subsequently the learning that transforms ineffective habits. These are directly resulted in the social cognitive theory, grounded in self-efficacy, and rooted in consequences. The learner must be encouraged by success to maintain the new learning application. Much like students, teachers are exposed to explanation and theory to elaborate on the repertoire of teaching. The learning is later demonstrated in the classroom for improved student results, if the results are successful then the new strategy will likely continue.

It is important to consider that learning and performing are not always simultaneous. This means that the learned skill or task may or may not be applied in authentic circumstances immediately following the learning (Schnuk, 2012). The learning may be stalled for various reasons: "motivation, interest, incentives, perceived need, physical conditions, social pressure, and competing activities" (p. 105). This situation may be difficult for the facilitation of learning in terms of measuring if the strategy is effective or not.

Like students, assessment of learning is an essential component of gauging the performance of teachers alike. In this case, the social cognitive theory will be further explored in a supportive culture and the application of change through embedded opportunities to apply new learning in the classroom will unfold. The opportunity is reliant on self-efficacy in terms of a person's belief in his or her success in a current or

future situation that involves teaching and learning, however it is crucial to remember that it is not isolated factor.

Ng and Lucianetti (2015) added that self-efficacy also determines the intensity of persuasion with idea generation. Further, the authors also contend that "individuals that experience increased anxiety and fear" are less likely to experience growth and positive performance. Emotional barriers are contingent on growth by opportunities presented to exert an opinion or idea without fear of being ridiculed or punished. Therefore, the learning organizational framework must be built on trust and respect.

Gray, Mitchell, and Tarter (2014) determined that the components presented in a PLC increase self-efficacy. The results contributed to the characteristics of an effective teacher, thus the establishment of trust to engage in collaboration is imperative if individual growth and self-satisfaction are the end result. Organizational trust refers to employees that expect positive results and believe that regardless of the risk, the employee trusts that the organization will follow through (Ng & Lucianetti, 2015). Further, the core of organizational trust is built on the ability of employees to engage in vulnerability, aiding in the development of self-efficacy. Additionally, innovative thinking and creativity can and will only be captured in an environment that is safe and psychologically sound for risk taking. The author maintained that perceived respect plays a crucial role in promoting the perception of self. Respect generates innovation and assists with overcoming emotional barriers that can hinder positive beliefs about one's own ability to create, implement, and maintain innovative ideas. Therefore, the alignment with Bandura's (1986) social cognitive theory further established how a social environment and acceptance will often contribute to effective behavior in a specific setting.

Therefore, there are significant details in prior studies on social cognitive studies and the importance of a trusting environment that PLCs should offer. It is crucial to determine the nature of a framework relative to a successful organization. Further, in the study conducted by Samimi-Duncan, Duncan, and Lancaster (2010) on the experience of pre-service teachers in a paired practicum reveal the importance of collaboration in teaching environments. The results of this study support the social cognitive theory and experiences of collaboration within an environment built on trust. The effective and positive teaching experiences were more likely a contribution of a less stressful environment; provided by time to collaborate and work together, the participants were more successful overall.

Similarly, Bandura and Wood (1989) described that the social cognitive theory is essentially relevant to organizational structure, it is directly the result of explicit guidelines that are provided to assist with improving individual competencies, self-regulatory abilities, and efficacy that will ultimately thrive in organizational structures. Thus, the development of people's cognitive, social, and behavioral proficiency through mastery modeling and the belief in one's own ability is paramount in personal motivation. The authors contended that efficay can be strengthened and instilled by four principal ways: mastery of experience, modeling, social persuasion, and physiological.

Banks and Kurth (2013) reported that PLCs are based on two assumptions. First, the knowledge and skills required in educational practice are initiated in the day to day experiences and interactions, therefore profound understandings are advanced through critical reflection with others who share the same experiences. Secondly, active, ongoing and structured professional discussion increases professional learning and abilities that improve student outcomes. As with the social cognitive theory, the ability to apply high

expectations of effective instructional delivery will certainly play a crucial part in the sustainment of teacher development. More importantly, the supportive conditions necessary for PLCs to function properly are reliant on logistical conditions, capacities and relationships developed among colleagues to ensure productivity (Hord, 2007; Gray et al., 2014). A safe and respectful environment will inspire individuals to take risks and step outside the bounds of comfort in the classroom. Further, the relationship between the social cognitive theory and the framework of a PLC significantly added to understanding the results of this researcher's, current study.

Methodology and Instrumentation

The review conducted, considered prior qualitative studies that supported this researcher's intent. More importantly, to explore how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development, the following were referenced. Bitterman's (2010) study examined how three middle schools engaged in professional learning communities to further develop effectively as science teachers. The findings included an analysis of implementation efforts to support teacher development in a middle school setting; however, it was specifically content focused. Professional development was discussed as a major component of success. Further, the collected data determined that professional development aligned to the team, and continuous support in embedded effective teaching practices was significant in developing teacher repertoire. The researcher determined that teachers benefit the most from continuous dialogue focused on data and instruction to meet the ongoing needs of students. The researcher

suggested that an elementary study on PLC's be conducted to further the knowledge on collaborative efforts within professional learning communities.

C. Stewart (2014) also found that learning within a professional learning community is most effective in transforming teaching and learning. Because participants are ideally invested in the work they do day to day, the buy in is of greater value. Further, the contributions of a PLC are best when all members have taken part in the organizational framework. Cohesion must be present if honest feedback and improvement is essentially the goal. Thus, the importance of needs based on student data are the driving force in these endeavors. The author concluded with the following: "active learning working with content to create lasting change; allows teachers to focus on specific needs" (p.31). The work produced by C. Stewart offers leverage needed to extend the work in qualitative form; ideally the work of a PLC is centralized on school improvement. Teacher perception on individual development is critical in order to examine the best framework that embraces an ongoing dialogue to further engage teachers in effective instruction.

Valentin (2014) also designed a qualitative study to investigate teachers' perspective on math instruction, student learning, and achievement in a vertical alignment. The researcher sought to interview teachers to better understand teacher perspective. Collaboration was found to be an effective way to connect teachers to district goals. The extent of collaborative efforts was found to help teachers better understand the curriculum and support student learning. The vertical alignment teams were meant to lead each individual school's math team on specific content and instruction delivery. Participants grappled with topics in each grade level to decrease repetition and provide transitions with ease for students. The researcher concluded that most participants

appeared to have established lasting connections and gratitude knowing who would be teaching his/her students the following year, which is supportive of an established culture of trust.

An additional case study is found in the work of K. Stewart (2012), the author sought to determine if PLC's sustain student achievement. The researcher determined through interviews and observations that simply relying on organizational factors would not guarantee success. The findings for sustaining student achievement included the following: "sustainable education leadership, student-centered learning, shared values and vision, collective inquiry into best practices, action oriented and a focus on results" (p.157). The researcher determined that the results support the reform efforts for improving teaching and learning for lower socioeconomic school districts. Significantly, the recommendation for further study included an investigation on the direct relationship of an implemented PLC model and student achievement. All participants in this study elaborated on the positive effect that collaboration has on student success, which was ideally aligned to the current study.

Chong and Kong (2012) offered a qualitative approach on lesson study that identified the conditions most effective in collaborative settings supportive of teacher efficacy. The findings suggested that sustainable change is captured in self-beliefs. Therefore, embedded professional development opportunities and time are necessary components to support sustained change. The study utilized social cognitive theory to better illustrate psychological constructs related to teacher motivation. The concluding efforts support that school PLCs provide influential forces linked to self-efficacy and effective instruction. Additionally, Lick (2006) included an analysis also using qualitative information to further glean defining factors of learning teams which are often PLCs. The

author determined that the potential of learning teams in collaborative structures is vast in terms of effectively achieving common goals. However, the development of learning teams must be intentional. An organization with these teams in place is more likely to generate change and new learning lending itself to school improvement. PLCs show great promise if the implementation process is well thought out.

Finally, Owen (2014) contributed a case study approach to address the experiences of teachers in one Australian state. This researcher determined that there is ample support and funding to individuals to attend external conferences then bring back that learning to share with their school or team. However, the delivered learning from a colleague may or may not be the profound objective of the training. There were identified indicators that characterized that not all PLCs operate in the same phase of development, however the author determined that as teachers survey various sources of data, co-assess student work, and debate its quality, as well as learn from each other, innovation is ongoing. In this case, the one that benefits the most is the student. The research further determined that leadership support is crucial in the development of teacher effectiveness, therefore it is imperative to explore the structure and organization of PLCs that are most prominent to teacher development.

In this case, the qualitative methodology provided tools to study complex phenomena within context (Baxter & Jack, 2008). Punch (2014) stated “Qualitative research is empirical research where the data are not in the form of numbers” (p.3); and the opposite is true of quantitative research, which is empirical research where the data examined is that of numbers (Punch, 2014). Therefore, qualitative research is descriptive, rather than predictive. This researcher sought to capture the words and phrases to respond to each of the research questions. Baxter and Jack (2008) found that observing the action

in an authentic setting allows the desired phenomenon to transpire in a natural context and a deeper understanding for the researcher's conclusion may be formed. In this case, PLCs were being conducted on site and the dedicated work is embedded into classroom teaching as well as contributing to teacher development.

Yin (2014) indicated that qualitative studies are most commonly used to understand complex phenomena, allowing the focus to be on a real world occurrence by studying organizational processes and perspective. This researcher entered the natural setting by meeting participants in the midst of an authentic working environment; the school or classroom. The wealth of information provided in this narrative format captured the magnitude and the significance of perception that a quantitative analysis would not support or adequately, respond to the described phenomenon.

Exploring a contemporary phenomenon required the investment of this researcher to seek perceptions of participants in the workplace. Yin (2014) determined that a case study is most commonly used to understand complex phenomena, allowing the focus to be on a real world occurrence by studying organizational processes and perspective. In contrast, a quantitative approach uses statistical comparisons and numbers to infer results. Therefore, a quantitative study would not have adequately represented the perception of individuals as accurately as a qualitative format did (Yin, 2014).

The instrumentation used in this study was carefully considered and based on the outcomes and experiences of prior qualitative studies. For instance, Owen (2014) used school documents, interviews and focus groups to conduct a case study to capture the PLC experiences of teachers in one Australian state. The results showed that not all PLCs operated in the same phase of development; however, the author determined that as teachers survey various sources of data, co-assess student work, and debate its quality, as

well as learn from each other, innovation is an ongoing process. This was an important consideration in this current study, as it is often perceived that PLCs are not always defined in the same way. Therefore, this researcher sought to explore this and use interview data as well as archival data that included: school improvement plans and PLC notes from organized meetings to further this understanding.

Next, Chong and Kong (2012) conducted a on PLCs four sources which included written reflections, discussion sessions, observation notes, and group interviews. The findings suggested that sustainable change is captured in self-beliefs. The research also concluded that embedded professional development opportunities and time are necessary components to support sustained change. Similarly, this researcher intended to capture the words and phrases and elaborate on a story that elicited the perception of educators to sustain improvement and development, therefore an interview and open-ended responses were the selected instruments to share the story.

An additional case study explored by K. Stewart (2012) sought to determine if PLC's sustain student achievement. The researcher used a qualitative method with interviews, the Learning Team Collaboration survey and observations. The findings for sustaining student achievement included the following: "sustainable education leadership, student-centered learning, shared values and vision, collective inquiry into best practices, action oriented and a focus on results" (p.157). This instrumentation was significant to the current study. Therefore, to determine the influence of student achievement as it related to PLCs and teacher development, collecting interview data and two-part questionnaire were selected.

Valentin (2014) designed a mixed methods study to investigate teachers' perspective on math instruction, student learning, and achievement in a vertical

alignment. The researcher sought to interview teachers to better understand teacher perspective. This current case study sought to explore perspectives on PLCs. Finally, Bitterman's (2010) multiple method study examined how three middle schools engaged in professional learning communities to further develop effectively as science teachers. The researcher used a teacher survey and interview data to elaborate on the concluding themes. In this current case study, the researcher determined that using a similar instrumentation would be justified to truly and accurately report the findings in a qualitative form. Therefore, a similar two part questionnaire with open-ended responses and a similar interview format were used in this study. Sources of data for this study included semi-structured interviews (see Appendix D), a two-part questionnaire (see Appendix D), and archival documents received from each school site were used to answer the identified research questions.

Questionnaires. Bitterman's (2010) questionnaire is aligned with the concepts of DuFour's recommendations of a PLC framework. Bitterman asked participants to report how they felt about the implementation process of PLCs as a framework for supporting school success. The questionnaire was used in this study as an initial data collection instrument. Teachers were asked to describe the status of the PLCs at their school site. Teachers were asked to define a PLC and how they would change their working definition, what those main facilitators are, and the barriers and successes they have experienced with the teaming structure. Questionnaires were provided to the schools selected in the study. The participants had an opportunity to respond openly to the questions. The data collected in the questionnaires was used to gather teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest.

Interviews. The researcher used Bitterman's (2010) interview, with permission, to glean in depth perspectives of teacher understandings and to find out how PLCs facilitate professional growth and development. Bitterman (2010) stated that "questions were constructed out of the characteristics that make up an effective professional learning community… to capture an accurate and complete understanding of teacher perceptions…" (p.47). Participants responded to the same questions during the interview and the protocol established (Yin, 2014). Each participant's interview was recorded, transcribed and reviewed by the participant for accuracy.

The interview data was used to explain how professional learning communities in one K-8 school district structured and implemented to show a primary focus on data-based decisions to improve teaching and learning. Additionally, this information was used to further explain how educators explain and describe how participation in professional learning communities influenced their professional growth and instructional effectiveness. Interviews were approximately 25-60 minutes and were delivered in an open-ended format to glean in-depth understandings of the phenomenon. The interview guide was composed of 10 questions that asked teachers to describe how collaborative teams were implemented at the school site, how they view PLC's as contributing to collaborative teams and the most effective ways that teachers feel these PLCs contribute to teaching and learning. A full copy of the interview guide is located in Appendix D of this dissertation.

Archival data. Next, archival school district data was analyzed to determine how the PLC structures aligned to Dufour's six characteristics of PLCs. The archival data used was provided by the school sites. This information included PLC meeting minutes from the 3-5 school sites, each site's continuous improvement plan, data from allthingsplc.com

as well as the Arizona Department of Education student achievement data which assisted with explaining how professional learning communities in one K-8 school district are structured and implemented to show a primary focus on data-based decisions to improve teaching and learning.

The data collected was used to explain how professional learning communities in one K-8 school district are structured and implemented and how the perceived participation in professional learning communities influenced teacher professional growth and development The researcher used all three sources in the triangulation analysis to determine "trustworthiness, consistency, confirmability and applicability" (Golafshani, 2003; Noble & Smith, 2015) of this case study.

Summary

The concepts that are significant in professional learning communities (PLCs) support the transformational learning theory and social cognitive theory, evidenced in the alignment of reflective dialogue resulting in the way one thinks about delivering high quality instruction and more importantly sustaining that way of thinking. As a 21st century educator, transformation is essential when maintaining innovative practices that encourage student thinking and teacher development. Adult learners must view learning as autonomous and maintain reflective thinking continuously. "Autonomy refers to the understanding, skills, and disposition necessary to become critically reflective of one's own assumptions and to engage effectively in discourse to validate one's beliefs through the experiences of others who share universal values" (Mezirow, 1997).

Additionally, the main themes included in this chapter are: identifying components and attributes of PLCs. Hord (1997) described that during the 1980s, the term "professional community of learners" evolved as the act of teachers and

> leaders continuously seeking new learning. The author listed five attributes of effective professional learning communities: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, shared personal practice. Professional learning communities redress teachers' isolation, create shared teacher responsibility for all students, and expose teachers to instructional strategies or knowledge they did not have access to previously. Such communities can be venues for JEPD (job embedded professional development) as well as other forms of reform based professional development. (p.7)

Common practices are needed to support professional development and continuous teacher development. Croft et al. (2010) highlighted that teachers benefit from multiple opportunities to learn. The author noted that colleagues must rely on each other's expertise to dissect the current instructional delivery and further focus on individual needs. Therefore, a focus on learning prompts the importance of transparency among teachers that innately fostesr a learning forum which is meaningful to members. PLC participants must focus and engage in discussions with colleagues from their team around crucial questions (Dufour et al., 2008). More importantly, collaborative learning structures involve teachers meeting on a regular basis to develop shared responsibility for students' success which includes following a cycle that begins with examining student needs and identifying the teaching strategies and approaches to best support the student (Chong & Kong, 2012).

Piercy (2010) contended that there are six conditions for necessary change to occur: mutual goals, equality among participants, shared responsibility for participation and decision making, shared responsibility for outcomes, sharing of resources, and voluntary. Further, the author determined that if collaboration is expected, then shared

understandings must be developed. Collaboration can be an essential part of creating a team of comfortable with transparency.

Stegall (2011) provided that the intent of professional development is to improve the quality of classroom instruction. In an effort to maintain this competitive role, educators are continuously seeking improved ways to impact student achievement. Additionally, job embedded professional development was determined as the most effective mode as is defined most accurately by Croft et al. (2010). The authors suggested that job- embedded professional development is seen as most valuable when it takes place in the classroom with a teacher's students, data and current practice to take true effect. This potentially occurs in the school before or after instruction, "away from students and focused on issues of actual practice" (Croft et al., p.3). Examples included as an embedded approach can sometimes include a mentor or instructional coach that observes, interacts, or plans with the teacher. This type of approach fosters supportive dialogue that elicits clarifications prior and after the lesson delivery. Furthermore, this could also involve the teacher applying a new strategy based on an article from a professional journal, blog, or attempting to journal about the experience throughout. More significantly, the authors discussed in detail the dynamics of teams of teachers engaging in interactive and result driven work. The closer the work is with current students the more job embedded the approach is.

The studies of Peppers (2015) and McConnell et al. (2013) provided the key to sustained PLCs which are the participants and the perceptions of teachers. Each study revealed that the perception of teachers noted positive collegial relationships. Additionally, opportunities were presented in PLCs that ensured an accountability to one another. The expectation in these collaborative times presented an occasion to reflect

deeply about instruction and student learning to determine best practices. More importantly the results in the analysis of each study infer a commitment to ongoing learning and school improvement.

There is a wealth of literature and empirical studies supportive of PLCs and the impact of such organizational structures which include teaching and learning, common practices, collaboration and professional development. However, it still remained limited in the area of teacher perceptions in K-8 schools. C. Stewart (2014) endorsed further empirical research regarding PLCs as a school reform model and how to sustain their effectiveness. Therefore, a gap exists was determined relative to PLC models and how they extend the growth and development of teachers in K-8 schools. This study explored how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development. Chapter 3 will outline the methodology, research design, and procedures required in this case study.

Chapter 3: Methodology

Introduction

According to Darling-Hammond and Richardson (2009), a new paradigm in professional development for teachers includes job-embedded professional learning communities. Most teachers are now collectively responsible for student outcomes; therefore, traditional methods of working in isolation are no longer acceptable. As a result, measures have been introduced in school systems designed to increase teacher collaboration (Forte, 2010). This measure is often the implementation of a professional learning community or referred to more frequently as a PLC. A PLC is described as a small team of teachers committed to meeting regularly and working collaboratively on shared goals in order to improve achievement for each individual student they serve. According to Scott (2012), this collaborative opportunity could significantly impact student success and teacher development in a positive way.

Based on the literature review, there is sufficient evidence to support the promising efforts of a PLC (Romeo, 2012; Stegall, 2011). However, minimal research existed to provide educators with information on how PLCs models are implemented with a focus on teaching and learning and how teachers perceived participation in PLCs influenced their professional growth and development (Valentin, 2014). Therefore, further investigation was needed to determine what teachers do to engage in the growth and develop an inquiry mindset needed to sustain both the PLC and professional learning.

This chapter will discuss the specific problem and research questions along with the phenomenon being addressed in this study. Then the methodology, research design, and population as well as the sample selection will be further explained. This chapter also examines sources of data, validity and reliability of the data that will be collected. Next,

this chapter will also disclose how the data was collected and managed during the process of this case study. The chapter will also address ethical considerations that were applied to each participant as well as the limitations and delimitations of the study. Finally, the chapter will present a concluding summary that focuses on the relevance of each point in the chapter.

Statement of the Problem

The problem addressed in this study is that it was not known how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning and how educators perceived participation in professional learning communities' influenced their professional growth and development. According to Chong and Kong (2012), teachers must have time to collaborate, must have access to embedded professional development and should use those two structures to focus on improving teaching and learning. However, many teachers struggle to find time to collaborate and balance their other job duties. Additionally, administrators often offer inadequate guidance and expectations for collaboration, which impacts the quality of collaboration. When PLCs function effectively and correctly, teachers have opportuntiies to engage in meaningful dialog (Hord, 1997).

Teachers need both a growth mindset and structured framework for the PLC process to work (Bitterman, 2010). However, more research was needed regarding how teachers described the implementation PLC structures that improve teaching, learning and also how they adopt that "inquiry" mindset (Bitterman, 2010; Valentin, 2014). This study explored how the PLC structures in one K-8 school were implemented, if and how they aligned to the intended mission of PLCs, and how teachers perceived this framework allowed them to grow as professional instructors.

Phenomenon and Research Questions

This study explored how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development. The research questions resulted in this cases study are from the literature and researcher recommendations for further study. The questions that guided this research are as follows:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on data-based decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

Bitterman (2010) provided a study of teacher perspectives on the impact of PLCs on student learning in science, yet the results did not include K-8 teacher perspectives on professional growth and development. This researcher obtained permission from Bitterman to use, modify or add to the instruments from that study to further the knowledge of PLCs. All teachers from the selected school sites, participating in PLCs were recruited to complete Bitterman's questionnaire in order to provide specific recommendations to the problem being addressed. Additionally, the researcher conducted interviews in order to capture in detail how teachers' perceived how the PLC structure

being implemented aligns with three guiding questions and Dufour's (2006) six PLC characteristics:

1. Shared purpose, clear direction, collective commitments and timeline goals all aligned to student learning
2. Collaborative culture focused on teacher development
3. Inquiry into best practices and current reality
4. Action oriented with an emphasis on learning by doing
5. A commitment to continued improvement by assessing student learning
6. A results oriented approach.

Finally, archival documents were reviewed to explore the impact, which specifically related to structuring and implementing PLCs with a focus on improved teaching and learning, focused on student results. The archival school data showed the progress and sustainment of growth in one school district over the course of the PLC implementation process. The selected school district has been highlighted as a recognized PLC model in the southwest (allthingsplc.com). The questionnaire was expected to explain the perception of teachers as well as provide a more in-depth understanding of the implemented structure of PLCs that support improved teaching and learning. Furthermore, the interviews conducted captured the educators' description of how participation in PLCs influenced their professional growth and instructional effectiveness. The archival data used was specifically selected to explore how PLCs are a characteristic of improved teaching and learning that promoted high levels of student achievement.

Research Methodology

The qualitative methodology provides tools to study complex phenomena within context (Baxter & Jack, 2008) and address the intent of what this researcher addressed. Lavrakas and Roller (2015) shared that qualitative research is conducted to better

understand human condition about a research issue that quantitative data does not address. Further, the uniqueness of qualitative data include gathering a story and sharing perspectives rather than numerical explanations. This provided the researcher with a descriptive account of what was being studied and captured in contextual situations. Additionally, Punch (2014) stated "Qualitative research is empirical research where the data are not in the form of numbers" (p.3); and the opposite is true of quantitative research.

The essence of qualitative research hinges on gathering plausibility, rather than truth from participants. Lavarkas and Roller (2015) described that research methodology focused on qualitative format interprets meaning from multiple sources that include variables such as the impact of the participant-researcher relationship. In this study, the researcher sought to capture the words and phrases to respond to the research questions and better explore the perception of teachers and sharing their story.

Baxter and Jack (2008) found that observing the action in an authentic setting allows the desired phenomenon to transpire in a natural context and a deeper understanding for the researcher's conclusion may be formed. For example, Bitterman's (2010) study examined how three middle schools engaged in professional learning communities to further develop effectively as science teachers. This research was an analysis of implementation efforts to support teacher development in a middle school setting, specifically content focused which delved into the importance of professional development. The collected data determined that professional development aligned to the team and continuous support with embedded effective teaching practices was significant, and this was according to teachers who participated in the study. However, this researcher also determined that a limitation that should be addressed was an elementary

study on PLCs. C. Stewart (2014) also contributed a qualitative effort that supported transforming teaching and learning in a professional learning community, a methodology aligned to exploring contextual situations in determining plausible results (Lavrakas & Roller, 2015). The research by C. Stewart (2014) offered leverage needed to further the effort in a qualitative format, ideally the work of a PLC that is centralized on school improvement. Significantly, teacher perception on perceived professional development is critical in order to describe and address the best framework that supports ongoing dialogue immersed in effective instruction and student achievement.

Owens (2014) also developed a qualitative case study to describe the experiences of teachers in one Australian state. This researcher discussed the efforts of external conferences adding value to all staff, even those who did not attend a particular conference. This case study described the ineffectiveness of such attempts in comparison to embedded PLCs, where all are involved in the learning. There were identified indicators that characterized that not all PLCs operate in the same phase of development, however the author determined that as teachers survey various sources of data, co-assess student work, and debate its quality as well as learn from each other, innovation is ongoing. In this case, and the case of this researcher a qualitative format is justified to further the work of PLCs.

In this case, PLCs were being conducted on site and the dedicated work was embedded into classroom teaching as well as contributing to teacher development. If Yin (2014) indicated that qualitative format is most often justified when research data is being collected in a real world context, then a narrative format was a plausible approach. In contrast, quantitative research focuses on data that are numeric in form and use of statistical tests to describe or measure the relationship between variables (Golafshani,

2003). Therefore, a quantitative method was not selected for this study as the researcher does not desire to measure variables related to implementation of PLCs, but rather sought to explain how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

Research Design

Several factors were considered in the selection of a case study design for this research design. First, the overarching research question focused on teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States. Since case studies are appropriate when the researcher wants to explore a current phenomenon in a natural setting, using multiple sources of evidence, this design was well suited for the current research (Baxter & Jack, 2008; Nobel & Smith, 2015; Yin, 2014). Further, to glean detailed understanding of the question, a qualitative methodology was used to analyze the experiences of participants in a more flexible research design (Lavrakas and Roller (2015).

Case studies are often pertinent when the research questions seek to describe or explain. Therefore, they would include "what," "how" or "why" questions. Case studies are also used to elucidate a specific situation through first-hand observation in a natural setting, rather than secondary data. (Lavarakas & Roller, 2015; Yin, 2014). A qualitative case study design was used for this study as the researcher wanted to explore three separate entities (schools) at a specific time (Yin, 2014). The PLC structure was explored in the context of three separate schools, with a definitive start and end.

However, other qualitative designs were considered for this study, but were discarded. For example, the phenomenological approach is designed to explore a common lived experience that a group of individuals have in common (Randies, 2012). Since the teachers at this school do not have one specific experience in common, phenomenology was discarded. Next, ethnographies are studies of cultures in an attempt to make sense of the culture being observed. This methodology requires the researcher to become situated in the environment to observe the interactions, actions and surroundings of the group (Broussard, 2006). The researcher did not desire to study one specific culture, so this design was also discarded. Also considered was grounded theory, which are studies conducted with the goal of deriving a theory based on data collected (Mateos-Moreno & Alcaraz-Iborra, 2013). The data collection in this study did not involve formulating a theory as a viable method of answering the research questions. Therefore, grounded theory was not selected.

As appropriate for a case study, multiple sources of data were gathered in the process (Yin, 2014). The researcher worked with the target school district to identify at least three schools willing to participate. The sample selected inlcuded at 30 questionnaire participants and no more than 16 teacher, interview participants: four administrators, four primary teachers (K-2), four intermediate teachers (3-6), and four middle-school teachers (7-8); in three K-8 public schools that had implemented PLC structures. The selected teachers and staff had particpated in the PLC model transcribed in the district's protocol of particpation to include but not limited to: K-8 teachers that teach various subjects or grade.

To collect the data, the researcher used Bitterman's (2010) questionnaire (see Appendix D) designed to gather teacher perspectives of PLCs, along with a modified

version of Bitterman's (2010) interview guide designed to explore perspectives on teacher perceptions of how PLCs facilitate teacher growth and development. The results were used to support the answer to the guiding questions:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

The purpose of Research Question 1 was to analyze educators' perceptions of the PLC implementation within the K-8 school district and if there was consistency and to what degree does the districts PLC model impact teaching and learning. This question was answered using the interview data and questionnaires completed by participants. The second question allowed the researcher to further determine how teaching and learning are the focus of the district's PLC model, and if this is true, what data based decisions were being made and more importantly what data supports drive the PLC's effectiveness. This question was addressed with the interview data, questionnaire and archived data, which encompassed the school improvement plans, aligned with current and past data provided by each school site as well as achievement data obtained from the allthingsplc.com website.

The third question provided this researcher with perceptions resulted from participating in PLCs. Further, the significance of this question captured the heart of professional growth and instructional effectiveness as explained by the participants. This question was answered by using the interview protocol and questionnaire completed by the participants. All of which assisted with explaining how professional learning communities in one K-8 school district are structured and implemented to show a primary focus on data based decisions to improve teaching and learning.

Population and Sample Selection

The population for this study included all teachers, administrators and staff members working in schools with active professional learning communities in the United States. The setting for this study was one K-8 school district located in a southwestern region of the United States. Thus, the study population consisted of all teachers, administrators and staff in five targeted schools within this district who participated in PLCs. The target district selected had implemented the PLC framework and was recognized by "All Things PLC" (2015), a website supported by Solution Tree indicative of ongoing research that identifies districts that have incorporated the working foundations of PLCs.

