Professional Learning Communities in an Elementary School: Teacher Perceptions, Implementation, and Impacts

Michael Garvin
mg372984@wcupa.edu

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Professional Learning Communities in an Elementary School: Teacher Perceptions, Implementation, and Impacts

A Mixed Methods Study of Professional Learning Communities in an Elementary School

A Dissertation
Presented to the Faculty of the
College of Education & Social Work
West Chester University
West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for
the Degree of
Doctor of Education

By
Mr. Michael G. Garvin
May 2020

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Dedication

This dissertation is dedicated to my family. My wife, Stephanie, has provided amazing strength and encouragement during my three years enrolled in this doctoral program. Her devotion and sacrifice has allowed me to complete this project. I am so grateful for your persistent encouragement and seeing this through with me. Our wonderful children – Olivia and Sophia – you have both lifted my spirits when I needed it and continue to be a daily source of joy, energy, and happiness for both Stephanie and me. It has been a blessing to share this journey with you, and I look forward to spending more time with you now that it is finished. Lastly, to my Mom and Dad. My work ethic is a testament of growing up and observing all the sacrifices you made for your kids. Thank you.
Acknowledgements

Many remarkable people have contributed to the completion of this doctoral program. My advisor, Dr. David Backer, has been instrumental. The other members of my dissertation committee, Dr. David Bolton and Dr. Niki Harvey, have been the foundation of much of the work that has led to this study. Thank you Dr. Christopher Marchese, Dr. Michael Berardi and Mr. Jeff Detweiler for your support and encouragement throughout this project. Marcie Hull and Amy Jenkins, my dissertation committee cohort members, are truly special to me. Thank you to Meg Ament, my editor. Thank you, Anita Riccio and Cathy Bailey, for reading and providing feedback. I appreciate the support through this project. I could not have completed this work without their technical and moral support. The other members of our cohort – Marcie, Amy, Jen, Jane, Lisa M., Lisa D., Maria, and Jeff – are amazing people that I will always remember. I will certainly miss our Monday night classes that brought us together for two years. I am blessed to have spent this time with all of them. The wonderful faculty at West Chester University, including, Dr. Haworth, Dr. Bolton, Dr. Backer, Dr. Staulters, Dr. Schugar, and Dr. Flanigan. Cathy Bailey, for seeing something in a 4th grade student that the student did not see in himself. Thank you.

While all of these brilliant colleagues, friends, and family above played huge roles in this project, this project would not have been able to be completed if it weren’t for the outstanding teaching staff of Eugene Intermediate School! I am eternally grateful to be working at such a great school and district. Thank you.
Abstract

The Every Student Succeeds Act (2015), signed into law by President Obama, reauthorized the elementary and secondary education act for K-12 students across the nation. A main component of ESSA resides with the professional development of teachers and administrators. The definition of teacher professional development by Learning Forward (2017) involves a sustained professional learning community (PLC) which is collaborative, intensive, job-embedded, and data driven. The idea of PLCs as a means of teacher professional development is the current popular trend amongst K-12 education (DuFour, 2004). PLCs are creating opportunities for teachers to collaborate regarding many aspects of the education profession. In this report, I provide a critical analysis of PLCs (DuFour, 2004) and teachers’ perceptions of PLCs. Implementation and impacts of PLCs are analyzed from teacher survey responses and semi-structured interview responses. An overview of results will articulate findings within the six dimensions of PLCs, identified in PLCA-R survey and through semi-structured interviews. Findings from the PLCA-R survey, survey comments and semi structured interviews reveal dimensions that had a low mean score, Shared Personal Practice vs areas of strength within Supportive Conditions – Relationships dimension.

Keywords: Professional Learning Communities, Andragogy, Transformative Leadership, Constructivism, Distributive Leadership, Teacher Capacity
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Chapter One
Introduction

The words “professional development” in a school setting often lead educators down an immediate path of contemplation, “I wonder how many personal days I have left?” Spending the greater part of ten years as an elementary and secondary educator, I too, have participated in brutal, time wasting; professional development sessions that did not help me improve my instruction in the classroom. Perhaps that is why I wanted to move from the role of teacher to principal, to ensure teachers never have to experience meaningless professional development.

Cole & Victoria (2004) wrote an article titled Professional Development – A Great Way to Avoid Change, and this article’s purpose was to provoke educational leaders to expand the debate about what constitutes effective professional development. Cole’s (2004) identified ten contentions with professional development:

1. Much of what is termed professional development develops no one.
2. What we understand as professional development needs to be broadened.
3. Professional learning, rather than professional development, is a more helpful construct to drive teacher improvement.
4. The place for most authentic teacher learning is the school.
5. Teachers generally avoid using the most effective means for promoting professional learning within the school - classroom observation, feedback and lesson study.
6. School leaders need to take more responsibility for establishing a professional learning culture within the school.
7. Generally it is teams, not individuals, who change schools.
8. Individual professional learning plans should start with identifying the teacher’s change intentions.

9. Greater clarification of the support teachers actually need to implement changes is required.

10. Development plans need to be practical, action-focused and time-bound (p. 2).

This is why a new vision of professional learning needs to emerge systemically throughout the United States. “The Canadian province of Alberta has even decided to make PLCs the law and passed legislation to mandate them” (Stoll & Louis, 2008, p. 182). The works of Hargreaves (2012) and Fullan (2014), have been monumental in shifting the purpose of professional learning. Dufour & Fullan (2013) bring forth a set of questions for educators to focus on regarding student learning:

1) What is it that we want our students to learn? What knowledge, skills, and dispositions do we expect them to acquire as a result of this course, this grade level, and this unit of instruction?

2) How will we know if each student is learning each of the skills, concepts, and dispositions we have deemed most essential?

3) How will we respond when some of our students do not learn? What process will we put in place to ensure students receive additional time and support for learning in a way that is timely, precise, diagnostic, directive, and systematic?

4) How will we enrich and extend the learning for the students who are already proficient (p. 15)?

Although there are multitudes of definitions of PLCs, Shirley Hord “an internationally known pioneer in the field of school improvement” (Hipp & Huffman, 2010, p. 11) claims
the premise is rooted in the concept of “professionals learning together in a community” (Hipp & Huffman, 2010, p. ix). Hord (1997) furthers the definition of a PLC “as the staff learning together to direct efforts toward improved student learning” (p. 11). Hord, in writing the forward of, “Demystifying Professional Learning Communities: school leadership at its best,” by Hipp & Huffman (2010) surmises:

Quality teaching is increased or enhanced through continuous professional learning that targets the needs of the students. The most productive context for continuous learning of professionals is the professional learning community. Many schools believe they have established PLCs, but in reality, they have not (ix).

This quote establishes the importance of PLCs as a construct of continuous professional learning. This study will examine teacher perceptions of a PLC in year two of school wide implementation.

**Purpose of Study**

This mixed methods study will determine teachers’ perceptions of PLCs in an elementary school. Furthermore, this study will determine challenges teachers and educational leaders encounter when implementing professional learning communities and articulating the impacts PLCs have on student learning.

The study will use Hipp and Huffman’s *Demystifying Professional Learning Communities: School Leadership at its Best* (2010) diagnostic survey that “provides perceptions of the staff relating to shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions” (p. 31). Descriptive statistics will measure teachers’ perceptions of PLCs and semi-structured qualitative
interviews will further the study of teacher perceptions of PLCs, impacts, and guide implementation. The qualitative interview results will lead to a narrative inquiry design; enabling the researcher to share a story of the implementation and impacts of PLCs in an elementary school. Much of the qualitative research on PLCs neglect to share the journey of PLC implementation and their impacts of student and adult learning.

**Rationale for Study**

This study is important to the field of teacher professional learning, more specifically PLCs for several reasons. Studying teacher’s perceptions will be the foundation to the implementation process of PLC. This research will set a path forward in defining how to implement PLCs in an elementary school and implications for educators. The research study is necessary because it involves educational culture change, impacts teacher professional learning has on student learning and the evolving role of the principal. The elementary school being studied is in year one of PLC implementation and the administration has one lead principal and two assistant principals.

DuFour and Fullan (2013) cite the work of Lezotte (2011) whom stated, “We have seen numerous cases where the principal of an effective school moved on for one reason or another and replaced by someone that did not share the same passion, vision or values” (p. 5). This speaks to the vital role district administration plays in supporting a schools systemic PLC learning goals and outcomes.

Additionally, this study will delve into teacher collaboration and the conditions necessary for adult learning, andragogy (Knowles, 1973). The review of literature will connect educational learning and leadership theories to adult professional learning. These connections will serve as a
benchmark for future educational leaders to consider when implementing school change, particularly implementation of PLCs.

**Problem Statement**

Race to the Top (RTT), signed into law by president Obama provided funding by encouraging states and local school districts to develop teacher evaluation systems in an effort to support effective teaching. PLCs became the model for providing professional learning opportunities for teachers in a collaborative setting. One of the many norms of PLCs is for teachers to be willing to accept and provide pedagogical feedback. PLC research determines why some teachers are willing to provide and accept feedback, as it pertains to student learning and best practices. Research on how/if teacher’s implement new pedagogical learning with students will determine the success of the PLC model. Particularly with the evolving role of the principal as an instructional leader of the building. The need for systemic PLCs outlined in DuFour and Fullan’s (2013) *Cultures Built to Last Systemic PLCs at Work* discusses a MetLife survey that indicated that teacher job satisfaction is declining and are leaving the profession. “39 percent of teachers in 2012 were satisfied compared to 62 percent two years earlier” (p. 4). The need for careful study and evaluation of PLCs programs is more important than ever.

**Research Questions**

The following research questions guide this mixed methods study:

1) What are teachers’ perceptions of PLCs?

2) When it comes to PLCs, what challenges and benefits do teachers report?

3) What structures and conditions are most propitious for the implementation of PLCs

**Rationale for Methods**
A Standards Inventory Assessment (SIA) PLCA-R (Appendix A) will be the survey used when conducting quantitative research. “The Professional Learning Community Assessment – Revised now serves as an even more powerful formal diagnostic tool for identifying school-level practices that support intentional professional learning” (Hipp & Huffman, 2010, p. 31). This instrument is a 52-question survey separated into six dimensions:

1) Shared and Supportive Leadership
2) Shared Values and Vision
3) Collective Learning and Application
4) Shared Personal Practice
5) Supportive Conditions - Relationships
6) Supportive Conditions – Structures

The PLCA-R is a quantitative questionnaire that assesses educators’ perceptions about all stakeholders in a school setting that participate in PLCs. When looking to determine the sustainability of PLCs in an Intermediate School (grades 3-6) this tool will enable me (the researcher) to determine strengths and weaknesses of teacher professional learning.

Descriptive statistics will determine teacher’s perceptions of PLCs. The statistics will be itemized and reported out from the PLCA-R assessment survey.

Through the survey of teachers’ perceptions of PLCs and conducting teacher interviews; the dissertation aims to share a story of how PLCs influence various aspects of a teacher’s daily life will set a foundation for PLC implementation. This qualitative approach of narrative inquiry connects to my constructivist conceptual framework of teaching and learning. My positionality with this research, conducting research in my place of work, with individuals that I supervise
will need attention. The findings of this study will contribute to the field of research involving PLCs, particularly in the area of elementary teacher’s perceptions, implementation and impacts.

Qualitative research relies heavily on coding, in-depth interviews, case studies, focus groups, and lived experiences of people. Furthermore, “Qualitative research is a way of knowing that assumes that the researcher gathers, organizes, and interprets information with his or her eyes and ears as a filter” (Lichtman, 2013, p. 9). This qualitative research design will include narrative inquiry (Clandinin & Connelly, 2000) in which the researcher will study a group of people in their workplaces. Narrative research design describes the life of an individual through a collection of stories (Connelly & Clandinin, 1990). My research design will include more than one individual to study regarding their lived experiences of participating in PLCs. Narrative research is still a developing research methodology that has historical roots in anthropology, sociology, and sociolinguistics. Clandinin and Connelly (2000) define the qualitative research process through the lived experience of a story. This research study will investigate the effectiveness of teacher collaboration (PLCs) through semi-structured teacher interviews. Clandinin and Connelly (2000) state that narrative inquiry, “is more often intended to be the creation of a new sense of meaning and significance with respect to the research topic than it is to yield a set of knowledge claims that might incrementally add to the knowledge in the field” (Clandinin & Connelly, 2000, p. 42).

Clandinin and Connelly’s 1990 article, "Stories of Experience and Narrative Inquiry," tells us that “many social science applications of narrative, elaborated on the process of collecting narrative field notes, and discussed the writing and structure of a narrative study” (Clandinin & Connelly, 1990, p. 2). As quoted in Clandinin and Connelly (1990), Hogan (1988) says of relationships, “Empowering relationships involve feeling of connectedness that are
developed in situations of equality, caring and mutual purpose and intention (Clandinin & Connelly, 1990, p. 12). The researcher has to match their epistemology, conceptual frameworks, and theoretical frameworks with the research in order to make the work interconnected, and I aim to establish this kind of relations with my research participants. The next section will articulate the significance of the study, particularly in the area of PLCs in an elementary school and their impacts.

Significance of Study

With an educational landscape shifting to meet the needs of diverse learners, adult professional learning tasks principals with dynamic leadership opportunities. Fullan (2014) brings full circle the connection between adult learning curriculum and professional learning communities. Fullan (2014) states, “When teachers are working together to examine individual student progress, decide on curricular topics, and learn from each other; teacher professional capital will enable curricular capacity building amongst adult learners” (p. 63). Principals and teachers learning together is much more influential than principals networking with each other (Fullan, 2014, p. 64).

School districts’ local education agencies (LEAs) could foster this engagement and place emphasis on teaching principal’s transformative leadership practices, they will be able to transfer the “lead learner” (Fullan, 2014) mentality to teachers. Elementary educators have different scheduling demands than secondary educators. Typically, there are no study halls for elementary aged students and elementary principals have to get creative with the master schedule to find teacher collaboration time. This obstacle, coupled with transformational leadership and how to implement professional learning communities in an elementary school may provide an answer to a deficit in adult learning curriculums amongst schools.
Limitations

One potential limitation to this mixed study is that I am an assistant principal conducting research at my school. My position may compromise the data collection and analysis given my position of relative power. However, the completion of the survey and interview participation were voluntary in nature. The fieldwork of interviewing PLC participants, doing observations, gather documents/data, were utilized in Peppers (2015) study of teachers’ perceptions of sustaining and implementing PLCs in a suburban high school. Peppers asked open-ended questions such as:

1) How do professional learning communities influence retention and achievement of students, retention of teachers, and teachers’ views of leadership?