A convenience sampling strategy was used to recruit no more than 14 public educators, interview participants that included 12 teachers and 2 administrators within the district and at least 30 questionnaire participants. A convenience sample was used by the researcher due to participants being willing to take part in a study and were relatively easy to access (Gravetter & Forzano, 2013). Marshal, Cardon, Podner and Fontenot (2013) conducted a study of qualitative sample sizes and found that the concept of saturation should ideally determine the sample size, but noted most multiple case studies

contained between two and eight cases. The sample size for this dissertation adheres to these recommendations, with three cases, and at least 16 target participants.

The researcher obtained site authorization from the southwestern K-8 public school district and worked with the target school district to identify at least three schools willing to participate (see Appendix B). Once principals of schools had been identified and gave consent for their campuses to participate in the study, the researcher sought to schedule a meeting with each principal to explain the purpose of the study, the requirements for participation and to recruit interested participants. Interview participants signed hard copies of the informed consent forms (see Appendix E) during the initial meeting and returned it to the researcher in person, prior to the start of the interview.

Participants' anonymity remained protected, as codes for each school and each participant were assigned rather than using real names. Additionally, all participants were able to withdraw from the study at any time with no penalty. Participation requirements included completing a questionnaire (consent was given upon the completion of the online questionnaire) and potentially participating in a semi-structured interview, for a total of approximately one hour of time. This case study offered an explanation of how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development.

Sources of Data

Sources of data for the study included semi-structured interviews (see Appendix D), an open-ended, two-part questionnaire (see Appendix D), and archival documents to address the problem relating to how PLC models in one K-8 school are designed and

implemented with a focus on teaching and learning and how educators perceived participation influenced teacher development.

The questions that guided the research assisted with designing the interview questions and questionnaire resulting in the following: Research Question 1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest? This question was answered using the interview and questionnaire data. Research Question 2 stated: How are professional learning communities in one K-8 school district structured and implemented to show a primary focus on databased decisions to improve teaching and learning? This question was answered with the interview data, questionnaire data and archived data which included school improvement plans aligned with current and past data, PLC meeting notes and student achievement data from allthingsplc.com (2015).

The third research question was: How do educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness? This question was also answered using the interview and questionnaire responses.

Questionnaires. Bitterman's (2010) questionnaire is aligned with the concepts of DuFour's recommendations of a PLC framework. Bitterman asked participants to report how they felt about the implementation process of PLCs as a framework for supporting school success. The questionnaire was used in this study as an initial data collection instrument. Teachers were asked to describe the status of the PLCs at their school site. Teachers were asked to define a PLC and how they might change their working definition, what the main facilitators are and the barriers and successes they have experienced with the teaming structure.

Questionnaires were provided to the 3-5 schools selected in the study. The participants had an opportunity to respond openly to a portion of the questions in word form. The data collected in the questionnaires was used to gather teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest.

Interviews. The researcher used Bitterman's (2010) interview, with permission, to collect in depth perspectives of teacher understandings and to find out how PLCs facilitate professional growth and development. An interview is described as a mode of verbal information derived from case study participants, which is usually conversational in nature and guided by the researcher's intent for specific findings (Yin, 2014). Further, Bitterman (2010) stated, "questions were constructed out of the characteristics that make up an effective professional learning community… to capture an accurate and complete understanding of teacher perceptions…" (p.47). Participants respond to the same questions during the interview and a protocol was established (Yin, 2014). Each participant's interview was recorded, transcribed and reviewed by the participant for accuracy. Interview responses were used to explain the perceived understandings of participating in a professional learning community and the influences on teacher professional growth and development.

Further, the interview data was used to explain how professional learning communities in one K-8 school district structured and implemented to show a primary focus on data-based decisions to improve teaching and learning. Additionally, this information was used to explain how educators explain and describe how participation in professional learning communities influenced their professional growth and instructional

effectiveness. Interviews were set to be approximately 45-60 minutes and were an open-ended format to develop understandings of the phenomenon being studied.

The interview guide had 10 questions that asked teachers to describe how collaborative teams are implemented at his/her school site, how they view PLC's as contributing to collaborative teams and the most effective ways that teachers feel PLCs contribute to teaching and learning. A full copy of the interview guide is located in Appendix D of this dissertation.

Archival data. Next, archival school district data was analyzed to determine how the PLC structures align to Dufour's six characteristics of PLCs. The archival data was mostly provided by the district, school sites. This information included: PLC meeting minutes from the 3-5 school sites, each school's improvement plan, data from allthingsplc.com (2015), as well as the Arizona Department of Education student achievement data which assisted with explaining how professional learning communities in one K-8 school district are structured and implemented to show a primary focus on data-based decisions to improve teaching and learning.

The data collected were used to explain how professional learning communities in one K-8 school district are structured and implemented and the perceived participation in professional learning communities influenced teacher professional growth and development. The researcher used the questionnaires, semi-structured interviews and archival data in the triangulation analysis to determine "trustworthiness, consistency, confirmability and applicability" (Golafshani, 2003; Noble & Smith, 2015) of this case study.

Validity

Validity in a qualitative study refers to how the results of the study are transferable from the sample to the population and the rigor with which the study was conducted with regard to the instruments used. Further, validity processes include: collection of multiple sources of data, triangulation, member checking, quasi-statistic, review of data analysis by others, expert panel review of developed instruments and/or practicing interviews and observations.

According to Guion (2002), validity in a qualitative study is determined when the results of the study are true and certain. In addition, the definition of "true" is accurately reporting the situation and "certain" meaning that there are no doubts that the work is supported by evidence. The researcher described the sample in clear and thorough terms to ensure comparison with other samples. Additionally, validity in qualitative studies entails the use of multiple sources of data. For the purposes of this study, the researcher provided three sources of data which included the electronic questionnaire collected from at least 30 participants, interviews of at least 16 educators along with the archival data sources to provide a convergence of different sources. Noble and Smith (2015) stated that qualitative research validity is reliant on "trustworthiness" of findings, based on the view of the participants. Therefore, the researcher used member checking to ensure the transcripts accurately represented each participant's thoughts. Finally, the researcher convened an expert panel to review the interview questions for clarity and to ensure the participants would understand what was being asked.

Reliability

Reliability refers to the quality and consistency of data collected in a study. Detailed data, collected through a clearly described and documented plan, enhances the

reliability of the study's findings (Saldana, 2013; Yin, 2014). For this study, the researcher used a detailed data collection process, documented in this chapter to include multiple sources of evidence: individual interviews, an electronic questionnaire, and archival data (Saldana, 2013; Yin, 2014). Through the use of this clearly documented method, other researchers could follow the sequence of this data collection process. Additionally, the same interview guide and questionnaire was used with all participants, to ensure that similar data was collected.

Yin (2014) suggested that the use of a detailed interview with an interview protocol ensures that each participant is provided the same opportunity to respond to the same question. The researcher adhered to this suggestion. In addition, the researcher included archival data consisting of PLC meeting notes, continuous improvement plans, achievement data from allthingsplc.com and Arizona Department of Education achievement data that formulated conclusions and answered the research questions in explicit detail. Thus, data triangulation involved the consideration of these different sources (Guion, 2002) in determining the results. Interviews from various stakeholders provided an array of understandings from several perspectives. Golafshani (2003) included that data triangulation was an important methodological consideration which is was used to control bias and established valid understandings in this research conclusion. These measures were used and considered to produce a reliable study.

Data Collection and Management

Data collection began once IRB permission was received from Grand Canyon University (see Appendix A). The researcher obtained site authorization from one southwestern K-8 public school district. The researcher worked with district personnel to identify at least five schools willing to participate (see Appendix B).

Lavrakas and Roller (2015) found that collecting qualitative data relies on the researcher-as-instrument as wells at the participant-researcher relationship. If this was true, then it would be significant for this researcher to maintain a level of respect and responsibility to each participant throughout participation. According to Yin (2014) preparing to collect data for a case study requires the researcher to adhere to the following: "ask good questions, listen, be adaptive, have a firm grasp of the issue being studied, and know how to avoid bias and bring high ethical standards to the research." (p. 70).

To ensure that this case study produced reliability and truth value, the researcher used a sample size of at least 16 interview participants and 30 questionnaire participants. The sample selected included no more than: four administrators, four primary teachers (K-2), four intermediate teachers (3-6), and four middle-school teachers (7-8) in three to five southwest K-8 public schools that had implemented PLC structures ensuring that familiarity of concepts that are present in the organizational framework were accessible.

Next, at least 30 particpants completed the questionaire in the selected school sites. Once principals had personally consented to having their campuses participate in the study, the researcher scheduled a meeting at each school site to share the purpose of the study, requirements for participation and to recruit volunteers for the questionnaire and interview. According to Yin (2014), the importance of using a structured questionnaire was to provide relevant information that could be referred to over and over again.

Once individuals had voiced interest to participate in the interview, the researcher had them sign an informed consent form prior to the start of the interview (see Appendix E). This opportunity included the researcher personally meeting with each individual at

the school site and explained the purpose of the study, provided the consent form as well as provided participant's the right to withdraw from the study throughout the four to six weeks. This delivered an opportunity to gain trust, openness and produce a non-threatening environment to collect the data more accurately (Yin, 2014).

The questionnaire was electronically accessible to at least 60 teachers using SurveyMonkey®. Each participant's school email address was used as the point of contact. The participants were asked to return the questionnaire within five days of receiving the item. It was the researcher's intent to collect at least thirty completed questionnaires to assemble reliability and a non-biased result in determining the answer to the problem. The questionnaires were then retrieved using the data collection source provided by SurveyMonkey®.

For the interview portion, the researcher intitially sought out two, eduator volunteers not within the chosen district to practice the interview prior to the start of the study. This is suggested as an addition of conducting a "pilot study" or practice session (Yin, 2014). Further, the researcher established clarity of potential questions or obstacles before the onset of the interview portion and ulitmately reserved time. The researcher requested at least eight educators from each school to particpate in the interview portion.

The interviews were scheduled with at least a two week notice to the participants or what was more convenient to the participant. Each school site was asked to provide a private area to ensure privacy to the both the researcher and participant. The interviews were recorded, transcribed and emailed to each participant for review and confirmation. The researcher intended to interview each participant for forty-five to sixty minutes.

Finally, the archival data included collected PLC meeting notes from each school site provided by the principals or designated staff member. The meeting notes were

collected for a minimum of four weeks. School improvement plans were provided to the researcher from the principal or school web site. The achievement data of each school site was retrieved from the Arizona Department of Education and the PLC website as provided as public knowledge (Arizona Department of Education, 2015; All Things PLC, 2015).

The selected coding process consisted of axial coding that focused on the four dimensions of context, strategy, processes, and consequences. The triangulation of the data consisted of reviewing all elements of the research and creating an array to organize the narrative data in cells, organized by question (Insites, 2007 & Yin, 2012). The research data was collected within four to six weeks and continues to be stored on this researcher's secured laptop. The collected data will be kept secured for a period of three years after which it will be destroyed.

Data Analysis Procedures

In this qualitative case study, the researcher addressed the three defined research questions by asking selected participants to reflect and elaborate on their perception of participation in a professional learning community. More specifically, the questions were intended to glean perceived influences on teacher professional growth and development. The first research question was: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest? This question was answered by using the interview items and questionnaire items.

Research Question 2 stated, how are professional learning communities in one K-8 school district structured and implemented to show a primary focus on data-based decisions to improve teaching and learning? This question provided an answer with the interview items, questionnaire items and archived data that included school improvement

plans aligned with current and past data, meeting notes and achievement data. The third research question was: How do educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness? This question was answered by using the interview items and questionnaire items.

The results of the questionnaire were transferred into an excel document to prepare for analysis. After each interview, the recordings were transcribed with a draft transcript and provided to the participant to review for accuracy (Yin, 2014); this is often referred to as member checking and is considered a means of triangulation. The archival documents that were collected and prepared for analysis were organized into a Word document. Pseudonyms were also signed to participants along with a coding system such as I-Sally, Q-Sally, to ensure the anonymity of participants, but to also connect each person to their different sources of data.

Hatch's (2002) strategy was used to analyze the data. This process consisted of several steps. First, the researcher read the data several times to get a sense of what was included and identify the parts that would be the "analyzable parts" (Hatch, 2002, p. 163). Then, domains or categories were developed based on identified relationships within the "analyzable parts" (Hatch, 2002, p. 163). Then, codes were assigned to these groups, followed by reading the data again to ensure the code names were accurate and to keep notes of the relationships in the data. Then, the researcher confirmed code names and sought specific examples in the data that supported these names and completed the data analysis using the code names. Then, the researcher identified themes across codes or domains and created an outline of those relationships, within and across domains (codes).

Finally, the researcher selected excerpts from the data that supported or provided examples of the codes in the outline.

The coding process was instrumental in the analysis to report the concepts that were profound in the collected data. Further, the data was triangulated to strengthen the trustworthiness of this case study and to provide an account of the perception of the participants (Noble, 2015; Yin, 2014). Data triangulation included the use of different sources or groups to determine insight on perceptions. The task ideally reveals the similar concepts among the various data or groups (Guion, 2002). Noble (2015) recommended that building a trustworthy account for credible findings in a qualitative study includes the following strategies: account for personal biases that may be influential of the findings, ensure that interpretations of data are consistent and transparent, include rich descriptions of participant's accounts to support findings and establish a case seeking out similarities and differences across accounts to ensure a difference in perspective.

Finally, the author determined that data triangulation supports a more comprehensive set of findings. Thus, the researcher considered this and identified patterns and themes across all three sources of data in order to triangulate findings. This process of coding the data, along with triangulation addressed the research questions, which focused on how teachers perceived collaboration. The results of this case study concluded with a thick, rich description of the phenomenon, as is appropriate for a case study (Yin, 2014).

Ethical Considerations

Grand Canyon University selected an IRB that approved the project for this study (see Appendix A). IRB aligns goals to the Belmont report which include the protection of human subjects, to develop and maintain ethical research, to ensure that researchers are

qualified and to ultimately add value to current research (GCU, 2014). This researcher ensured that personal bias were not included in the findings. According to Yin (2014), "avoiding bias is but one facet of a broader set of values that falls under the rubric of research ethics" (p.76). The inclusion of the following were also recommended by the author to produce credible research: "having responsibility to scholarship, such as neither plagiarizing nor falsifying information, as well as being honest, avoiding deception, and accepting responsibility for ones' own work" (Yin, 2014, p, 76). Further, particpants were provided the following protection by giving informed consent, avoiding the use of any deception, protecting confidentiality so that they are not unwillingly put into any undesirable position and equitable selection (Yin, 2014).

In accordance with The Collaborative Institutional Training Initiative (CITI Program, 2014), the defining factors of informed consent "is largely derived from the principle of autonomy." The participants were informed of the process throughout the study and had the opportunity to accept or decline participation without fear of negative consequences. A written consent and a signature was also collected at each interview. The district, school, and participants were informed of the following:

1. The purpose of the research
2. The participant's rights, including the freedom to discontinue participation at any time
3. How the subject's privacy and anonymity will be protected
4. Whether there is compensation for participating
5. Who the contact persons are if a subject has questions or concerns about the research (CITI Program, 2014).

Participants were specifically informed of the following:

- Anonymity: Anonymity will occur by the researcher ensuring that names of participants are not included in any production of the written work.

- Privacy: Additional precautions shall be taken by securing a private room for the interview and an anonymous survey.

Strategies to prevent coercion included that the bias opinions of participants and the researcher were not included in the conclusion of this case study. Potential conflicts of interest were prevented by interviewing a sample of staff from different school sites at various grade levels.

Finally, the data collected will be kept for 3 years, after which time it will be destroyed. The information shall be stored in a locked filing cabinet and on a removable drive. The interview data and questionnaires do not include the names of the participants and the collected information is anonymous. The potential concerning factors that were included were natural events that could have prevented participants from consistently participating, specific school factors preventing participation during common release time and the extent to which the school staff willingly participated.

Limitations and Delimitations

The implications of such a study could potentially be misguided by previously embedded philosophies on PLCs and the non-characteristics of PLCs by the participants that participated in the study. For instance, "teachers collaborate to analyze their practice and discuss new strategies and tactics, testing them in the classroom and reporting the results to each other" must be a shared belief within the team (Croft, Coggshall, Dolan, Powers and Killion, 2010, p. 7). This idea of collaboration with intention, is a rich conversation and learning opportunity if embraced in an open mindset, but may not have been present for all participants.

Additionally, some participants in very limited cases, were hesitant to disclose an honest perception related to collaborative efforts; "school leaders must foster an

organizational culture of continuous learning and teamwork through venues such as professional learning communities and professional norms, including, for example, an open door policy for observing each other's classroom" (Croft, Coggshall, Dolan, Powers & Killion, 2010, p. 8). Next, a time commitment "to align and develop capacity to create the results its members desire to achieve" (Lick, 2006, p. 92), is a significant limitation of this case study, in this case participants were asked to contribute planning time to participate in this study.

Summary

This chapter presents the specifics of a qualitative case study. The literature review offers substantial evidence to support that there are characteristics relative to teacher development that are profound in professional learning communities. Therefore, a more descriptive approach on how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influenced their professional growth and development was vital.

The chapter begins by recognizing that recent reforms in education and calls for increased accountability have triggered administrators and teachers to implement a range of programs and strategies designed to improve student achievement. One point among many stakeholders is that teachers can no longer work in isolation if the staff is collectively responsible for the learning of all students. Therefore, measures have been introduced in school systems designed to increase teacher collaboration. One of these valid structures is a PLC, which Darling-Hammond and Richardson (2009) publicized as the new standard of professional development. Gray, Mitchell and Turner (2014)

contributed that trust, collective efficacy enable school structures to elicit keen characteristics to an environment that promotes the success of PLCs.

A unique opportunity to develop a deep understanding of the phenomenon presented in the organizational framework of PLCs was present in this case study. Furthermore, to gain understanding of the questions the researcher determined that a qualitative format analyzing the experiences of participants in an authentic manner was justified.

The research questions that guided this study were:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

Yin (2014) stated "a case study is an empirical inquiry that investigates a contemporary phenomenon (the case) in depth and within a real world context" (p.16). A case study is an approach to research that explores a phenomenon within a context using an array of data sources (Baxter & Jack, 2008; Nobel & Smith, 2015). Further, the recommendations of previous research presented findings in limited format that suggested the extension of using additional methods to provide a more thorough

investigation of the phenomenon embedded into the PLC concept be applied (Chong & Kong, 2012).

Following the data analysis, the researcher will report the findings of this study in explanatory format in the upcoming chapter, Chapter 4. In this chapter, the researcher will share the interview transcripts outlining similar responses. The questionnaire responses are presented in an organized format along with the integration of the archival data. The discussion is focused on the perceptions of teachers relative to professional growth and the organizational structures within a professional learning community that are most prominent to support teaching and learning.

Chapter 4: Data Analysis and Results

Introduction

This case study explored how professional learning community models in one K-8 school were designed and implemented with a focus on teaching and learning and how educators perceived participation in professional learning communities (PLC) influenced their professional growth and development. A qualitative methodology was used for this study, as the researcher investigated a multifaceted phenomenon in the context of a school setting (Baxter & Jack, 2008). Qualitative research was conducted to better understand human condition about a research issue that quantitative data does not address (Lavrakas & Roller, 2015) and in this case, an opportunity to gather a story and share perspectives, rather than numerical representation was provided.

The study population consisted of teachers, administrators, and staff in five schools within this district, who also participated in PLCs. Three research questions guided the research and purpose for data collection. The first research question focused on teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States. The second question addressed how professional learning communities in the district were structured and implemented to show a primary focus on data-based decisions to improve teaching and learning. The third question asked educators to explain and describe how participation in professional learning communities influenced their professional growth and instructional effectiveness.

The researcher used multiple sources of evidence, including semi-structured interviews, an electronic questionnaire, and archival data. The archival data provided by building administration and consisted of a continuous improvement plan, PLC meeting

notes and current student achievement data. The researcher also sought archival achievement from the AZ MERIT data located on the Arizona Department of Education website as well as noted information on this school district provided by Allthingsplc.com.

This chapter supports the questions and responses for each research question and the relatable responses being explored in the case study. Furthermore, this chapter outlines the purpose of the study and the designated research methodology, provides a summary of the qualitative questions and data analysis used to conclude findings. The researcher collected, coded, and thematically analyzed the survey, questionnaire and interview data. The results of the study included in this chapter include a description of the process, a summary of the data, the results of the study and a summary of the findings.

Descriptive Data

The focus of the study was on teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States. Three different sources of data were gathered, which included individual interviews, a two-part questionnaire and artifacts from three schools. Fourteen participants completed semi-structured interviews. This source totaled 63 transcribed, single-spaced pages (see Appendix I). Forty-one participants from the five schools completed Part 1 of the questionnaire, and 31 participants completed both Part 1and Part 2 of the questionnaire (see Appendix H). Three individual school continuous improvement plans along with PLC meeting minutes from one grade level were provided by three of the selected schools used as archival data in this study.

All participants who completed the questionnaire were afforded an opportunity to skip questions if they chose to do so. Ten participants chose not to complete Part 2 or

indicate personal information. Therefore, demographic data from 31 participants was included in the descriptive data.

Teachers identified their job role, number of years in their current school and number of years in the current subject area or grade level. Two participants identified their job role as instructional support specialist (ISS) were referred as teachers for data purposes. All participants specified that they assumed the role of a teacher, but not all participants indicated the grade level. Fifteen participants indicated that they had been at the school site for 1-4 years, 12 participants indicated that they had been part of the school site for 5-10 years, and four particpants indicated that they had been at the school site for more than 10 years. Table 1 demonstrates the demographic information summarizing that portion for the questionnaire participants.

Fifteen participants indicated that theyhad been teaching the content or grade level for 1-4 years, 11 participants indicated that they had been in the same content area or grade level for 5-10 years, and five participants responded that they had been in the same content area or grade level from more than 10 years. Table 2 represents how questionnaire participants responded when asked how long they had been teaching the current subject or grade level.

Table 1

Questionnaire Participant of Years Taught at Current School

1-4 years	5-10 years	10+ years
15	12	4

Table 2

Questionnaire Participant of Years Teaching Current Subject or Grade Level

1-4 years	5-10 years	10+ years
15	11	5

Questionnaire descriptive statistics. After AQR and IRB approval, the questionnaire was sent to building principals to forward to staff along with an explanation of the purpose of the study and participation guidelines. The questionnaire consisted of two parts. Part 1 included 36 Likert scale questions on a 5-point scale, asking participants to respond with strongly agree to strongly disagree. Part 2 was designed to generate written responses in an open-ended format.

The researcher prepared the questionnaire data in two parts Items 1-36 were Likert scaled items and items 37-41, open-ended responses. The original rating scale noted that strongly agree was worth a scaled score of 1; however, the researcher chose to reformate the formula in Excel with strongly agree valued at a scaled score of 5. Table 3 represents the first part of this process.

A copy of the full set of questionnaire responses and mean scores is located in Appendix G. For ease of reporting, the highest and lowest scores are presented in this section. All mean scores of 4.5 or higher and 3.5 or lower are represented in Table 3. The highest scoring items included statements where teachers felt they took collective responsibility for student learning, created environments where students felt comfortable learning, teachers routinely learned from one another, teacher routinely collect data to evaluate student learning, have high expectations for student learning and take responsibility for their own learning as educators. The lowest scoring items indicated that teachers felt they did not have enough time dedicated to classroom observations, did not

receive enough training on how to work and learn in teams, felt they did not have enough dedicated time to be mentored in a new role, and did not feel they routinely engaged in team teaching.

Table 3

Rating Average for Questionnaire Part 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
1. Take collective responsibility for pupil learning.	23	18	0	0	0	4.56	41
3. Create conditions for pupils to feel confident to learn.	29	10	1	1	0	4.63	41
4. Learn together with colleagues.	21	19	0	1	0	4.46	41
8. Routinely collect, analyze and use data and evidence to inform my practice.	24	13	4	0	0	4.49	41
9. Have high expectation of students.	32	9	0	0	0	4.78	41
26. Take responsibility for my own professional learning.	20	21	0	0	0	4.49	41
11. Have time dedicated to classroom observations.	6	20	5	9	1	3.51	41
21. Receive training on how to work and learn in teams.	5	16	9	11	0	3.37	41
28. Have dedicated time to be mentored in a new role.	4	12	15	8	2	3.20	41
29. Engage in team teaching.	1	14	13	12	1	3.05	41

Next, the researcher determined responses indicating the percentage of participants agreeing with the item statements; this conversion to percentile demonstrates the response count in relation to the participants in this portion of the study. The response counts for items 1-36, with the exception of items 2, 30, 31 and 36, which received 41 responses, is included in Appendix G.

Part 2 of the questionnaire was given to participants in an open-ended format. Item 37 asked participants to identify the PLC they are currently part of, and item 38 asked participants to define PLCs. Three items asked the participant to elaborate on perceptions; these are identified as items 39-41. Item 39 asked the participants to describe how useful PLC's are to his/her school and students, item 40 asked what the main facilitators are in order to sustain a PLC, and item 41 asked respondents to identify challenges of sustaining a PLC. Finally, item 42 asked participants about themselves that provided specific information on position, number of years at the school site and number of years teaching the specific grade level or content.

Figure 1 outlines results of item 37, or the percentage of teachers who reported their school was in the developmental stages of establishing PLCs, starting the journey of establishing PLCs, or working to re-establish what had once been a PLC. 37 teachers responded to this question. Over half (59.5%) of the teachers reported their school was in the initial stages of developing PLCs, about 11% noted their school was on the journey to establishing PLCs, and about 30% of the teachers noted their school was working to re-establish PLCs.

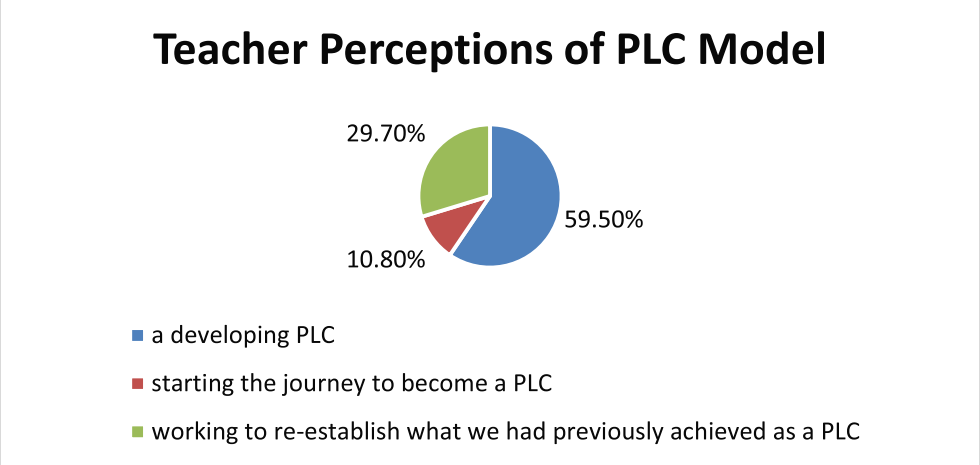

Figure 1. Teacher perceptions of school PLC model

Item 38 asked teachers to define PLCs. The teachers were presented with Bitterman's (2010) definition of a PLC, "Usually a school attempting to develop a professional learning community is set up so that teachers work in collaborative teams to develop, plan, and implement lessons that are innovative and promote student learning" (p.98). Teachers were asked whether they would change the definition or to provide additional thoughts as to their own definitions of a PLC. The responses indicated a support of the PLC concept. Table 5 summarizes the working definition of a PLC from the educators' perspectives.

Table 4

Participant Definitions of PLCs

Participant Summaries
• Seven participants indicated they agreed with the definition as written.
• Three participants stated they did not understand what the question was asking.
• "Working together as a team to be collectively accountable for student learning."
• "Our teachers work together as a team to best meet the needs of our students."
• "A team of teachers that works together on daily basis that is continually changing to better meant the needs of our students."
• "I believe a PLC is a community of professionals working together to achieve a common goal. In our school our goal is to see every student succeed. We work together every day to achieve our goals."
• "Too much to do, not enough time."
• "Professionally committed to ongoing improvement."
• "I think a PLC is a group of people that come together to work towards making sure that all students are successful."
• "A PLC is a community of professionals who work together to achieve a common goal.
• "Teams working together, teachers having a say in what happens in the school, taking time to listen to new ideas."
• "We had a lot of changes in our leadership in recent years. We are working to reestablish what we had as a PLC before the change."
• "Working to rebuild a PLC that has been lost over time. "
• "Working together as a team to be collectively accountable for student learning."

Item 39 of the questionnaire asked teachers how useful the idea of a PLC is. Respondents shared information that allowed the researcher to better comprehend the perception of the

teachers and identify the usefulness of a PLC structure. Of the total responses, all but three teachers indicated they felt the facilitation of PLCs were useful or extremely useful; two indicated neutral perspectives, with comments related to they work only if the staff understands the philosophy, and that they “take time” to develop. Only one teacher felt PLCs were not useful. Table 5 shows those responses

Table 5

Participant Perceptions of PLCs Usefulness

Sample Responses: **How useful is the idea of a professional learning community for your school and pupils?**
• "It has had a profound impact."
• "I think PLC is very useful because we keep our students in mind with everything we do."
• "Not as useful since not everyone knows the philosophy of PLC."
• "Essential, less work with more hands/minds."
• "I think it is very useful and find it successful on my grade level because we have time to share ideas and discuss what is best for our students on a weekly basis."
• "I think it is useful, but it is usually focused on elements besides first best instruction, which means are students do worse than if that time was devoted to refining how we present information and concepts to our students."
• "Extremely useful. We have 2 days per week that is set aside to work alongside our grade level team."
• "Very useful."
• "It is useful as long as you have a team that is strong in their professional knowledge."
• "It is extremely useful. I can't imagine teaching without a PLC. The knowledge I have gained from PLC meetings with my grade level team, my school teams, and teams from other schools is irreplaceable."
• "A PLC is very useful for the students at my school. Our students provide a challenging and varied range of what they bring to the table. It makes it so much easier when teachers work together to create lessons, but also to group students based on their needs for intervention. Trying to do all of this on my own would be overwhelming and daunting. Being able to share the workload and ideas makes it easier to address the needs of every student."
• "I think we try to be a good PLC school and we hear all the time that "you're already doing what a PLC is" but I don't really think the teachers understand all that is involved. Just by making it mandatory to meet during our preps does not make us a PLC. I'm convinced, especially in the K-2 sections of our school, the kids have no idea what it means to be a PLC."
• "It is extremely useful because there is always, and should always be, room for improvement."
• "I would not be half the teacher I am today if I did not work in a PLC. Because teachers are given time to communicate in a group about plans and strategies, I was able to learn best practices than I did from student teaching."
• "I would say it is highly useful. It is data-driven and a community working towards a common goal. As a single member in a professional learning community I don't feel alone and as if all of the weight is on my shoulders. It gives a sense of security and support."
• "I feel that a plc is very beneficial to a school and its students when implemented properly. When all voices are heard and time to meet and grow is respected."
• "It is essential for the all-around success of our school."
• "It does not seem to be useful. We are driven more by decisions made by individuals rather than community discussion. We talk about how we are implementing the ideas of others rather than if these ideas are actually working for students."
• "When I was a part of a very cohesive PLC it was great. We were more of a community than coworkers."
• "Very useful, the students become ours instead of mine! It brings everyone on the same page."

Table 6 outlines the responses to Item 40. This item asked participants to identify the main facilitators of becoming a PLC and sustaining a PLC. Participants provided insightful information that further supported the phenomenon of a sustainable PLC. Most of the comments centered on terms reflecting the need for buy-in, working as a team, focusing on data to inform instruction, and time for collaboration.

Table 6

Questionnaire Item 40 Responses

40. What do you see as the main facilitators to becoming a professional learning community and sustaining a professional learning community?
• "Professional Development, Staff buy-in, Time given by admin."
• "Consistency in our curriculum so we can become experts on what to teach."
• "Working/planning as a team, genuine relationships. Discussing student data, what is working what's not. How can we change things that aren't working so that they are best for the student."
• "It needs to be focused on things teachers actually think are valuable to teaching their students and there needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else.
• "Working together as a team, talking about student progress on a regular basis, and planning together as a team to better accommodate all our student."
• "Team time. We must have dedicated time to meet with our PLC teams to ensure that we can analyze data and answer the 4 key questions."
• "The main facilitators are a collective and positive teacher buy-in as well a constant yet changing meaningful purpose."
• "I think the biggest factor is "buy in." Everyone has to be part of the process in order for it to work effectively. In sustaining a PLC I think there should be ongoing training for new staff and even "refresher" courses for everyone."
• "The whole staff needs to have the buy in that it really works and team leaders and admin need to work collectively to make sure everyone understands what it at stake and how to get the most out of a PLC"
• "Effective collaboration, working norms, high expectations, vision, assessment, and commitment."
• "The main facilitators would be the Administrators but every member of the school is a stakeholder therefore collaboration is key to maintaining momentum toward our goals."
• "I think that the teachers and the school community need to buy into the idea. For some people it is a shift in how they have always done things and it can be hard for some to collaborate with others. A strong team of people that want to collaborate and share makes it sustainable"
• "Collaboration, time for collaboration and less focus on the numbers and more focus on the wellbeing of students and teachers."
• "Conversations that center on methods for sustaining and improving student learning."

Table 7 corresponds with the responses to item 41. This item asked participants to discuss the challenges of becoming a PLC and sustaining a PLC. Participants provided

the information that noted the challenges perceived by teachers participating in PLCs adding to the sustainability factor. Most barriers were identified with comments such as lack of time, teacher turnover, learning curve for new teachers, and consistent participation and agreement among team members.

Table 7

Questionnaire Item 41 Responses

41. What do you see as a challenge to becoming a professional learning community and sustaining a professional learning community?
• New teachers-might not have the training/experience of plc." "Finding the time to do it and doing it with fidelity."
• "Making sure everyone can agree and be on the same page the majority of the time."
• "There needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else. It is frustrating to sit in a PLC meeting when you know you will then have to spend extra hours after school to prepare for giving your students first best instruction."
• "People that are unwilling to adjust their old habits and create new ones that will work better for their co-workers and students." "Not all members value the time spent together for collaboration." "Time to reestablish all those norms."
• "We focus too much on finding out where the students are at rather than focus on producing better lessons." "One person making decisions and teachers not having a voice in decisions that involve them and the students. "A lot of change. Changes in leadership and staffing."
• "The 'Hogs and Logs'. When one person takes over the entire over meeting and doesn't allow others to share can ruin a PLC. On the flip side to that, those that sit like a log and don't contribute at all. This type of negative attitude can really affect a team."
• "The complete curriculum change we experienced this year had both negative and positive impacts. When teachers are overwhelmed with too many changes at once, they sometimes function alone instead of pulling together to work as a team. Gradually as we surface from so much change, we started collaborating and finding a way to work together again."
• "A big challenge is not everyone participating in the process. It slows down the progress and hampers the workload. A challenge to sustaining the PLC is not ensuring everyone is following the PLC process. Trainings and refresher courses could help with that."
• "Teacher morale is a challenge due to, changing curriculums or no curriculum, implementation of a given practice without follow through and reliability. Teachers are expected to do A LOT with limited resources and incentive which also affects teacher "buy in" on sustaining a PLC."
• "Sometimes teachers are told to do specific activities during the time they have to meet and I think there needs to be more input from teachers on how the community should work and what expectations should be. For example, if teachers have very different students in their classrooms is it truly best for the students to expect all teachers to be doing the exact same thing."

Interviews. Scheduled interviews were conducted after AQR and IRB approvals were granted to the researcher. The interviews began on February 26, 2016 and concluded on March 24, 2016. Each interview took place at a time that was convenient for each of the participants. Interview participant locations were identified in this study as

follows: school site (S1-S5) or district site and school position (teacher, administrator or ISS (instructional support specialist)). Participants ranged in experience, grade level and location. This sample included 13 females and one male, 10 classroom teachers (all female), two instructional support specialists (noted as teachers on special assignment: one assigned to S1, one district support coach also assigned as a part time teacher, both female) and two administrators (one principal from S5 (male) and one assistant principal from S3 (female). Figure 2 shows the demographic data of interview participants.

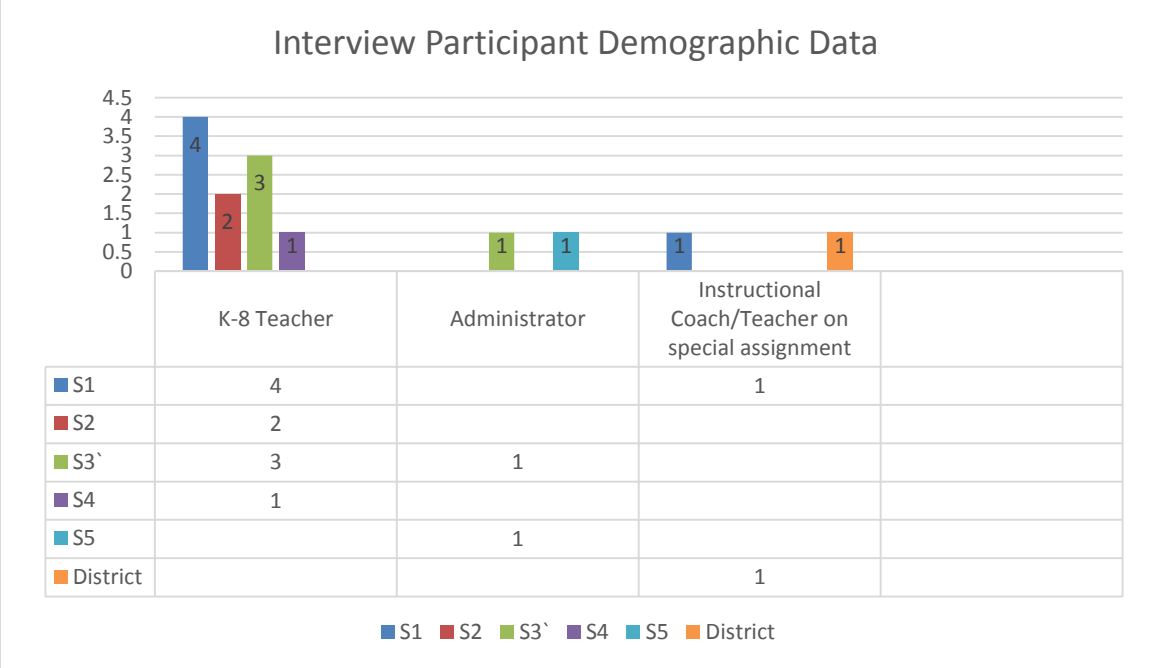

Figure 2. Interview participant demographic data

The interviews were conducted in a semi-structured format and included 10 questions. Each participant's interview varied in length, from 21 minutes to 60 minutes. The transcribed data (see Appendix I) varied per interview ranging from 3 to 8 pages, totaling 63 pages. The transcribed data produced during the interview portion of this case study included 63 pages; a sample of transcription is available in Appendix I.

Participants 1, 4, 5, 6, 11 and 12 interviewed for 30 minutes, producing 3-6 pages each. Participants 2, 3, 7, 10, 13 and 14 interviewed for more than 30 minutes and produced 4-8 pages each. Participants 8 and 9 each interviewed for less than 30 minutes and produced 3-4 pages each. Below in Figure 3, the information represents the number of minutes and the number of transcribed pages that resulted in the interview process of this case study. Interview participants were provided an opportunity to skip questions if they chose to do so and had the opportunity to withdraw at any point during the study, it is noted that none of the participants chose to skip questions or withdraw from the study.

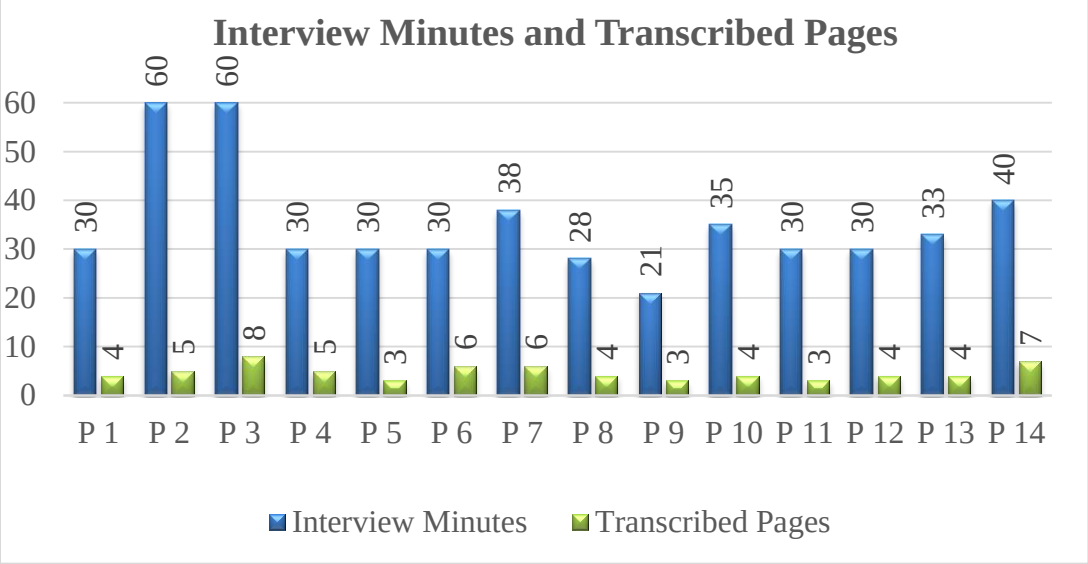

Figure 3. Interview minutes and transcribed pages.

Archival data. The researcher chose to use the achievement data as an artifact to determine the impact on student achievement specified in RQ2. This information was obtained from allthingsplc.com (2016) that indicated increases in student learning during two years of the PLC implementation process for the identified school district. All scores increased during the timeframe under investigation. The researcher took into consideration that the data were not current; however, the state assessment currently in

place is not at a measureable point due to the recent changes in the format of the assessment. Figure 4 outlines the achievement data used for this case study.

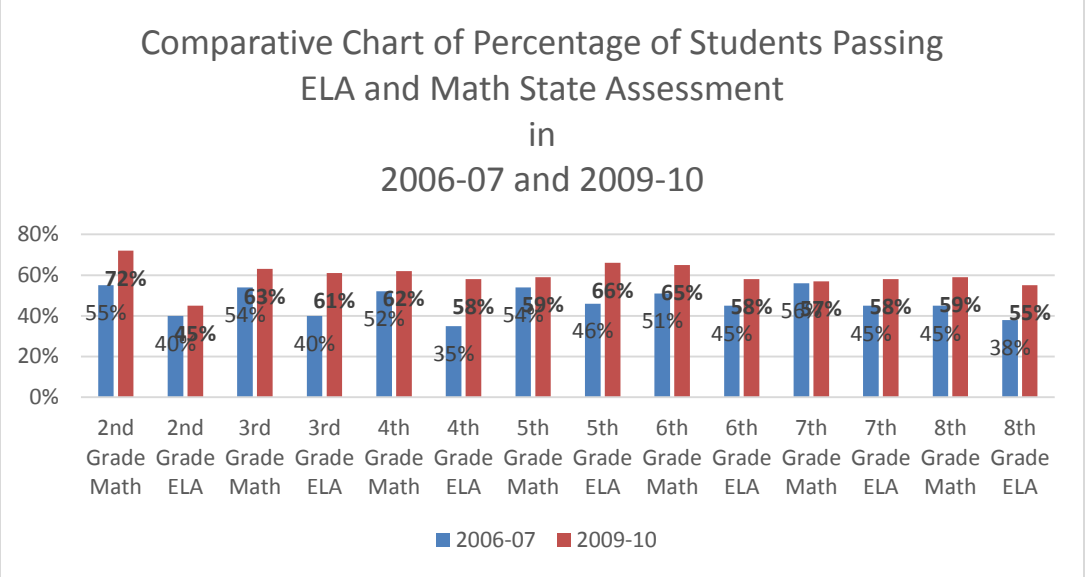

Figure 4. Percent of students passing statewide (English language arts and math) assessment in 2006-07 compared to 2009-10.
(allthingsplc.com, 2016)

Three of the five schools provided the researcher with each site's continuous improvement plan and PLC meeting minutes for one grade level over a period of four weeks. School plans and PLC minutes are outlined in Table 8. Table 8 recognizes three school sites identified as: S1, S2 and S3. Each continuous improvement plan outlined goals, strategies and action steps towards student achievement. The PLC minutes that were collected over a 4-week period, included a site selected team to submit the meeting minutes for this case study: S1 represents a 4th grade team, S2 represents a 4th grade team and S3 represents a 2nd grade team.

Table 8

Archival Data Supporting School Improvement

Participating School Site	School Continuous Improvement Plan	PLC Meeting Notes/ Minutes
School Site 1	**Goal:** Increase Student Achievement **Strategy:** Strengthen Instruction for all students **Action Step:** Professional development **Action Step:** Data driven decision making **Action Step:** Plan development, implementation, and evaluation	**Discussion agenda**: Subject specific noting specific items to work on and discuss, leadership information, data discussion regarding common assessment
School Site 2	**Goal:** Increase Student Achievement **Strategy:** Strengthen Instruction for all students **Action Step:** Support specialists (instructional coaches) **Action Step:** Collective inquiry (teams meet to engage in conversations about practice and strategies) **Action Step:** Data driven decision making	**Discussion agenda:** Team building, leadership information, current data, looking ahead, and common assessment schedule. Our goal: 80% mastery How will we know when our students are learning? How will we respond when our students don't learn? How will we respond if they already know it?
School Site 3	**Goal:** Increase Student Achievement **Strategy:** Strengthen Instruction for all students **Action Step:** Professional Learning Communities (PLC) **Action Step:** Embedded professional development **Action Step:** Data based decision making	**Discussion agenda**: Norms, team purpose statement, school mission, SMART goal. Guiding questions in analysis: What strategies are working? What are students struggling with? Next steps?

In summary, the participants involved in this case study met the study's criteria relative to having experienced a PLC and currently participating in a PLC at their school site. Questionnaire participant information included the number of years assigned at the current school placement and number of years teaching the assigned grade level or subject area. During the semi-structured interview the participants disclosed current

position (noted as a teacher or administrator) at the school site. Participants varied in school position, number of years taught to the number of years in their current placement. The data sources used provided sufficient information for determining the results of the identified research questions. The following section outlines the analysis procedures that support the results.

Data Analysis Procedures

The research questions below guided the analysis for this study:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

Preparing raw data for analysis. The qualitative data included for this study, consisted of a two-part questionnaire that was uploaded into an Excel document. Also, transcribed interviews were produced using a voice-to-text software and edited by the researcher for accuracy. This section describes how raw data were prepared for analysis.

Questionnaire. Preparation for data analysis launched with Part 1 of the questionnaire (see Appendix G). The researcher downloaded items 1-36 (see Appendix G) identified as Likert scaled items from SurveyMonkey® in the form of scaled score responses, rating averages, and response counts for each item. The delivered original

rating scale noted that strongly agree was worth a scaled score of 1; therefore, the researcher chose to reformat the formula in Excel with strongly agree worth a scaled score of 5 (see Table 3). The researcher tallied items by response count and rating scale. Table 4 was created to indicate the percentage of participants that agreed/strongly agreed with each of the items or participants in the opposition with disagree/strongly disagree. For Part 2 of the questionnaire, the researcher combined all participant responses to these open-ended items in one Word document for review and analysis. The researcher noted that not all questionnaire participants completed both parts of the instrument, however there was little to no impact on the overall results.

Interviews. All interviews were audio-recorded, transcribed by a voice recognition, computer software and edited by the researcher. Then, the participating interviewee was sent the transcribed information via email to verify accuracy, also known as member checking. Each interviewee had the opportunity to agree, disagree or add to the data. Once the participant confirmed the accuracy, the researcher uploaded that data into an Excel spread sheet. Next, the interview data were organized by relating each interview question by determining appropriate information that would support the results of each research questions. Then, this document was used to complete the coding process and assisted with identifying themes relatable to each of the guiding questions. The researcher selected excerpts from the data that supported the codes in the process (see Appendix K).

Artifacts. The use of artifacts contributed to builidng a trustworthy study as three of the five schools. Each school selected one grade level to submit PLC meeting notes, two sites chose a 4th grade team and one site chose a 2nd grade team. The researcher was also afforded an opportunity to observe a leadership PLC meeting at S3; this was not a

scheduled observation, yet the school leaders welcomed the researcher's attendance. This observation provided the researcher a glimpse of the working community in action. Additionally, the outlined findings used as artifacts for this study are noted in table 8 organized to identify the key points of each CIP and PLC notes. Next, the researcher chose the allthingsplc.com website to address the data during the implementation phase of PLC during this district's initiative which began during the 2006-2007 school year and concluded during the 2009-10 school year. Figure 5 outlined the data that was applied in this study, used specifically to address RQ2.

Thematic analysis. The researcher used Hatch's (2002) recommendations to analyze this qualitative data. This process consisted of several steps. First, the researcher read the data several times to get a sense of what is included and identified the parts that would be considered (Hatch, 2002, p. 163). Then, domains or categories were developed based on identified relationships within the data considered to be "analyzable" (Hatch, 2002, p. 163). Then, codes were assigned to these groups, followed by reading the data again to ensure the code names were accurately recorded and noting the relationships in the data. Then, the researcher confirmed code names and identified specific examples in the data that supported these names, completing the analysis using code names. Next, themes across the codes or domains assisted with creating an outline of those relationships, within and across domains (codes). Finally, the researcher selected excerpts from the data that supported the codes in the outline. This process assisted with defining the themes that emerged in this data. This specific coding and thematic analysis process was applied to both the open-ended questions (see Appendix K) and the interview portion (see Appendix J) of this case study. Table 9 details the developed codes in the analysis of questionnaire items 38, 39, 40 and 41.

Table 9

Key: Identified Codes for Items 38-41

	Yellow	Green	Lt. Blue	Purple
Item 38	Working together	Ongoing	Student success	
Item 39	Consistency if understanding is present	Sharing responsibility	Useful	
Item 40	Staff buy in	Data focused	Time	Collaboration
Item 41	Ongoing training	Staff buy-in		Time

Next, each research question was aligned with the specific data associated with answering the question. Specific data was selected as it was significant in this study to conclude with results that determined each questions answer. Data triangulation included the use of various sources or groups to determine perception. The task revealed the similar concepts among the various data or groups (Guion, 2002), in this case the 39-41 participants for questionnaire part 1, 31 participants that completed questionnaire part 1 and part 2, the 14 interviewed participants and the alignment of the artifacts used in this case study were all considerable data sources.

The researcher referred to Noble (2015) for building a trustworthy account for credible findings in this qualitative study as simultaneously applying Hatch's (2002) recommendations. The author included that the researcher must account for personal biases that may be influential in the findings, ensure that interpretations of data are consistent and transparent, include a rich description of the participant's accounts to support findings and establish a case seeking out similarities and differences to ensure all

perspectives are valued. The researcher addressed each as a potential limitation. Therefore, differences in perspective were determined in the sampling the researcher chose to follow and valued in the concluding results.

Finally, Noble (2015) determined that data triangulation supports a more comprehensive set of findings in qualitative methods. In this case, the researcher identified codes or descriptors, patterns and themes across all three sources of data in order to triangulate findings. This process of coding the data, along with triangulation addressed each research question that significantly focused on how teachers perceive collaboration as it related to the foundations of PLCs. In the following paragraphs, the researcher represented each data source as it influences each research question. The results of this thorough analysis are presented by research question in the following section.

Results

The researcher organized study results by research question to address and explain the phenomenon as well as address the gaps in literature noted in the literature review. The following research questions guided data collection:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

First, the results of questionnaire part 1 were organized and evaluated according to mean score (see Table 3). Each item identified the perception of the current practice implemented within the school and how teachers related to each item. After this, the researcher read and re-read each response to the open-ended portion of the questionnaire, noted as part 2 (see Appendix H) as well as the interview data (see Appendix I). Each question guided the significance of codes extracted from each items response. Next, the questionnaire items from part 2, including items 38, 39, 40 and 41 were used to determine contributions to the thematic analysis (see Appendix K). Each participant is identified as QP followed by an identifying number to ensure anonymity. The collected responses are accounts of each participant's perception. The researcher highlighted codes in the information that would be significant in the analysis.

Definition of PLC. To support the understanding of how a K-8 school district is structured and implemented to show a primary focus on data based decisions to improve teaching and learning participants were asked to clarify or define a PLC. The participants indicated that the working definition of a PLC should include the following: ongoing, working together, and meeting the needs of students. These characteristics or phrases were extracted from the open-ended responses and used to explain participants understanding of the purpose of a PLC collaboration.

To further understand how participation in professional learning communities influenced their professional growth and instructional effectiveness participants indicated that PLCs are useful as long as teachers understand the purpose as defined by some of the

participants in the following questionnaire, participant phrases included: “is an ongoing professional learning community,” “working together as a team to be collectively accountable for student learning,” “consistently changing as professional learning community” and “work together as a team to best meet the needs of our students”.

To describe how PLCs were structured and implemented to show a focus on databased decisions that improve teaching and learning, the respondents contributed that staff buy in, data focus and time were important facilitators of PLCs. Additionally the opposite must be considered; therefore, participants added that structured and implemented PLCs aligned to databased decisions to improve teaching and learning, often experience challenges including: time, training as well as participant attitudes that play a crucial role which influencing professional growth.

Following this, the interview data was organized in a similar way; codes were excerpted from each participant’s response (see Appendix K), and additionally the researcher extracted sample phrases from the transcription to elaborate the theme specifically aligned to reoccurring codes. Next, triangulation of all three sources supported the analysis. Data triangulation was comprised of three different sources to determine a clear understanding of the perceptions of the participants. Building the case study results, the researcher first referred to Hatch (2002) recommendations of reading and re-reading to identify specific patterns, considered analyzable pieces. The task revealed comparable concepts among the various data to produce codes and according to Guion (2002), building trustworthy results are indicated by comparable concepts, revealing themes.

The researcher additionally referenced Noble (2015), who suggested that constructing a trustworthy account for sound findings in a qualitative study must include

the following: account for personal biases that may be influential of the findings, ensure that interpretations of data are consistent and transparent, include rich descriptions of participant's accounts to support findings and establish a case seeking out similarities and differences across accounts to ensure a difference in perspective. In this case, the researcher's triangulated process of all sources included: questionnaire part 1, questionnaire part 2, the interviews and artifacts compiling relatable results and assisted with further explaining the phenomenon and responding to the guiding questions. In the following, the researcher represents each source as it pertains to the explanation of the answer for each research question.

Research Question 1. The first research question focused on teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States. The intent of this question was to analyze educators' perceptions of the PLC implementation within the K-8 school district and to determine consistencies of the districts PLC model and the influence on teaching and learning. Data collected to answer this question came from Interview Questions 1, 2, 5 and 9, open-ended items on the Questionnaire Part 2: 38, 39, 40 and 41 and questionnaire items part 1: 14, 15, 16, 17, 21, 22, 28, 29, 31, 35, and 36. Four themes emerged from the interviews: collaborative teams, data-driven decisions focused on student success, shared responsibility, and commitment/buy-in to a common practice. Table 10 outlines the themes developed in the coding process evidenced throughout the data analysis.

Table 10

Research Question 1 Emergent Codes and Themes

Theme	Codes	Notes on Emerging Codes
Theme 1: Collaborative Teams	Working together, Collaboration, Team	The term "team" was referenced by 40 participants in the questionnaire; 14 interview participants used similar terms or phrases.
Theme 2: Data-driven decisions focused on student success	Student success, data, student data, progress monitoring, school goals, achievement	39 teachers agreed with the item that showed they based teaching approach on good evidence. The interview transcript referenced this several more times by the majority of participants. All three school improvement plans elicited that increasing student improvement was a goal.
Theme 3: shared responsibility	Sharing ideas, shared responsibility, useful collaboration	Questionnaire items produced evidence that teachers agreed with statements focused on collective responsibility. Similar and like phrases appeared throughout interview data.
Theme 4: Commitment/Buy-in to common practice	Staff buy in, consistency among staff, common goals, common practice	Questionnaire items showed pros and barriers to shared commitment, buy in and values. Terms and phrases repeated in interviews.

Questionnaire Part 1. Items: 14, 15, 16, 17, 21, 22, 28, 29, 31, 35, and 36 generated responses for RQ 1 (see Appendix G). These items identified the school district's model being implemented according to teacher participants. The following items determined that 90%-92% participants completing the questionnaire part 1, strongly agreed/agreed with statements indicating they each shared a common core of educational values, were members of at least one professional team, had opportunities to take on leadership roles, had some protected time for joint planning and development, and actively contributed to the school as a professional learning community. In contrast, 24%-31% of participants disagreed or strongly disagreed with the statement that they received

training on how to work and learn in teams, had dedicated time to be mentored in a new role, and engaged in team teaching.

Questionnaire Part 2. Questionnaire items 38, 39, 40 and 41 generated data also used to support RQ 1 (see Appendix L). The findings for those items provided that when teachers were asked how they would change the definition of a PLC, the codes associated with the answer to this question included: ongoing, working together, and student success. Next, when teachers were asked to discuss how useful the idea of a PLC was for their school, codes associated with this question included useful, collaboration, and consistency. Then, when teachers described the main facilitators for a PLC codes such as buy in, time, collaboration, and data focused emerged. Finally, when teachers described some challenges associated with PLCs these included: time, teacher training and participant attitudes.

Interviews. Interview questions 1, 2, 5 and 9 also produced data to answer RQ1 (see Appendix K). Themes associated with these interview responses included: collaborative teams, data-driven decisions focused on student success, shared responsibility, and commitment and buy-in to a common practice.

Theme 1. Collaborative teams. One primary theme that emerged from the data indicated that 40 questionnaire participants, felt the "team" concept was critical to a functioning PLC. Questionnaire items indicated that teachers worked in teams. Item 4 indicated a high mean score of 4.46, which determined that teachers felt they learned together as a group. Other items indicated that most of the participants were members of a PLC, but also indicated that little team teaching took place.

In defining PLCs, phrases were evident that supported the concept of team, those included: ongoing and working together. Responses from teachers' opened-ended

questionnaire items included phrases such as: “Working/planning as a team,” “Working together as a team, talking about student progress on a regular basis, and planning together as a team to better accommodate all our students,” “Team collaboration,” “Building trust and supportive teams,” and “teamwork, sharing ideas, and knowledge.”

Interview responses also supported the team theme. All 14 interview participants indicated the need for teaming. Grade level teams are composed of members that teach the same grade, each team meets at least weekly between 45-120 minutes. Leadership teams, which included grade level lead teachers, specialists and administration meet less often. Most often this team meets biweekly to monthly.