2) How do leadership practices influence the development and sustainability of PLCs when collaboration and empowerment is not entrenched in the learning environment? (Peppers, 2015)

Semi-structured open-ended interviews like the above Peppers investigated in 2015, will yield an appropriate data set when coding participant responses. Employing a narrative inquiry approach to the qualitative portion of this study (Clandinin & Connelly, 2000) contend, “The first challenge we experienced concerns the starting point for inquiry. Because narrative inquiry is a methodology for the study of experience, our starting point is the focus on an individual’s stories of experience” (Clandinin et al. 2000, p. 93). Conclusions and data from the collection and coding of respondents will enable me to identify teacher perceptions of professional learning communities. The research findings will provide me with a direction for further implementation of PLCs in an elementary school. The last potential limitation to this study is that the research
was conducted at one school. However, the research site is one of the largest elementary schools in the state.

**Definition of Terms**

*Andragogy*: An organized and sustained effort to assist adults to learn in a way that enhances their capacity to function as self-directed learners (Mezirow, 1981).

*Collaboration*: A process when members of a team “work interdependently to achieve common goals” (Eaker & Dufour 2009, p. 11).

*Collective Efficacy*: In the K-12 school setting collective efficacy refers to the perception’s teachers have of their colleagues’ ability to affect student outcomes in a positive way (Goddard, 2002; Goddard, Hoy, & Hoy, 2000).

*Constructivism*: Fundamentally, constructivism asserts that we learn through a continual process of building, interpreting, and modifying our own representations of reality based upon our experiences with reality (Jonassen, 1994).

*Perceptions*: must include a shared mission, well-defined direction, and mutual values steer the PLC goals through an ethical purpose that outlines why each day’s efforts are so important in the school (Hipp & Huffman, 2003).

*Professional Learning Community*: the professional staff learning together to direct efforts toward improved student learning (Hord, 1997).

*Transformational Leadership*: Leadership that focuses on problem finding, problem solving, and collaboration with stakeholders with the goal of improving organizational performance (Marks & Pinty, 2003)

**Summary**
Understanding teachers’ perceptions of professional learning provides a path forward for implementing PLCs in an elementary school. This study will assess teachers’ perceptions of PLCs through a survey and interviews. Using the PLCA-R survey by (Hipp and Huffman, 2010) findings will include data from shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions. Olivier, Hipp, and Huffman (2003), whose work was rooted in an extensive review of literature by Shirley Hord (1997), adapted these elements of PLCs. Further research of creating, implementing and sustaining PLCs in an intermediate elementary school is necessary and will add to evolving research involving teacher professional learning and the conditions school administrators need to set. The next section will be a review of the literature pertaining to PLCs and theoretical frameworks.
Chapter Two

Review of Literature

This literature review will focus on five areas: the definition of PLCs, historical roots, teachers’ perceptions of PLCs, the impacts of PLCs, and PLC implementation. It will include a thorough synthesis of the literature written on the problem to date and build a case for the necessity of the study. Finally, since this dissertation’s theoretical framework includes andragogy, transformational leadership, and constructivism the literature review will articulate how these theories are crucial to understanding the results of this study and presenting recommendations from those results.

Professional Learning Communities Defined

The definition of PLCs emerged from a variety of sources, “connected with notions of enquiry, reflection, and self-evaluating schools” (Stoll et al., 2006, p. 222). Stoll et al. (2006) noted the works of Stenhouse (1975), whom argued, “Teachers ought to be school and classroom researchers and play an active part in the curriculum development process” (Stenhouse, 1975, p. 223). PLCs are one-way teachers can play that active role Bolam et al. (2005) defined the PLC “the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing student learning” (Bolam et al., 2005, p. 145). This definition of a PLC conceptualized the importance of student learning as an essential component to a PLC. There are many definitions for what comprises the structure and functions of PLCs, current literature supports the following five PLC defined assumptions:

1. Shared mission, vision, values and goals which are focused on student learning;
2. A collaborative culture with a focus on learning;
3. Collective inquiry into best practice and current reality;
4. A commitment to continuous improvement;
5. A results orientation to improve practice and drive continuous improvement.

(DuFour & Fullan, 2013, p. 14)

Servage (2009) cites the work of DuFour and Eaker (1998), who claim that “the basic premise of PLCs is that teachers can and should be working together to plan lessons, develop assessments, study curriculum, and otherwise improve student learning” (Servage, 2009, p. 150). This focus on teachers learning together how best to teach is why DuFour, DuFour, Eaker, Many, and Mattos (2016) defines PLCs as follows:

An ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. PLCs operate under the assumption that the key to improved learning for students is continuous job-embedded learning for educators. (p. 10)

Campbell (2017) connected with Stoll’s (2006) review of literature on PLCs, which further proposed a structure for how adult professional learning should include “teams of professionals, including teachers, principals, teacher leaders, and administrators, to engage in collaborative inquiry” (Stoll, 2006, p. 6). A commonality within the literature regarding PLCs is therefore collaboration amongst administrators and teachers. PLC elements such as collective inquiry and reflective dialogue are essential elements when establishing group norms. Articulating the definition of PLCs are important when establishing a historical perspective of teacher collaboration, professional development and professional learning.
Hipp and Huffman (2010) extend the definition of PLCs by identifying Hord’s (1997) five dimensions of a PLC as follows:

1) Supportive and shared leadership: School administrators share power, authority, and decision making, while promoting and nurturing leadership.

2) Shared values and vision: The staff share visions that have an undeviating focus on student learning and support the norms of behavior that guide decision about teaching and learning.

3) Collective learning and application: The staff share information and work collaboratively to plan, solve problems, and improve learning opportunities.

4) Shared personal practice: Peers meet and observe one another to provide feedback on instructional practices, to assist in student learning, and to increase human capacity.

5) Supportive conditions: Relationships include respect, trust, norms of critical inquiry and improvement, and positive, caring relationships among the entire school community.

(p. 13)

The six dimensions of the PLC outlined above led to the creation of the Professional Learning Community Assessment – Revised (2003) survey that assesses strengths and weaknesses of school-based PLCs. Chapter Three will provide more in-depth analysis of the PLCA-R as a means to collect PLC data. The next section will outline the history of PLCs and their emergence in the educational sector.

**History of Professional Learning Communities**

The historical context of PLCs spans back only a few decades when Thompson, et al. (2004) described the concept of a learning organization in the 1980s and 1990s. “The term professional learning community actually emerged from organizational theory and human
relations literature” (Hipp & Huffman, 2010, p. 11). PLCs started in the business sector, before emerging in the field of education (Walker, 2002). Walker claims,

The roots of the concept of community of leaders run as deep as the roots of community of learners. Mary Follett's (1924) work in the human relations movement in business led to democratic ways of relating in the workplace, and to Burns’ (1978) transformational leadership. (p.2)

Similar knowledge-based social structures “span back to ancient Rome where corporations of metal workers, potters, masons, and other craftsmen had both a social aspect and a business function, such as training apprentices and spreading innovations” (Wegner et al., 2002, p. 5). Wegner et al. (2002) furthered the idea of community-based social structures by articulating some examples that are evident today. They point to regional community-based accomplishments and social structures: “Why else are the U.S. automakers all based in Detroit? What explains the high-tech fertility of Silicon Valley? And why can’t you buy a world-class flute outside of three small manufacturers based in Boston?” (Wegner et al., 2002, p. 5) Similar communities of practice have begun to emerge in the education sector with federal mandates that have forced schools to improve learning for students. Hipp and Huffman (2010) advanced this idea of learning community and applied the concept of community learning to the field of education with teachers emerging as leaders of inquiry and acting on their own learning to improve the learning of students. Hipp and Huffman’s work is rooted in Hord’s (1997) PLC framework, which includes the “five dimensions of a professional learning community” (Hord, 1997, p. 10). Shirley M. Hord’s 1997 landmark review of literature titled, “Professional Learning Communities: Communities of Continuous Inquiry and Improvement,” consolidated essential
aspects of a PLC. “The message of this review seems abundantly clear: Professional learning communities can increase staff capacity to serve students, but success depends on what the staff do in their collective efforts” (p. 59-60). Hipp, Huffman, Pankake, and Olivier (2008) made an adaption to Hord’s dimensions, which include the following six PLC dimensions:

1) Shared and supported leadership
2) Shared values and vision
3) Collective learning and application
4) Shared Personal Practice
5) Supportive conditions-relationships
6) Supportive conditions-structures (p. 13)

PA Nation at Risk was published in 1983 by the National Commission of Excellence (Hipp & Huffman, 2012) and was designed to improve education for students. This report included “bureaucratic top-down measures, which succeeded in alienating teachers and administrators, thus widening the gap between the decision-making policy makers and the real work in schools and classrooms” (Hipp & Huffman, 2012, p. 2). Connecting Hipp and Huffman’s (2012) description of the impacts federal educational mandates have on the culture of schools are the works of Lewis (1989), Restructuring America’s Schools. Lewis plainly stated, “If schools are, as some charge, dismal places to work and learn, it is because people have created them as such” (Lewis, 1989, p. 220). Poignantly stated by Lewis, educational settings for both students and teachers need attention. The disconnect between federal mandates and local school boards created gaps in funding and educational expectations. Tensions began to surface between the federal government, with congressional educational reforms, and local school leaders when others began to point out such dismal conditions (Lewis, 1989).
Peter Senge’s landmark book, *The Fifth Discipline* (1990), in response to the tensions between top-down federal educational mandates for student learning and the disconnect of sustaining a learning organization. Senge (1990) noted, “The struggle facing educators involves not only a clear vision for improvement and learning opportunities for educators and students, but also providing time for teachers and administrators to examine student data and to guide collaborative work decisions” (p. 206). Subsequent educational federal mandates, The National Education Goals (1990), Goals 2000: Educate America Act of 1994, No Child Left Behind of 2001 (NCLB), and Every Student Succeeds Act of 2015 (ESSA), influenced changes in schools, and most notably, includes the concept of PLCs (Hipp & Huffman, 2003). Hipp and Huffman (2003) claim, “The challenge for school leaders in this millennium is to guide their school communities from concept to capability – a capability that is self-sustaining and will institutionalize reform” (p.149). PLCs require leaders to collaborate with all stakeholders within a school community. The history of PLCs lends itself to the idea of a self-sustaining mode of professional development. PLCs were one way for leaders to guide their communities according to these reforms.

“Beginning in the 1980s and expanding rapidly throughout the 1990s, the concept of a learning organization was applied to the world of education, developing collaborative work cultures for teachers” (Thompson et al., 2004, p. 18). Hargreaves and Fink (2004) noted a longitudinal study that spanned the 1970 to 1990 period that suggested sustaining school change required “nourishing and taking care of people; sharing responsibility; activist engagement to secure outside support; and developing capacity that enables people to adapt to, prosper and learn from each other in their increasingly complex environment” (p. 247). The aforementioned
findings from Hargreaves and Fink (2004) systemically determine that value and effort need to be imbedded in teacher collaborative learning, an essential component of PLCs.

Adding to the historical perspective of PLCs is Peppers (2013) citing the works of Fullan (1991), “A redesign of the workplace, so that innovative and improvements were built into the daily activities of teachers (p. 353). Effective educational change needs to be embraced by an entire staff with the advancement of a school’s core values and norms. Hord and Sommers (2008) surmised,

PLCs were designed to focus on communities of professionals embracing and working collegially and collectively to improve student learning by engaging in continuous collective learning on their own as well as seeking and empowering others in a community of professionals. (p. 22)

Teacher collaboration and engaging in collective learning are themes that resonated when linking some of the historical aspects of the works of Fullan (1991) and Hord and Sommers (2008). The next section will discuss teachers perceptions of PLCs which is rooted in Peppers (2015) PLC perceptions research study of a large suburban high school.

**Teachers Perceptions of PLCs**

The Professional Learning Community Assessment-Revised (2010) is a survey that has been revised from its 2003 version (Olivier et al., 2003). This survey “assessment was created to assess everyday classroom and school-level practices in relation to PLC dimensions; specifically, teacher’s perceptions of PLCs” (Olivier et al., 2003, p. 20).

A study conducted by Peppers (2015) titled, “Teachers’ Perceptions and Implementation of Professional Learning Communities in a Large Suburban High School,” discovered that PLCs
have been effective in teachers’ professional learning. The research methodology was a qualitative narrative ethnography utilizing open-ended semi-structured interviews. Peppers’ (2015) teacher perception research cited Fullan’s work regarding institutional school change in which Fullan claims, “A redesign of the workplace, so that innovative improvements were built into the daily activity of teachers” (Fullan, 1991, p. 353). Peppers’ teacher perception research claims that the creation of PLCs yielded positive impacts on school improvement and further articulates the characteristics of the school leader. “In addition, the research has shown that when schools operate as PLCs, a context of change that is conducive to the organization of individuals, led by an effective transformational leader” (Peppers, 2015, p. 26). The importance of school leadership is defined throughout much of the literature relating to PLCs.

Teacher’s perceptions, according to Peppers (2015) research specifically found that school administrators should engage in “promoting a process, which would provide commitment, accountability, and actual shared leadership between teachers and administrators” (p. 29). Stollar, (2014) discusses the effectiveness of PLC, through the lens of teacher’s perceptions of professional learning and cites the idea that trust is the foundation of a PLC. Hipp and Huffman (2003) wrote about how teacher’s perceptions of a PLC need the following factors established and nurtured: “trust, respect and a sense of fellowship” (p.20). DuFour et. al (2008) connects to the works of Stollar (2014) and Hipp and Huffman (2003) stating that teacher perceptions must include a “shared mission, well-defined direction, and mutual values steer the PLC goals through an ethical purpose that outlines why each day’s efforts are so important in the school” (p.14). Teachers who feel valued and part of a curricular instructional decision-making team will be able to excel in an environment that encourages risk taking and collaborative practitioner reflection.
Principals who focus on leading learning and collaboration during PLCs will take learning initiatives forward (Fullan, 2014).

Connecting to Pepper’s work of teachers’ perceptions of PLC is the idea of teacher collective efficacy. In the K-12 school setting “collective efficacy refers to the perception’s teachers have of their colleagues’ ability to affect student outcomes in a positive way” (Goddard, 2002; Goddard et al., 2000). Bandura (1997) connects teacher perceptions to efficacy claiming, “the group’s shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments” (p. 477). The next section will further explain leadership’s role in the implementation of PLCs.