The first evidence of support was determined by comments regarding time for collaboration. Open-ended questionnaire items reflected this:

- Team time. We must have dedicated time to meet with our PLC teams to ensure that we can analyze data and answer the 4 key questions.
- Dedicated time to plan, collaborate, share ideas/lessons, look at data
- We are given an amount of time but I honestly feel that it’s never enough in order to become a truly successful professional learning community. There is so much involved but not enough time for collaboration, searching for resources, and group learning.

Interview Participant 1 described planning time:

> We have an hour on Thursday mornings, then half an hour on Tuesday afternoons. So we really do break it up with planning our units, planning what we can do to teach those and looking at data. So I think weekly is a good thing. I say weekly because I think anything longer than that you would feel lost… like you know you’re going to meet with your team and that they are there if you have any questions on anything. I think it gives everyone common goals and you have that goal, you have a mission, you have a purpose for meeting whether its data driven,

> sharing instructional strategies or quarterly planning, everyone is on the same page.

Interview Participant 14 discussed the fact that contributing to the team and planning time is important:

> A PLC really helps when you come to contribute to your collaborative teams and it makes people more willing to contribute and then follow through. Grade level meetings weekly is necessary and there was a period of time that we actually met twice a week with our teams probably and I actually really liked that only because there's a lot to do with your grade level PLCs and often times, even this year I feel like sometimes were not getting to things.

Interview Participant 9 elaborated on grade level time, by stating:

> Well we meet as a grade level team several times a month, two times a week and then the leadership team meets as well. I really enjoy working on the team and within a PLC because everyone brings what they have to the table for whatever standard we are working. We're really there to support each other.

Interview Participant 11 highlighted the need for a leadership component of the PLC team:

> We currently have our leadership team for all grade level leads to come together and collaborate. We have grade level teams that collaborate. We have what we call our problem-solving team, which includes resource, our school site interventionists and administration that collaborate using data.

Theme 2. Data-driven decisions focused on student success. A second theme related to RQ 1 indicated a focus on data-driven decisions. Questionnaire responses specified teacher support for databased decisions. Thirty-nine teachers agreed with the

item that showed they based teaching approach to change on good evidence, 41 teachers agreed that they set learning targets for individual students. A high mean score of 4.49, represented that almost all participants routinely collect, analyze and use data and evidence to inform practice, and regularly monitored the learning and progress of individual students. Teacher responses to open-ended questionnaires also evidenced data-based decisions:

- Working/planning as a team.
- Discussing student data, what is working what's not working.
- How can we change things that aren't working so that they are best for the students.
- Working together as a team, talking about student progress on a regular basis
- Planning together as a team to better accommodate all our students
- Dedicated time to plan, collaborate, share ideas/lessons, look at data
- Conversations that center on student learning and methods for sustaining and improving student learning

Archival data were used to determine if schools focused on data to make decisions in efforts to improve teaching and learning. All three schools had increasing student achievement as a goal, with action steps dedicated to data-driven decision making. Discussion agendas referenced data discussion regarding common assessment, current data, looking ahead, common assessment schedule, SMART goals and a discussion on what strategies are working and what students are struggling with.

Finally, interview responses showed evidence that teachers supported databased decisions as part of the PLC. Eight of the fourteen interviewed participants mentioned the importance of databased decisions. This included the analysis of student data both formally and informally to inform instructionally practices: adjust, reteach or enrich instruction. With regard to data, the following responses are noted.

Interview Participant 1 stated:

> This year we've done a really good job as a team looking at our students, collecting data and going over our data after we've given a common assessment or unit assessment. Really looking at what can we do to reteach and meet those kids that didn't get it or how can we help the kids that did.

Interview Participant 3 added:

> Being open and willing to talk about data together as a team and then being willing to share ideas about those things to help each other. During your PLC, everything should be about instruction or assessment or planning interventions.

Interview Participant 7 stated that: "So when I look and I think about the grade level PLC and that collaborative team, their whole focus is on student achievement." Additionally, Interview Participant 14 responded:

> I think that it's really good for our team, I think it helps guide our instruction, it helps us to be able to ask questions to each other about our students and we're kind of all on the same page.

Theme 3. Shared responsibility, commitment, and buy-in to a common practice. The third theme that emerged from the data focused on teacher's responses provided that PLCs require buy-in, commitment, shared values and shared responsibilities. Questionnaire items produced evidence that teachers agreed with statements focused on collective responsibility and shared values. A high mean score of 4.56 determined they felt they take collective responsibility for pupil learning. A high mean score of 4.46 indicated that they learned together with colleagues. Forty-one participants related to actively sought ideas from colleagues. While the majority represented that most shared a common core of educational values, determined that they shared experiences and success,

experiment and are innovated about new curriculum. Additionally, a high score of 4.39 indicated that a shared responsibility for student learning was present, while a score of 4.27 indicated that they actively contributed to the school as a professional learning community. Open-ended questionnaire items showed pros and barriers related to shared commitment, values and buy-in. These items are presented in Table 11.

Table 11

Advantages and Barriers Related to Shared Commitment

Sample Questionnaire Responses Related to Shared Commitment
Advantages
• Consistency in our curriculum so we can become experts on what to teach
• It needs to be focused on things teachers actually think are valuable to teaching their students Having all members on board
• The main facilitators are a collective and positive teacher buy-in as well a constant yet changing meaningful purpose.as
• Effective collaboration, high expectations, vision, assessment, and commitment
• The main facilitators would be the Administrators, but every member of the school is a stakeholder therefore collaboration is key to maintaining momentum toward our goals.
• I think that the teachers and the school community need to buy into the idea. For some people it is a shift in how they have always done things and it can be hard for some to collaborate with others. A strong team of people that want to collaborate and share makes it sustainable.
• The main facilitators are working norms and time to meet.
• Trust, honesty, collaboration
• Building genuine relationships and having support from administration
• Teamwork, sharing ideas, and knowledge.
Barriers
• Making sure everyone can agree and be on the same page the majority of the time.
• The different attitudes and personalities/beliefs of all people
• A big challenge is not everyone participating in the process. It slows down the progress and hampers the workload. A challenge to sustaining the PLC is not ensuring everyone is following the PLC process. Trainings and refresher courses could help with that.
• Some teachers are set in their ways and do not feel that a collaborative unit works best. Some teachers give it their all, and some just "show up" to work.
• Employee turnover
• Being open to new ideas and sharing the workload.
• Some challenges could be that professionals could not agree on what is best for the students. Another challenge could be if a teacher does not come prepared to a meeting or follow what the group agreed upon.
• Not having enough time to develop true bonds and relationship

Additionally, evidence from interview responses showed teacher perspectives on shared responsibilities, which included sharing instructional strategies, data and responsibility to all students within the grade level. Interview participant 3 responded to shared responsibility by stating: “In the beginning its rocky road because you have to get

used to owning all the kids as your own and not just owning your class." Interview participant 4 described collective responsibility to all students, sharing instructional strategies and data discussion by reflecting on her first year as a teacher:

> My first year teaching my team lead was phenomenal and it kind of just resonated with me from the PLC conference, when they said a teacher who is a first year teacher who is in a PLC can get or leave their first year with the knowledge of a three year teacher without a PLC. It just stuck because I mean my first year teaching it was like- what did I decide to do, but my team lead and being able to work in a team and share ideas and share data and be transparent with each other made it feel like I wasn't alone and you have other people to support you and your students.

Interview Participant 7 identified the relationship between shared vision, collective responsibility and a focus on data:

> When I look and think about the grade level PLC and that collaborative team, their whole focus is on student achievement. Our common goals are making sure that we remain committed to our vision and mission and then that were making sure student achievement is always backed with what we're doing. It all goes back to data.

Interview Participant 8 related a responsibility to all students by stating:

> A lot of what we do here is we end up sharing kids a lot with different types of programs that we're doing with either interventions or walk to read or walk to math, so suddenly they really are our kids. I think we're in a different time, I think we need every single piece of everybody to do the job.

This interview participant also noted that the transition into the model is a process by adding, “You know it didn’t happen overnight but it developed. I think people had some trust and also just some experience.” Table 12 identifies the theme name, description, like responses and sample quotes by individual participant’s response relating to RQ1.

Table 12

Research Question 1 Themes

Theme	Theme Description	Number of Interview Participants with Like Responses	Sample Quotations
Collaborative teams	Grade level teams, these teams are composed of members that teach the same grade, Leadership teams which include grade level lead teachers, specialists and administration	14/14 14/14	• *We have grade level bands that meet once a week during a common time* • *The leadership teams meets additionally which includes grade level leaders, additional leadership which includes our specialists, resources and the speech teacher* • *We have our grade level meetings and those are our PLCs and then we also have staff meetings, leadership meetings, those are one’s that I’m part of we also do have some committee meetings as well* • *We currently have our leadership team for all grade level leads that come together to collaborate* • *Every grade level meets every week, all MAP (music, art, PE) meet together so those collaborative teams are in place, it’s nice to meet once a week* • *We have collaborative teams within grade levels so that the entire grade level is at the team, we meet once to twice a week as the team*
Data Driven Decisions	Teachers analyze student data both formally and informally to inform instructionally practices: adjust, reteach or enrich instruction	8/14	• *..focused on student achievement* • *Openly look at data and really search to see what was working and what wasn’t working and then going back and applying those practices to your classroom* • *PLC’s within grade levels were really focused on data and seeing not only what was going on in your room but what was going on in other teacher’s classrooms* • *We look at data to determine our instruction.. and to see if students are learning*

Theme	Theme Description	Number of Interview Participants with Like Responses	Sample Quotations
Shared responsibility	Sharing instructional strategies, data and responsibility to ALL students within the grade level	10/14	• *When you're sharing ideas and other people are sharing ideas that ultimately we're all going to be accountable to one another again helps out* • *Contribute and follow through* • *When you work together and call them our kids not just my kids the power that's in that is really beneficial* • *It's not just shared responsibility amongst the grade level but a shared responsibility amongst the entire staff for every student* • *Learning how to compromise and setting aside personal feelings*
Commitments to common practice	Commitments to common practice and accountability to one another to follow through	12/14	• *It helps guide our instruction and we're all on the same page* • *Being there to support each other and it's not like someone's better than us, it's like we're all on an even playing field, just trying to help each other be successful* • *Maintain efficient time and honoring all members* • *It sets a structure and guidelines of what we should be doing at our meetings and in our classrooms*

Summary of Research Question 1. The first question focused on teacher perceptions of the PLC model being implemented in one K-8 school district located in the southwest region of the United States is as follows. The researcher identified three themes responding to this question. These included collaborative teams, data-driven decisions focused on student success, and a shared responsibility, commitment and buy-in to a common practice.

The team concept was evidenced by the fact that many teachers noted common planning time is provided during the school day to participate in collaborative conversations that are focused on data related to instructional planning. A shared responsibility to ensure that all members are accountable to each other and to all the

students within the grade level or school consistently emerged with 10/14 interview participants referring to this as an important factor. Then, 12/14 interview participants noted that commitments to common practice and supporting each other was also significant factor in place. The results showed that teacher perceptions of the PLC model being implemented included teams that are composed of grade level members. More than 90% of questionnaire respondents indicated that shared educational values, having protected time to plan with one another and participating in an opportunity to contribute to a learning team are all components of the processes being implemented.

Teachers described the characteristics that facilitate a PLC to include staff buy in, time, collaboration, and data. Next, factors that were identified as challenges to PLCs included: providing time, training, member attitudes or openness. Teacher's described these challenges by indicating, "New teachers might not have the training/experience of a PLC," "district changes from year to year," Makings sure everyone can agree and be on the same page the majority of the time', "when one person takes over the entire meeting and doesn't allow others to share can ruin a PLC," "teachers are expected to do a lot with limited resources and incentives which also affects teacher buy in and sustaining a PLC."

Outliers. One interesting finding in the data associated with this question emerged a difference between where teachers described the stage of PLCs in their schools and their comments on PLCs, which indicated a more advanced implementation phase. More than half (59.5%) of the teachers thought their school was in the initial stages of developing PLCs, about 11% noted their school was on the journey to establishing PLCs, and about 30% of the teachers noted their school was working to re-establish what had once been a PLC (see Figure 1). However, when asked about the definition of PLCs, or to add to the definition, the vast majority of teachers could readily identify the attributes of

PLCs and agreed with the definition. Most teachers collectively used terms like: working together and a community of professionals achieving a common goal as well as student success in defining a PLC. Additionally, 82% of teachers felt PLCs are useful for schools and students. Participant phrases included: “organized collaboration,” “a team can experience and explore more opportunities together than an individual does alone,” “It makes it so much easier when teacher work together to create lesson, but also to group students based on their needs for intervention” and “It is data driven and a community working towards a common goal. As a single member in a PLC I don’t feel alone and as if all the weight is on my shoulders, it gives me a sense of security and support.”

Research Question 2. The second research focused on how professional learning communities in the K-8 school district were structured and implemented to show a primary focus on databased decisions to improve teaching and learning. Questionnaire Qtems 1, 3, 5, 7, 8, 9, 12, 24, 27, 33, 38 and 39 addressed this question. Interview questions 3, 6 and 7 also provided support. In determining a clear clarification the archived data, which is comprised of the continuous improvement plans, PLC meeting notes and achievement data by three of the five school sites involved in this case study will be explored as the fourth data source for this question. The researcher identified three themes responding to this question. These included that teaching and learning are dependent on common instructional goals and assessments goals, progress monitoring, and teacher support. Table 13 outlines the themes developed in the coding process that were evidenced throughout the data analysis.

Table 13

Research Question 2 Emergent Codes and Themes

Theme	Codes	Notes on Emergent Codes
Theme 1: Teaching and learning are dependent on common instructional goals and assessments goals.	Data focus, student success, common goals, assessments, progress monitoring	Inteview participants identified consistently that grade level teams analyze assessments to determine goals. Terms and phrases appeared throughout questionnaire, interview and in school plans.
Theme 2: Progress Monitoring	Data focus, intervention, progress monitoring	37 questionnaire participants indicated they regularly monitor student learning. Interview participants echoed this with similar phrases, terms and ideas.
Theme 3: Teacher Support	Share responsibility, "our" kids, learning from each other, support	37 responses indicated that teachers learn from one another. Interview phrases, terms and ideas also referenced this idea of support throughout.

Questionnaire Part 1. Results from the Likert-scale items related to RQ2 showed 95%-100% of participants strongly agreed or agreed with the following statements indicating they take collective responsibility for pupil learning, create conditions for pupils to feel confident to learn, have high expectation of students, and share responsibility for student learning. Additionally, 82%-90% of the teachers strongly agreed or agreed that they ensure students receive constructive feedback about their work, routinely collect, analyze and use data and evidence to inform practice, regularly monitor the learning and progress of individual students, routinely share information with parents and community and give priority to learning more about student learning. Only 4% of the participants stated that they disagreed or strongly disagreed with the statement: set learning targets for individual students.

Questionnaire Part 2. The findings in the open-ended questionnaire items included comments from participants, which showed a focus on teaching, learning and data. Some examples are below:

- We have time to share ideas and discuss what is best for our students on a weekly basis.
- It is data-driven and a community working towards a common goal. As a single member in a professional learning community I don't feel alone and as if all of the weight is on my shoulders. It gives a sense of security and support.
- Consistency in our curriculum so we can become experts on what to teach.
- Discussing student data, what is working, what's not. How can we change things that aren't working so that they are best for the students.
- Talking about student progress on a regular basis, and planning together as a team to better accommodate all our students.
- Dedicated time to look at data.

Interviews. Responses collected from the aligned interview items identified as 3, 6 and 7 addressed RQ2 (see Appendix K). The researcher determined three themes responding to this question. These included that teaching and learning are dependent on common instructional goals and assessments goals, progress monitoring, and teacher support.

Theme 1. Common instructional goals and assessments goal. The first theme that emerged from RQ2 was common instructional and assessment goals. This referred to the fact that 13 interview participants identified that grade level teams either design or are provided common assessments, and that grade levels analyze a variety of assessment to determine quarterly SMART goals, specifically noted by 6 of the interview participants. 31 questionnaire respondents indicated that they use common instructional goals or factors that determine learning targets.

More specifically, 37 questionnaire respondents and a mean score of 4.34 indicated that they regularly monitor student learning. The vast majority of the questionnaire participants and a high mean score of 4.56 indicated that they take collective responsibility for pupil learning. While another high score of 4.63 determined

that the majority of participants create conditions for pupils to feel confident to learn, while all 41 participants indicated that teachers have high expectation of students, and a score of 4.39 defined that most share responsibility for student learning. Additionally, over 90% of the teachers and mean scores ranging from 4.20-4.49 reported they ensure students receive constructive feedback about their work, routinely collect, analyze and use data and evidence to inform practice, and regularly monitor the learning and progress of individual students. Some comments from open-ended questionnaires reflected common instructional goals:

- Working together as a team, talking about student progress on a regular basis planning together as a team to better accommodate all our students.
- Dedicated time to plan, collaborate, share ideas/lessons, and look at data.

Interview Participant 1 discussed how the PLC team reviewed data and created goals:

> This year we've done a really good job as a team looking at our students, collecting data and going over our data after we have given a common assessment. We are all assessing the same way, we may use different instructional strategies, but were all going to be assessing the same way, then if one student or one class did really well, we may ask what did you do? We have academic goals like our SMART goals, making sure we have whatever percentage it is moving. Students are constantly being progress monitored every week so we get to see how they're doing so if they're making those improvements, then going back again and looking at that data.

Participant 2 highlighted the importance of common goals:

> The PLC helps with keeping meetings organized with the focus on student achievement and definitely going through the questions that PLC asks us to go

> through to make sure we meet our goals. SMART goals are created for each grade level team, every time we have our district benchmark, that is something we track very carefully, especially through progress monitoring, that is the key piece right there.

Participant 6 determined that common goals are established by, "We have quarterly assessments, and we give them at the end of the quarter. We focus on different ones each quarter but the big ones are all year." Participant 14 added that during their grade level PLC:

> We set goals throughout the semester and we change our goals two or three times once they've met the goal or if they're not meeting the goals than we look at it and see what we need to do differently.

Theme 2. Progress monitoring. The second theme that emerged from RQ2 was progress monitoring, which includes constant monitoring of individual students to ensure benchmarks or standards covered on common assessment are being met. Thirty-seven questionnaire participants indicated with mean scores ranging from 4.20-4.49, that they ensure students receive constructive feedback about their work, routinely collect, analyze and use data and evidence to inform practice, and regularly monitor the learning and progress of individual students. A vast majority of participants, which included 39 questionnaire participants and a mean score of 4.63, indicated that the majority of participants create conditions for pupils to feel confident to learn. While all 41 questionnaire participants and a mean score of 4.78 specified that they have high expectation of students.

Participant 14 described the focus on common assessments and progress monitoring by sharing:

> We meet weekly as a team and we talk about our common assessments that we had and then we talk about where the kids are and what can we do to get them to the next place. We share students, so we have intervention after lunch for about 40 minutes and all the kids that need skill one go to one teacher and all the kids that need skill two go to a different teacher and then within our own classroom were working on a skill that the majority of our students need. We change our goals two or three times, once they've met the goal then we up it or if they're not meeting the goal, then we look at it and see what we need to do differently. We take a look at each individual teacher's data and then we say how many of those kids do you think you can try your best to move and we all go around and discuss our kids and say the number we can move by a certain point.

Participant 13 highlighted the connection between SMART goals, common assessments and progress monitoring to ensure that standards are met:

> When we meet as a team we set what we call SMART goals all based on data, ideally we want our kids meeting at around 80% or higher…we're looking at the data, so you can tell are the kids getting it and if they are what are our next steps and how can we push them further. If the student isn't getting it, what do I need to do or where is the breakdown or what gap is missing?

Theme 3. Teacher support. The third theme associated with RQ2 focused on teacher support. This is evidenced with 37 questionnaire participants and mean scores ranging from 4.46 to 4.33 that determined participants learn from each other and have dedicated time for joint planning and development. 31 questionnaire participants and a mean score of 3.88 reflected that most learn about their own learning during PLC collaboration, while 38 participants responded that they have opportunities for

professional development. This evidence provides that teachers sharing instructional strategies in various forums lends to better instruction. It also reflected that being transparent with data allows teachers to participate in supportive structures. The following excerpts are indicative of teacher support.

For example, Interview: participant 3 responded that: “I think it helps people to not feel alone in a situation, either because we’ve all been in that spot where you’re like I did everything I thought that I should be doing and it just didn’t work.” Interview Participant 7 referenced teacher support evidenced in the following:

> We only know so much so collaboration allows ideas and strategies to be shared out and if I’m struggling in an area and we’re having collaboration time and somebody has this great idea and it’s worked with their students, maybe it’s a strategy I can try and apply or vice versa. Maybe my colleague is really struggling and so I can share my ideas too.

Interview Participant 11 supported this by stating:

> A true PLC team who is very transparent with each other and aren’t afraid to make mistakes or admit where they’re not as strong in seeking help for that, you know finding the people who are strong in the areas where you’re weak and asking for help.

Interview Participant 13 also supported this idea by stating:

> I think things come up in discussion that I would’ve never considered on my own and then I think it’s great because then that helps me become a better teacher because I think, “oh I need to make sure that next time I’m thinking of that.” The discussion part I feel like is really an important piece of the collaboration I just get so much of out of it then I would on my own.

Interview Participant 14 identified that being supported is significant with the following response:

> I think our PLC time really helps me, just like working with my team and anytime I have questions I feel comfortable going to anyone on my team and saying I don't get this. I'm not teaching it right or something and the kids aren't getting it, can you help me.

Table 14 specifies the theme name, description, like responses and sample quotes by individual participant's response relating to RQ2.

Table 14

Research Question 2 Themes

Theme	Theme Description	Number of interview participants with like responses:	Sample Quotations
Common assessments and common goals	Grade level teams either design or are provided common assessments which include AIMS web or Galileo quarterly assessments	13/14 6/14 identified SMART goals	• *We give common assessments. We enter our student data.* • *When we can sit down together and plan, everybody is on the same page.* • *What are we doing to improve student learning, what are we doing right and what do we need to look at for tier support.* • *SMART goals are created for each grade level.* • *SMART goals are established but small goals are created to check and recheck to get us ready for AZ Merit.* • *SMART goals are based off student data* • *We are focused on student achievement, what are we doing to close the gap. Common goals are making sure we are committed to the vision and mission.*
Progress Monitoring	Constant monitoring based on individual student to ensure benchmark is being met.	8/14	• *Looking at our data and then if it's not working and our kids aren't getting it, what are we going to do* • *Progress monitoring, that is the key piece right there* • *We do create quick checks and we talk about those* • *Tracking everything and then at the end of the quarter we will see if what we changed is working*
Teacher support	Sharing instructional strategies and being transparent with data allows teachers supportive structures.	13/14	• *Being willing to talk about data together and share ideas about those things to help each other.* • *Going back and reviewing our kids constantly* • *Not feeling alone because we've all been in that spot* • *We ask how did you teach it or what strategies did you use* • *A big part has to with trust, supporting you because a lot of what we do here, we end up sharing kids* • *.. identifying strengths and weaknesses.. seeing what you need to work on*

Archival data. The researcher also included evidence of goals, common assessments and progress monitoring in the archival data. Table 8 represented the

archival data, which represents three of the five school's CIP (continuous improvement plan) as well as one grade level team from each of the three schools' PLC meeting notes over a four week period. The information provided the researcher the identifying factors that support student achievement, this included a CIP that focused on increasing student achievement as a school-wide initiative, strengthening instruction for all students, professional development and data driven decision making. Further, PLC minutes for grade levels provided data focused topics that either identified goals or common assessments that teams used to further student achievement.

Additionally, the overall student achievement performance at the start of the PLC initiative that began in 2006-2007 transitioning to 2009-10 into the PLC model was also included. This demonstrated achievement gains when PLCs were employed as part of the professional development model in the current school district. The average percentage of students passing English language arts (ELA) in 2006-07 was 41.5%, and in 2009-10 that increased to 57.2% of students passing the ELA state assessment. In math, the average percent of students passing was 52.2%, and by 2009-10, 63% of students passed the math state assessment as noted previously in figure 5.

The final archival item considered for RQ 2 analysis was the 2014 schoolwide data as measured by Arizona's state assessment, AZ MERIT data as a source was previously noted in chapter three. However, the Arizona Department of Education implemented this as a new assessment: AZ MERIT (Arizona's Measurement of Educational Readiness to Inform Teaching) in November 2014 (http://www.azed.gov, 2016), the datum was considered but was not relevant to the findings in this study due to the inconsistency of the assessment.

Summary of Research Question 2. The second research question focused on how professional learning communities this district focused on data based decisions to improve teaching and learning. The researcher identified three themes responding to this question. These included that teaching and learning are dependent on common instructional goals and assessments, progress monitoring, and teacher support. All of the questionnaire participants indicated that school sites take collective responsibility for student learning, have high expectations and share responsibility for student learning.

The interview data revealed that 13/14 interview participants recognized that grade level teams either created or are provided common assessments to improve student learning by ensuring grade level members are teaching student objectives during the same time. The data also showed that teams support one another on next instructional steps observed through data analysis. The majority or 13/14 of the interviewed participants also identified that sharing instructional strategies as well as being transparent promote supportive team structures.

More than 90% of the questionnaire part 1 participating teachers responded that creating conditions for students to feel confident to learn, providing constructive feedback to students, using data to inform practice, regularly monitoring student progress and giving priority to student learning are all important factors of decisions that improve teaching and learning. Further, three out of five continuous improvement plans and teacher PLC notes indicated that a focus on strengthening instruction for all students and data driven decision making aligns to the processes substantial in the success of PLCs. This is simply the ideal way of creating common goals. It is also evident that throughout the PLC implementation process for this selected district during 2006-2010, this school district gained a 14.7 percentage increase in math and a 10 percentage increase in ELA.

Research Question 3. The third question focused on how K-8 educators explained and describe participation in professional learning communities influences their professional growth and instructional effectiveness. This question provided the researcher with participant perceptions resulting in participating in PLCs. More significantly, this question netted the core of professional growth and instructional effectiveness as explained in the participant's point of view. Questionnaire items 1, 2, 4, 6, 10, 11, 13, 18, 19, 20, 23, 25, 26, 30, 31, 32 and 34, 39, 40 and 41 provided data to answer this research question. Additionally, interview questions 4, 8 and 10 aligned to RQ3. Five themes emerged from data related to RQ3, which showed evidence of teacher growth and development. These included a common planning time, purposeful collaboration, teacher buy-in, communicating expectations and support. Table 15 outlines the themes developed in the coding process that were evidenced throughout the data analysis.

Table 15

Research Question 3 Emergent Codes and Themes

Theme	Codes	Notes on Emergent Codes
Theme 1: Common Planning Time	Providing time, allotted time, grade level planning	All schools commit to common planning time indicated in questionnaire and interview responses. "Time" appeared consistently in analysis.
Theme 2: Purposeful Collaboration	Efficieny of time, common goals, student focus, data talk	Collaboration terms and phrases was identified throughout the data.
Theme 3: Teacher buy-in	Ownership, teacher buy-in, empowerment, attitude	Opportunity to grow and learn appeared in similar terms and phrases. "Buy-in" consistently appeared.
Theme 4: Communicating expectations	Ongoing training, expecations, leader support, facilitation expectations	Ongoing training was captured throughout the interview transcripts and questionnaire analysis that referenced expectations.
Theme 5: Communicating Expectations and support	Constant communications, teacher support, constant, sharing workload	The terms or phrases that referenced communication and support were consistent.

Questionnaire Part 1. Several questionnaire items identified the perception of professional growth and instructional effectiveness by participating in a PLC as determined by the participant's responses. Eighty-five percent or more of teachers strongly agreed or agreed that they learned together with colleagues, sought out and used research relevant and practical information to inform work, learned from one another, took responsibility for professional learning, had protected time for joint planning and had professional development opportunities.

Questionnaire Part 2. Questionnaire items 39, 40 and 41 generated supportive data used to support RQ 3 (see Appendix L). When teachers were asked to discuss how useful the idea of a PLC was for their school, codes associated with this question included useful, collaboration, and consistency. Then, when teachers described the main facilitators for a PLC codes such as buy in, time, collaboration and data focused were identified. Finally, when teachers described some challenges associated with PLCs they included time, teacher training, and participant attitudes.

Interview responses. Themes from interview responses included common planning time, purposeful collaboration, teacher buy-in, communicating expectations, and teacher support. Participants provided information to give the researcher insight on influences of professional growth and instructional effectiveness. Finally, teachers shared.

Theme 1. Common planning time. The first theme that emerged for RQ2 included the benefits of a common planning time. 24 of the questionnaire participants and indicated that PLCs are useful, by supporting schools commitment to common planning time. The first evidence of support was determined by the usefulness of PLCs. Open-ended questionnaire items indicated this in the following:

- Essential, less work with more hands/minds
- I think it is very useful and find it successful on my grade level because we have time to share ideas and discuss what is best for our students on a weekly basis.
- We have two days per week that is set aside to work alongside our grade level team.
- It is extremely useful, I can't imagine teaching without a PLC. The knowledge I have gained from PLC meetings with my grade level team, my school teams, and teams from other schools is irreplaceable.
- A team can experience and explore more opportunities together than an individual does alone
- It makes it so much easier when teachers work together to create lessons, but also to group students based on their needs for intervention.
- It is extremely useful because there is always, and should always be room for improvement.
- I would not be half the teacher I am today, if I did not work in a PLC. Because teachers are given time to communicate in a group about plans and strategies, I was able to learn best practices.

The next evidence of support was determined by questionnaire, participant comments regarding common planning time as provided by the participating schools.

Open-ended questionnaire items reflected this include:

- Team time. We must have dedicated time to meet with our PLC teams to ensure that we can analyze data and answer the 4 key questions.
- Dedicated time to plan, collaborate, share ideas/lessons, look at data
- We are given an amount of time but I honestly feel that it's never enough in order to become a truly successful professional learning community. There is so much involved but not enough time for collaboration, searching for resources, and group learning.

Further, 37 of the questionnaire participants and a mean score of 4.33 indicated that participants had protected time for joint planning. 8 open-ended questionnaire participants noted that having time is an essential characteristic of effective PLCs, while 7 questionnaire open-ended participants noted that having enough time to do it all was

challenging. Additionally, interview participants shared that common planning time provided them with the opportunity to learn and grow as educators.

For instance, interview participant 1 expressed the following: “I think giving time is a huge part, so giving time to meet.” Interview participant 5 evidenced this by responding: “Definitely giving the time to meet and our principal has been very helpful in giving us time.” Interview participant 6 reflected on common planning time by sharing:

> I know the district kind of forced us into it, they were like this is what we’re doing, which got people upset. Then, you know they started giving us time to plan together and time to actually look at our student data, instead of finding time on our own. The spin on it was, this is going to benefit everyone.

Interview participant 7 evidenced the importance of a common planning time by responding:

> What I think makes our teams really successful is scheduling, making sure not only do they have common prep but that they are teaching the same things at the same time so there is more of an alignment and a better way to build discussions and strategies.

Interview participant 9 defined that time may be a challenge of PLCs, but the way in which you use your time is important. This is referenced by the participant affirming the following:

> People always you know, need more time but I think it’s not as much time but creative use of time and best use of your resources and really smart players that have a lot of content and although it’s great to be a leader but know that you don’t know certain things and then find the people that do.

Interview participant 10 noted that common planning time was essential by stating:

> If we had to do it on our own time, so many people have different commitments. So it's nice to have that time within the day and a lot of times we don't necessarily get to the planning until the end because we're looking at goals. We're looking at data and discussing whether or not we want to give small group time or individual time. We don't talk about business, the agendas are very much this is what we're doing.

Theme 2. Teacher buy-in and collegial support. Thirty-eight questionnaire participants and a mean score of 4.27 indicated that they actively contribute to the school as a PLC. The open ended responses reflected the following that encompass the idea of teacher buy in and collegial support with the following:

- Staff buy in.
- It needs to be focused on things that teachers actually think are valuable to teaching their students.
- Having all members on board.
- The main facilitators are collective and positive teacher buy in.
- I think the biggest factor is buy in, everyone needs to be part of the process in order for it to work effectively.
- The whole staff needs to have buy in.
- Every member of the school is a stakeholder.
- The school community need to buy into the idea.
- Building trust and supportive teams.

Additionally, 13 of the 14 interview participants, highlighted the fact that buy-in was important in the professional growth process of a PLC. Teacher buy-in included allowing teachers a voice in decision making and empowering teachers to try new ideas. Collegial support involved teachers engaging in constant conversations that support their own development and also student achievement.

Interview participant 1 related to this by discussing the purpose of empowering teachers by stating:

> Everything gets discussed, there are emails about it, and so it's very transparent. We trust them (administration) to make decisions so they trust us (teachers) to make decisions we need to make, so I think just giving everybody that and that's how you get buy in to make it successful. Because if you're not feeling like your voice is heard you're not going to speak and that's one less idea and one less change that could be made.

Interview participant 3 stated that collegial support is imperative by sharing: "Constantly having conversations with teachers about instructional practices, what is working and what isn't working." Interview participant 4 shared that building leadership capacity can begin by:

> I think really just seeing what is already going on and what's already working and see who is already leading and what is functioning well, then work on the things that aren't working well and leave those other things alone for a while. If you have other ideas may be revisit it later but when you start a new PLC, change is hard and so be very cautious and purposeful.

Interview participant 8 also responded that having leadership support was vital by stating:

> We would have leadership team members who were always there, which I think people unfortunately felt like it was someone to spy on them, but really it was just like a liaison that helped but I think having a team leader that is well trained on how to facilitate conversations helps the team.

Interview participant 13 mentioned the importance of buy-in:

> …you know almost everybody has to buy in to the ideas and the philosophy of PLCs if you have a team. Sometimes it's hard making sure that staff really know what the benefits of this are so trying to build that guy in because if you don't have that then the rest of your professional development isn't going to go anywhere.

Theme 3. Communicating expectations. Communicating expectations of the PLC process was also evidenced. The questionnaire participants' open ended responses determined this by the following:

- In sustaining a PLC, I think there should be ongoing training for new staff and even a refresher course for everyone.
- Make sure everyone understands what is at stake and how to get the most out of a PLC.
- For some people, it's a shift in how they have always done things and it can be hard for some to collaborate with others.
- A big challenge is not everyone participating in the process.

All 14 interviewees referred to the importance of establishing common norms and expectations for PLC team members.

Interview participant 1 stated the source of communication is essential by stating:

> We have a leadership team, which we need a leadership team because they report directly to the district, but then it also goes down to the specialists and what can they do to plan those professional developments and then bringing it back to extended leadership which includes the grade level leaders, and then those grade level leaders get back to their team to discuss and debrief.

Interview participant 2 highlighted the significance of communication by sharing:

> The communication of why we chose to be educators and what should we look at as a final product, which is obviously our kids. Definitely keeping that in mind, with everything that you do, it's not about what you teach, it's about what the results are in relation to what you teach.

Interview participant 3 determined that being transparent and communicating the purpose is valuable by stating:

> I think that it always helps whenever there is change to begin by explaining to teachers the research behind it and the rationale of why we do this and how it helps students and how it helps us as educators.

Interview participant 5 shared the significance of establishing norms by stating:

> Having set guidelines of this is what's expected during our meeting, because that time does go by so fast and if you're sitting there dwelling on something, you're not really focused or getting the work done.

Interview participant 7 added:

> I think they have to be able to build team norms; you can't just go in and go we are going to use the norms from here, but really what are our team norms so that we can get to the collective commitments on our own because you have all these little teams contributing to a big team, really our school is one big PLC.

Table 16 identifies the theme name, description, like responses and sample quotes by individual participant's response relating to RQ3.

Table 16

Research Question 3 Themes

Theme name	Theme Description	Number of interview participants with like responses:	Sample Quotations
Providing Common Planning Time for Collaboration	Teams are provided common planning time at least weekly. The district offers a half day each week for professional development. Paid time is offered after school quarterly to teachers to collaborate	10/14	• *It's giving people time, but then again explaining the purpose and why we do this, it's ultimately helping our kids.* • *Being provided the time to look at data and plan.* • *Scheduling common time and block time so that teachers are teaching the same thing at the same time to ensure alignment happens during collaboration.* • *Giving the time to meet and setting mandatory meeting days.* • *Sharing purposeful ideas that are focused on the topic helps to develop skills because it's supported with data.* • *Working together to share ideas to support not only you but your students.*
Teacher Buy-in and collegial support	Allowing teachers a voice in decision making and empowering teachers to try new ideas	9/14	• *We (teachers) trust them (administrators) to make decisions they need to make and they trust us to make the decisions we need to make..* • *Creating buy in from staff by explaining the purpose and why we do this.* • *Having leaders willing to listen to new ideas.* • *Establishing little teams (grade levels) that contribute to the big team (school level).* • *Sharing kids and holding each other accountable for success.* • *Constantly having conversations about what is working and what isn't working* • *Understanding that not everyone is the same, but in turn you grow from that.*
Communicating Expectations	Training leads and establishing norms, commitments and expectations that are revisited regularly	14/14	• *Making sure that transparency in communication exists between leaders and teachers.* • *Communicate whey we chose to be educators.* • *Define expectations and commitments.* • *Establishing norms and guidelines focused on what needs to get done.* • *Understanding what a PLC is (not a personal meeting but a professional meeting)* • *Understand the structure to have all members participate*

Summary for RQ3. The third question focused on the foundation of a PLC contributing to teacher growth and instructional effectiveness. Questionnaire participants indicated that 90% or more agree that learning together with colleagues, learning from each other, having protected time for joint planning or development and having opportunities for professional development contributed to influencing professional growth and instructional effectiveness. Further, an astounding 100% of the questionnaire participants agreed or strongly agreed that taking responsibility for they own professional learning is significant in being a member of a PLC. Most or 82% of the questionnaire participants described that PLCs are useful for schools and students. Participants described the characteristics that facilitate a PLC to include staff buy in, time, collaboration, and data. These resulted from the contributing open-ended excerpts collected from the questionnaire participants: "there needs to be time to do it without just adding one more thing for teachers to fit in along with everything else," "talking about student progress on a regular basis and planning together as a team to better accommodate all of our students," "we must have dedicated time to meet with our PLC teams to ensure that we can analyze the data and answer the four key questions," "the whole staff to have buy in, everyone has to be part of the process in order for it to work effectively, sustaining a PLC should be ongoing training for new staff and even refresher course for everyone."

Next, the factors that were identified as challenges of PLCs included providing time, training, member attitudes, or openness. Questionnaire participants described these challenges by indicating in the following open ended responses: "New teachers might not have the training/experience of a PLC," "district changes from year to year," "making sure everyone can agree and be on the same page the majority of the time," "when one

person takes over the entire meeting and doesn't allow others to share- can ruin a PLC," "teachers are expected to do a lot with limited resources and incentives which also affects teacher buy in and sustaining a PLC."

The researcher identified three themes relevant to RQ3, which were consistently common planning time that must be provided and that it should be structured and purposeful to support professional growth and instructional effectiveness. Further, instructional effectiveness is driven by purposeful collaboration that requires ongoing conversations that are relevant to content and student achievement. Teachers buy-in when they can authenticate and validate a structure of what and why PLC's are in place. When mutual trust exists between colleagues and school leaders, as stated by one participant: "We (teachers) trust them (administrators) to make decisions they need to make and they trust us to make the decisions we need to make" then sustainable change is probable. Also, this structure should ensure that all members are respected, valued and empowered to be collaborative members of a school organization and that all stakeholders have fluid communication. It was significantly recognized that collective commitments, norms and expectations be priorities when meeting in a PLC to confirm that professional growth and instructional effectiveness be the focus. A reoccurring component of the success of PLC was heavily grounded in teacher support. Teachers believed that continued development is linked to support and this ultimately supports doing what is best for all kids.

Summary

This study explored how professional learning community models in one K-8 school district were designed and implemented with a focus on teaching and learning and how educators perceive participation in PLCs influenced their professional growth and development. Five schools in the southwest United States participated in this study. The

case study included 14 participants that were interviewed and 39-41 participants who completed the electronic questionnaires. Finally, artifacts that included three of the five schools' continuous improvement plan, PLC minutes and achievement data collected during the implementation process were used to support the results. Hatch's (2002) data analysis strategy of coding was used to determine specific patterns and themes in the following.

The first research question focused on teacher perceptions of the PLC model being implemented the district. The researcher identified three themes responding to this question: collaborative conversations structured in grade level teams or leadership teams that are focused on data supporting student achievement, along with a shared responsibility to ensure that all members are accountable to each other and to all the students by sharing instructional strategies and data. Finally, mutual commitment to common practices was indicative of how teachers supported one another.

The second question focused on how the PLCs were structured and implemented to show a primary focus on data based decisions to improve teaching and learning. The researcher identified three themes responding to this question. These included that teaching and learning are dependent on common assessments, common goals, progress monitoring and teacher support. This included that common assessments are used to improve student learning by ensuring grade level members are teaching student objectives during the same time so that teams can collaborate or support one another on next instructional steps observed through data analysis. Continuous monitoring student progress and giving priority to student learning are all important factors of decisions that improve teaching and learning. Further, three out of five continuous improvement plans and teacher PLC notes indicated that a focus on strengthening instruction for all students

and data driven decision making aligns to the processes substantial in the success of PLCs. This is simply the ideal way of creating common goals.

The third question determined how K-8 educators explain and describe participation in professional learning communities' influenced their professional growth and instructional effectiveness in the southwest region of the United States. Most do agree that learning together with colleagues, learning from each other, having protected time for joint planning or development and having opportunities for professional development that contribute to influencing professional growth and instructional effectiveness. The researcher identified three themes relevant to RQ3, which were consistently common planning time that must be provided, structured and purposeful forums that support professional growth and instructional effectiveness. Further, instructional effectiveness is driven by purposeful collaboration that requires ongoing conversations that are relevant to content and student achievement. Teachers buy-in when they can authenticate and validate a structure of what and why PLC's are in place. When mutual trust exists between colleagues and school leaders, as stated by one participant: "We (teachers) trust them (administrators) to make decisions they need to make and they trust us to make the decisions we need to make" then sustainable change is probable. Also, this structure should ensure that all members are respected, valued and empowered to be collaborative members of a school organization and that all stakeholders have fluid communication. It was significantly recognized that collective commitments, norms and expectations be priorities when meeting in a PLC to confirm that professional growth and instructional effectiveness be the focus. A reoccurring component of the success of PLC was heavily grounded in teacher support. Teachers believed that continued development is linked to support and this ultimately supports doing what is best for all kids.

Limitations of this case study include the number of schools involved in the study. The participating school district currently supports 21 schools and 5 were selected to create a manageable study, determined as a purposeful sampling technique used by the researcher. Further, it was also noted that teacher participants may have been hesitant to disclose honest perceptions related to collaborative efforts. Additionally, time commitment was prominent factor in this case study, in this case, teachers were asked to contribute planning time or outside time to participate, and not all teachers had the time necessary to complete the two-part questionnaire or participate in the interview process.

Chapter 4 provided the findings of the two part questionnaire conducted by the participants working in an identified PLC school district located in the southwest region of the United States. The descriptive statistics of the data collected, identified and supported the codes defined in the interview and open-ended response data. These codes provided identified themes in the thematic analysis of this case study. This chapter provided a rich version of data to respond to each research question using a triangulation analysis of all sources relevant to each answer. Chapter 5, is the final section. This section will present the researcher's explanation of findings, a discussion of the outcomes relative to the literature, limitations, implications of findings, recommendations for future research, and the conclusion of the study.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

There is a significant amount of research supporting that professional learning communities (PLC) offer teachers learning and training opportunities aligned with recent reforms in education (Scott, 2012). School organizations grapple with initiatives including the No Child Left Behind Act, referred to as NCLB (2001), Race to the Top (2011) and most recently, the implementation of the Common Core Standards that are meant to ensure student success. Yet, how and when teachers receive support and resources to be successful is often an obstacle. Further, these directives have obliged school leaders and teachers to acquire innovative instructional and collaborative skills to meet the needs of all students and secure ongoing student achievement.

In order to aid these initiatives, many school organizations have relied on collaborative models such as professional learning communities (PLCs) to provide authentic, embedded professional development at school sites to encourage student data analysis and teacher development. Many supporters of PLCs indicate that team members collaborate as a unit to examine student achievement data in order to discuss, design and implement instruction to improve teaching and learning (Bitterman, 2010). However, Thessin (2015) contributed that obstacles to a successful implementation of the PLCs often include a lack of training, a lack of administrator support and collective, clarity of PLC components. This current study sought to discover more information on this phenomenon and determine participant perspective.

In order for PLCs to be implemented effectively, teachers need time, training, and guidance to collaborate and plan instruction designated to improve student learning. More importantly, one consideration that must be addressed is the implementation process,

which includes a professional development framework of the school's PLC, a culture that is supportive of the collaborative efforts of teachers, and a readiness by school leaders to engage and communicate the expectations (Thessin, 2015).

Thus, a PLC "provides a framework and process for ongoing learning and professional growth" (Stegall, 2011, p. 9). More importantly, this type of forum focuses on continued efforts to develop effective instructional decision making and transform instructional practice. Yet, knowing how professional learning community models are designed and implemented with a focus on teaching and learning and how educators perceive participation in professional learning communities' influences their professional growth and development provided an opportunity to focus on K-8 teacher perceptions.

The purpose of this study was to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development. Stegall (2011) suggested that PLCs are designed to respond to the instructional needs of teachers that impact student achievement. The facilitation of PLCs in schools demand an clear definition of learning and a framework that supports leaders in thinking about what counts as learning within collaborative groups and how organizational leverages might engage in instructional learning (Van Lare & Brazer, 2013).

Chapter 5 provides a formative summary of the study followed by a brief overview of the findings and conclusions organized by each research question supported with reoccurring themes that informed this researcher's results. Additionally, the chapter delivers implications related to the theoretical foundation, and implications for future

practice and research. Finally, the chapter concludes with recommendations to further this research study.

Summary of the Study

The purpose of this study was to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development. The researcher chose to use multiple data sources in this qualitative case study. First, the questionaire instrument selected was composed of two parts. The first part consisted of 36 likert scaled questions, while the second part asked one question that described the PLC at the teacher's (participant's) site and 4 open-ended questions that captured more details related to PLCs as a learning model for teachers. The questionnaire instrument formerly performed by Bitterman (2010) was used with minimal changes. The questionnaire asked teachers specific questions about his/her position, years taught at the current site and number of years in current grade level or subject.

Next, 14 educator interviews were conducted: two administrators, two instructional coaches (noted as a teacher on special assignment or a teacher) and 11 classroom teachers all from various school sites were conveniently sampled to participate. Prior to beginning the interview process, the researcher recruited two educators from two different southwest school districts to participate in the pilot study. The results of the pilot study indicated that the questions were clear and respondents understood that perception was the focus of the interview. The participants' feedback specified that the questions were easy to follow but required thoughtful responses;

therefore, time would need to be considered. This information was useful and afforded the researcher an opportunity to maintain the semi-structured format.

This current study included public school teachers and administrators working in schools with active professional learning communities in one K-8 school district in the southwest United States. Specifically, the researcher sought this school district because it had implemented the PLC framework and was recognized by "All Things PLC" (2016), a website supported by Solution Tree, indicative of ongoing research that identifies districts that have incorporated the working foundations of PLCs. This researcher contacted the school district's assistant superintendent for consent. With permission (see Appendix B), the researcher and district liason recruited via email five principals who would be willing to participate in the case study.

Once Grand Canyon University's IRB approved the proposal (see Appendix A), the two-part questionnaire was sent to five building principals in the approved school district located in the southwest United States. The school district assisted by identifying five schools willing to participate. The building principals aided with ensuring that all school staff members had access to the questionnaire by sending an attached link to staff along with a detailed email crafted by the researcher explaining the case study purpose and outlining the recruiting participation requirements (see Appendix F). Interview participants were recruited by building leaders as well as the researcher to engage in the semi-structured interviews. The researcher used a convenience sample to give participants an opportunity to participate as well as being relatively easy to access during a difficult time in the school year (state testing preparation) (Gravetter & Forzano, 2013).

A confidentiality release was obtained once the questionnaire participant accessed the questionnaire on SurveyMonkey®, the interview participants signed a separate

confidentiality form individually (see Appendix E). Fortunately, five schools willingly participated in this study. This sample included 14 educator participants that were interviewed and 31 educator participants that completed the entire electronic questionnaire. 41 educators completed just part one of the questionnaire or items 1-36.

SurveyMonkey®'s generated system rating scales were used for data analysis for part 1 or questions 1-36 (see Appendix G). The second part of the questionnaire was downloaded into an excel document to thoroughly analyze each of the written responses (see Appendix H). Next, the interviews ranged from 21 minutes to 60 minutes per participant and were audio-recorded, transcribed by a computer software and edited by the researcher to accurately replicate every word. The participating interviewee was sent the transcribed information to verify accuracy, also referred to as member to member checking. The transcribed data (see Appendix I) varied per interview ranging from 3 to 8 pages, totaling 63 pages. A review of the narrative data collected from the interviews and questionnaires assisted with identifying themes that responded to each question. The researcher read and re-read each response to determine similar codes, which involved organizing each interview question into a table to assist with identifying similarities (see Appendix J).

The following research questions guided the data collection for this study:

R1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?

R2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

R3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

This case study was grounded in Meizrow's (1997) transformational learning theory, Bandura's (1986) social cognitive theory and the foundation of PLCs (Dufour et al., 2008). The researcher sought to add to the work of PLCs by contributing the results of this case study on teacher perception. Dufour et al. (2008) suggested that there are opportunities presented in PLCs that ensure an accountability to one another that naturally enhances learning. The purpose of this collaborative forum allows one to reflect deeply about instruction and student learning to determine best practices as a part of a continuous learning cycle, which systemically impacts teacher development and student achievement. The researcher conducted a thematic analysis of the narrative data aligning the collected responses with the questionnaire items and then provided a corresponding response for each research question. What follows is a summary of the findings of this qualitative analysis.

Summary of Findings and Conclusion

The focus of this study was to explore how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceived participation in professional learning communities influences their professional growth and development. A major obstacle for school reform sustainability is that most teachers are accustomed to working in isolation (Schmoker, 2005; Voelkel, 2011), however, this practice can no longer meet the explicit needs of student learning or continued teacher development. It has become significant to rely on the expertise of one another to address student data and engage in deep

conversations that lead to changed instruction. The purpose of the current study was to glean the importance of the contributions of professional learning communities and the power of collaboration relative to teacher learning and student achievement as it supports educational reform. The research was based on the efforts of previous scholars and authors, including Bandura (1986), Mezirow (1997; 2003), Hord (1997), Dufour (2009) and Dufour et al. (2008). The clarifying evidence builds an understanding of the importance that structures and organizations of PLCs in collaborative teams have on teacher development and student achievement.

Hord (1997) described the evolution of the term professional community of learners evolved in the 1980's as the act of teachers and leaders continuously seeking new learning and the goal of this action was to enhance effectiveness that resulted in student improvement. This has also been touted as communities of continuous inquiry and improvement. The author contributed five characteristics of effective professional learning communities which include: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. In 2012, a research concluded by Scott, determined that a PLC structure is the best design to support teacher collaboration, provide instructional tools as well as time encouraging lifelong learning. The author indicated that this design was well suited to increase student achievement beyond average acceptance. Likewise, Bitterman (2010) conducted a study that stipulated supportive themes captured in a PLC, which included constant collaboration focused on effective instruction that impacted student learning. This research further specified that schools must not only focus on improved teaching strategies but improved learning opportunities that are meaningful to teachers.

The results from the current study extend this work by explaining how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development. Furthermore**,** the findings were consistent with previous research and support the priorities outlined by the participants, all of which are relevant to the foundations of the PLC frame work noted by Dufour et al. (2008). These common understandings and terms continue to play a significant role in composing the results that drive student achievement and encourage teacher development. The findings are as follows:

Research Question 1. What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States? The intent of this question was to analyze educators' perceptions of the PLC implementation within the K-8 school district and to define consistency relative to the degree the districts PLC model impacts teaching and learning. Data collected to answer this question came from interview questions and selected questionnaire items.

What are teacher perceptions of the PLC model being implemented in one K-8 school district located in the southwest region of the United States was determined as follows: Teachers first described the stages of PLC implementation in their schools by indicating with more than half 59.5% of the teachers reporting the current PLC in the initial stages of developing, about 11% noted their school was on the journey to establishing PLCs, and about 30% of the teachers noted their school was working to re-

establish what had once been a PLC (see Figure 1). Also, when asked how teachers defined a PLC, teachers responded with the following contributions:

- A team of teachers that works together on daily basis that is continually changing to better meant the needs of our students.
- I believe a PLC is a community of professionals working together to achieve a common goal. In our school our goal is to see every student succeed. We work together every day to achieve our goals.
- Professionally committed to ongoing improvement.
- I believe we are on the way to becoming a fully functioning PLC. I would not necessarily change the definition as we are still on the journey to becoming a PLC.
- A PLC is a community of professionals who work together to achieve a common goal.

Most participants collectively used terms like: working together and a community of professionals achieving a common goal as well as student success in defining a PLC.

82% of the participants for questionnaire part 2 (see Appendix K) determined that PLCs are useful for schools and students, participant phrases that were collected, included:

- Organized collaboration.
- A team can experience and explore more opportunities together than an individual does alone.
- It makes it so much easier when teacher work together to create lesson, but also to group students based on their needs for intervention.
- It is data driven and a community working towards a common goal. As a single member in a PLC I don't feel alone and as if all the weight is on my shoulders, it gives me a sense of security and support.

Teachers described the characteristics that facilitate a PLC to include staff buy in, time, collaboration and data. These are evidenced by the following participant excerpts:

- There needs to be time to do it without just adding one more thing for teachers to fit in along with everything else.
- Talking about student progress on a regular bases and planning together as a team to better accommodate all of our students.
- We must have dedicated time to meet with our PLC teams to ensure that we can analyze the data and answer the four key questions.

- The whole staff to have buy in, everyone has to be part of the process in order for it to work effectively, sustaining a PLC should be ongoing training for new staff and even refresher course for everyone.

Next, factors that were identified as challenges to PLCs included: providing time, training, member attitudes or openness. Teacher's described these challenges by indicating the following:

- New teachers might not have the training/experience of a PLC.
- District changes from year to year.
- Making sure everyone can agree and be on the same page the majority of the time.
- When one person takes over the entire meeting and doesn't allow others to share can ruin a PLC.
- Teachers are expected to do a lot with limited resources and incentives which also affects teacher buy in and sustaining a PLC.

The researcher identified three themes responding to this question. The researcher identified three themes responding to this question. These included: Collaborative teams, data-driven decisions focused on student success, and a shared responsibility, commitment and buy-in to a common practice. The team concept was evidenced by the fact that many teachers noted common planning time is provided during the school day to participate in collaborative conversations that are focused on data related to instructional planning. A shared responsibility to ensure that all members are accountable to each other and to all the students within the grade level or school consistently emerged with 10/14 interview participants referring to this as an important factor. Then, 12/14 interview participants noted that commitments to common practice and supporting each other were also significant factors in place. The results showed that teacher perceptions of the PLC model being implemented included teams that are composed of grade level members. More than 90% of questionnaire respondents indicated that shared educational values,

having protected time to plan with one another and participating in an opportunity to contribute to a learning team are all components of the processes being implemented.

Teachers described the characteristics that facilitate a PLC to include staff buy in, time, collaboration, and data. Next, factors that were identified as challenges to PLCs included: providing time, training, member attitudes or openness. Teacher's described these challenges by indicating, "New teachers might not have the training/experience of a PLC," "district changes from year to year," "Makings sure everyone can agree and be on the same page the majority of the time," "when one person takes over the entire meeting and doesn't allow others to share can ruin a PLC," "teachers are expected to do a lot with limited resources and incentives which also affects teacher buy in and sustaining a PLC."

Similarly, in the study by Chong and Kong (2012), the authors added that successful teaching requires that PLCs as a training tool need to be intensive, ongoing, and connected to practice. Bitterman (2010) also found that in order for teachers to be aware of the latest research on instruction and learning, they needed a structured framework for the PLC process to benefit. That framework allocates time for teachers to plan and develop as professionals. They also needed a growth mindset and focus on inquiry to best support this way of developing.

Research Question 2. How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning? This question sought supportive information to determine how teaching and learning are the focus of the district's PLC model and if this is true, what data based decisions are being made and more importantly what data supports drive the PLC effectiveness. It was addressed and answered by the questionnaire, interview items and further support focused

on improved achievement, archival data was used. The archival data provided by three out of the five schools included continuous improvement plans, PLC meeting notes and achievement data.

As identified in RQ1 results, the participant's described the stages of PLC implementation indicating that more than half 59.5% of reported their school was in the initial stages of developing PLCs, about 11% noted their school was on the journey to establishing PLCs, and about 30% of the teachers noted their school was working to re-establish what had once been a PLC (see Figure 1). Also, when asked how teachers define a PLC, teachers contributed the following:

- A team of teachers that works together on daily basis that is continually changing to better meant the needs of our students.
- I believe a PLC is a community of professionals working together to achieve a common goal. In our school our goal is to see every student succeed. We work together every day to achieve our goals.
- Professionally committed to ongoing improvement.
- I believe we are on the way to becoming a fully functioning PLC. I would not necessarily change the definition as we are still on the journey to becoming a PLC.
- A PLC is a community of professionals who work together to achieve a common goal.

Most teachers collectively used terms like: working together and a community of professionals achieving a common goal as well as student success in defining a PLC. 82% of teachers that participated in the questionnaire part 2 (see Appendix G) determined that PLCs are useful for schools and students, participant phrases included:

- Organized collaboration.
- A team can experience and explore more opportunities together than an individual does alone.
- It makes it so much easier when teacher work together to create lesson, but also to group students based on their needs for intervention.

- It is data driven and a community working towards a common goal. As a single member in a PLC I don't feel alone and as if all the weight is on my shoulders, it gives me a sense of security and support.

The researcher identified three themes responding to this question. In summary, the second research question focused on how professional learning communities this district focused on data based decisions to improve teaching and learning. The researcher identified three themes responding to this question. These included that teaching and learning are dependent on common instructional goals and assessments, progress monitoring, and teacher support. All of the questionnaire participants indicated that school sites take collective responsibility for student learning, have high expectations and share responsibility for student learning.

The interview data revealed that 13/14 interview participants recognized that grade level teams either created or are provided common assessments to improve student learning by ensuring grade level members are teaching student objectives during the same time. The data also showed that teams support one another on next instructional steps observed through data analysis. The majority or 13/14 of the interviewed participants also identified that sharing instructional strategies as well as being transparent promote supportive team structures.