Leadership Role in PLCs

Historically, principals bear a resemblance to the middle management, a go between district office and students; which was extended in William Whyte’s (1950) classic, *The Organization Man, An Overseer of Buses, Boilers, and Books*. Harvey (2013) describes this shift within K-12 public education needs from building leaders, specifically principals. “Principals can no longer function simply as building managers, tasked with adhering to district rules, carrying out regulations and avoiding mistakes. They have to be (or become) leaders of learning who can develop a team delivering effective instruction” (Harvey, 2013, p. 6). Principals leading learning (Fullan 2014) means implementing authentic PLCs with a focus on developing deep learning of new teacher pedagogies. This characterization of the principal evolves the role of the principal as learning leader.

Fullan (2014) identifies seven main elements of system coherence for educational leaders to consider while implementing PLCs: (a) visions and goals, (b) resources, (c) exemplary pedagogy, (d) data, (e) digital citizenship, (f) proliferation of leadership, and (g) unbounded
learning. Fullan (2014) contends that principals need to allocate the appropriate time for teachers to collaborate, reflect, and implement new learning with students. There are tensions principals face when allocating time for professional learning for teachers. Exploring teacher contractual tensions vs. principal’s time allocation will provide a solution to the issue of “finding time” for professional learning. Educational leaders acknowledging the importance of relationship maintenance with stakeholders is an important aspect when considering implementing professional learning opportunities for adult learners.

Vygotsky (1978) involved the theory of social constructivism, which understanding how time is a critical factor when planning adult learning, administrators that articulate an intentional learning focus, while distributing leadership, will provide impactful professional learning. Elementary educators have different scheduling demands than secondary educators. Finding time to incorporate PLCs into the weekly or daily schedule may present a roadblock for administrators. Identifying these scheduling tensions and proposing a path forward may have a positive effect on a school community.

Dooner, et al. (2008) discussed a tension principal’s need to navigate within the PLC framework that impact implementation and sustainability. “The problem remains, however, that interpersonal tension often makes people uncomfortable and teachers are no exception to this general observation (Dooner et al., 2008, p. 565). Dooner et al. (2008) extends the argument by claiming that teachers can view these tensions as personal attacks, developing resentment towards the greater good of the group. Dooner et al. (2008) further extends, “strategies such as group problem-solving can help to prevent disagreements from being construed as personal attacks or political maneuvering, while strategies such as avoiding and contending tend to elicit affective discord” (p. 572).
Principals with an understanding of how to meet teachers’ social, emotional and academic needs will have success in educating adult learners. Westover (2009) describes the essential components of adult learning through the integration of components of the adult learning theory. These elements include, “motivation, reinforcement, retention, transference, and evaluation” (Westover, 2009, p. 436). DuFour and DuFour (2012) specifically addresses the role of the principal during the PLC process claiming, “Different researchers have argued that a principal must serve as an instructional leader, transformational leader, servant leader, strategic leader, learning leader, empowering leader, participatory leader, delegatory leader or moral leader” (p.1). It should be noted that transactional leader characteristics were not mentioned in DuFour’s description of effective leadership characteristics. A fundamental assumption that DuFour and DuFour (2012) bring forth is that the building principal is to:

(a) lead a collective effort to create a PLC that ensures high levels of learning for students through recursive processes that promote adult learning. (b) Principals play a vital role in creating conditions that lead to improved learning for both students and the adults in their schools. (p. 2)

The principal has been identified as a main facilitator of a learning community. Fullan (2014) describes countries that have a strong teaching profession such as Singapore, Finland and Canada. These countries did not achieve this status through, “using a crude method of reward and punishment. Instead they established a developmental approach to making teachers more effective: they developed leaders, such as principals” (Fullan, 2014, p.31).

Next, Hipp et al. (2008) pointed to the works of Supovitz and Christman (2003) whom conducted a study comparing initiatives in Cincinnati and Philadelphia. Their study investigated
communities of instructional practice and delved into specific aspects of successful school leadership characteristics. Supovitz and Christman reveal principal engagement during change initiatives citing the following determining factors which can lead to effective/ineffective principals:

(a) tools and training to systematically explore relationships between current practice and student learning,

(b) data that guides further investigation,

(c) processes for assessing and providing feedback on programs and student progress,

(d) a voice for instructional improvement as the community’s first priority, and

(e) logistical arrangements for team teaching and cross-visitation. (p. 193)

The above structures point to the importance of leadership’s involvement and support with school change initiatives. By leveraging educational leaders in this work, transparency and the expectations of creating high performing school leader’s to shifts in school cultures. Further research connecting leadership theories to elements of PLCs will provide insight to specific examples of PLCs.

Fullan, et al. (2006) discusses the changing role of the principal and the supports necessary to ensure a sustained learning environment. “Educational leadership and coordination are not the sole responsibility of school principals: they can and should be exercised at all levels of the organization (Fullan et al., 2006, p. 95). Lead teachers are the creation of learning teams and intra school support are all encompassing components to a PLC school leadership team. Furthering the conversation, Fullan et al. (2006) recommends that schools and state departments of education reexamine the role of the principal through reducing distractors and figuring out how to efficiently streamline managerial duties. “Presently the role is encumbered by excess
baggage and far too many demands and distractions from the main teaching and learning mission of the school” (Fullan et al., 2006, p. 96). Fullan, a prominent educational researcher has many publications relating to educational leadership, most notably, *The Principal Three Keys of Maximizing Impact* (2014). Fullan (2014) sets forth a plan for the changing role of the principalship. The three keys are as follows: (a) principal as lead learner, (b) the principal as a system player, and (c) the principal as change agent. Fullan’s work emerges as collaborative and entrenched in building capacity amongst teachers and principals.

**Implementation and Impacts of PLCs**

A comprehensive review of the literature conducted by (Vescio, et al., 2008) explored the impacts of PLCs. Guiding their investigation were the following questions:

1) In what ways does teaching practice change as a result of participation in a PLC? And, what aspects of the PLCs support these changes?

2) Does the literature support the assumption that student learning increases when teachers participate in a PLC? And, what aspects of the PLCs support increased student learning? (Vescio et al., 2008, p. 81)

School culture and increasing student achievement were two main topics in the aforementioned review of the literature regarding impacts of PLCs. Of the 11 research studies that Vescio et al. (2008) synthesized reports of increased student achievement and teacher efficacy were found. DuFour (2004) cautioned the overuse of the term PLC claiming that the term has been used so universally that it runs the risk of an ambiguous understanding of the term. As far as being able to demonstrate results, DuFour surmises that “PLCs must be able to articulate their outcomes in
terms of data that indicate changed teaching practices and improved student learning, something they have not yet established as common practice” (DuFour, 2004, p. 6).

Louis and Marks (1998) conducted a research study which encompassed 24 total schools. Specifically, the researchers “examined the connection between quality of classroom pedagogy and the existence of the core characteristics of a PLC (Louis & Marks, 1998, p. 83). Their finding concluded that there was a “36% of the variance in quality classroom pedagogy providing strong support of the impacts of a PLC” (p. 83).

A study conducted by Willis and Templeton (2017) titled Investigating the Establishment and Sustainability of Professional Learning Communities in Rural East Texas: The Principals’ Perspectives studied school principals in select schools. The qualitative study identifies factors that influence the sustainability of PLCs. Seven principals were interviewed during the study and common themes began to emerge, such as, a) teachers have to get along and buy in to what they are doing b) teachers need to trust principals c) communication has to be present. “Participant R emphasized that leading as a micromanager would not benefit PLCs; to effectively lead PLCs, the role of principals should be to set the mission, facilitate, and give teachers opportunities to work together toward that mission” (Willis & Templeton, 2017, p. 34). The term micromanager was identified as leadership style that has been presented throughout PLC literature as a barrier regarding authentic professional learning/development and teacher autonomy.

The juxtaposition between launching another program vs. implementing a process of continuous improvement DuFour and Fullan (2013) caution on the stark differences between the two. They summarize how they differ in three major ways:

1) Programs typically represent an appendage of the existing structure of a school.

2) Programs are viewed as a way to compensate for the deficiencies of educators.
3) Programs are often viewed as short-term solution to an immediate problem
(DuFour & Fullan, 2013, p. 28-29).

When PLCs are implemented correctly, they impact every aspect of the school. DuFour and Fullan (2013) cite the work of Hargreaves (2004) stance on implementation and impacts of a PLC stating, “an ethos that infuses every single aspect of a school’s operation. When a school becomes a professional learning community, everything in the school looks different than it did before (p. 48). DuFour and Fullan (2013) sum up their stance claiming that systemic change within an entire organization is essential when building PLCs into schools; school, district, state or province.

Fullan (1985) discussed three levels of innovation regarding systemic school change. Noting that each level takes time and influenced by factors both internal and external of the school organization.

- Initiation - the faculty and staff adopt an innovation by making the decision to proceed with the change.
- Implementation - the faculty and staff begin to operationalize the innovation into practice.
- Institutionalization—the innovation is recognized as an ongoing part of the system or the way things are done around here. (Hipp et al., 2008 p. 176)

Implementation begins when the teaching staff is prepared to move forward with the PLC process and leadership can set the conditions to facilitate the collaboration. Stoll et al. (2006) contends the term institutionalization does not “capture the element of continuous growth that is
necessary for change, rather they used the term sustainability, which more accurately represents the current literature and clarifies how change occurs” (Hipp et al. 2008, p. 176). Interestingly, the terminology evolves from institutionalization to sustainability when referring to elements of PLC implementation. The next section will link PLC research to the theoretical frameworks used during this study. Andragogy, transformative leadership, and constructivism are identified as important theories of a PLC.

**Theoretical Framework**

A theoretical framework is theory-driven thinking that relates to the researcher’s work throughout the dissertation process. Grant and Osanloo (2014) claim that the “theoretical framework is the blueprint for the entire dissertation inquiry” (p. 13). My research examines teachers’ perceptions of professional learning and the principal’s role in school-wide implementation of PLCs. The theoretical frameworks appropriate for understanding PLCs are transformative learning and leadership theory, adult learning theory, and constructivism learning/instructional theory. Leadership theories that are evident in the PLC research are transformative leadership, transactional leadership, and adult learning theory. With the transformational leadership theory, much value is placed in relationship building and the connections formed between principals and teachers. Marks and Printy (2003) cite Hallinger’s (1992) work claiming that “transformational leadership focuses on problem finding, problem solving, and collaboration with stakeholders with the goal of improving organizational performance” (Marks & Printy, 2003, p. 372).

Currently, my research connects to the works of DuFour and Eaker’s (1998) understanding on how transformative leadership theory can positively influence an elementary school’s professional learning. DuFour et al. (2016) extended PLC terminology claiming, “a
cardinal rule of decision making in a professional learning community is that prior to making a
decision, people must first build a shared knowledge, that is, they must learn together” (p. 28).
PLCs presume a certain theory of learning best explained through constructivism, as opposed to
behaviorism, for instance. The next section will identify the learning theories constructivism and
transformational learning.

**Constructivism and Transformative Learning Theory**

Constructivism is a learning theory that states knowledge is constructed by a person, not
just transmitted to the person via lecture or through a textbook. Hoover (1996) highlighted two
ideas regarding the knowledge construction process: “(a) prior knowledge always influences the
formation of new knowledge, and (b) learning is an active process” (p. 17). Grabinger and
constructivism asserts that we learn through a continual process of building, interpreting, and
modifying our own representations of reality based upon our experiences with reality” (Jonassen,
1994, p. 12). Extending the terminology of constructivism is the idea of collaboration and
teamwork presented by Bednar, Cunningham, Duffy, and Perry (1991) who contend,

> A major characteristic of constructivism is the importance of collaboration and social
> negotiation of meaning. Learning happens within a social context. Conceptual growth
comes from sharing our perspectives and testing our ideas with others, modifying our
internal representations in response to that process of negotiation. (p. 88)

Robinson and Friday (2013) cite the works of Merriam, et al. (2007) whom compared the
constructivist theory of learning with elements of transformational learning by identifying how
learning is established. “Transformative learning is manifested in the constructivist orientation to
learning, in which meaning is made through learning, reflection, and dialogue” (Merriam et al., 2007, p.133). Mezirow (2000) defined transformative learning as "the process by which we transform our taken-for-granted frames of reference to make them more inclusive, discriminating, open, emotionally capable of change, and reflective" (p. 8). In comparing Merriam et al. (2007) to Mezirow (2000), their terminology of transformative learning both includes “reflection” as a major component. Bednar et al. (1991) stated that constructivism “comes from sharing our perspectives” (p. 90) which connects with transformational learning through reflective thinking. While constructivism is generally applied to children’s learning, PLCs are an adult learning experience so we must think about adult learning in particular when examining them. The next section of the theoretical framework will describe the terminology of adult learning theory and andragogy.

**Adult Learning Theory**

Malcolm Knowles, “the father of adult learning”, coined the term “andragogy” which parallels pedagogy” (Saunders, 1991, p. 42). Mezirow (1981) defined “andragogy as an organized and sustained effort to assist adults to learn in a way that enhances their capacity to function as self-directed learners” (p. 46). Mezirow (1981) and Knowles (1984) agreed with the concept that the learning progression of adults is significantly different from adolescents. The principal is a critical component when organizing professional learning opportunities for teachers and the learning has to be relevant to each teacher’s job. Zepeda (1999) stated, “Adult learners tend to feel uncommitted to any decision or activity when they feel the event is being imposed on them without their input in the learning process” (p. 26). Some of the underpinnings of adult learning theory, andragogy (Knowles, 1989) transcends many aspects of student learning.
Knowles (1989) claimed that education for adolescents and cited the following andragogy conditions:

1) The learners feel a need to learn.
2) The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences.
3) The learners perceive the goals of a learner’s experience as their goals.
4) The learners accept a share of the responsibility for planning and operationalizing a learning experience and therefore have a feeling of commitment toward it.
5) The learners participate actively in the learning process.
6) The learning process is relevant to and makes use of the experiences of the learner.
7) The learners have a sense of progress toward their goals. (p. 85-87)

Knowles’ (1989) adult learning theory connects with elements of transformative leadership and is in conflict with transactional leadership. In connecting Knowles’ (1989) research with andragogy are the works of Katzenmeyer & Moller (2009) which incorporates a practitioner viewpoint of adult learning and teacher leadership. “The relationship between the principal and teacher leader is crucial for the teacher leader. If the principal values teacher leadership and is skilled in supporting teacher leadership, then the way is cleared to do meaningful work” (p. 128). Teachers assuming leadership positions amongst their peers, led by building principals, fosters an environment of what Knowles articulates as responsibility and commitment towards a common goal.
Extending the argument of andragogy and bringing in the perspective of transformative learning theories are the works of Mezirow (1997). Mezirow (1997) links the sociopolitical conditions that adult learners have set in place that either hinder or facilitate adult learning. Connecting the works of Knowles (1984) and Mezirow (1997) can inform the researcher of conditions necessary for adult learning. One distinctive difference between Mezirow and Knowles’ work is Mezirow’s stance that adult learning is more of a self-directed, autonomous event (1981). Merriam (2001) points to the work of Davenport and Davenport (1985) to further the discussion of the validity of adult learning theory. “Andragogy has been classified as a theory of adult education, theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of assumptions (Davenport & Davenport, 1985, p. 157).”