More than 90% of the questionnaire part 1 participating teachers responded that creating conditions for students to feel confident to learn, providing constructive feedback to students, using data to inform practice, regularly monitoring student progress and giving priority to student learning are all important factors of decisions that improve teaching and learning. Further, three out of five continuous improvement plans and teacher PLC notes indicated that a focus on strengthening instruction for all students and data driven decision making aligns to the processes substantial in the success of PLCs.

This is simply the ideal way of creating common goals. It is also evident that throughout the PLC implementation process for this selected district during 2006-2010, this school district gained a 14.7 percentage increase in math and a 10 percentage increase in ELA.

Similarly, Banks and Kurth (2013) explained that PLCs are based on two assumptions. First, is that the knowledge and skills required in educational practice are initiated in the day to day experiences and interactions, therefore profound understandings are advanced through critical reflection with others who share the same experiences. Secondly, an active, ongoing, and structured professional discussion increases professional learning and abilities that improve student outcomes. However, the supportive conditions necessary for PLCs to function properly are heavily, reliant on logistical conditions, capacities, and relationships developed among colleagues to ensure productivity (Hord, 2007; Gray, Mitchel & Tarter, 2014), which is also evidenced in this current study.

Research Question 3. How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States? This question provided the researcher with participant perceptions resulting in participating in PLCs. More significantly, this question netted the core of professional growth and instructional effectiveness as explained in the participant's point of view. This question was supported with questionnaire items and interview items. Participants indicated that 90% or more agree that learning together with colleagues, learning from each other, having protected time for joint planning or development and having opportunities for professional development contribute to influencing professional growth and instructional effectiveness. Further, an astounding 100% of questionnaire part 1 participants agree or

strongly agree that taking responsibility for his/her own professional learning is significant in being a member of a PLC. Eighty-two percent of teachers that participated questionnaire part 2 (see Appendix K) determined that PLCs are useful for schools and students.

Teachers described the characteristics that facilitate a PLC to include staff buy in, time, collaboration and data. These resulted from the contributing excerpts from the participants:

- There needs to be time to do it without just adding one more thing for teachers to fit in along with everything else.
- Talking about student progress on a regular bases and planning together as a team to better accommodate all of our students.
- We must have dedicated time to meet with our PLC teams to ensure that we can analyze the data and answer the four key questions.
- The whole staff have to have buy in, everyone has to be part of the process in order for it to work effectively, and sustaining a PLC should be ongoing training for new staff and even refresher course for everyone.

Next, factors that were identified as challenges to PLCs included: providing time, training, member attitudes or openness. Teacher's described these challenges by indicating:

- New teachers might not have the training/experience of a PLC.
- District changes from year to year.
- Makings sure everyone can agree and be on the same page the majority of the time.
- When one person takes over the entire meeting and doesn't allow others to share can ruin a PLC.
- Teachers are expected to do a lot with limited resources and incentives which also affects teacher buy in and sustaining a PLC.

The researcher identified three themes relevant to RQ3, which were consistently common planning time that must be provided and that it should be structured and

purposeful to support professional growth and instructional effectiveness. Further, instructional effectiveness is driven by purposeful collaboration that requires ongoing conversations that are relevant to content and student achievement. Teachers buy-in when they can authenticate and validate a structure of what and why PLC's are in place. When mutual trust exists between colleagues and school leaders, as stated by one participant: "We (teachers) trust them (administrators) to make decisions they need to make and they trust us to make the decisions we need to make" then sustainable change is probable. Also, this structure should ensure that all members are respected, valued and empowered to be collaborative members of a school organization and that all stakeholders have fluid communication. It was significantly recognized that collective commitments, norms and expectations be priorities when meeting in a PLC to confirm that professional growth and instructional effectiveness be the focus. A reoccurring component of the success of PLC was heavily grounded in teacher support. Teachers believed that continued development is linked to support and this ultimately supports doing what is best for all kids.

Comparable to many of the prior studies including Banks and Kurth (2013), Chong and Kong (2012) and Bitterman (2010), the following problem was addressed and supported: How professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities' influences their professional growth and development. The answer is reinforced by teacher and leader commitment to the foundations of a PLC. The perception of educators indicated that the factors with the greatest influence on professional growth are purposeful meetings, shared responsibility, commitments to common practice and assessments and ongoing progress monitoring. Further, teachers indicated that buy in was crucial to develop a sustained model to

promote continuous reflection and refinement on effective instruction. Most significantly, teachers believed that participating in a PLC offered a necessary support to teachers. Many believed that because they didn't feel alone to discuss classroom obstacles, they could embrace change.

Implications

The implications of this research are supported by teacher and leader commitment to the foundations of a PLC and based on the efforts of scholars and authors, including Bandura (1986), Mezirow (1997; 2003), Hord (1997), Dufour (2009) and Dufour et al. (2008) that impacted the determination of the problem defined in this study. The clarifying evidence built an understanding of the significance of the structure and organization of PLCs in collaborative teams. This current work contributes to organizations seeking to establish or re-establish PLCs as supportive frameworks for professional development.

What Hord (1997) described in the 1980s was the term "professional community of learners," which evolved as the act of teachers and leaders continuously seeking new learning. The author included that effective professional learning communities must include: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice all of which continued to be identified as significant in the results of this study. Additionally, the work of Bitterman (2010), added supportive themes that are often captured in a PLC, to include: constant collaboration centralized on effective instruction that impacted student learning. This research found that schools seeking PLC shifts, should not just focus on teacher effectiveness but learning opportunities that are meaningful to teachers. The purpose of this current study was intended to explain how professional learning community models

in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development. The findings from this study were consistent with previous research and supported the priorities outlined by the teacher participants, all of which are relevant to the foundations of a PLC framework, heavily noted by Dufour et al. (2008). These common understandings and terms are significant in composing the results that drive student achievement and support teacher development. The findings identified the factors that have the greatest influence on professional growth, which are: purposeful meetings, shared responsibility, commitments to common practice and assessments with ongoing progress monitoring. Further, participants indicated that buy in was crucial to develop a sustained model to promote continuous reflection and refinement of effective instruction. Most significantly, most believed that participating in a PLC offered much needed teacher support. Many participants noted that because they didn't feel alone to discuss classroom obstacles, they could embrace change.

Theoretical implications. This current research study was supported by the transformational learning theory, social cognitive theory, and the foundations of professional learning communities. This was provided to explore the characteristics of PLCs and how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development. Each of these concepts is significant to further understand professional development, student learning and organizational support relative to the results of the study.

Transformational learning theory. Mezirow (1997) stated that transformative learning is the act of automaticity of thinking and should eventually occur naturally. As an adult learner within a PLC framework, the author explained that livelihood and the actions of being are sometimes a direct result of how we are expected to behave and are dependent on a personal "frame of reference." A frame of reference is grounded in past experiences, associations, new information, conditioned responses, and values. All of which were often identified as challenges of PLCs. Further, the ideas of others could be rejected based on the preconceptions one may hold and can challenge the goal, which is sustained change. Servage (2008), described that transformation within schools as a fundamental shift relies heavily on the concepts grounded in PLCs. Therefore, if PLCs are implemented correctly, they have a profound way of transforming new truths that better define effective classroom instruction. The findings of this current study suggested that PLCs are highly valuable and contribute to teacher development if they are implemented correctly.

Additionally, the factors relevant to transforming a frame of reference is often through "critical reflection on the assumptions" based on interpretation, beliefs, and habits of mind, all of which are indicated to play key roles in changing instructional habits. More importantly, the established belief of one's own ideas are at times so strong that shared or contribution of ideas by others are often rejected based on preconceptions held as truth by the participant. According to participants, PLCs must have staff buy in and if this is accomplished then value is established in the structure making it less confined to top down leadership, as described in teaming structures identified as grade level teams or leadership teams. According to authors, McComish and Parsons (2013), transformational learning about teaching occurs when teachers begin to examine their

practice critically and develop different perspectives that deepen one's understanding. Similarly, the participants in this study indicated that PLCs offer an opportunity to reflect, share and support one another through the process of data analysis and questioning the current instructional practice. In retrospect, PLCs appear to be modalities of learning that do not rest on pedagogical skills but rather rely on critical reflection that enables learners to transform beliefs into sustained instruction that become the norm of effective teaching (Servage, 2008).

Social cognitive theory. Bandura's (1986) social cognitive theory addresses the relationships involving personal, behavioral, and social/environmental factors influencing individual behavior. The theory implies that capabilities inclusive of processing are vicarious, symbolic, and self-regulatory, all of which play a significant role on acquisition of learning. Symbolic processes are often used to alter environments that pose obstacles. Further, this includes reacting to situations by problem solving, communicating to enhance learning, and seeking new ways of addressing situations. This study delved into personal factors that influenced professional growth and development. Participants described that PLCs are learning opportunities that are based on shared responsibility to determine the factors that influence student success and failure. This was often a means of addressing groups of students that were identified as at risk, then collaborating on instructional skills to support students.

What happens next is noted as self- regulation, which involved assessing goals and identifying strategies to achieve the end goal. The progress monitoring that occurs throughout PLCs confirms whether the instructional decision is effective or not. As the progress produces a positive outcome, teachers begin to believe in the process and in his/her own ability. Bandura and Wood (1989) contend that belief in one's own abilities

can be strengthened and instilled by the following ways: mastery of experience, modeling, social persuasion, and physiological state of mind.

In this case, the theory was further elaborated by a learning environment grounded in discourse and the application of change through embedded opportunities to learn noted in PLC frameworks. Additionally, the social cognitive theory supported that an opportunity for learning is contingent on supportive environments and shared resposibilities, both components are essential in PLCs and were described in the results of the current study. A person's belief in his or her own success in present or future situations are often encompassed in teaching and learning, also essential in this study's findings.

Professional learning communities. According to Dufour (2009), the skills necessary to support all learning environments that promote student achievement are derived in PLC settings. PLCs are teams of participants that meet together to determine what students need to know, how will it happen, what happens if they don't learn and what happens if they do learn, all of which drive the operational structure of purposeful dialogues based on student data. This foundation is upheld in the structure of functional PLCs. Dufour et al. (2008) contended that there are three ideas that drive professional learning communities; first, members' work together to determine what students must learn. Then, teachers commit to progress monitoring the learning on a timely basis. Then, teachers provide support to those students who are struggling, and extend or enrich the learning of those who have mastered the objective. Second, the term isolation is noted as unproductive and calls for collaborative efforts that build on interdependency and collective responsibility of all learning for all students within the school organization. The current study, determined that teachers work together to problem solve and seek the

expertise within the school team for further development. Additionally, participants described an evidence based monitoring system to validate that students were learning and could support instructional changes and contend as effective instructors.

Significantly, "professional learning communities have been up held as powerful structures for teachers' continuing professional development" (Servage, 2008, p. 74). If this was true, then there were important details that needed to be explored to determine how collaborative teaming models are perceived by educators to advance professional growth including: addressing poor student performance, acknowledging that not all teachers have the skills to address particular student needs, and addressing the discourse of new content and teaching strategies (Van Lare & Brazer, 2013). The results of the current study, determined that addressing student achievement and instructional strategies afforded teachers an opportunity to collaborate and extend his/her own craft in teaching by seeking the expertise of one another.

It was also important that teachers were willing and able to effectively collaborate in PLCs to transform instruction that improved student achievement and personal development based on an open-mind set. This study extended the theories that support the perceptions of teachers as they participate in collaboration. Further, the influence on teacher development within effective professional learning communities continued to play a significant role in transformational learning and sustained improvement.

Practical implications. This study contributed to existing studies by providing more specific details on the influences of collaborative teaming models for teacher development within professional learning communities and teacher perceptions of participation. The potential of this study can be used to increase organizing and

structuring a PLC working environment that is perceived as meaningful and supportive to teachers and educational professionals. According to the results of this current study, the investment of time, funding and resources associated with the implementation of PLCs are substantial (Doherty, Jacobs, Neuman-Sheldon, & Walsh, 2010). The value of this study to teachers, local community and society is better explained in the characteristics that encourage sustained and consistent professional growth for all teachers over time through the structure and implementation of a PLC (Stegall, 2011). The resulting outcomes translate to improved student learning, which in turn, contributes to positive outcomes in the local community and society in general, as students will be more apt to leave school career ready (Dufour, 2009). The determinations inclusive of establishing a high functioning PLC are a direct contribution of how organizations are structured and supported, and the most important component of this particular forum is often the teacher.

An identified strength of this current study offered educational leaders direction on teacher support and sustainability of teacher development. This current study suggested that school organizations provide an opportunity for purposeful, collaborative conversations structured in grade level teams or leadership teams that support student achievement and are relevant to content. This opportunity of a shared responsibility ensured that all members are accountable to each other and to all the students by sharing instructional strategies, committing to common practice and sharing student data occurred in a common planning time. Teachers noted that buy-in can authenticate and validate a structure of what and why PLC's are in place. When mutual trust exists between colleagues and school leaders ensures that all members are respected, valued and

empowered to be collaborative members of a school organization and that all stakeholders have fluid communication.

It was significantly recognized that collective commitments, norms and expectations be priorities when meeting in a PLC to confirm that professional growth and instructional effectiveness be the focus. A reoccurring component of the success of PLC was heavily grounded in teacher support. Teachers believed that continued development was linked to support and this ultimately derived to doing what is best for all kids and leading with common goals.

Future implications. A future implication could involve seeking the perception of K-8 principals participating in PLC forums that address the needs of building leaders. This future study would identify what support leaders need to be effective change agents in sustaining PLC frameworks. An identified weakness of this study was the selection of using five schools to determine the results of a larger district. Because this study included five schools but the school district targeted consists of twenty one schools, it would be essential to have all schools participate in a quantitative study that addresses questions that identify the state of the district's PLC. The researcher chose to study five schools to maintain a manageable case study, however a quantitative study may provide a broader interpretation of perceptions if the 36 Likert scale is used to extend this study. Furthermore, it is also suggested that further work be addressed to determine the discrepancy in identifying the school site PLC and the understanding that prompts that determination. The work of PLCs is vast, therefore further work in the Southwest region is warranted.

Recommendations

Bandura's social cognitive theory was referenced to gain more understanding on the perception of effectiveness (efficacy) and capability to produce result driven instruction. In this case study, the researcher determined that organizations seeking collective efficacy amongst teachers should adhere to the following for effective and sustainable PLC models within K-8 schools: First, participation in professional learning communities is a useful professional development model, as long as participants understand the purpose. It is recommended that school sites have fluid communication by addressing PLC commitments, norms and expectations when meeting together to confirm that professional growth and instructional effectiveness are the focus. PLC goals must be established by student achievement results. Teams must maintain an ongoing professional learning community forum and work together to be collectively accountable for student learning as well as adhere to doing what is best for students based on produced data.

Next, to further understand how PLCs are structured and implemented with a primary focus on databased decisions to improve teaching and learning, the researcher recommends that staff buy-in be established and common time for collaborative conversations structured in grade level teams or leadership teams be prioritized for organizational participants. It is also recommended that for instructional effectiveness to take place, meeting together must be driven by purposeful collaboration that requires ongoing conversations that are relevant to content and student achievement. Dufour, Dufour and, Eaker (2008) noted that the most effective professional development experiences are those that include opportunities for teachers to collaborate and learn "on-the-job," through observing others and applying what is learned in workshops and other training experiences. Also, this recommendation adheres to a structure that respects,

values and empowers participants to be collaborative members of the school organization.

Recommendations for future research. This study provided an opportunity to seek how an organized structure captures the most effective PLC model. Stegall's (2011) and Romeo's (2010) research studies showed that teacher efficacy was substantially higher when they were members of a collaborative team in an environment built on trust.

- Therefore, it is recommended that the factors that have greatest influence on professional growth are purposeful, shared responsibility, commitments to common practice and assessments with ongoing progress monitoring.
- Further, teachers indicated that buy in was crucial to develop a sustained model to promote continuous reflection and refinement of effective instruction. Most significantly, teachers believed that participating in a PLC offered much needed teacher support. Many believed that because they didn't feel alone to discuss classroom obstacles, they could embrace change.
- PLCs offer teachers the structured time to meet and focus solely on the use of data to improve teaching and learning. Thus, as teachers collaborate and observe the work of their colleagues, they should have the opportunity to engage in reflection and to transform their instructional practices.
- Thus, since the work of PLCs is vast, it is further recommended that additional work in quantitative studies on teacher perceptions of PLCs and student achievement be addressed to continue this work.

Further, additional qualitative research is needed to identify how teachers perceive PLCs as a form of job-embedded professional development and how PLC participation influences, if any, teacher reflection on what they learn in professional development or during meetings.

Recommendations for future practice. Bitterman (2010) conducted a study that stipulated supportive themes captured in a PLC, this included constant collaboration centralized on effective instruction that impacted student learning. Likewise, this researcher also specified that schools must not only focus on improved teaching strategies but improved learning opportunities that are meaningful to teachers.

Furthermore**,** the findings from this study are consistent with previous research and support the priorities outlined by the teacher participants, all of which are relevant to the foundations of a PLC framework as noted by Dufour et al. (2008). It is significant for organizations to establish common understandings that drive student achievement and teacher development. The potential of this study was to increase organizing and structuring a PLC working environment that is perceived as meaningful and supportive to teachers and educational professionals, yet data driven. Next, the investment of time, funding and resources associated with the implementation of PLCs although these costs may be substantial (Doherty, Jacobs, Neuman-Sheldon, & Walsh, 2010) but are highly recommended by this case study results.

The intended value of this study is to teachers, local community and society to encourage sustained and consistent professional growth for all teachers over time through the structure and implementation of a PLC (Stegall, 2011), therefore the researcher recommends the following:

1. Invest time, funding, resources and training to the PLC process.
2. Take time to establish a mission and vision for the PLC, to gain teacher buy-in.
3. Establish structures conducive for PLC success: common planning time, or time dedicated to planning; clear, established norms and expectations.
4. Provide opportunities for purposeful, collaborative conversations structured in grade level teams or leadership teams that support student achievement and are relevant to content.
5. Develop shared responsibility that ensures that all members are accountable to each other and to students by sharing instructional strategies, committing to common practice, and sharing student data occurring in a common planning time.
6. Develop mutual trust between colleagues and school leaders to ensure that all members are respected, valued and empowered to be collaborative members of a school organization and that all stakeholders have fluid communication.

7. Determine collective commitments, norms and expectations as priorities when meeting in a PLC to confirm that professional growth and instructional effectiveness be the focus.

Finally, organizations must establish priorities within PLCs that include valuing participant time, ongoing training and opportunities to collaborate or share ideas based on student data. The resulting outcomes translate to improved student learning, which will in turn, contribute to positive outcomes in the local community and society in general, as students will be more apt to leave school career ready (Dufour 2009). The determinations inclusive of establishing a high functioning PLC are a direct contribution of how organizations are structured and supported, and the most important component of this particular forum is often the teacher. A reoccurring component of the success of PLC is heavily grounded in teacher support. Therefore, teachers believed that continued development was linked to support and this ultimately derived to doing what is best for all kids and leading with common goals. Hence, districts and schools must acknowledge and support the development of those who are significantly influential of student success (Marzano, 2003) by creating purposeful collaborative settings focused on student achievement.

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Appendix A

IRB Approval Letter

GRAND CANYON
UNIVERSITY

3300 West Camelback Road, Phoenix, Arizona 85017 · 602.639.7500 · Toll Free 800.800.9776 · www.gcu.edu

DATE:	February 23, 2016
TO:	Tracy Watkins
FROM:	Grand Canyon University Institutional Review Board
STUDY TITLE:	[783303-1] Professional Learning Community Implementations and Teachers Perceptions of Participation Influences on Professional Growth
IRB REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	February 23, 2016
REVIEW CATEGORY:	Exemption category # *[7.1,7.2]*

Thank you for your submission of New Project materials for this research study. Grand Canyon University Institutional Review Board has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office.

If you have any questions, please contact Stephanie Henkel at 602-639-8010 or stephanie.henkel@gcu.edu. Please include your study title and reference number in all correspondence with this office.

cc:

Appendix B

[redacted]

Date: February 16, 2016

Office of Academic Research Grand Canyon University
College of Doctoral Studies
3300 W. Camelback Road
Phoenix, AZ 85017
Phone: 602-639-7804

Dear IRB Members,

After reviewing the proposed study, **"Professional Learning Community Implementations and Teachers Perceptions of Participation Influences on Professional Growth",** presented by Tracy Watkins, I have granted authorization for Tracy Watkins to conduct research in [redacted]. I understand the purpose of the study is to investigate ***how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development.***

Tracy Watkins, will conduct the following research activities (contact, recruit, collect data). It is understood that this project will end no later than June, 2016.

I have indicated to Tracy Watkins that [redacted] will allow the following research activities: *onsite interviewing of volunteer participants, access to school improvement plans for designated schools, PLC meeting notes for designated schools, request for teachers to complete survey/questionnaires at participating sites on survey monkey.*

Restrictions, limitations and/or responsibilities include working with [redacted] for additional support.

To ensure that the employees are protected, Tracy Watkins has agreed to provide to me a copy of any Grand Canyon University IRB-approved, consent document before s/he recruits participants in the [redacted] Tracy Watkins, has agreed to provide a copy of the study results, in aggregate, to our college.

If the IRB has any concerns about the permission being granted by this letter, please contact me at the phone number listed above.

[redacted]

Letter of Consent

Appendix C

Permission Letters to Use the Instruments Copy of Instruments

To Teresa_Bitterman@Gwinnett.k12.ga.us

Jul 7 at 10:29 AM

Dr. Bitterman,

Thank you for responding! My name is Tracy Watkins, and I am currently a doctoral student at Grand Canyon University in Phoenix, Arizona. I will be referencing your 2010 study to extend teacher perceptions in my dissertation: "Professional Learning Community Implementations and Teacher Perceptions of Participation that influences Professional Growth."

Therefore I would like to request to use the questionnaire portion of your research study as well as use the interview questions with some modifications that would specifically address my questions. If you would be so kind as to grant me permission that would be great!

Sincerely,

Tracy Watkins

Response:

Hey there,

Ms. Sanders let me know that you wanted to use my research from my dissertation. I hope it can be helpful to you and please let me know if you have any questions. Have a great week.

Dr. Teresa Bitterman
Osborne Middle
6th Grade Science
Master Teacher Certified
http://gcps-TeresaBitterman.onmycalendar.com/

Appendix D

Copy of Instruments

Professional Learning Communities Questionnaire

The idea of the school as a professional learning community is relatively common and the purpose of this research is to investigate its feasibility and relevance. The provisional, working definition used in this research is: “Usually a school attempting to develop a professional learning community is set up so that teachers work in collaborative teams to develop, plan, and implement lessons that are innovative and promote student learning" (Bitterman, 2010).

Directions: For each statement (1-36), please choose one answer that best describes your position, based on the given scale.

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

Part 1

1. Take collective responsibility for pupil learning.
2. Base teaching approach to change on good evidence.
3. Create conditions for pupils to feel confident to learn.
4. Learn together with colleagues.
5. Ensure students receive constructive feedback about their work.
6. Actively seek ideas from colleagues in other schools.
7. Set learning targets for individual students.
8. Routinely collect, analyze and use data and evidence to inform my practice.
9. Have high expectation of students.

10. Seek out and use external research that is relevant and practical to inform your work.
11. Have time dedicated to classroom observations.
12. Regularly monitor the learning and progress of individual students.
13. Use professional/subject associations for professional learning.
14. Share a common core of educational values.
15. Think the work load is too heavy.
16. Are involved in seeking solutions to problems facing the school.
17. Are members of at least one professional team.
18. Regularly discuss teaching methods.
19. Share my experiences and success.
20. Experiment and innovate about new curriculum.
21. Receive training on how to work and learn in teams.
22. Have opportunities to take on leadership roles.
23. See the school as stimulating and professionally challenging.
24. Routinely share information with parents and community
25. Learn from each other.
26. Take responsibility for my own professional learning.
27. Give priority to learning more about student learning
28. Have dedicated time to be mentored in a new role.
29. Engage in team teaching.
30. Learn about my own learning
31. Have some protected time for joint planning and development.
32. Give priority to learning more about subject knowledge.
33. Share responsibility for student learning.

34. Have opportunities for professional development.

35. Satisfied with my job.

36. Actively contribute to the school as a professional learning community.

Part 2

Directions: For question 37, please chose the best answer that defines your school's Professional Learning Community.

For questions 38-41, please explain your answer.

37. Overall this school is:

38. How would you change the working definition? What is your definition?

39. How useful is the idea of a professional learning community for your school and pupils?

40. What do you see as the main facilitators to becoming a professional learning community and sustaining a professional learning community?

41. What do you see as a challenge to becoming a professional learning community and sustaining a professional learning community?

Please indicate your position in this school.

42. About YOU:

How many years have you worked in this school/ including this year?

How many years have you taught your subject area or grade level?

Interview Questions

1. What collaborative teams are in place at your school site?
2. How do you view PLC's contributing to collaborative teams?
3. How do you view collaborative teams within PLC's helping teachers focus on student achievement?
4. Why do you feel collaboration is an important part of PLCs and teacher development?
5. What do you think is the most effective way to meet in collaborative teams within PLCs (weekly, biweekly, monthly)?
6. What common goals are established for your collaborative team?
7. How does your collaborative team measure those?
8. What best supports your professional growth?
9. What are some challenges of professional learning communities?
10. What ways are collaborative teams within PLC's implemented to best support educators?

Appendix E

Interview Protocol/ Participant Consent

Dissertation Research: ***Professional Learning Community Implementations and Teachers Perceptions of Participation Influences on Professional Growth.***

Interviewer: _____
Interviewee: _____
Position of Interviewee: _____
Time of interview: _____
Date: _____

Permission to audio record: The researcher will say: "Part of this interview process will include audio recording so the data may be transcribed, reviewed by both you and I and confirmed by you. Do you give your permission to be audio-recorded during this interview?"

Provide the purpose of the study: The researcher will state: "The purpose of this study is to explain how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development".

Details of the Interview: The researcher will set aside assumptions or prejudgments relative to professional learning communities so that the phenomenon explored has the ability to be captured in true form. Although the structured research questions provide a guide, it will be encouraged that each participant share authentic experiences applied in PLC organizations. When each question is asked, the participant will have the opportunity to respond without being interrupted and provided a full opportunity to respond completely. Participants may elaborate more or less on specific questions that will allow a more in-depth understanding of the phenomenon.

CONSENT FORM
TITLE OF RESEARCH STUDY
Professional Learning Community Implementations and Teachers Perceptions of Participation Influences on Professional Growth

INTRODUCTION

The purposes of this form are to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research and to record the consent of those who agree to be involved in the study.

RESEARCH

Tracy Watkins (principal investigator), Grand Canyon University Doctoral Student has invited your participation in a research study.

STUDY PURPOSE

The purpose of the research is to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development.

DESCRIPTION OF RESEARCH STUDY

If you decide to participate, then as a study participant you will join a study involving research of professional learning community implementation and teacher perceptions of participation influences on professional growth.

The researcher will use semi-structured interviews, archival data, and an open-ended questionnaire for participants. Each instrument is further discussed below:

Interview

The interview data that will be collected by the selected, purposeful sample will be used to explain how professional learning communities in one K-8 school district structured and implemented to show a primary focus on data-based decisions to improve teaching and learning. Additionally, this information will be used to further explain how educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness.

Interviews will be approximately 20-30 minutes and will be the open-ended format to glean in-depth understandings. Participants have the authority to skip questions.

Questionnaires

The participants will have an opportunity to openly respond to the questions in word form. The data collected in the questionnaires will be used glean teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the Southwest. The data collected will also be used to explain how professional learning communities in one K-8 school district are structured and implemented to show a primary focus on data-based decisions to improve teaching and learning. Participants will be provided the questionnaire on google.doc and have the authority to skip questions.

If you say YES, then your participation will last for four to six weeks. Approximately 30 subjects will be participating in this study designed to explain how professional learning community implementations and teacher perceptions of participation influences professional growth.

RISKS

There are no known risks from taking part in this study, but in any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS

The main benefits of your participation in the research provide an opportunity to advance the foundation for determining the organization and implementation of collaborative teams, and will contribute to the PLC's organizational structure in K-8 schools that promote professional growth as perceived by educators. Further, this work will serve as a catalyst that promotes the transparency of educator's work as a crucial for opportunity that is centralized on honest dialogue and encourages transformational learning. Further, intentional conversations and actions that identify instructional strengths and weaknesses shared through formative experiences will impact not only the individual but the organization as "one".

Although there may be no direct benefits to you, the possible benefits of your participation in the research is that others will benefit by you contributing perceptions to the effective implementation of K-8 collaborative teams within PLCs which will address the nature of collaborative learning and will significantly impact a positive working relationship amongst school teams and responding to reform efforts.

NEW INFORMATION

If the researchers find new information during the study that would reasonably change your decision about participating, then they will provide this information to you.

CONFIDENTIALITY

All information obtained in this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify you. In order to maintain confidentiality of your records, Tracy Watkins will maintain confidentiality by ensuring that personal opinions are not included in the findings. Further, personal views shall be protected during the case study. Field notes and interview data shall not include the names of the participants; the collected information shall remain anonymous.

WITHDRAWAL PRIVILEGE

Participation in this study is completely voluntary. It is ok for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time.

COSTS AND PAYMENTS

The researcher wants your decision about participating in the study to be absolutely voluntary. Yet they recognize that your participation may pose some time restraints and inconveniences. There is no payment for your participation in the study.

VOLUNTARY CONSENT

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by:
Tracy Watkins [redacted] or [redacted]

If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Institutional Review Board, through the College of Doctoral Studies at (602) 639-7804.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be given (offered) to you.

Your signature below indicates that you consent to participate in the above study.

_____	_____	_____
Subject's Signature	Printed Name	Date
_____	_____	_____
Other Signature (if appropriate)	Printed Name	Date

INVESTIGATOR'S STATEMENT

"I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature. These elements of Informed Consent conform to the Assurance given by Grand Canyon University to the Office for Human Research Protections to protect the rights of human subjects. I have provided (offered) the subject/participant a copy of this signed consent document."

Signature of Investigator_____ Date_____

Appendix F

Recruitment Letter

Professional Learning Community Implementations and Teachers Perceptions of Participation Influences on Professional Growth

Date _____

Dear [redacted]Educator:

My name is Tracy Watkins. I am a graduate learner under the direction of Dr. Cristie McClendon in the College of Doctoral Studies/ Organizational Leadership at Grand Canyon University.
I am conducting a research study to investigate how professional learning community models in one K-8 school are designed and implemented with a focus on teaching and learning, and how educators perceive participation in professional learning communities influences their professional growth and development.

I am inviting your participation, which will involve completing a questionnaire requiring a minimum of 10-15 minutes per educator.
You may be asked to participate in a semi-structured interview of approximately 45 minutes per interview; the interview will then be transcribed and sent via email for your review and confirmation of accuracy, approximately 10-15 minutes. You have the right not to answer any question, and to stop the interview at any time.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. There are no foreseeable risks or discomforts to your participation. Your response will be anonymous. The results of this study may be used in report, presentations, or publications but your name will not be used.

I would like to audiotape this interview to transcribe responses accurately. The interview will not be recorded without your permission. Please let me know if you do not want the interview to be taped; you also can change your mind after the interview starts, just let me know. The recorded information will be stored under my discretion and will be destroyed within one year of concluding the study.

If you have any questions concerning the research study, please contact the research team at:
Tracy Watkins
[redacted]

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the College of Doctoral Studies at (602) 639-7804.

Sincerely,

Tracy Watkins

Appendix G

Questionnaire Results Part 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
1. Take collective responsibility for pupil learning.	23	18	0	0	0	4.56	41
2. Base teaching approach to change on good evidence.	14	19	6	0	0	4.21	39
3. Create conditions for pupils to feel confident to learn.	29	10	1	1	0	4.63	41
4. Learn together with colleagues.	21	19	0	1	0	4.46	41
5. Ensure students receive constructive feedback about their work.	13	24	3	1	0	4.20	41
6. Actively seek ideas from colleagues in other schools.	8	13	14	6	0	3.56	41
7. Set learning targets for individual students.	15	16	8	2	0	4.07	41
8. Routinely collect, analyze and use data and evidence to inform my practice.	24	13	4	0	0	4.49	41
9. Have high expectation of students.	32	9	0	0	0	4.78	41
10. Seek out and use external research that is relevant and practical to inform your work.	11	24	6	0	0	4.12	41
11. Have time dedicated to classroom observations.	6	20	5	9	1	3.51	41
12. Regularly monitor the learning and progress of individual students.	19	18	3	1	0	4.34	41
13. Use professional/subject	11	21	6	3	0	3.98	41

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
associations for professional learning.							
14. Share a common core of educational values.	12	25	3	1	0	4.17	41
15. Think the work load is too heavy.	14	16	9	1	1	4.00	41
16. Are involved in seeking solutions to problems facing the school.	7	25	8	1	0	3.93	41
17. Are members of at least one professional team.	18	20	3	0	0	4.37	41
18. Regularly discuss teaching methods.	14	20	4	3	0	4.10	41
19. Share my experiences and success.	13	24	1	3	0	4.15	41
20. Experiment and innovate about new curriculum.	11	22	3	4	1	3.93	41
21. Receive training on how to work and learn in teams.	5	16	9	11	0	3.37	41
22. Have opportunities to take on leadership roles.	11	24	3	3	0	4.05	41
23. See the school as stimulating and professionally challenging.	9	22	6	4	0	3.88	41
24. Routinely share information with parents and community	13	21	6	1	0	4.12	41
25. Learn from each other.	16	21	2	2	0	4.24	41
26. Take responsibility for my own professional learning.	20	21	0	0	0	4.49	41
27. Give priority to learning more about student learning	12	26	3	0	0	4.22	41

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Rating Average	Response Count
28. Have dedicated time to be mentored in a new role.	4	12	15	8	2	3.20	41
29. Engage in team teaching.	1	14	13	12	1	3.05	41
30. Learn about my own learning	5	26	8	1	0	3.88	40
31. Have some protected time for joint planning and development.	18	19	1	2	0	4.33	40
32. Give priority to learning more about subject knowledge.	9	27	4	0	0	4.02	41
33. Share responsibility for student learning.	16	25	0	0	0	4.39	41
34. Have opportunities for professional development.	17	21	2	1	0	4.32	41
35. Satisfied with my job.	10	25	3	2	1	4.00	41
36. Actively contribute to the school as a professional learning community.	16	22	1	2	0	4.27	40

Appendix H

Questionnaire Results Part 2

38. How would you change the working definition? What is your definition?	I wouldn't change it. is an ongoing professional learning community working together as a team to be collectively accountable for student learning consistantly changing professional learning community our teachers work together as a team to best meet the needs of our students I'm not sure what this question is asking... A team of teachers that works together on daily basis that is continually changing to better meant the needs of our students. I believe a PLC is a community of professionals working together to achieve a common goal. In our school our goal is to see every student succeed. We work together everyday to achieve our goals. not sure what this means.... no change I'm new. too much to do, not enough time Professionally committed to ongoing improvement I believe we are on the way to becoming a fully functioning PLC. I would not necessarily change the definition as we are still on the journey to becoming a PLC. I think a PLC is a group of people that come together to work towards making sure that all students are successful. A PLC is a community of professionals who work together to achieve a common goal. I honestly wouldn't change it. My definition is the definition given. The only thing I might emphasize is the need for time to accomplish the working definition. teams working together, teachers having a say in what happens in the school, taking time to listen to new ideas We had a lot of changes in our leadership in recent years. We are working to reestablish what we had as a PLC before the change. Community of Professional Learners Working to rebuild a PLC that has been lost over time. We are a plc. I wouldn't
39. How useful is the idea of a PLC for your school and pupils?	It has had a profound impact. I think PLC is very useful because we keep our students in mind with everything we do Not as useful since not everyone knows the philosophy of PLC essential, less work with more hands/minds I think it is very useful and find it successful on my grade level because we have time to share ideas and discuss what is best for our students on a weekly basis. I think it is useful, but it is usually focused on elements besides first best instruction, which means are students do worse than if that time was devoted to refining how we present information and concepts to our students. Extremely useful. We have 2 days per week that is set aside to work alongside our grade level team. very useful It is useful as long as you have a team that is strong in their professionsl knowledge. It is extremely useful. I can't imagine teaching without a PLC. The knowledge I have gained from PLC meetings with my grade level team, my school teams, and teams from other schools is irreplaceable.

	It is very useful in that it allows for organized collaboration with a strong driven purpose. Very. A team can experience and explore more opportunities together than an individual does alone. It takes time. A PLC is very useful for the students at my school. Our students provide a challenging and varied range of what they bring to the table. It makes it so much easier when teachers work together to create lessons, but also to group students based on their needs for intervention. Trying to do all of this on my own would be overwhelming and daunting. Being able to share the workload and ideas makes it easier to address the needs of every student. good I think we try to be a good PLC school and we hear all the time that "you're already doing what a PLC is" but I don't really think the teachers understand all that is involved. Just by making it mandatory to meet during our preps does not make us a PLC. I'm convinced, especially in the K-2 sections of our school, the kids have no idea what it means to be a PLC. It is extremely useful because there is always, and should always be, room for improvement. Very Very useful and effective when there is consistency. It's useful to the school although sometimes I would not be half the teacher I am today if I did not work in a PLC. Because teachers are given time to communicate in a group about plans and strategies, I was able to learn more best practices than I did from student teaching. I would say it is highly useful. It is data-driven and a community working towards a common goal. As a single member in a professional learning community I don't feel alone and as if all of the weight is on my shoulders. It gives a sense of security and support. I feel that a plc is very beneficial to a school and its students when implemented properly. When all voices are heard and time to meet and grow is respected. It is essential for the all around success of our school. It does not seem to be useful. We are driven more by decisions made by individuals rather than community discussion. We talk about how we are implementing the ideas of others rather than if these ideas are actually working for students. When I was a part of a very cohesive PLC it was great. We were more of a community than coworkers. Very useful, the students become ours instead of mine!0 very useful as it brings everyone on the same page
40. What do you see as the **main facilitators** to becoming a PLC and sustaining a PLC?	Professional Development, Staff buy-in, Time given by admin we are actuvely a learning community that does very well compared to another school I was in continuing learning about PLC's and putting that into practice consistancy in our curriculumn so we can become experts on what to teach Working/planning as a team. Discussing student data, what is working whats not. How can we change things that aren't working so that they are best for the students. It needs to be focused on things teachers actually think our valuable to teaching their students and there needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else. It is frustrating to sit in a PLC meeting when you know you will then have to spend extra hours after school to prepare for giving your students first best instruction. Working together as a team, talking about student progress on a regular basis, and planning together as a team to better accommodate all our students. Having all members on board

	Team collaboration Retaining teachers so you don;t have to start over each year. Team time. We must have dedicated time to meet with our PLC teams to ensure that we can analyze data and answer the 4 key questions. The main facilitators are a collective and positive teacher buy-in as well a constant yet changing meaningful purpose.as Dedicated time to plan, collaborate, share ideas/lessons, look at data Less students in classrooms, so have more time available to us. I think the biggest factor is "buy in." Everyone has to be part of the process in order for it to work effectively. In sustaining a PLC I think there should be ongoing training for new staff and even "refresher" courses for everyone. good The whole staff needs to have the buy in that it really works and team leaders and admin need to work collectively to make sure everyone understands what it at stake and how to get the most out of a PLC. Effective collaboration, high expectations, vision, assessment, and commitment Building trust and supportive teams The main facilitators would be the Administrators but every member of the school is a stakeholder therefore collaboration is key to maintaining momentum toward our goals. I think that the teachers and the school community need to buy into the idea. For some people it is a shift in how they have always done things and it can be hard for some to collaborate with others. A strong team of people that want to collaborate and share makes it sustainable. The main facilitators are working norms and time to meet. The main facilitators would be time and resources. We are given an amount of time but I honestly feel that its never enough in order to become a truly successful professional learning community. There is so much involved but not enough time for collaboration, searching for resources, and group learning. collaboration, time for collaboration and less focus on the numbers and more focus on the well being of students and teachers. Trust, honesty, collaboration Conversations that center on student learning and methods for sustaining and improving student learning. Building genuine relationships and having support from administration Teamwork, sharing ideas, and knowledge.
41. What do you see as a **challenge** to becoming a PLC and sustaining a PLC?	Finding the time to do it and doing it with fidelity nothing New teachers-might not have the training/experience of plc time to restablish all those norms district changes from year to year Making sure everyone can agree and be on the same page the majority of the time. There needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else. It is frustrating to sit in a PLC meeting when you know you will then have to spend extra hours after school to prepare for giving your students first best instruction. People that are unwilling to adjust their old habits and create new ones that will work better for their co-workers and students. not all members value the time spent together for collaboration We focus too much on finding out where the students are at rather than focus on producing better lessons. High turnover and young staff The 'Hogs and Logs'. When one person takes over the entire over meeting and doesn't allow others to share can ruin a PLC. On the flip side to that, those that

	sit like a log and don't contribute at all. This type of negative attitude can really affect a team. Time!!!! The complete curriculum change we experienced this year had both negative and positive impacts. When teachers are overwhelmed with too many changes at once, they sometimes function alone instead of pulling together to work as a team. Gradually as we surface from so much change, we started collaborating and finding a way to work together again. Teachers are already overworked and stressed The different attitudes and personalities/beliefs of all people A big challenge is not everyone participating in the process. It slows down the progress and hampers the workload. A challenge to sustaining the PLC is not ensuring everyone is following the PLC process. Trainings and refresher courses could help with that. not enough time Some teachers are set in their ways and do not feel that a collaborative unit works best. Some teachers give it their all, and some just "show up" to work. Employee turnover Being open to new ideas and sharing the workload. Teacher morale is a challenge due to, changing curriculums or no curriculum, implementation of a given practice without follow through and reliability. Teachers are expected to do A LOT with limited resources and incentive which also affects teacher "buy in" on sustaining a PLC. Sometimes teacher are told to do specific activities during the time they have to meet and I think there needs to be more input from teachers on how the community should work and what expectations should be. For example, if teachers have very different students in their classrooms is it truly best for the students to expect all teachers to be doing the exact same thing. Some challenges could be that professionals could not agree on what is best for the students. Another challenge could be if a teacher does not come prepared to a meeting or follow what the group agreed upon. The main challenge would be time. We are given an amount of time but I honestly feel that its never enough in order to become a truly successful professional learning community. There is so much involved but not enough time to accomplish it all. One person making decisions and teachers not having a voice in decisions that involve them and the students A lot of change. Changes in leadership and staffing. Changing initiatives and lack of support for building social capital Not having enough time or resources to develop true bonds and relationships Time is always a challenge! negative attitudes from fellow teachers

Appendix I

Sample of Transcribed Interviews

Participant 1
2/26/16

1. What collaborative teams are in place at your school site?
   Right now the ones that I'm aware of are, of course the leadership team that is composed of I believe it's the principal, Vice Principal and specialists and then there is extended leadership which is the leadership plus grade level leaders and then we have grade level teams

2. How do you view PLC's contributing to collaborative teams?
   I think it helps because it gives everyone a common goal when we meet as a whole staff we set goals for the year for student learning, for teaching and learning, for interventions for pretty much everything. That way when you break up into your smaller PLC teams and you have that goal, you have a mission, you have a purpose for your meetings: whether it's data driven, sharing instruction strategies, quarterly planning. Everything is set and I think everyone is then on the same page. You can come back and kind of share out so it just gives everybody the same path to follow.

3. How do you view collaborative teams within PLC's helping teachers focus on student achievement?
   This year we've done a really good job as a team looking at our students: collecting data and going over our data after we have given a common assessments or a unit assessment. Really looking at what we can do during our bridge days to help reteach and meet those kids that didn't get it or how we can help the kids that did, how can we enrich and encourage them. Then just making sure that we are all assessing the same way. We may be using different instructional strategies but were all going to be assessing the same way, then if one student or one class did really well, we may ask what did you do? And going back and trying that in your own classroom and then sharing out. It always goes back to that data, whether its schoolwide, grade bands or even just within your own grade level team.

   Follow up Question: Can you expand more on "bridge days"? Well, the district this year is using guarantee viable curriculum. Over the summer teachers and teacher leaders got together and created a blueprint for the year: what would be taught, put it into units and gave certain standards: priority and supporting standards to go along. Then gave those days. So you have maybe 14 total days to teacher a unit which might be 1 to 5 standards depending on what it is. Then within those 14 days you have may be two "bridge days." You assess on the 12th day and then the TWO bridge days would be used to reteach or to enrich or both. It is site based and even team based on how you want to use those bridge days. So going through every subject we have units with bridge days built into our teaching.

4. Do you feel collaboration is an important part of PLCs and teacher development?
   I think it is, especially because no matter how many years you have in your teaching, there still always that uncertainty of am I doing my best for my students? So I think constantly meeting whether it's within your grade level or across grade levels and always talking and sharing the strategies and coming together. For us we switch for reading, so I may have some six graders sometimes in my reading group. Some of my fifth graders may go up to the sixth grade and we just have grouped our kids together by need. So they are really all our kids. I want to know how my students that I have, I want to know how they are doing in their 6th grade homeroom class. And how are my own fifth-graders doing in their six grade reading class. Sharing through that collaboration, like what would be the best way to teach: integrating information from two texts on the same subject. What would we do? Or what does that look like because some of the standards are so wordy. They are so deep that you really have to kind of scaffold and build from the bottom up. For me I'm a top down I want to see what they should know and then look down by finding out what they should already come knowing. So what will I need to do if they don't need this, then I need to go down and even talking to fourth grade. Asking them what did you guys do to help with this? So constantly talking and in collaboration by sharing. It just helps whether you are a veteran teacher or you are a brand-new teacher or even in our case, we have long-term subs that have never been in a classroom so it helps them with understanding the content and those strategies. Then, we can come in and model for someone. Or someone can model for us. Then we can see what it is that we want help in for those new strategies.

5. What do you think is the most effective way to meet in collaborative teams within PLCs (weekly, biweekly, monthly)?
   Right now we meet pretty much weekly as a staff and weekly as a grade level PLC. We are given 90 minutes a week with our grade level to plan. So we have an hour on Thursday mornings then a half an hour on Tuesday afternoons. So we really do break it up with planning our units, planning what we can do to teach and looking at data. So I think I think weekly is a good thing. And giving uninterrupted time for doing it so that it can get done. The district even offers sometime after school to meet for a couple of extra hours so that we can, you know especially when the quarters beginning to get that planning for the quarter done and get it all laid out on a timeline along with assessment dates and everything set. I think weekly, sometimes it is overwhelming. You think you have got another meeting and I can't even catch up, but then you realize you're not the only one feeling that. It's nice to share your frustrations and then you realize okay I'm not the only one. What can we do to fix this and why aren't the kids getting it and what can we do to help them. I say weekly because I think anything longer than that you would kind of feel lost. You tend to start to depend on them, in a positive way- it becomes like a codependent type of thing, like you know you're going to meet with your team and that they are there if you have any questions on anything. You know that that's your time to discuss it

   Follow up Question: You talked a little bit about the offer you get for extra hours, the extra hours that are offered: how does that work? Are you paid? Yeah, we do get paid for that extra time and so it's usually just once a quarter and it is usually at the

end of the quarter so that you can plan for the following quarter. So it's just extra time because it can take a lot of time to really break down those units and all the different supporting standards. You need time to really look at them and see what's best to clump together to teach. What's best in solitary, you know - maybe you need to cut some time off of one unit to add it to another because that standard we know from the past is really difficult for the kids to grasp.

6. What common goals are established for your collaborative team?
   We have our academic goals like our SMART goals, you know making sure we have whatever percentage it is moving to proficient from partially proficient and some from minimally proficient into even partially proficient so there's those percentages. But then, we also have personal goals of putting in your data, being prepared for your team that way when we do meet we are there for what we need to do. We are there for the kids and what we can do to help move them up, so making sure that we have what we need so we can get the kids where they need to be. Especially you know, this college and career readiness is the big thing here and we have eighth-graders going to ASU to learn about college life and even starting as little as kindergarten, making sure that they understand and showing them that the reason we set these daily learning goals or whatever it is that we have set up in our class, that were talking about it as a team so that we are on that same page to get those kids moving. So data pretty much does drive that.

7. How does your collaborative team measure those?
   So just going back and reviewing our kids constantly. Especially our strugglers, they are constantly being progress-monitored every week so we get to see how they're doing so if their making those improvements. Then going back again and looking at that data. We have sheets where we plug in our data for every assessment that we give.

   Follow up Question: Does every grade level use the same tool?
   I don't know about other grade levels but I know that we do our team does that so we are able to put it in and check to see during reassessing. The kids know that it's not just one chance they get another chance to take it again and improve their scores and get better. So they can ask what I can do better. It's asking themselves so looking at the data we're given from the data specialist from their progress monitoring. Looking at the lexile goals, looking at aims web, CBM goals, looking at math-m comp goals and always revisiting those goals and showing the kids exactly where they are and then talk about it and celebrating: oh we moved five kids from here to here. We now have this many less kids in strategic than we did when we started. So looking at those and constantly revisiting

8. What best supports your professional growth?
   Personally, I think just feeling that my thoughts and ideas are respected. In return knowing that I am open to suggestions and constructive criticism and knowing that it's a balancing act with all of us. There are some of us that complement each other on certain things, whether it's management or instruction. There's always something that you can do better and I think that you know being heard. That's another thing is, our administration and leadership team really do listen to what the teachers need and if

we are feeling overwhelmed, they will stop and say you know what: you guys need a work day and letting us have that time to breathe and catch up on our own work, whether it's moving one pile from one place to another. It's knowing that was respected. When they can see that we are overwhelmed OR they see what everybody's asking questions about, like writing. So let's do a PD on writing, they're flexible enough to move around and provide what a lot of teachers need from even understanding the moods and emotions of seventh and eighth grade. We had in a teacher talk about that and that was really interesting and it did help us. So then, I invited eighth-graders to come and give my spelling test on Friday. Today was the first day and they did an amazing job, and building that relationship. My kids shouldn't be afraid of the eighth-graders on campus just as the other way, they need to treat my students with respect to. Not just those little fifth-graders, there students at the school too so I think it goes all around with respect and that mutual trust and value those commitments make a big, big difference.

9. What are some challenges of professional learning communities?
   I think there is a few and fortunately I haven't really felt that in my current site but buy-in from teachers. If there is no buy-in then it's not gonna work. I mean even learning how to compromise, you know not everyone will get everything that they want, but we realize that it's for these kids. That's what you have to put aside. I used to be one of those teachers that thought, nope those are my kids and they are mine, I own them they are mine. I didn't want to let anybody else teach them. I don't want to let anybody else get to know them, you get selfish but they really do need to build relationships with other classrooms, other kids and other teachers. So letting go and that like the release of that and these are really our kids. So, but these are still my kids I still do special things with just them but there's also other kids out there that might want to come to my room or might not want to come to my room. Then there's also you know the leadership is one of the big challenges. When you have leadership that doesn't value teacher opinion, teacher suggestions, teacher knowledge or teacher commitment and it's all about them it becomes much less of a democracy and more of you know you either do it this way or there you go. So it's really hard for anyone no matter what field you're in if you don't feel valued by your leaders and your leaders know that they can't lead without you then there's not going to be much performance you're not going to do your best at your job. If you don't feel that anybody cares then why are you going to go above and beyond? So why would you put in that extra time and effort, pull kids in for lunch, stay after school and volunteer to work after school? You're not gonna do that because why bother if it doesn't matter, so that is a huge issue. Right now it's every little thing that you, do there's somebody saying thank you and noticing and that makes a big deal. So it's a huge difference

10. What ways are collaborative teams within PLC's implemented to best support educators?

Follow up Question: So you could think of this question as maybe giving advice to a building principal or district that may want to implement PLC's, so think about protocols you could give someone else to follow:

11. I think giving time that's a huge part. Giving teams time to meet. Building smaller teams so it's not just one decision-making entity up here that like it's the end-all and be-all of everything. Where we have a leadership team which we need a leadership team because the principal and the assistant principal are the ones that report to directly to the district but then it also goes down to the specialists and what can they do to plan those PD's and then bringing it back to extended leadership where you have the grade level leaders in those meetings and then those grade level leaders and to get back to their team and we discuss and debrief and then I take the concerns of my team to our extended leadership meeting that we discuss everything. So just making sure that there's communication going on on every level and so everybody knows what the other teams are doing and it's not a secret and it's not hidden and it's not taboo. We know that leadership discussed this are now we are working to discuss it here, then you take it back to your teams and bring it back. Everything gets discussed and there's emails about it, so it's very transparent. There's notes sent out and agendas and everything's available for everyone to see. I think that's huge thing, that's trust right there. We trust them to make the decisions they need to make and they trust us to make the decisions we need to make, so I think just giving everybody that and that's how you get buy-in to make it successful. Because if you're not feeling your voice is heard you're not going to speak and that's one less idea and one less change that could be made.

Participant 13
3/23/2016

1. What collaborative teams are in place at your school site?
   Okay so we have collaborative teams within grade levels so that the entire grade level is at the team I we meet once to twice a week as the team there's also a leadership team so it's team leaders from each grade level along with the administrators and the specialist on campus they all get together and meet as well and then as a school we do staff meetings where sometimes it's the staff that makes decisions as a whole occasionally we will do that as well there's also teams as far as PST we do interventions and things like that you were looking at those kids who are struggling so there is a team in place that looks at that and they collaborate together and look at those kids so we have several different kinds of collaborative teams on campus

   Follow up: What does PST stand for? So PST, yeah it's problem-solving team and that's even changed every year it's a different acronym but yes

   Follow up: So does that team just look at students that are at risk or?

   So we call them tier 2 tier 3 kids you know you the kids that are really struggling the kids that are in danger of potentially falling into that category so yeah they look at those kids and see what interventions are in place if they need to get pulled to see some of our interventionist that can happen as well so there's different decisions that can go on in the team

2. How do you view PLC's contributing to collaborative teams?

So with the PLC there's several different things that we look at since we brought PLC into our way of working in teams we look at a lot of data where we didn't so much before where it's definitely more data driven we look at data to determine our instruction and we're looking at data to see how was our instruction did the students learn it there's those for big PLC questions you know what we want the students to learn what do we going to do for the students who don't learn it what are we doing for the students who already know it before you teach it so it's just always kind of looking at that before we even approach any lesson that were planning so it's where we are looking at data to know what interventions we want to do so it's always looking at those PLC questions that were looking at and it's kind of helped us as a team to be more focused and more I guess data driven more focused and in our team time

3. How do you view collaborative teams within PLC's helping teachers focus on student achievement?

   So I guess I kind of touched a little bit on the so definitely we're looking at the data, so you can tell are the students getting it and if they are what's the next step how can push them further if the student are not mastering the concept what do I need to do what or where is the breakdown you know what gap is missing that I need to fill in what interventions do I need to put in place, so that's probably the main thing

4. Why do you feel collaboration is an important part of PLCs and teacher development?

   So I definitely feel that collaboration is so important because I learned so many things from working with my coworkers you know my team that I wouldn't have thought of before like they had other ideas that I wouldn't think of I think everybody on the team is so different and so dynamic that have different styles and so when we all get together we have those discussions I think things come up in those discussions that I would've never even considered on my own and then I think it's great because then that helps me become a better teacher because I think oh I need to make sure that next time I'm thinking of that as well or I'm looking at it from that perspective and so I just think it's great for teacher development and just with the whole collaboration the discussion part I feel like is really an important piece of the collaboration I just get so much out of it then I would on my own

5. What do you think is the most effective way to meet in collaborative teams within PLCs (weekly, biweekly, monthly)?

   I mean I definitely think depending on what type of team you're on will kind of determine how often you meet as a grade level I think definitely weekly is or probably a little bit more often because were constantly assessing our kids in our classroom I mean informal assessing when were in the middle of instruction and you can tell oh that lesson didn't go well what do I need to do differently and so when your meeting with your team because you know you want that immediate feedback so you're like okay what can I do tomorrow for my lesson tomorrow to make sure the kids really get it on and so that constant just feedback from your

team you know is definitely beneficial so as far as that goes probably it has been more often with the teams as far as other collaborative teams on campus the extended leadership I know they're typically scheduled to meet once a week but often times it goes to more like every other week so twice a month and I think that's okay because there aren't as many like schoolwide issues that come up that often so I definitely think as a grade level because you know with the instruction you just you always need that immediate feedback to try and assess the kids you know almost in every lesson that you're doing you're assessing so definitely getting that feedback from your team

6. What common goals are established for your collaborative team?

So when we meet as a team each quarter we set what we call smart goals and so these are goals that we it's all based on data so this year we looked at our reading fluency data from aims web and we set a goal based on that as far as what percentage of students we expect to be at benchmark by the end of the quarter and what percentage of students that we also want to move from the falling far below into the approaching category coming from approaching to meets and so on and so we kind of set goals based on that and then we also we talk about other goals we don't really have anything set but we talk about that we want the kids to be able to get 80% or higher on any assessments or when we give assessments we also want our classrooms to be around 80% of the class meeting the assessment as well that would be the ideal situation for all

Follow up: In some schools they talked about this idea of the assessment has kind of changed this year, what the district is asking schools to do is a little different this year than what has been in the past, so one thing that I thought was really interesting is the idea that if the kids have an opportunity retake so if they are given an assessment and if they don't perform at a certain percentage they are able to be retaught and then they retake it.

Yes

Follow up: Do you think that is compromising common assessments within your group or how does that or how is that working out when you guys have dialogue?

So when we give the first assessment and let's say we have 10 out of 25 students not passing the test so as a team we talk about okay what were the struggles where did those students not meet and if there is a small percentage of students who didn't pass then we talk as a team and say okay maybe those students can just go to one teacher and that teacher can just do interventions if it's a small group and then the other teachers can take the rest of that teachers class to continue on with the next standard however if we notice that there's like a huge amount in the grade level then we talk okay we need to do interventions or maybe we need to go back to first best instruction and go back and reteach it and so I love that opportunity for the kids to be able to get those interventions and then reassess the window right now is about two days they have so you're intervening for about two days I do wish it was longer I don't know that two days can make that much of a difference but at least it's something right now and so a lot of times it's just one small thing that the student you know missed or they missed passing the test

the first time by like one question so those kids typically will move up when you reassess so I do like it for that you know reason you have a lot of kids who maybe had a bad day and they just tested horribly that day and you know they know it or maybe they are there sick so it allows them another chance to you know to gather their thoughts so okay I do know this test and so I do think that part is great I love that they've changed that this year

7. How does your collaborative team measure those?

   So like our Smart goal we give another aims web at the end of the quarter just to see the progress the growth how many what percentage of the kids are moving up towards the benchmark area but we also look at it because we do walk to read and so a lot of our groups for walk to read is based on the data and so we group the students with common scores together and then we know how to instruct the students and so we have one teacher who does SRA with those really struggling students so they are missing the standard but if the student can't read they're not going to well on the standard anyways so we really need to get them to read and then the other classes we have also another class who does phonics so these are kids who can kind of read that might have a little or some gaps in their phonics that prevent them from reading a good percentage of words and then we have a group that does fluency so these are kids that can read but they just need to build up the fluency to be able to comprehend text better and then we have those other classes that are doing the benchmark students who can read and then the working comprehension the standards and things like that so that's kind of how we use our data in that's how we do our first best instruction is pretty much is through walk to read

8. What best supports your professional growth?

   So for me I would really love the opportunity I know that our schools kind of talked about a little bit we haven't actually done it so I would love the opportunity to go and observe other teachers so anything that I feel like I would like to improve on myself it would be nice to go see the teachers already doing well with that and go and observe and see it in practice I think that would really help me I know we have professional development with the district that I do go attend and those are really good at into I've been to some really good ones which have helped and then we do a lot of professional development here at school as well we had some teachers on campus that are Kagen coaches and they have Singapore strategies and so a lot of those of been really helpful as well just for me personally I love like going to classes and learning so I tend to do a lot of that and then I think the one thing that I feel like I am missing is the observing phenomenal teachers out there that are already doing an awesome job

   Follow up: So during you PLC time do you guys share ideas and do you think I would really like to see that or how do you know there phenomenal?