Building principals are “accountable for developing their staffs into high-performing PLCs” (DuFour et al., 2016, p. 238). The principal leadership in effective school districts are supported through “superintendents helping principals develop a deeper understanding of the PLC process by providing them with training, sending them to exemplar schools and leading them in reading books and articles on the process” (DuFour et al., 2016, p. 238). Fullan’s research delves into the role of the principal and the tensions between leadership styles, such as, instructional leader or lead learner (Fullan, 2014). Fullan (2010) couples his stance of the leadership roles necessary for professional learning through building teacher capacity by identifying the enabling conditions, which leaders must cultivate, including

- a plan for achieving the vision;
- ways of measuring where things are now, learning from the work;
- professional learning that builds pedagogical capacity and embeds the new concepts;
• ubiquitous technology integrated with the completely new framework; and
• whole system framework (p. 51).

Fullan (2014) connects adult learning and professional learning communities. “When teachers are working together to examine individual student progress, decide on curricular topics, and learn from each other; teacher professional capital will enable curricular capacity building amongst adult learners” (Fullan, 2014, p. 150). Fullan and Hargreaves (2012) define teacher professional capital as, “the redirection of attention to the policy directions that emphasize developing individual and group actions that support accountability within the profession as well as functioning to provide transparency to the public” (p. 3). Connecting to Fullan’s (2014) work of professional learning and building teacher capacity, Stoll (2006) is claiming, “Principals need to work with teachers in joint enquiry and provide opportunities for teachers to take on leadership roles related to bringing about changes in teaching and learning” (p. 237). According to the current literature, a trend in distributive leadership and building teacher capacity are dynamic components of PLCs. Distributive leadership, also referred as delegatory (DuFour, 2016) leadership is the result “of reflecting the cognizance on organizational management regarding the view that leadership roles and positions should be shared” (Göksoy, 2015, p. 110). The supporting conditions concerning adult learning theory are elements, which include fostering teacher professional capital and distributive leadership.

**Transactional Leadership Theory vs. Transformational Leadership**

Educational leadership, in this case, means a principal leading learning and/or administrator teaching teachers. To understand transformational leadership more clearly, we can contrast it with transactional leadership. Monga (2015) stated, “the transactional theory focuses
on the role of supervision, organization and group performance and the exchanges that take place between leaders and followers. This approach confines leadership on a system of rewards and punishments” (p. 5). This theory of leadership creates an atmosphere of fear and distrust. Lamb (2013) agrees with Monga’s definition of transactional leadership theory, stating, “The notion that a leader’s job is to create structures that make it abundantly clear what is expected of followers and the consequences (rewards and punishments) associated with meeting or not meeting organizational expectations” (Lamb, 2013, p. 5). These types of structures, rewards and punishments, are visible in public schools throughout the commonwealth due to the pressures school districts, administrators, and teachers face with school performance profile scores and teachers’ PVAAS (Pennsylvania Value-Added Assessment System) data, which helps determine their 82-1 teacher evaluations. There is tension between being a transformational leader and placating to the needs of the state (transactional). Relationship building and shared leadership philosophies are not valued with the transactional leadership theory. Principals and administrators who believe in transformative leadership will find this initial step purposeful in gathering input from the collective group. Transformative leadership tenants are rooted in collaboration and distributive leadership. Transactional leaders, in direct conflict with transformative leadership, Bass (1990) stated, include “organizations whose leaders are transactional are less effective than those whose leaders are transformational particularly if much of the transactional leadership is passive management-by-exception” (p. 22-23).

With transformational leadership theory, value is placed in building relationships and the connections formed between leaders and followers. Charry (2012) advances the notion of transformative leadership by claiming,
Transformational leaders motivate and inspire people by helping group members see the importance and higher purpose of the task. These leaders are focused on the performance of group members, but also on each person to fulfilling his or her potential. Leaders of this style often exhibit high degree of ethical and moral standards (p. 2).

Charry furthers the definition of transformational leadership theory by contending, “Charismatic leaders inspire eagerness in their teams and are energetic in motivating employees to move forward. The ensuing excitement and commitment from teams is an enormous asset to productivity and goal achievement” (Charry, 2012, p. 5). Charry’s concept of transformational leadership theory contrasts with Lamb’s (2013) transactional leadership theory.

Hallinger (2003) cites transformational leadership as an essential component to the creation and sustainability of PLCs. “Transformational leaders create a climate in which teachers engage in continuous learning and in which they routinely share their learning with others” (Hallinger, 2003, p. 329). The top-down leadership with limited collaboration conflicts with a transformational leader. The next section will summarize the main components of this review of literature.

Summary

PLCs are defined as a continual process of enquiry, reflection, and teacher collaboration. Fullan (2014) articulated the five assumptions of PLCs and identified the seven elements of system coherence for leaders. Historical components of PLCs brought to light how top-down federal educational mandates placed tension on school leaders to implement school change (A
Nation at Risk, 1983). Lastly, the role of the principal was articulated through the discussion pertaining to leadership style, supporting conditions, and fundamental roles (Fullan, 2014). Principals, who remain transparent during the implementation process, noting teacher’s perceptions of PLCs, will lead to a professional learning framework where determining impacts will be a collaborative effort. The theoretical frameworks discussed were the transformational learning theory and the constructivist learning theory. In comparing those two learning theories the idea of reflection, both group and individual, were evident. Fullan (2014) and Knowles’ (1984) work connects through adult learning theory, building teacher capacity, and distributive leadership through professional learning. Fullan (2016) articulated elements of capacity building and enabling conditions for adult learning, which connect with Knowles’ (1984) seven conditions for adult learning. Next, Charry’s (2012) transformational leadership definition contrasted to Lamb’s (2013) transactional leadership definition, were identified as opposing leadership styles. Thus, when succinctly fitting these theories into a framework, elements of constructivism, including reflection and collaboration, are evident. Likewise, with andragogy and transformative learning theories in which building teacher capacity, adult learning enabling conditions, and distributive leadership are components joining these theories together.
Chapter Three

Methodology

Overview

The purpose of this study was to explore teachers’ perceptions of PLCs in an elementary school and to investigate the implementation and impacts of this professional learning structure. This mixed methods research study, which incorporated a survey and semi-structured interviews, sought to answer three research questions:

1) What are teachers’ perceptions of PLCs?

2) When it comes to PLCs, what challenges and benefits do teachers report?

3) What structures and conditions are most propitious for the implementation of PLCs?

I believe that the results of this study will add to current literature about PLCs and will be beneficial for educational leaders, school board members, and teachers who are involved collaborative school settings. The school site being studied was Eugene Intermediate School, which consists of elementary grades 3-6. This school had one lead principal and two assistant principals. EIS also had a teacher leader group, in which two grade level leader representatives helped support the school’s leadership agenda(s).

The first question that was investigated was answered through the distribution of a Professional Learning Assessment – R (PLCA-R) questionnaire. The Standards Assessment Instrument (SAI) PLCA-R (Appendix A) was the survey used when conducting quantitative research. Participants completed a 52-question online survey, which consisted of seven categories, which Hipp and Huffman (2010) identified as main components of PLCs:

1) Shared and Supportive Leadership

2) Shared Values and Vision
3) Collective Learning and Application

4) Shared Personal Practice

5) Supportive Conditions - Relationships

6) Supportive Conditions – Structures (p. 13)

The survey was the PLCA-R forced choice Likert-scale questionnaire that assessed educators’ perceptions about all stakeholders in a school setting that participated in PLCs. When looking to determine teachers’ perceptions of PLCs in an elementary school (grades 3-6), this tool enabled the researcher to determine strengths and weaknesses of teacher professional learning. Participants were invited to participate in open-ended semi-structured qualitative interviews at the research site. The survey was distributed to all teachers at Eugene Intermediate School electronically and the data were stored online through the PLC Associates individual user account.

The qualitative portion of this mixed methods study sought to answer the next two research questions: When it comes to PLCs, what challenges and benefits do teachers perceive? What structures and conditions are most propitious for the implementation of PLCs? Through coding participant responses, determining the impacts and implementation of PLCs with narrative inquiry will add to rather dry research of PLCs. The research findings will provide me with a direction for further implementation of PLCs in an intermediate school.

Setting

The teachers surveyed and interviewed for this research study were set within a predominantly white suburban elementary school serving students in grade 3-6. This suburban school district outside Philadelphia served approximately 5,000 students from five townships and two boroughs. During the 2019-2020 school year, the student demographics were as follows:
• 69% White
• 24% Hispanic
• 3% Multi-Race
• 2% Asian
• 1% Black
• 0.80% American Indian
• 0.20% Hawaiian

The school districts faculty profile included:

• 332 Teachers
• 31 Counselors, Psychologist, and Nurses

Participants

The participants in this study were teachers that worked at the grade 3-6 elementary building. All teachers in grades 3-6 were invited to participate in the study. Of the 85 teachers who worked at this school, 63 teachers completed the PLCA-R. Five teachers volunteered to participate in the semi-structured open-ended interview component of the research study. Teachers in this study were employed by the school district and were certified to teach various subject areas such as English language arts (ELA), mathematics, social studies, science, special education, English language learners (ELL’s), music, arts, physical education, computers and guidance.
Procedures

Consideration of research ethics and participant confidentiality throughout the research process are essential components of research. Through the informed consent process, participants agreed to participate in the survey and agreed to be audio recorded during the semi-structured interviews for transcribing purposes. With informed consent, it is the “researcher’s responsibility is to make sure that participants are informed, to the extent possible, about the nature of your study” (Lichtman, 2013, p. 54). The informed consent was electronically marked when participants were sent the PLCA-R survey. Data results from the survey are stored electronically through the survey software’s internal database, which is password protected. Only the researcher has access to the 63 participant responses. Descriptive statistics will identify teachers’ perceptions of PLCs, and responses are reported individually and collectively through cohort respondent analysis.

The qualitative portion of this study used a semi-structured open-ended interview and a narrative inquiry methodology that constructed a story challenges and benefits of PLCs. Next, the interviews articulated necessary structures and conditions that were most propitious for the implementation of PLCs.

Instrumentation


The measure has been administered to professional staff in numerous school districts at varying grade levels throughout the United States. This assessment has assisted educators
and researchers in determining the strength of practices in their own schools within each dimension. (Hipp & Huffman, 2010, p. 30)

The PLCA-R instrument helps align teacher perceptions of PLC development: “initiating, implementing, and sustaining” (Hipp & Huffman, 2010, p. 30) and for internal consistency the creators cite the widespread use of the instrument provided an opportunity to review the dimensions. The PLCA-R consisted of 52 questions that assessed teacher perceptions of a PLC, specifically perceptions about the school principal, staff, and stakeholders of a school. Hord (1997) as cited in (Hipp and Huffman 2010) provided a comprehensive audit of how PLCs operated and identified common practices that have emerged from the literature:

- “Shared leadership
- Continuous inquiry and learning
- Shared practice
- Creation of collaborative structures and relationships, and, most importantly,
- An undeviating focus on student learning as the ultimate desired outcome” (p. 13)

A result from Hord’s 1997 research led to the creation of the PLCA-R assessment, which has identified teacher perceptions of the PLC. The PLCA-R assessment administration answers the three main research questions of this study:

1) What are teacher’s perceptions of PLCs?
2) What When it comes to PLCs, what challenges and benefits do teachers report?
3) What structures and conditions are most propitious for the implementation of PLCs
The survey instrument has seven categories that identify teacher perceptions of PLCs. The next section will articulate teacher perceptions of PLCs as identified in Hipp and Huffman’s (2010) PLCA-R assessment:

Statements 1-11 are “Shared and Supportive Leadership,” which pinpoint the following perceptions of PLCs:

- “Nurturing leadership among staff.
- Shared power, authority, and responsibility.
- Broad-based decision making that reflects commitment and accountability.
- Sharing information” (p.24).

Statements 12-20 identify perceptions of PLC through “Shared Vision and Values” which claim:

- “Espoused values and norms.
- Focus on student learning.
- High expectations.
- Shared vision guides teaching and learning” (p. 25).

Statements 21-30 identify “Collective Learning and Applications,” citing:

- “Sharing information.
- Seeking new knowledge, skills, and strategies.
- Working collaboratively to plan, solve problems, and improve learning opportunities” (p. 25).

Statements 31-37 identify perceptions of PLCs through “Shared Personal Practice” citing:

- “Peer observations to offer knowledge, skills, and encouragement.
- Feedback to improve instructional practices.
- Sharing outcomes of instructional practices.
• Coaching and mentoring” (p. 25).

Statements 38 – 42 list items that pertain to “Supportive Conditions - Relationships:”

• “Caring relationships.
• Trust and respect.
• Recognition and celebration.
• Risk-taking.
• Unified effort to embed change” (p. 25).

Statements 43-46 articulate elements pertaining to “Supportive Conditions – Structures:”

• “Resources (time, money, materials, people).
• Facilities.
• Communication systems” (p. 25).

Lastly, statements 47-52 are categorized as “Statements” which identify items such as school cleanliness, resources for staff, communication systems that promote a flow of information, and the organization of school data. All of these 52 statements are identifiers of teacher perceptions of PLCs. The next section will identify the validity and reliability of the PLCA-R tool.

Validity and Reliability

According to Hipp and Huffman (2010):

The most recent analyses of this diagnostic tool has confirmed internal consistency resulting in the following Cronbach Alpha reliability coefficients for factored subscales (n=1209): Shared and Supportive Leadership (.94); Shared Values and Vision (.92); Collective Learning and Application (.91); Shared Personal Practice (.87); Supportive Conditions-Relationships (.82); Supportive Conditions-Structures (.88); and a one-factor solution (.97). This assessment tool has gone through construct validity (Expert Study...
and factor analysis), and has yielded satisfactory internal consistency for reliability (p.30).

PLCA-R analysis will encompass descriptive statistics, identifying strengths and weaknesses of the dimensions identified in the survey. The data analyzed at the individual respondent level or the lens of a cohort will be synthesized in Chapter Four. The next section will discuss the qualitative portion of the study, which will identify researcher reflexivity through a process of self-examination.

Survey Questions

The research questions used in the qualitative portion of this study are:

1) When it comes to PLCs, what challenges and benefits do you perceive?

2) What structures and conditions are most propitious for the implementation of PLCs?

To find answers to these research questions the researcher will directly ask the introductory questions above as well questions posed below. The questions and follow-up questions will provide input on the impacts of PLCs, structures, benefits, and challenges of elementary school PLCs. The next section will list the interview questions and I will employ a semi-structured open-ended interview process that will include follow up questions:

3) Describe your experience as a member of a PLC.

Follow up - In what ways have your opinions about PLCs changed over time?

Rationale: Question 3 and its follow-up question will enable the researcher to understand a teacher’s experience as a member of a PLC. I will be able to articulate teachers’ experiences as a member of a PLC and identify the evolution of a PLC over time.

4) What did you think of teacher collaboration prior to the implementation of PLCs?
Follow up - Are there ways teachers we have done PLCs better than the current model?

Rationale: Question 4 and the follow-up question will explore how the teacher feels about teacher collaboration prior to the schools’ implementation of PLCs. These questions will provide input regarding teacher collaboration and how the teacher feels during teacher collaboration.

5) What works for you as a member of a PLC?

Follow up – What does not work for you as a member of a PLC?

Rationale: These questions will articulate how teachers feel about what is effective and ineffective regarding PLCs. This question will guide the conversation to question 6 naming potential obstacles of being a member of a PLC.

6) What obstacles are present when collaborating with teachers or administrators?

Follow up – How do you think collaboration amongst teachers and administrators could improve PLCs?

Rationale: These questions will provide insight into the challenges and benefits of teacher collaboration. These questions will also provide an understanding of potential obstacles PLCs face amongst teachers and administrators.

7) Describe teacher preparedness of facilitating and leading a PLC. How do you think teachers can be more prepared to lead PLC work?

Follow up – Why do you think some teachers become teacher leaders of their PLC and others do not?

Rationale: These questions will explore teacher leader participation in a PLC. Next, it will identify characteristics within teacher leaders through exploring structures within a PLC for teacher feedback and overall teacher preparedness in leading PLCs.

8) How are grade level PLCs held responsible for PLC work?
This question will address structures and conditions that are propitious for PLC implementation and impacts of PLCs.

9) How do you feel PLCs impact classroom instruction?

Follow up - How do you think elementary schools can improve PLCs?

Overall, the aforementioned questions will provide data to answer my original research questions. The next section will articulate limitations within the research.

**Limitations**

A potential limitation to this research study is that I am an assistant principal conducting research in my school of employment. My position may have compromised the data collection and analysis given my position of relative power. However, the completion of the survey and interview participation were voluntary in nature. One duty as an assistant principal at the research site is an overseer of curriculum, instruction, and assessment. My role has me directly working with teachers in the capacity of leading and facilitating PLC work by training teachers to become teacher leaders of their PLCs. I am close to the work that is being researched in terms of direct job responsibilities; however, my questions were crafted in a way that got to the root of how teachers felt about PLCs and was not supervisory in any fashion. Next, the interviews were conducted in the school professional learning classroom in lieu of my office. This setting was a neutral location that was not in an evaluative space. As the lead researcher, I examined the works of Licthman (2013) regarding reflexivity and self-examination.

Although there are many definitions of reflexivity, when regarding qualitative research as cited in Licthman, (2013) Russel and Kelly (2002) asserted, “Reflexivity is a process of self-examination primarily informed by the thoughts and actions of the researcher” (p. 164).

Reflecting upon one’s research methodologies and practices ties together ethics, self-awareness,
and growth. Licthman (2013) expanded the definition of reflexivity, “It concerns itself with the impact of the researcher on the system and the system on the researcher” (Licthman, 2013, p. 165). Connecting my personal research views and professional responsibilities as an administrator, while conducting research in my work environment, links the system and researcher. Teachers value teacher-to-teacher collaboration, namely professional learning communities. However, teachers having the ability to articulate the impacts PLCs have on student learning and personal professional development with evidence will be an interesting portion of my research. I point to specific examples that demonstrate the effectiveness, or lack of, as it relates to the PLC framework. This is accomplished through the collection of survey data and data from semi-structured open-ended interviews.

Enosh and Ben-Ari (2016) discussed the phenomenon of reflexivity from the perspective of the participants and the researcher. Enosh and Ben-Ari’s (2016) conceptual framework and epistemology was rooted in constructivism and knowledge construction. The authors contended, “researchers’ reflexivity may be characterized by two processes, one of discovery and one of construction” (Enosh & Ben Ari, 2016, p. 579). Through the research process, the researcher not only learns from its research participants, the researcher learns about himself or herself. Next, the participant’s reflexivity was defined as “involving a constant movement in and out of one’s experience, which thus creates a liminal space vis-à-vis the participant’s perception of such experiences” (Enosh & Ben Ari, 2016, p. 580).

Linking the reflexivity of the researcher, research participants, and research methodology helps identify the researcher’s epistemology. The connectedness of these components will establish a clear framework for educational research. The next section will summarize the research selected research methodology.
Summary

Identifying teachers’ perceptions of professional learning provides a path forward for implementing PLCs in an elementary school. This study assesses teacher perceptions of PLCs through a survey and interviews. The research provides data on teacher perceptions of PLCs through the administration of the PLCA-R assessment in shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions and statements (p.13). Olivier, Hipp, and Huffman’s (2010) work connects with the literature by Shirley Hord (1997), whom is widely known as the inventor of PLCs (DuFour, 2014). Utilizing a semi-structured open-ended interview process was used to investigate the challenges and benefits teachers perceived in a PLC and the structures and conditions most propitious for the implementation of PLCs. Further research of implementing and sustaining PLCs in an intermediate elementary school is necessary and will add to evolving research involving teacher professional learning and the conditions school administrators need to set. The next section, Chapter Four, will thoroughly investigate the research results of PLCs in an elementary school, teacher perceptions, impacts, and implementation.
Chapter Four

Results

“When teachers are working together to examine individual student progress, decide on curricular topics, and learn from each other; teacher professional capital will enable curricular capacity building amongst adult learners” (Fullan, 2014 p. 63).

I introduced Chapter One with a personal experience I have had as an educator, both as a teacher and as an administrator. Throughout my career I have heard an immeasurable amount of teacher anecdotal comments regarding lackluster professional learning days and forced teacher collaboration. Researching the topic of professional development, I cited the work of Peter Cole (2004), who wrote an article titled Professional Development – A Great Way to Avoid Change; this article’s purpose was to provoke educational leaders to expand the debate about what constitutes effective professional development. Personally, I have always been fond of increasing my professional knowledge base of education through meaningful collaboration with teachers because my personal experiences have always left me wanting more. This professional learning collaboration led me down a path of the works of Fullan (2013), DuFour (2013), and Hipp and Huffman’s Demystifying Professional Learning Communities: School Leadership at its Best (2010). The aforementioned text includes the questionnaire which assesses teacher perceptions about the principal(s), staff, and stakeholders based on the dimensions of a PLC and related attributes. These results will be organized under the following six dimensions of a PLC: (1) Shared and Supportive Leadership, (2) Shared Values and Vision, (3) Collective Learning and Application, (4) Shared Personal Practice, (5) Supportive Conditions - Relationships, and (6)
Supportive Conditions – Structures (Hipp and Huffman, 2010) Each dimension will align with my three main research questions:

1) What are teachers’ perceptions of PLCs?
2) What challenges and benefits do teachers report when it comes to PLCs?
3) What structures and conditions are most propitious for the implementation of PLCs?

The survey was sent to 85 teachers who were employed at Eugene Intermediate School grade 3-6 elementary building during the 2019-2020 school year. All teachers in grades 3-6 were invited to participate in the study. Of the 85 teachers who worked at this school, 63 completed the survey and three teachers volunteered to participate in semi-structured interviews.

Triangulation of data included data from the Professional Learning Communities Assessment – Revised (2014), teacher comments in the comments section of the PLCA-R dimensions, and qualitative data from three semi-structured interviews. With the quantitative data serving as the foundation of the research findings, and the results will be reported in alignment to the PLCA-R survey.

Overview of Findings

The data from the PLCA-R survey confirms what was expected regarding the implementation and impacts of PLCs and teacher collaboration at Eugene Intermediate School. The school is in year two of PLC implementation and teachers and administrators have just begun to observe some of impacts teacher collaboration has on student growth and achievement. According to the Pennsylvania Department of Education’s (2020) report on student growth of 1,997 schools of similar grade spans (Pennsylvania Department of Education, 2020) Eugene Intermediate School is in the top 10 in both ELA and Math.
Figure 4.1 and Table 4.1 identify the mean measure of central tendency, average raw score, and the standard deviation of the six PLC dimensions using a forced choice Likert scale which included: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. The means of the 63 participants scores on the six dimensions ranged from 2.47 (lowest) to 2.90 (highest). The data was organized according to the dimensions of the PLCA-R and three main research questions: (i) Teacher Perceptions, (ii) Challenges and Benefits, and (iii) Propitious Structures and Conditions for Implementation. A presentation of quantitative and qualitative findings aligns with the three main research questions.

**Figure 4.1**

*PLC Dimensions*
Table 4.1

Mean and Standard Deviation

<table>
<thead>
<tr>
<th>PLC Dimensions</th>
<th>Shared and Supportive Leadership</th>
<th>Shared Values and Visions</th>
<th>Collective Learning and Application</th>
<th>Shared Personal Practice</th>
<th>Supportive Conditions - Relationships</th>
<th>Supportive Conditions - Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean:</td>
<td>2.52</td>
<td>2.70</td>
<td>2.89</td>
<td>2.47</td>
<td>2.90</td>
<td>2.67</td>
</tr>
<tr>
<td>Standard Deviation:</td>
<td>0.67</td>
<td>0.61</td>
<td>0.56</td>
<td>0.73</td>
<td>0.63</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Shared and Supportive Leadership

Hipp and Huffman (2010) described Shared and Supportive Leadership with an opening quote from Fullan (2002): “Ultimately, your leadership in a culture of change will be judged as effective or ineffective, not by who you are as a leader but by what you produce in others” (Hipp & Huffman, 2010, p. 137). The data from the PLCA-R (Figure 4-2) survey indicated that the data spread was quite large; however, most everyone was in the middle. There were teachers on both ends, with one teacher on the high end and four teachers on the low end. The mean and median were in the middle between 1 and 4. The mean equaled 2.52, the median equaled 2.45, and the standard deviation equaled 0.40. The frequency figure 4-2 provides a visual representation of the survey data totals.

The first dimension (Table 4-2), Shared and Supportive Leadership, had a mean score of 2.52 and a standard deviation of 0.67, which places respondents’ scores are halfway between “agree” and “disagree.” The Shared and Supportive Leadership dimension included the following eleven statements, as seen in Table 4-2.
Table 4-2

Distribution of Responses (1-4) by Statement - Shared and Supportive Leadership

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>2 (3.2%)</td>
<td>17 (27.0%)</td>
<td>38 (60.3%)</td>
<td>6 (9.5%)</td>
</tr>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>0 (0.0%)</td>
<td>21 (33.3%)</td>
<td>37 (58.7%)</td>
<td>5 (7.9%)</td>
</tr>
<tr>
<td>Staff members have accessibility to key information.</td>
<td>4 (6.3%)</td>
<td>36 (57.1%)</td>
<td>22 (34.9%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>2 (3.2%)</td>
<td>18 (28.6%)</td>
<td>40 (63.5%)</td>
<td>3 (4.8%)</td>
</tr>
<tr>
<td>Opportunities are provided for staff members to initiate change.</td>
<td>3 (4.8%)</td>
<td>33 (52.4%)</td>
<td>25 (39.7%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>2 (3.2%)</td>
<td>37 (58.7%)</td>
<td>22 (34.9%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>1 (1.6%)</td>
<td>18 (28.6%)</td>
<td>38 (60.3%)</td>
<td>6 (9.5%)</td>
</tr>
<tr>
<td>Leadership is promoted and nurtured among staff members.</td>
<td>4 (6.3%)</td>
<td>45 (71.4%)</td>
<td>11 (17.5%)</td>
<td>3 (4.8%)</td>
</tr>
<tr>
<td>Decision-making takes place through committees and communication across grade and subject areas.</td>
<td>2 (3.2%)</td>
<td>31 (49.2%)</td>
<td>26 (41.3%)</td>
<td>4 (6.3%)</td>
</tr>
<tr>
<td>Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>1 (1.6%)</td>
<td>34 (54.0%)</td>
<td>25 (39.7%)</td>
<td>3 (4.8%)</td>
</tr>
<tr>
<td>Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>11 (17.5%)</td>
<td>40 (63.5%)</td>
<td>12 (19.0%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

Note: Participant Response (N=63)

As stated in Hipp and Huffman (2010), Hord (1997) says shared and supported leadership “is evident when school administrators share power, authority, and decision making with teachers” (Hipp & Huffman, 2010, p. 14). The next section includes quantitative and qualitative findings. The qualitative data was coded for themes as they related to the six dimensions of a
PLC. Connections to the quantitative data from three semi-structured interviews and comments made in the Shared and Supportive Leadership comments section will connect to the findings of the three research questions regarding the following: (i) Teacher Perceptions, (ii) Challenges and Benefits, and (iii) Propitious Structures and Conditions for Implementation.

Figure 4-2

Shared and Supported Leadership

The data within the Shared and Supportive Leadership dimension with the highest rate of agreement was 78%, which stated that “leadership is promoted and nurtured among staff members.” A comment one teacher respondent made in the survey comment box conflicted with this agreement data: “The administrators in the school district do not share responsibilities in decision making and I have not seen evidence of staff members' opinions being considered.” This comment contradicts the Likert-scale results that leadership was promoted and nurtured among staff members. This respondent likened the promotion and nurturing of leadership with not observing evidence of staff members’ opinions not being considered.
In an interview, Participant #1 mentioned leadership's role in promoting a nurturing leadership among staff members, which was supported with the Likert-scale results:

I think this year in how PLC leads are able to fill in the TCT (Teacher Collaboration Time) calendar has really given more power to the team leads because it's not just like we're being told – follow these directives. We have autonomy to be able to set the agenda. Also, administration has fostered an environment that allows for teams to differentiate at each grade level; which means one team may be working on an assessment and another is analyzing data. (Participant #1)

Participant #1 articulated the administration’s efforts in fostering an environment which included teacher autonomy and the ability for teacher leaders to differentiate work according to team needs.