   Because you hear from word-of-mouth from a lot of people or even from like our instructional support specialist they'll say oh so-so is really good at that so you'll hear those comments and I'm like I want to see that I want to see how is it good what's great about it but yeah definitely

9. What are some challenges of professional learning communities?

I think they a big challenge is when we do meet as a team meeting takes time and so you have to find the common time I know one thing that we are trying last year and this is her second you're doing this is having team time during the school day so they find common preps for all of their grade and so all of us take our students to their specials and then that's the time we meet as the team and it's scheduled for each grade level on a different day of the week so we can do that but the challenge with that is then I'm losing prep time that you know I could be planning or looking at data and things like that and that I feel is kind of a challenge also we've also done in the past where we would meet at the team after school so sometime the challenge of that is you know you've got other things going on after school and so we would have meetings but then you would have an IEP meeting is scheduled time so you're missing your team meeting and or you have you know a doctor from you have to leave for and there's different things and then you are missing your team time so sometimes the that parts a little challenging scheduling that is hard and then within the meeting with a pretty big team of seven teachers on our team which is pretty big and sometimes with those large teams there's not enough time to really get into a really good discussion because you've got seven people you've got to listen to so sometimes I feel like we don't get as much accomplished during the team time that I wish we could, I have been on a smaller team where there were just five teachers and it felt like you kind of got a lot more done so that can be a challenge to when you have a pretty big team same thing with the extended leadership I've been in those meetings as well and you've got about 14 people in there something a large group of people so it's a lot of opinions a lot of ideas and listening to a large you know group when you're going around and so it's just time consuming you know

10. What ways are collaborative teams within PLC's implemented to best support educators?

it's I know it's really hard is and sometimes it's you know teachers might be the worst with this is we aren't really good at change and so you have to have you know almost everybody has have a buy in to the idea the philosophy of PLC if you have a team and you've got half of your team is really buying into it it's not at work so that I think that is an important piece of that is if you're going to do it you have to be all in and you have to do it it's it is very collaborative so you didn't have a lot of teachers who are especially some of the teachers been teaching for while they've been doing this on their own and all of a sudden they are being asked to work as a team and so that's kind of been sometimes hard as well so I think part of it is making sure your staff really knows that what the benefits of this are and trying to build that buy in because I mean if you don't have that even to start with the rest of your professional development isn't going to go anywhere so I think build that up first and then once your staff buys in the teachers are you know in invested then you can move into those other areas so what does a collaborative team look like how should it work you know you've got to set your norms and all of that you know to get your team to function what do you talk about in these meetings and you know what is it look like to analyze data

and then you can go further into the if you have that much people who don’t or aren’t invested in it then they’re not going to go forward

Appendix J

Interview Analysis Example of Coding Process

Key: Identified Emerging Codes for RQ1

	1. What collaborative teams are in place at your school site?	2. How do you view PLC's contributing to collaborative teams?	5. What do you think is the most effective way to meet in collaborative teams within PLC's?	9. What are some challenges of professional learning communities?
Yellow	Leadership	Common understanding, practice, goal		Compromising or working together with ALL
Green	Grade level			Student based
Blue	Improvement	"Shared"	Grade level-weekly	
Lt Blue		Data Driven		
Gray				Large teams

RQ 1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?				
Interview Question:	1. What collaborative teams are in place at your school site?	2. How do you view PLC's contributing to collaborative teams?	5. What do you think is the most effective way to meet in collaborative teams within PLC's?	9. What are some challenges of professional learning communities?
P1	Leadership, Grade level	Common goal, data driven, sharing instruction strategies, planning and sharing out	GL: weekly (90 minutes) uninterrupted time, district offers paid time after school to meet for extra hours for quarterly planning	Learning how to compromise, letting go, setting aside personal feelings and knowing these are all "our" kids, leadership dominance
P2	Leadership, Grade level, Continuous Improvement Plan, School Support	Commitments, follow up, data for decision making, PLC is the main ingredient to holding us together	GL: weekly, School support and CIP: Quarterly because book studies are the focus	Being a PLC not just "doing PLC," not all members on the same page of understanding, setting aside personal feelings and doing what's best for kids, staying focused on student achievement
P3	Grade level, leadership, Various committee	Accountability to each other, sharing ideas, follow through, contributing	GL: Weekly (45-60 minutes) Early release PD days with time given to PLC,	Having a staff member not on board, compromising, having difficult

RQ 1: What are teacher perceptions of the professional learning community model being implemented in one K-8 school district located in the southwest region of the United States?				
			Leadership team weekly (bimonthly is more effective)	conversations, teacher turn over
P4	Grade level, Book Study	Setting structure, focused, common understandings	GL: Weekly, that doesn't even seem to be enough time, Committees bi weekly to monthly, Leadership: bi monthly	Working with people that are not the same as you, different perspectives, lack of foundation of PLC
P5	Grade level, Problem solving, Leadership	Data focused, working together for "our" kids not just "mine," consistent teaching, common goal	GL: one common prep is given per week 45 mins; Three times a month teams are given an extra 45 mins per week. Twice a week is most effective, Leadership: bimonthly	Negativity of team mates, remembering that it's about kids
P6	Grade level, Leadership	Contributing, consistent teaching, planning	GL: Weekly to discuss informal data as well (exit ticket)	Finding time, being open: "there are some people that look at it like this is my classroom, my castle stay out"
P7	Grade level, leadership, PBT (Peralta Brain Trust)	Commitments, every voice is heard, common understanding and expectation, shared responsibility	GL: weekly if not more often to discuss decisions that are impacting students, Leadership: bi-monthly	Personalities, time and resources, philosophical views, being open to learning
P8	Departmental, Grade level	Structure, data focused, working together	GL: weekly to avoid lag in assessment analysis	Time, efficient use of time and leaders, learning to work together
P9	Grade level, leadership	Working together, problem solving	GL: weekly because so many things are happening in one week (45 efficient minutes)	Personalities, running out of time, large teams 6-8 people, inefficient use of time
P10	Grade level, staff, leadership	Data driven, working on common practice, follow through	GL: depends on how much time you're given (30-45 mins is not enough time) the most efficient way would be an 1.5-2.0 hours weekly	Different personalities, backgrounds and experiences, insecurities and being transparent and willing to be open
P11	Grade level, Problem Solving, Leadership	Data focused, common practice, effective instruction, sharing	GL: biweekly for one hour each which was a commitment by the team, quarterly planning during the day for 2 hours	Time (we have a lot of given time but it's not enough), teacher turnover, PLC understandings
P12	Grade level, MAP (music, art, PE)	Planning, consistency, data driven	Common Team (PE): weekly District Team (PE): bimonthly	Following through on commitments, not having like content and being expected to collaborate
P13	Grade level, leadership, Problem Solving	Data driven, common instruction, focused	GL: weekly or more often because we are constantly assessing learning, Leadership: Bimonthly	Time, maintaining uninterrupted time, large teams with lots of ideas
P14	Grade level, Leadership, Committee	Common instruction, shared responsibility	GL: Weekly or as frequently as possible to ensure consistency (two hours a week)	Team consistency, large teams of 6 or more, agreeing on commitments

Key: Identified Emerging Codes for RQ2

	3. How do you view collaborative teams within PLC's helping teachers focus on student achievement?	**6. What common goals are established for your collaborative team?**	**7. How does your collaborative team measure those?**
Yellow	Student achievement	Goal oriented	Progress monitoring
Green	Supportive	Norms	

RQ 2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?

Interview Question:	3. How do you view collaborative teams within PLC's helping teachers focus on student achievement?	6. What common goals are established for your collaborative team?	7. How does your collaborative team measure those?
P1	Going over our data after we have given a common assessment or unit assessment. What can we do during our bridge days to reteach, enrich or encourage. All assessing the same way	Academic goals like SMART goals, making sure that whatever percentage it is moving to proficient from partially proficient and some from minimally proficient to partially. We also have personal goals of putting in your data and being prepared for your team, that way when we meet we are there for what needs to get done.	Going back and reviewing our kids constantly, plugging in our data for every assessment. Looking at reassessments and progress monitoring and showing the kids exactly where they are
P3	With student achievement, being open and willing to talk about data together and share ideas about those things to help each other. During your PLC, everything should be about instruction, assessment or planning	To get kids making growth based on data. Our assessments have changed this year and that was a little unclear for us. But in years past, we always started with our current reality and then we would always look at those at least quarterly and say okay where are they making growth, and if they didn't we would change it to: this is our current reality and adjust.	Quarterly common assessments, it is something that we come back to every quarter and look at our percentage of students in each category. So again just coming back to it quarterly and looking at data and then if it is not working and our kids aren't getting it, what are we going to do

RQ 2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?			
	interventions. Not feeling alone in a situation because we've all been in that spot		
P4	I think once we get comfortable then it really helps us focus on student achievement. So I think it helps a lot once you get to the point where you can respond to each other's data and have real conversations.	SMART goals are established at the beginning of the year. So we set small goals to check and recheck to get us ready for AZ Merit.	We want a certain amount still at 80% meeting or exceeding then we follow what we wanted for Galileo and our team documents.
P5	We give common assessments. We all enter in our student data and then when we meet part of our meeting time is looking at the data. So if we see like one of the teachers go an 85% average, we ask how did you teach it or what strategies did you use	SMART goals are based off the student data and our CIP. Then we also created norms for both the leadership and grade level teams.	With our data and with our norms at the beginning of each meeting we say our norms and remind ourselves of what they are and then when we give a common assessment, we input the data and look at it. With some assessments with give like twice a quarter, but we do create quick checks and we talk about those.
P6	Common assessments We have quarterly assessments, 5-6 pretests that we give at the end of the quarter. So I do see that collaborative teams do help when we can sit down together and plan, everybody is teaching the same thing	We look at our standards, then we actually break them down by month. It's nice that we do break it down by quarter.. so it's not so overwhelming to us or our students.	With our common assessments. Every teacher gives the same thing.
P7	Their whole focus is on student achievement. What are you teaching, how are you teaching, what are you re-teaching and how are you	Leadership Team: Making sure that we are focused on student achievement, what are doing to close the gap. Common goals are making sure that we are committed to our vision and mission.	Progress monitoring with google docs so that we can use those during PLCs. Looking at AIMS web, SRA; measured based on student achievement.

RQ 2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?			
	enriching all of that goes directly back to student achievement.		
P8	I would say that developed teams have a better chance of doing that well. A big part has to do with trust, supporting you because a lot of what we do here we end up sharing kids.	Realistic goal setting based on data. What can we shoot for rather than saying "I'll do my best, but .." so looking at the kids before making the goal.	Galileo, benchmark every quarter, AIMS web. Once we gave a test we would look at it together and then see what was our biggest area of need or what can we do to fix it, what can we work on based on our data.
P9	In our teams we look at data quite a bit. We plan interventions based on skill. We plan 5 minute skill groups based on what kids need to meet the benchmark.	SMART goals, we want 100% of students to have letter names and sounds.	We use our phonics screener, we use AIMS web. We look at our goals and see what goals need more work
P10	True PLCs are very transparent with one another. Finding the people who are strong in the area's where you are weak and asking for that help.	Benchmark goals for AIMS web and Math	Student achievement, we look at our MAZE scores (AIMS web)
P11	Focused on data and looking at teachers that did very well, so identifying strengths and weaknesses. It helps teachers really grow because you're seeing that you need to work on this based on data. Taking ideas to help the kids.	Norms and then looking a grade level data to better support each goal.	Tracking everything.. Galileo and then at the end of the quarter we will see if what we changed is working
P12	I do think it's important that my assessments are the same. That way it's consistent	Fitness test	We measure the goals based on performance. Pre test is given at the beginning of the year and a post test at the end.

RQ 2: How are professional learning communities in one K-8 school district in the southwest region of the United States structured and implemented to show a primary focus on databased decisions to improve teaching and learning?			
P13	We're always looking at data, planning interventions	SMART goals for each quarter. We want 80% or higher on any assessment that we give.	We look at the progress of growth based on the benchmark data, we group the kids with common scores so we know how to instruct.
P14	We meet every week and talk about where the kids are. We used to use common assessments, but now we created skill assessment and we use the 95% group.	We use the 95% scale for every student. We change our goals two or three times once they've met the goal.	We compare where kids are in the beginning and we see how many kids we can move. We look at our RCBM and agree on a percentage of kids each of us will move.

	4. Why do you feel collaboration is an important part of PLCs and teacher development	**8. What best supports your professional growth?**	**10. What ways are collaborative teams within PLCs implemented to best support educators?**
Yellow	Sharing strategies	Collegial support and reflection	TIME
Green	Working together	Observing each other	Communicating expectations and leadership support
Lt Blue	Building trust to transform practice	Buy in	Grade level-weekly
Purple	Focus on student achievment		Smaller teams
Gray			Continued improvment

Key: Identified Emerging Codes for RQ3

RQ 3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?

Interview Question:	4. Why do you feel collaboration is an important part of PLCs and teacher development	8. What best supports your professional growth?	10. What ways are collaborative teams within PLCs implemented to best support educators?
P1	… an uncertainty of am I doing my best for my students (confirmation) Sharing strategies … we switch for reading, so they really are "our" kids	Feeling that my thoughts and ideas are respected Being open to suggestions Administration and leadership team listening to what we need Respect, mutual trust and valuing those commitments make a big difference	Giving time Building smaller teams so it's not just one decision making entity Making sure there is communication, transparency We trust them to make decisions they need to make and they trust us to make the decisions we need to make, and that's how you get buy in
P2	It's about breaking the walls down in classroom and understanding how to teach, reflect and empower Building trust to share with colleagues	Alignment with what all staff receive Putting things in perspective on what we should prioritize to move our students ahead	Communication of both why we chose to be educators and what should we look at as the final product Asking what is going to have an impact on student learning Setting commitments and guiding ourselves through continued improvement

RQ 3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?			
P3	It's constantly learning – new teachers and veteran teachers. Sharing purposeful ideas that are focused on the topic It helps develop skills, because you're hearing about it but it's supported with data	Constantly having conversations with teachers about instructional practices and things that are working or not working Circling back to things you know are good even if you have gotten out of routine	Creating buy in from staff Defining expectations and commitments (It's giving people time but then again explaining the purpose and why we do this, it's ultimately helping our kids)
P4	Working together and learning how to work together. Collaboration forces you to understand that not everyone is the same, but in turn you grow as a teacher which helps you teach and understand your students	The instructional specialist, always giving me something else to try (collaboration) She empowers me to try new things	Determine what is working and what isn't working, because change has to be purposeful Training and revisiting the purpose of a PLC with a clear focus
P5	Working together, sharing ideas and support you and your students	Working in a collaborative setting with my team and having supportive administration that care about what we need	Giving the time to collaborate Having leadership that are willing to listen to new ideas Establishing norms, guideline and expectation to focus on getting the work done
P6	Better support to teachers especially new teachers Ensuring you're on the same page Being open to new ideas	Alignment to expectations in the grade level Focused on what we are teaching	Communicate expectations Knowing that this is good for students and good for our school Being provided the time to look at data and plan
P7	Collaboration allows ideas and strategies to be share Support to one another ("hey you know my students are struggling with this and this is what I did for them" There's a focus on student achievement, what is best for all our students	Read and process new ideas, but also I need time to talk and share out and take in different points of view	Scheduling common time and block time so that they are teaching the same thing during the same time to ensure alignment happens during collaboration Making sure that common practices are occurring (collective commitments) Norms (expectations) Establishing little teams that contribute to the big team (collaborative decision making)
P8	Everyone has something to give Accountability of working together and being open with what you're doing	Observing other teachers with a specific focus Collaborating with each other on what works Relevant to what I need	Time Content specific Setting expectations Having team leads that are trained
P9	Sharing the workload	Instructional coaches that support and give ideas	Provided time during the school day

RQ 3: How do K-8 educators explain and describe how participation in professional learning communities influences their professional growth and instructional effectiveness in the southwest region of the United States?			
	Sharing ideas and supporting the success of our students	Being a continuous learner and seeking learning opportunities on your own	Planning opportunities that support data Setting goals (commitments, expectations)
P10	It supports doing the best for your students Identifying strengths and weaknesses in your team and taking that and growing from it	Looking at data to plan re-teaching Being reflective and ensuring that I'm setting expectations for student achievement Collaboration about what is working in someone's classroom	Setting expectations Providing time to meet Establishing norms, procedures (commitments)
P11	It helps with reflecting on practice Looking at results to support that practice	Looking at data and being given feedback Sharing data and collaborating on what is working Making sure your discussions are focused	Understanding what a PLC is (not a personal meeting but a professional meetings) Being ok with difficult conversations and knowing that it's part of the growing process (open mind set)
P12	Looking and reflecting on data Learning from other teachers about what is working and how to support student learning	Purposeful meetings that include planning for what I teach Collaborating with teachers that teach what I teach	Time provided to plan and collaborate Having common assessments that support the planning process Understanding the structure to have participation by all members
P13	I've learned so much from my coworkers Sharing ideas with all the dynamics of "We have those discussions that I think things come up that I would've never thought of on my own"	Observe master teachers Focused topics that apply to my instruction	Buy in on the philosophy of PLC Communicate the benefits, expectations Setting norms (what does it look like, how do we analyze data)
P14	Planning together to make sure we're all talking about the same thing Sharing ideas and strategies Reflecting on what is working and what isn't working	Asking questions to your team Working together to share the best strategies to support our kids Observing other teachers	Giving time to meet and setting mandatory meeting days Making sure that they are focused (data) Sharing kids and holding each other accountable

Appendix K

Questionnaire Part 2 Example of Coding Process

Key: Identified Emerging Codes for Items 38-41

	Yellow	Green	Lt. Blue	Purple
Item 38	Working together	Ongoing	Student success	
Item 39	Consistency if understanding is present	Sharing responsibility	Useful	
Item 40	Staff buy in	Data focused	Time	Collaboration
Itme 41	Ongoing training	Staff buy-in		Time

Results of Item 38

38. How would you change the working definition? What is your definition?	**Response:**
QP 1	I wouldn't change it.
QP 2	is an ongoing professional learning community
QP 3	working together as a team to be collectively accountable for student learning
QP 4	consistently changing professional learning community
QP 5	our teachers work together as a team to best meet the needs of our students
QP 6	I'm not sure what this question is asking...
QP 7	A team of teachers that works together on daily basis that is continually changing to better meant the needs of our students.
QP 8	I believe a PLC is a community of professionals working together to achieve a common goal. In our school our goal is to see every student succeed. We work together every day to achieve our goals.
QP 9	Not sure what this means....

38. How would you change the working definition? What is your definition?	**Response:**
QP 10	no change
QP 11	I'm new.
QP 12	too much to do, not enough time
QP 13	Professionally committed to ongoing improvement
QP 14	I believe we are on the way to becoming a fully functioning PLC. I would not necessarily change the definition as we are still on the journey to becoming a PLC.
QP 15	I think a PLC is a group of people that come together to work towards making sure that all students are successful.
QP 16	A PLC is a community of professionals who work together to achieve a common goal.
QP 17	I honestly wouldn't change it. My definition is the definition given. The only thing I might emphasize is the need for time to accomplish the working definition.
QP 18	teams working together, teachers having a say in what happens in the school, taking time to listen to new ideas
QP 19	We had a lot of changes in our leadership in recent years. We are working to reestablish what we had as a PLC before the change.
QP 20	Community of Professional Learners
QP 21	Working to rebuild a PLC that has been lost over time.
QP 22	We are a plc.
QP 23	I wouldn't
QP 24	I wouldn't change it.
QP 25	is an ongoing professional learning community
QP 26	working together as a team to be collectively accountable for student learning

Results of Item 39

39. How useful is the idea of a professional learning community for your school and pupils?	**Response:**
QP 1	It has had a profound impact.
QP 2	I think PLC is very useful because we keep our students in mind with everything we do
QP 3	Not as useful since not everyone knows the philosophy of PLC
QP 4	essential, less work with more hands/minds
QP 5	I think it is very useful and find it successful on my grade level because we have time to share ideas and discuss what is best for our students on a weekly basis.
QP 6	I think it is useful, but it is usually focused on elements besides first best instruction, which means are students do worse than if that time was devoted to refining how we present information and concepts to our students.
QP 7	Extremely useful. We have 2 days per week that is set aside to work alongside our grade level team.
QP 8	very useful
QP 9	It is useful as long as you have a team that is strong in their professional knowledge.
QP 10	It is extremely useful. I can't imagine teaching without a PLC. The knowledge I have gained from PLC meetings with my grade level team, my school teams, and teams from other schools is irreplaceable.
QP 11	It is very useful in that it allows for organized collaboration with a strong driven purpose.
QP 12	Very. A team can experience and explore more opportunities together than an individual does alone.
QP 13	It takes time.
QP 14	A PLC is very useful for the students at my school. Our students provide a challenging and varied range of what they bring to the table. It makes it so much easier when teachers work together to create lessons, but also to group students based on their needs for intervention. Trying to do all of this on my own would be overwhelming and daunting. Being able to share the workload and ideas makes it easier to address the needs of every student.
QP 15	Good

39. How useful is the idea of a professional learning community for your school and pupils?	**Response:**
QP 16	I think we try to be a good PLC school and we hear all the time that "you're already doing what a PLC is" but I don't really think the teachers understand all that is involved. Just by making it mandatory to meet during our preps does not make us a PLC. I'm convinced, especially in the K-2 sections of our school, the kids have no idea what it means to be a PLC.
QP 17	It is extremely useful because there is always, and should always be, room for improvement.
QP 18	Very
QP 19	Very useful and effective when there is consistency.
QP 20	It's useful to the school although sometimes
QP 21	I would not be half the teacher I am today if I did not work in a PLC. Because teachers are given time to communicate in a group about plans and strategies, I was able to learn best practices than I did from student teaching.
QP 22	I would say it is highly useful. It is data-driven and a community working towards a common goal. As a single member in a professional learning community I don't feel alone and as if all of the weight is on my shoulders. It gives a sense of security and support.
QP 23	I feel that a plc is very beneficial to a school and its students when implemented properly. When all voices are heard and time to meet and grow is respected.
QP 24	It is essential for the all-around success of our school.
QP 25	It does not seem to be useful. We are driven more by decisions made by individuals rather than community discussion. We talk about how we are implementing the ideas of others rather than if these ideas are actually working for students.
QP 26	When I was a part of a very cohesive PLC it was great. We were more of a community than coworkers.
QP 27	Very useful, the students become ours instead of mine!0
QP 28	very useful as it brings everyone on the same page

Results of Item 40

40. What do you see as the main facilitators to becoming a professional learning community and sustaining a professional learning community?	**Response:**
QP 1	Professional Development, Staff buy-in, Time given by admin
QP 2	we are actively a learning community that does very well compared to another school I was in
QP 3	continuing learning about PLC's and putting that into practice
QP 4	consistency in our curriculum so we can become experts on what to teach
QP 5	Working/planning as a team. Discussing student data, what is working what's not. How can we change things that aren't working so that they are best for the students.
QP 6	It needs to be focused on things teachers actually think our valuable to teaching their students and there needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else. It is frustrating to sit in a PLC meeting when you know you will then have to spend extra hours after school to prepare for giving your students first best instruction.
QP 7	Working together as a team, talking about student progress on a regular basis, and planning together as a team to better accommodate all our students.
QP 8	Having all members on board
QP 9	Team collaboration
QP 10	Retaining teachers so you don't have to start over each year.
QP 11	Team time. We must have dedicated time to meet with our PLC teams to ensure that we can analyze data and answer the 4 key questions.
QP 12	The main facilitators are a collective and positive teacher buy-in as well a constant yet changing meaningful purpose.as
QP 13	Dedicated time to plan, collaborate, share ideas/lessons, look at data
QP 14	Less students in classrooms, so have more time available to us.
QP 15	I think the biggest factor is "buy in." Everyone has to be part of the process in order for it to work effectively. In sustaining a PLC I think there should be ongoing training for new staff and even "refresher" courses for everyone.

40. What do you see as the main facilitators to becoming a professional learning community and sustaining a professional learning community?	**Response:**
QP 16	Good
QP 17	The whole staff needs to have the buy in that it really works and team leaders and admin need to work collectively to make sure everyone understands what it at stake and how to get the most out of a PLC.
QP 18	Effective collaboration, high expectations, vision, assessment, and commitment
QP 19	Building trust and supportive teams
QP 20	The main facilitators would be the Administrators but every member of the school is a stakeholder therefore collaboration is key to maintaining momentum toward our goals.
QP 21	I think that the teachers and the school community need to buy into the idea. For some people it is a shift in how they have always done things and it can be hard for some to collaborate with others. A strong team of people that want to collaborate and share makes it sustainable.
QP 22	The main facilitators are working norms and time to meet.
QP 23	The main facilitators would be time and resources. We are given an amount of time but I honestly feel that it's never enough in order to become a truly successful professional learning community. There is so much involved but not enough time for collaboration, searching for resources, and group learning.
QP 24	Collaboration, time for collaboration and less focus on the numbers and more focus on the wellbeing of students and teachers.
QP 25	Trust, honesty, collaboration
QP 26	Conversations that center on student learning and methods for sustaining and improving student learning.
QP 27	Building genuine relationships and having support from administration
QP 28	Teamwork, sharing ideas, and knowledge.

Results of Item 41

41. What do you see as a challenge to becoming a professional learning community and sustaining a professional learning community?	**Response:**
QP 1	Finding the time to do it and doing it with fidelity
QP 2	Nothing
QP 3	New teachers-might not have the training/experience of plc
QP 4	time to reestablish all those norms
QP 5	district changes from year to year
QP 6	Making sure everyone can agree and be on the same page the majority of the time.
QP 7	There needs to be time to do it without just adding it as one more thing for teachers to fit in along with everything else. It is frustrating to sit in a PLC meeting when you know you will then have to spend extra hours after school to prepare for giving your students first best instruction.
QP 8	People that are unwilling to adjust their old habits and create new ones that will work better for their co-workers and students.
QP 9	not all members value the time spent together for collaboration
QP 10	We focus too much on finding out where the students are at rather than focus on producing better lessons.
QP 11	High turnover and young staff
QP 12	The 'Hogs and Logs'. When one person takes over the entire over meeting and doesn't allow others to share can ruin a PLC. On the flip side to that, those that sit like a log and don't contribute at all. This type of negative attitude can really affect a team.
QP 13	Time!!!!
QP 14	The complete curriculum change we experienced this year had both negative and positive impacts. When teachers are overwhelmed with too many changes at once, they sometimes function alone instead of pulling together to work as a team. Gradually as we surface from so much change, we started collaborating and finding a way to work together again.
QP 15	Teachers are already overworked and stressed
QP 16	The different attitudes and personalities/beliefs of all people
QP 17	A big challenge is not everyone participating in the process. It slows down the progress and hampers the workload. A challenge to sustaining the PLC is not ensuring everyone is following the PLC process. Trainings and refresher courses could help with that.
QP 18	Some teachers are set in their ways and do not feel that a collaborative unit works best. Some teachers give it their all, and some just "show up" to work.

41. What do you see as a challenge to becoming a professional learning community and sustaining a professional learning community?	**Response:**
QP 19	Employee turnover
QP 20	Being open to new ideas and sharing the workload.
QP 21	Teacher morale is a challenge due to, changing curriculums or no curriculum, implementation of a given practice without follow through and reliability. Teachers are expected to do A LOT with limited resources and incentive which also affects teacher "buy in" on sustaining a PLC.
QP 22	Sometimes teacher are told to do specific activities during the time they have to meet and I think there needs to be more input from teachers on how the community should work and what expectations should be. For example, if teachers have very different students in their classrooms is it truly best for the students to expect all teachers to be doing the exact same thing.
QP 23	Some challenges could be that professionals could not agree on what is best for the students. Another challenge could be if a teacher does not come prepared to a meeting or follow what the group agreed upon.
QP 24	The main challenge would be time. We are given an amount of time but I honestly feel that it's never enough in order to become a truly successful professional learning community. There is so much involved but not enough time to accomplish it all.
QP 25	One person making decisions and teachers not having a voice in decisions that involve them and the students
QP 26	A lot of change. Changes in leadership and staffing.
QP 27	Changing initiatives and lack of support for building social capital
QP 28	Not having enough time or resources to develop true bonds and relationships
QP 29	Time is always a challenge!
QP 30	negative attitudes from fellow teachers