The dimension component with the highest rate of disagreement at 69.8 was: “Staff members are consistently involved in discussing and making decisions about most school issues.” Also, at 69.8 strongly disagree/disagree was the dimension component, “The principal participates democratically with staff sharing power and authority.” Teacher perceptions in this area indicated expectations regarding school leadership, namely the principal. This data was also supported with a comment in the PLCA-R survey, “Select few are chosen from principals to have responsibility and rewards for curriculum, changes, etc.”

The role of the principal was specifically addressed during a participant’s #1 semi-structured interview with the following suggestion:

I think the buy-in for PLCs is hard for some teachers. I don't think teachers truly understand the purpose of a PLC and I think more professional development would be
helpful for all teachers to understand what is a Professional Learning Community. I think a lot of the team leads that help lead the PLCs understand but some don't understand what the importance is. (Participant #1)

Participant #1 connects the disagreement data by claiming the that *all teachers* need to participate in PLC decision making. Further connection of interview data to survey data suggested that PLC lead teachers felt like they had a *say* in democratic decision making but that administration was lacking in involving non-lead PLC participants.

With asked teachers’ perceptions of PLCs, data suggested a mean score of 2.52, which is in the middle of agree and disagree. Of the 63 teacher respondents, seven teachers elected to write comments in the Shared and Supportive Leadership comment sections. Four of the seven comments of the PLCA-R survey comments suggested negative teacher perceptions of PLCs regarding administration:

1) “It feels like through surveys our admin asks for our opinions but there is no follow through or reasoning for their decisions.”

2) “Staff are often asked for their input on these various topics, but it often seems higher administration makes decisions without regard for this input.”

3) “It feels that decisions are made, and then staff is expected to comply. There is no discussion as to what is best for the students.”

4) “The administrators in the school district do not share responsibilities in decision making and I have not seen evidence of staff members' opinions being considered.”
The above survey comments support the evidence that teachers’ perceptions of PLCs differ. PLC leaders report autonomy, differentiation, and choice. Non-PLC leaders report administrative teacher compliance and no follow through.

**Challenges and Benefits**

Participant #1, #2, and #3 agreed on the aspect of needing *more meeting time* as a challenge and more *meeting time* would be beneficial for PLCs as it relates to Shared and Supportive Leadership. Participant #1 supported this need:

More time. When I worked in Philadelphia, every other Wednesday was a half day for the kids and we would have four hours to collaborate. Our current model (EIS), we have 30 minutes daily for PLC work. However, by the time we all get our kids to where they need to be, we have 15-20 minutes to try to get PLC work done. Meanwhile, teachers are still trying to deal with everything else that is going on regarding our students and sharing responsibility. If we had a little bit more time we would be more effective and less stressed. (Participant #1)

The challenge and benefit from Participant #1 were clear in terms of needing more time for PLC work. Participant #1 discussed the notion of sharing responsibility regarding students and PLC duties, which can be linked to the following survey statement: Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority. On average, survey respondents reported that it was neither agreeable (55%) or non-agreeable (45%) regarding the challenges and benefits of shared responsibility and accountability. Overall, the data would indicate that a challenge and benefit to the dimension of Shared and Supportive Leadership would be increased meeting time for PLC work.
Propitious Structures and Conditions for Implementation

In connecting question two’s challenges and benefits of PLCs to the third research question about structures and conditions are most propitious for the implementation of interview Participant #3 discussed the structures of PLC meeting times as an area that needed to be further investigated:

Common meeting time, and the goal is to have everybody on the same page in the PLC.
We don't want to end up just sitting there and talking. Having a clear goal in mind and being able to come back, reflect, learn from what we accomplished is critical. As a teacher leader I want to know what I can change and do better next time so those structures can stay consistent. (Participant #3)

Participant #3 discussed the notion of propitious structures of a PLC and noted the concept of teacher leadership. Participant #3 was not a lead PLC teacher, but noted “wanting to know what I can change and do better next time.” Emerging was the concept of teacher leadership, and during the semi-structured interview, Participant #3 alluded to the structure of her 5th grade math PLC when asked the following question: How did your team get to the point you are currently operating from?

It took a long time. Honestly, where it started out from to know a lot has changed. We used to have the math leads who always ran the meetings. The math leads would check math assessments while other teachers worked on them. Kelly was the lead last year because she was the team leader. We now organize the work and the leader facilitates who is going to lead certain work. Everyone feels like their voice and opinion matters and we've gotten so much accomplished and look at the results. (Participant #3)
Participant #3 was alluding to the state testing PSSA results and how their specific grade level and subject area was first in the county in terms of student achievement in math. The propitious structure and condition for PLC implementation can be surmised as one that has total team facilitation and distributed leadership.

**Shared Values and Vision**

“The lack of a compelling vision for public schools continues to be a major obstacle in any effort to improve schools” (DuFour & Eaker, 1998, p. 64). Dufour and Eaker conclude a major obstacle to school improvement is the lack of vision and the importance of a shared vision.

Shared Values and Vision, the second dimension within the PLCA-R survey, indicated a mean score of 2.70 which was a score that trended closer to overall agreement. Teachers of EIS demonstrated the highest level of agreement with a score of 79% with the survey statement: “A collaborative process exists for developing a shared sense of values among staff.” This statement was followed by the second and third highest agreement rates with 76% of EIS teachers claiming, “Data are used to prioritize actions to reach a shared vision” and “Policies and programs are aligned to the school’s vision.” There were four survey comments made by teachers at EIS that did not align with the overall mean agreement score of the Shared Values and Vision dimension of the PLCA-R survey. There were nine statements included within the Shared Values and Visions as seen in Table 4-3.
### Table 4-3

*Distribution of Responses (1-4) by Statement – Shared Values and Vision*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A collaborative process exists for developing a shared sense of values</td>
<td>5 (7.9%)</td>
<td>45 (71.4%)</td>
<td>11 (17.5%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>among staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared values support norms of behavior that guide decisions about teaching</td>
<td>1 (1.6%)</td>
<td>43 (68.3%)</td>
<td>18 (28.6%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>and learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members share visions for school improvement that have an undeviating</td>
<td>3 (4.8%)</td>
<td>38 (60.3%)</td>
<td>20 (31.7%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>focus on student learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decisions are made in alignment with the school’s values and vision.</td>
<td>3 (4.8%)</td>
<td>38 (60.3%)</td>
<td>20 (31.7%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared vision among staff.</td>
<td>2 (3.2%)</td>
<td>37 (58.7%)</td>
<td>21 (33.3%)</td>
<td>4</td>
</tr>
<tr>
<td>School goals focus on student learning beyond test scores and grades.</td>
<td>4 (6.3%)</td>
<td>31 (49.2%)</td>
<td>19 (30.2%)</td>
<td>9 (14.3%)</td>
</tr>
<tr>
<td>Policies and programs are aligned to the school’s vision.</td>
<td>1 (1.6%)</td>
<td>45 (71.4%)</td>
<td>17 (27.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Stakeholders are actively involved in creating high expectations that</td>
<td>3 (4.8%)</td>
<td>37 (58.7%)</td>
<td>23 (36.5%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>serve to increase student achievement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data are used to prioritize actions to reach a shared vision.</td>
<td>5 (7.9%)</td>
<td>43 (68.3%)</td>
<td>15 (23.8%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

*Note: Participant Response (N=63)*

The statement that had a score that aligned with the highest level of disagreement with a score of 45% was the statement, “School goals focus on student learning beyond test scores and grades.”

This data suggests that it was neither agreeable or disagreeable percentage of data. This level of disagreement connected to the four survey comments that was further investigated in the upcoming dimension.
Figure 4-3

*Shared Values and Vision*

The quantitative data included in Figure 4-3 indicates the variability was moderate and not normal. The data is bimodal, with two groups: 1) 3 and above versus 2) below 2.8. This frequency table indicates that 20 individuals had scores between 2.6 and 2.79 and 16 individuals had scores between 3.0 and 3.19.

*Perceptions*

Coded themes of teacher collaboration and shared vision of professional learning within the Shared Values and Vision dimension of the PLC were aligned to the survey data. With statement one asking if a collaborative process existed for developing a shared sense of values among staff, 79% of the teaching staff agreed with this statement. Interview Participant #2 was asked: Do you think that book by Robert DuFour and Michael Fullan, *Cultures Built to Last Systemic PLCs at Work*, help you lead PLC vision? Participant #1 responded:

Absolutely, I think without that book I would still be kind of be floundering with the vision of our PLC. Last year I didn’t understand what we're supposed to doing on a day
to day basis. Now, much improvement in the goals and vision of our plc helps us understand the structure and then I try to be a leader our PLC by facilitating a collaborative vision. (Participant #1)

Participant # 2 articulated the importance of grounding decision making in researched best practices. This interview participant indicated that this shared text “helps align a shared vision.”

Extending the Shared Values and Vision perceptions was a survey comment that did not align with survey statement one, “A collaborative process exists for developing a shared sense of values among staff,” where 79% of teachers agreed:

There is a vision for our schools that guides us towards student learning and achievement and claims to be solely about teaching a whole child. However, teachers are placed on improvement plans if their students do not do well on state assessments and that forces the teachers to stress the importance of assessment to their students. This not only puts stress on the teachers, but on the students, which is the opposite of helping/teaching a whole child. (Survey comment)

The aforementioned survey comment also connected with the next two survey comments that did not align with the overall teacher agreement data with the Shared Values and Vision dimension of a PLC. “Priority is placed on the PSSA,” stated one survey.”

Verbally administration makes it sound like school goals focus on student learning beyond test scores and grades, but the feeling given to teachers is that test scores are what counts and we will be punished if our scores are not of a certain level. It is said that we
should do what's best for our students, but decisions made in the building seem to be made without thinking about what is best for students' well-being. (Survey comment)

These survey comments included teacher perceptions that did not align with the Shared Values and Vision dimension of a PLC. For the quantitative data within the Shared Values and Vision dimension of the PLC (Table 4-3), eight of the nine survey statements had an agreement rate of 61.9 or higher. One statement in the survey that mentioned if school goals focused on student learning beyond test scores and grades had the lowest agreement rate of 56%. This low agreement rate aligned with the survey comment: “Shared values are decided for us. Teachers do their best to follow the given shared values. Data analysis is a huge component; however, can become too much of an emphasis.” This comment suggested that teachers were doing their best to align their efforts to the school’s core values but felt that school data could be overvalued. Overall, teacher perception data would include an overall sense of Shared Values and Vision amongst stakeholders, with the caveat of much priority is placed on PSSA state testing.

**Challenges and Benefits**

The statement “Shared values support norms of behavior that guide decisions about teaching and learning” had an agreement rate of 70%. Staff members shared visions for school improvement that had an undeviating focus on student learning had an agreement rate of 65%. Aligning to the findings of the PLCA-R survey was a coded theme of teacher buy-in and collaboration. Participant #2 indicated the following regarding the challenges and benefits of Shared Values and Vision of a PLC:

I think the buy-in and a shared vision for PLCs is hard for some teachers. I think a lot of teachers are very used to *just the way things have always been done* and feel that they're just not fully into it. I've seen throughout the past year or two years teachers really buy
into the PLC process. Teachers see the benefit of PLCs and value the collaboration.

(Participant #2)

Participant #2 likened the experience she went through as a participant in a PLC by explaining components of a shared teacher vision and group buy-in.

Regarding the challenges and benefits of a PLC, participant #3 agreed with Participant #2: Within my math PLC everyone matters. Everyone has an equal voice and no one is the leader. A facilitator records all the information but everyone's opinion and voice matters. Every moment counts and when we make decisions that impact the kids, we stay grounded in our work. (Participant #3)

Participant #3 provided insight into how her PLC functioned, citing shared teacher voice and group leader facilitation. This comment connected to the strongly agree/agreement rate response of 76% of respondents when asked, “Data are used to prioritize actions to reach a shared vision.” Participant #3 discussed how to prioritize the work within the PLC:

One main benefit when we meet as a PLC is that teachers are able to collaborate on the creation and grading of summative assessments. We have conversations on what the standard and eligible content state. The standard state the student can do a particular skill and we don't change assessment questions based off of our kids not being able to handle an assessment question. If the state says this is what a 5th grader has to do, then we have to leave the standard there and do what we do best to get those kids to rise. (Participant #3)
This quote from Participant #3 demonstrates the challenges and benefits of teachers collaborating during a grade level PLC, while aligning state standards with common summative assessments.

**Propitious Structures and Conditions for Implementation**

The fifth question within the Shared Values and Vision dimension of a PLC, if the collaborative process existed for developing a shared vision among staff, had an overall agreement rate of 62%. Participant #3 shared a viewpoint regarding propitious structures and conditions for implementation of a PLC when asked: What obstacles are present when you are collaborating with teachers and administrators?

I think our biggest obstacle when implementing our PLC is when administrators want to teachers to fill in protocol-type documents of student data. Some compliance pieces hold up our work and we feel that we need to backtrack to fill in *this form* that needs to be filled in that no one needs and no one looks at it after we leave the PLC. It's just filled in for administrators out of compliance. (Participant #3)

Participant #3 equated the obstacle of completing compliance protocols and how they slowed down the work of a PLC. This participant likened backtracking as an element of protocol PLC minutia.

**Collective Learning and Application**

Collective Learning and Application as a dimension of a PLC focuses on learning of both teacher and student. As stated in Hipp and Huffman (2010), “in observing mature PLCs, teachers recognize that student learning is a function of teacher learning. In other words, teachers see themselves as the first learners” (p.17). Collective Learning and Application had a mean of 2.89
and a standard deviation 0.56, which indicated close agreement. This dimension included the following 10 statements as seen in Table 4-4.

**Table 4-4**  
*Distribution of Responses (1-4) by Statement – Collective Learning and Application*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>9 (14.3%)</td>
<td>50 (79.4%)</td>
<td>4 (6.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>10 (15.9%)</td>
<td>47 (74.6%)</td>
<td>6 (9.5%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>13 (20.6%)</td>
<td>46 (73.0%)</td>
<td>3 (4.8%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>2 (3.2%)</td>
<td>38 (60.3%)</td>
<td>22 (34.9%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>2 (3.2%)</td>
<td>49 (77.8%)</td>
<td>12 (19.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Professional development focuses on teaching and learning.</td>
<td>3 (4.8%)</td>
<td>51 (81.0%)</td>
<td>7 (11.1%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>1 (1.6%)</td>
<td>39 (61.9%)</td>
<td>21 (33.3%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>School staff members are committed to programs that enhance learning.</td>
<td>8 (12.7%)</td>
<td>43 (74.6%)</td>
<td>12 (19.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>4 (6.3%)</td>
<td>47 (74.6%)</td>
<td>12 (19.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Staff members collaboratively analyze student work to improve teaching and learning.</td>
<td>8 (12.7%)</td>
<td>41 (65.1%)</td>
<td>12 (19.0%)</td>
<td>2 (3.2%)</td>
</tr>
</tbody>
</table>

*Note: Participant Response (N=63)*

Within this dimension, the teaching staff at EIS had higher levels of agreement rates than the previous two dimensions and second overall highest mean 2.89.
Figure 4-4 indicates a normally distributed set of survey data. The variability was also relatively narrow. The mean was higher as well, with a score 2.89. The frequency table (Figure 4-4) illustrates how 54 individuals had scores between 2.6 – 3.39.

Perceptions

Research data finding from the PLCA-R survey indicated an agreement rate of over 90% with the first three survey statements within the Collective Learning and Application dimension. Ninety-three percent of EIS staff agreed that members worked together to seek knowledge, skills and strategies and apply this new learning to their work. The next statements within this dimension had an agreement rate of 92%: “Collegial relationships exist among staff members that reflect commitment to school improvement efforts.” The third statement, “Staff members plan and work together to search for solutions to address diverse student needs,” had a 94% agreement rate. Not aligning to the survey data was a comment made by a teacher that suggested that teachers and administrators at EIS did not collaborate:
“Teachers do this together on their own time, not during PLC. Administration is not an active part of this process.” At EIS there is a daily 30-minute block of time in the master schedule for teacher collaboration to occur.

One teacher, however, made a survey comment connected to Collective Learning and Application stating, “There is a want for collaboration from administrators and students, however, not every group of teachers in the schools are given the opportunity to collaborate together on a regular basis.” This statement is communicating that not all stakeholders within the teaching community have equal PLC time and these finding may need further exploration.

**Challenges and Benefits**

The overall research findings within the Collective Learning and Application dimensions of a PLC suggested that EIS had a consensus agreement rate. Linking this data to the semi-structured interviews indicated similar findings. Interview Participant #1 discussed the challenges and benefits of collective learning:

This year PLC leads are able to fill in the TCT (Teacher Collaboration Time) calendar, which has given more power to the team PLC leads. We have the autonomy to be able to set the agenda. Also, administration has fostered an environment that enable teams to differentiate at each grade level. (Participant #1)

A survey comment with in this dimension directly contradicted this qualitative data: “For questions 21-23, we are the ones who make this happen using our personal planning time to work together.” This teacher was referring to personal planning time to conduct PLC work and not the daily 30-minute teacher collaboration block. The TCT block in the master schedule was a daily defined block of time for teachers to conduct PLC work.
Participant #1 provided further details regarding Collective Learning and Application when asked how he/she feel PLCs impacted classroom instruction with your students.

I think it really helps with consistency and also it really benefits the students just as much as it does the teachers. A lot of times if one teacher is struggling with a certain curriculum, subject or student, more than likely, there might be another teacher in that PLC is having the same problem. Teacher collaboration will help identify students who need more interventions in order to make progress. (Participant #1)

Participant #1 likened Collective Learning and Application to focused curricular work, interventions for students, and determining student academic progress. This statement was supported by research data within the Collective Learning and Application dimension as it referred to the benefits a PLC. Specifically with the fifth statement within this dimension, “Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.” This comment generated an agreement rate of 81% of teacher respondents.

**Propitious Structures and Conditions for Implementation**

Participant #2 discussed internal structures of her PLC and was asked during the semi-structured interview what worked for you and what did not work for you as a member of a PLC. The respondent stated:

There is a lot more that works than what doesn't. I like having the time to meet with people who all have a common goal of PLC implementation and teacher learning. For grade level teachers to be able to collaborate with everyone who's teaching similar subjects like language arts and social studies that connectedness is already there. We're
all doing the same thing and we get to discuss collectively what's been working well for students and make sure we're all doing the best thing for the kids. (Participant #2)

Participant #2 concluded that grade level teachers who shared similar curricular departments should collaborate. This statement can be linked to the survey statement with a 64% agreement rate, “A variety of opportunities and structures exist for collective learning through open dialogue.”

Collaboration was a theme that resonated throughout each of the three interview sessions and could be linked as an essential component of propitious conditions of a PLC. Each interview lasted approximately 10 minutes and of the three interviews the term collaboration came up 19 times.

**Shared Personal Practice**

The fourth dimension, Shared Personal Practice, garnered the lowest mean agreement score of all dimensions equaling 2.47. Hipp and Huffman (2010) discussed the necessary conditions of the Shared Personal Practice dimension citing Wood (1993), “teachers need an environment that values and supports hard work, the acceptance of challenging tasks, risk taking, and the promotion of growth (Wood, 1993, p.18). This dimension of the PLCA-R dimension included the following seven statements as seen in Table 4-4.
Table 4-5

*Distribution of Responses (1-4) by Statement – Shared Personal Practice*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>1 (1.6%)</td>
<td>14 (22.2%)</td>
<td>29 (46.0%)</td>
<td>19 (30.2%)</td>
</tr>
<tr>
<td>Staff members provide feedback to peers related to instructional practices.</td>
<td>0 (0.0%)</td>
<td>24 (38.1%)</td>
<td>28 (44.4%)</td>
<td>11 (17.5%)</td>
</tr>
<tr>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
<td>9 (14.3%)</td>
<td>50 (79.4%)</td>
<td>3 (4.8%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>2 (3.2%)</td>
<td>42 (66.7%)</td>
<td>17 (27.0%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>Opportunities exist for coaching and mentoring.</td>
<td>2 (3.2%)</td>
<td>29 (46.0%)</td>
<td>24 (38.1%)</td>
<td>8 (12.7%)</td>
</tr>
<tr>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>0 (0.0%)</td>
<td>46 (73.0%)</td>
<td>15 (23.8%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>Staff members regularly share student work to guide overall school improvement.</td>
<td>0 (0.0%)</td>
<td>24 (38.1%)</td>
<td>33 (52.4%)</td>
<td>6 (9.5%)</td>
</tr>
</tbody>
</table>

*Note: Participant Response (N=63)*
Figure 4-5

*Shared Personal Practice*

Most survey participants (Figure 4-5) were in the middle within a narrow range. However, there were four participants on the low end who fell outside of the narrow middle group, which increased the variability illustrated within frequency Figure 4-5. The overall mean score was 2.47, median score of 2.57, and a standard deviation of 0.43. The qualitative data from the semi-structured interviews matched the quantitative data, suggesting this was an area of need.

**Perceptions**

A survey comment that was a clear PLC teacher perception was: “Our PLCs are really important.” Paralleling to this perception was the survey statement, “Staff members informally share ideas and suggestions for improving student learning,” which had a 93.7 agreement rate. However, the research findings within this dimension suggest that this was an area of need at EIS. A second teacher stated in the comment section of the dimension:
I placed a disagree next to several of these items because I think we can improve the 
frequency with which these teachers to teacher collaboration opportunities are offered. At 
this point I do not see this occurring on a regular basis. (Survey comment)

This comment reflected the overall data consensus of an average score of 2.47 which leaned 
more towards disagree (2) than agree (3). During the semi-structured interviews, Participant #2 
discussed some issues she had when trying to move forward with as a leader of her PLC when 
asked: How are you prepared to lead your PLC?

I'm still learning. I'm definitely not an expert at leading a PLC. I still feel terrified a lot 
and a little bit self-conscious. I don't want it to be me leading and dictating all the work 
that needs to be accomplished. I want to try to get to a point where it's a shared 
responsibility. That shared responsibility and purpose I found is the most difficult to try 
to build. I think when we try to talk about going back to our former principals’ theme of 
assume positive intentions. (Participant #2)

Participant #2 was able to articulate the inner-turmoil teacher leaders faced and the support that 
was essential from administrators and other members of the PLC team.

**Challenges and Benefits**

The statement, “Opportunities exist for staff members to observe peers and offer 
encouragement,” had an overall agreement rate 24%. Comments made in this part of the survey 
suggested that there was a need and want from teachers at EIS to further collaborate and observe 
teachers. “I imagine if we asked to observe peers it would be allowed but can't say for sure,” 
stated one participant. “I do know that there is plenty of opportunity for new teachers to observe
outside of their classroom and to be observed by their mentors. I do not know if this occurs with all staff members in the building,” stated another.

Aligning to the theme of the need for teachers to collaborate within the Shared Personal Practice dimension was the survey statement, “Staff members provide feedback to peers related to instructional practices.” This survey statement had a 38% agreement rate suggesting that this was an area that needed to be addressed. Aligning to these data points were interview Participant #2, who discussed the struggles related to Shared Personal Practice, when asked about the obstacles that were present when leading PLC work.

The mentality - I this just another meeting? I have to do a lot of things right now like conference prep, grading, lesson planning etc... Getting everybody to be on that same page is the most important thing we need to do right now. The PLC can quickly turn into kind of a complaint session if we don’t focus on instructional practices. (Participant #2)

Participant #2 was specifically addressing the concept of Shared Personal Practice through identifying how quickly a PLC could get off task. She likened getting everybody on the same page to focused PLC team time.

**Propitious Structures and Conditions for Implementation**

The survey data, comments, and interview data discovered one area of strength within EIS Shared Personal Practice. Participant #3 commented on propitious PLC structures by stating:

We were top in the county in 5th grade math PSSA achievement (77% proficient and advanced). When we learned that we were top in the county in PSSA - Our PLC asked the question - What changed? What changed is that teachers worked as a cohesive group in building our assessments and collaborating. We didn't come up with the questions and
say these are the questions were putting on the test. We looked at every single assessment question and other teachers collectively rose their expectations for what their students can achieve. (Participant #3)

This statement suggested a productive grade level PLC and one that could serve as an exemplar model of PLC implementation. Shared Personal Practice as a dimension is rooted in collaborative efforts amongst teachers while focusing on increasing student achievement.

**Supportive Conditions - Relationships**

“Throughout our work, we have found Supportive Conditions to be the glue that holds all the other dimensions together” (Hipp & Huffman, 2010, p. 19). The fifth dimension, Supportive Conditions – Relationships, received the highest mean score totaling 2.90 with a standard deviation of 0.63. The Supportive Conditions – Relationships dimension includes five statements seen in Table 4-6.
## Table 4-6

*Distribution of Responses (1-4) by Statement - Supportive Conditions – Relationships*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>9 (14.3%)</td>
<td>50 (79.4%)</td>
<td>4 (6.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>A culture of trust and respect exists for taking risks.</td>
<td>10 (15.9%)</td>
<td>47 (74.6%)</td>
<td>6 (9.5%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>13 (20.6%)</td>
<td>46 (73.0%)</td>
<td>3 (4.8%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>2 (3.2%)</td>
<td>28 (60.3%)</td>
<td>22 (34.9%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>2 (3.2%)</td>
<td>49 (77.8%)</td>
<td>12 (19.0%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

*Note: Participant Response (N=63)*
Further quantitative analysis within the frequency figure 4-6 indicates this data were normally distributed with a great deal of variability. The mean was highest in this dimension compared to the other dimensions. The overall mean score was 2.90, a median score of 3, and a standard deviation of 0.42.

**Perceptions**

“The teachers in our school district go above and beyond to teach our students and to have respectful and trusting relationships with our students and their families,” was one of two survey comments that were made in the comment section of the Supportive Conditions – Relationships dimension of the PLC. Aligning with this perception comment was 94% of the staff at EIS who agreed with the following survey statement, “Caring relationships exist among staff and students that are built on trust and respect.” This was followed with 91% of the staff at EIS who agreed that “a culture of trust and respect exists for taking risks.” An outlier in the
Supportive Conditions – Relationships data came in the form of a written comment made by a teacher in the survey:

Any staff relationships are purely made on their own accord and not from a culture of trust and respect rooted with administration. Staff feel there is a "guys club" and "favorites" that earn respect, trust and celebration from administration. If you are not in the crew, you frequently feel invalid or not valued. (Survey comment)

Further data analysis suggested that the 64% EIS school administration and teachers valued celebrating staff and students with the following survey statement, “Outstanding achievement is recognized and celebrated regularly in our school.”

Challenges and Benefits

“Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.” This survey statement had an overall agreement rate of 81%. Connecting this survey data to the semi-structured interview, Participant #2 discussed challenges and benefits of a PLC:

Our PLC work puts all teachers on the same pathway of high student expectations and teacher to teacher relationships. These teacher relationship norms can be set at the onset of our work, and all of that benefits the kids. Some challenges of PLCs - so much work needs to be done and the time constraints are sometimes and impediment. We are fortunate enough to have a thirty-minute teacher collaboration block, while our students are at recess to complete curricular work. However, that time flies. An additional challenge is the teacher mindset shift that occurs; one minute we are in teacher mode, then have to shift to learner to complete import PLC work. (Participant #2)
This was yet another interesting point that was brought up during the qualitative interview process. Interview Participant #2 shed light on the day-to-day struggles that occurred when teaching students and the mindset shift that needed to occur to begin PLC facilitation.

**Propitious Structures and Conditions for Implementation**

Interview Participant #3 discussed the Supportive Conditions building administrators could support when asked: How do you think administrators can help support your PLC?

Let us do it. Let it be teacher run. Obviously, we have to have guidelines so that we stay within time constraints and that we stay focused. If you have a good group then it should be ok and choose their topic let them choose the format of analyzing the data if you want the data reported on fine. But let the teachers show you how we are going to dig further into data or common assessments. Let the teachers create a framework to further analyze a standard. Just don't give a us tedious things. We want to do the work well and our work is rooted in benefiting the kids. Just filling out data sheets for compliance purposes does not help our productivity in the PLC – Our work is the work – The statement “death by protocol” comes up from time to time in our PLC. (Participant #3)

This interview statement discussed the importance of teacher expectation levels for students and how all members of the PLC need to have matching levels of student expectations. This interview respondent did get to the core of the PLC, discussing trust and relationship building.

**Supportive Conditions – Structures**
The sixth and final dimension (Hipp & Huffman, 2010) is Supportive Conditions - Structures. Hipp and Huffman (2010) cited the work of Hollins (2006), Louis and Kruse (1995), and Wiggins and McTighe (2006) whom identified the physical conditions needed to support PLCs:

- time to meet and dialogue,
- physical proximity of the staff to one another in departments or grade-level groups,
- small school size,
- collaboratively teaching roles and responsibilities,
- effective communication programs,
- autonomous school units that are connected in meaningful ways to the district office and personnel, and
- intentional arrangements for teachers to influence decision making (Hipp & Huffman, 2010, p. 19).

As seen in Table 4-7, this dimension had an average mean score of 2.67 and included the 10 statements.
### Table 4-7

*Distribution of Responses (1-4) by Statement - Supportive Conditions – Structures*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time is provided to facilitate collaborative work.</td>
<td>6 (9.5%)</td>
<td>44 (69.8%)</td>
<td>9 (14.3%)</td>
<td>4 (6.3%)</td>
</tr>
<tr>
<td>The school schedule promotes collective learning and shared practice.</td>
<td>2 (3.2%)</td>
<td>40 (63.5%)</td>
<td>15 (23.8%)</td>
<td>6 (9.5%)</td>
</tr>
<tr>
<td>Fiscal resources are available for professional development.</td>
<td>0 (0.0%)</td>
<td>30 (47.6%)</td>
<td>22 (34.9%)</td>
<td>11 (17.5%)</td>
</tr>
<tr>
<td>Appropriate technology and instructional materials are available to staff.</td>
<td>6 (9.5%)</td>
<td>31 (49.2%)</td>
<td>16 (25.4%)</td>
<td>10 (15.9%)</td>
</tr>
<tr>
<td>Resource people provide expertise and support for continuous learning.</td>
<td>0 (0.0%)</td>
<td>31 (49.2%)</td>
<td>26 (41.3%)</td>
<td>6 (9.5%)</td>
</tr>
<tr>
<td>The school facility is clean, attractive and inviting.</td>
<td>12 (19.0%)</td>
<td>39 (61.9%)</td>
<td>8 (12.7%)</td>
<td>4 (6.3%)</td>
</tr>
<tr>
<td>The proximity of grade level and department personnel allows for ease in</td>
<td>1 (1.6%)</td>
<td>39 (61.9%)</td>
<td>21 (33.3%)</td>
<td>2 (3.2%)</td>
</tr>
<tr>
<td>collaborating with colleagues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication systems promote a flow of information among staff members.</td>
<td>3 (4.8%)</td>
<td>34 (54.0%)</td>
<td>25 (39.7%)</td>
<td>1 (1.6%)</td>
</tr>
<tr>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>3 (4.8%)</td>
<td>37 (58.7%)</td>
<td>23 (36.5%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Data are organized and made available to provide easy access to staff members.</td>
<td>3 (4.8%)</td>
<td>41 (65.1%)</td>
<td>17 (27.0%)</td>
<td>2 (3.2%)</td>
</tr>
</tbody>
</table>

*Note: Participant Response (N=63)*
Further quantitative data analysis within the Supportive Conditions – Structures dimension of a PLC, as illustrated in frequency figure 4-7 indicates moderate variability in the middle with a seemingly bimodal distribution, except for the outlier on the high end, which increased the variability. The mean score 2.67 indicated a closer agreement score vs disagreement. The median was 2.6 and the standard deviation was 0.37. The qualitative data from the survey comments and interview data supported the overall quantitative data findings.

**Perceptions**

Interview Participant #2 discussed her perception of Supportive Conditions – Structures that helped her lead the PLC:

Common meeting time is an essential component to the structure of a PLC. One goal is to have everybody on the same page in the PLC so that we don't end up just sitting there and talking about non-school related topics. We have to set an agenda and stick to it.
Prioritizing the work, together as a team and breaking out into subgroups within the PLC helps build capacity amongst teachers. This is what I am trying to get better at.

(Participant #2)

Interview Participant #2 likened common meeting time and setting an agenda as vital components of the structure of a PLC. Also, identified as an essential element by Participant #2 was prioritizing work and structuring a smaller teacher groups within the PLC. This interview comment aligned with survey statement, “Time is provided to facilitate collaborative work,” where 79% of the staff agreed with time being provided to staff.

During the interview process the word “time” was brought up 56 times during the three semi-structured interviews. “Data are organized and made available to provide easy access to staff members” was a time related statement embedded in the survey which 70% of teacher respondents agreed.

**Challenges and Benefits**

Interview Participant #3 provided insight with the challenges and benefits of the PLC within the Supportive Conditions – Structures dimension of the PLC when asked, “When it comes to PLCs what challenges and benefits do you report?” Her response was that “It’s challenging to deal with limited time constraints especially when we are really getting into something and we suddenly have to stop and go back to teaching the students.” Interview Participant #1 also articulated a challenge to PLC work structures as it related to time, when asked what structures could be improved as it related to the PLC.

More time. When I worked in Philadelphia, every other Wednesday was a half day for the kids and so the kids went home at 12 and we would have four hours to collaborate
within our PLC. Currently we have scheduled 30 minutes daily for our PLC and by the
time we get the kids out to recess and settled in, we only have 15-20 minutes to try and
get as much done as possible. (Participant #1)

Interview Participant #1 connected her past PLC experiences, citing a longer, continued block of
time was more beneficial than shorter daily blocks of time for PLC work.

The survey statement, “Time is provided to facilitate collaborative work,” had an
agreement rate of 81%. However, interview respondents indicated that more time was needed to conduct PLC work.

**Propitious Structures and Conditions for Implementation**

The school facility was clean, attractive, and inviting, and the proximity of grade level and department personnel allowed for ease in collaborating with colleagues were structures that had agreement rates of 60% or higher. Implementing PLCs and facilitating leadership was discussed by interview Participant #2, when asked about teacher leadership within a PLC.

The first thing that stands out is positivity and just kind of having that you know not any negativity coming from the leader to the team. Coming together as a team is an essential component to internal structures of PLC implementation. When presented with an obstacle, such as time and meeting spaces - you still need to have that positive mentality. The team leads have smiles on their faces and they want to work through things to make things better… even when some colleagues put up obstacles or barriers. (Participant #2)
Participant #2 discussed the structure of group positivity as an essential component of the PLC, further citing that the team leads had to have smiles on their faces when coming together as a PLC.

One area of further consideration could be the flow of communication systems within EIS. Data suggested these were areas of need within survey statements:

1) Communication systems promoted a flow of information among staff members – 59% overall agreement.

2) Resource people provided expertise and support for continuous learning – 49% agreement.

As EIS continues to implement PLCs systemically, consideration to internal structures will help promote increased communication channels amongst teachers and administrators. The next section, Chapter Five, includes a discussion of the research and findings. A summary of the research findings includes an application of conceptual framework to findings and limitations to the study, methodology, and analysis. Lastly, implications of future educational research are presented.
Chapter Five

Discussion

“I now know why our fifth grade has the highest achievement data in the district. Having the opportunity to observe their teacher ELA and Math PLCs was an eye-opening experience and helps our team plan moving forward.” (EIS Teacher)

I opened Chapter Four with a quote from Fullan (2014) that connects with this EIS teacher’s account of observing another grade level’s PLC. Fullan addresses the importance of maximizing teacher professional capital and building capacity amongst adult learners. Throughout this study, a significant benefit was that the researcher, in this case, the Assistant Principal of EIS, was able to conduct research, gather quantitative data, and interview teachers regarding teacher perceptions of PLCs, its implementation, and its impacts. This led to a greater understanding of where the teaching staff at EIS was in terms of the six dimensions outlined in the PLCA-R (Hipp & Huffman, 2014).

EIS is a large school. In 2018-2019, the school district annual report listed overall student enrollment at 1,505 students. The school district, a predominantly white, wealthy, suburban school district in southeastern Pennsylvania, serves approximately 5,000 students from five townships and two boroughs. The faculty profile of the school district included 320 teachers and 33 counselors, nurses, and a school psychologist. Of the 320 teachers employed at the school district, 253 teachers held a Master’s degree and four held a Doctorate degree. The next section includes a summary of the study, which will include quantitative and qualitative research findings.
Summary of Study

This mixed methods study included quantitative survey data from the Professional Learning Communities Assessment – Revised (2014). The six dimensions of a PLC, according to “Demystifying Professional Learning Communities: School Leadership at its Best,” are as follows: (1) Shared and Supportive Leadership, (2) Shared Values and Vision, (3) Collective Learning and Application, (4) Shared Personal Practice, (5) Supportive Conditions, and (6) Supportive Conditions – Structures. Each dimension includes quantitative survey data, survey written statements, and qualitative semi-structured interview data. All three data sets answered the three main research questions:

1) What are teachers’ perceptions of PLCs?
2) When it comes to PLCs, what challenges and benefits do teachers report?
3) What structures and conditions are most propitious for the implementation of PLCs?

Figure 4-1 displays the Likert-scale mean data: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. The 63 participants’ mean scores ranged from 2.47 lowest to 2.90 highest.

This summary reports on findings based off of the PLCA-R survey.

Figure 4.1 complies the mean score data from the 63 participants who took part in this research study. As such, the data agreement/disagreement data can be clustered into three main groups regarding teacher perceptions of PLCs:

1) Agreement – Supportive Conditions – Relationships mean score 2.90; Collective Learning and Application – mean score 2.89

2) Marginal agreement – Shared and Supportive Leadership – mean score 2.52; Shared Values and Visions – mean score 2.70; Supportive Conditions – Structures 2.67.

3) Disagreement – Shared Personal Practice – mean score 2.47
A key area of improvement and major finding in the research sample was the perception of Shared Personal Practice. This dimension had the lowest mean score of the six dimensions, totaling 2.47.

*Shared and Supportive Leadership*

The first dimension had a mean score of 2.52 and a standard deviation of 0.67, which placed respondents’ scores towards the middle of agree and disagree. Findings are as follows.

**Perceptions.**

1) Leadership is promoted and nurtured among staff members (77% agreement rate).

2) Staff members are consistently involved in discussing and making decisions about most school issues (70% disagreement rate).

3) The principal participates democratically with staff sharing power and authority (70% disagreement rate).

**Challenges and Benefits.**

1) Time: teachers report the challenges of needing more time to conduct PLC work – interview data.

2) The principal participates democratically with staff sharing power and authority (70% disagreement rate).

3) The principal is proactive and addresses areas where support is needed (68% disagreement rate).

**Propitious Structures and Conditions for Implementation.**

1) Common meeting time is reported as an essential condition – interview data.

2) Decision-making takes place through committees and communication across grade and subject areas (52% agreement rate).
3) Staff members have accessibility to key information (64% agreement rate).

**Shared Values and Vision**

The second dimension has a mean score of 2.70, which placed respondents’ scores towards the strongly agree/agreement than disagree. Findings are as follows.

**Perceptions.**

1) A collaborative process exists for developing a shared sense of values among staff (79% agreement rate).

2) Interview Participant #2 was asked: Do you think that book by Robert DuFour and Michael Fullan, “Cultures Built to Last Systemic PLCs at Work,” help you lead PLC vision? Participant #2 responded:

Absolutely, I think without that book I would still be kind of be floundering with the vision of our PLC. Last year I didn’t understand what we're supposed to doing on a day to day basis. Now, much improvement in the goals and vision of our plc helps us understand the structure and then I try to be a leader our PLC by facilitating a collaborative vision.

3) A collaborative process exists for developing a shared sense of values among staff (79% agreement rate).

**Challenges and Benefits.**

1) Shared values support norms of behavior that guide decisions about teaching and learning (70% agreement rate).

2) Data are used to prioritize actions to reach a shared vision (76% agreement rate).

3) Participant #3 stated,
Within my math PLC everyone matters. Everyone has an equal voice and no one is the leader. A facilitator records all the information but everyone's opinion and voice matters. Every moment counts and when we make decisions that impact the kids, we stay grounded in our work.

**Propitious Structures and Conditions for Implementation.**

1) Participant #3 stated,

I think our biggest obstacle when implementing our PLC is when administrators want to teachers to fill in protocol-type documents of student data. Some compliance pieces hold up our work and we feel that we need to backtrack to fill in this form that needs to be filled in that no one needs and no one looks at it after we leave the PLC. It's just filled in for administrators out of compliance.

2) Participant #3 equated the obstacle of completing compliance protocols and how they slow down the work of a PLC. This participant likens backtracking as an element of protocol PLC minutia.

**Collective Learning and Application**

The third dimension has a mean score of 2.89 and a standard deviation of 0.67, which placed respondents’ scores towards agreement. Findings are as follows.

**Perceptions.**

1) Collegial relationships exist among staff members that reflect commitment to school improvement efforts (90% agreement rate).

2) Staff members plan and work together to search for solutions to address diverse student needs (93% agreement rate).
3) Survey comment: “There is a want for collaboration from administrators and students, however, not every group of teachers in the schools are given the opportunity to collaborate together on a regular basis.”

**Challenges and Benefits.**

1) Interview Participant #1 stated:

This year PLC leads are able to fill in the TCT (Teacher Collaboration Time) calendar, which has given more power to the team PLC leads. We have the autonomy to be able to set the agenda. Also, administration has fostered an environment that enable teams to differentiate at each grade level.

2) Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry (81% agreement rate).

**Propitious Structures and Conditions for Implementation.**

1) Participant #2 stated:

There is a lot more that works than what doesn't. I like having the time to meet with people who all have a common goal of PLC implementation and teacher learning. For grade level teachers to be able to collaborate with everyone who's teaching similar subjects like language arts and social studies that connectedness is already there. We're all doing the same thing and we get to discuss collectively what's been working well for students and make sure we're all doing the best thing for the kids.

2) A variety of opportunities and structures exist for collective learning through open dialogue (64% agreement rate).
3) Collaboration was a term that was mentioned 19 times during the three, 10-minute semi-structured interviews.

**Shared Personal Practice**

The fourth dimension had a mean score of 2.47 was the lowest mean score of the six dimensions, leaning towards disagreement. Results are as follows.

**Perceptions.**

1) A comment from the survey was as follows:

I placed a disagree next to several of these items because I think we can improve the frequency with which these teachers to teacher collaboration opportunities are offered. At this point I do not see this occurring on a regular basis.

2) Participant #2 stated:

I'm still learning. I'm definitely not an expert at leading a PLC. I still feel terrified a lot and a little bit self-conscious. I don't want it to be me leading and dictating all the work that needs to be accomplished. I want to try to get to a point where it's a shared responsibility. That shared responsibility and purpose I found is the most difficult to try to build.

**Challenges and Benefits.**

1) Opportunities exist for staff members to observe peers and offer encouragement (23% agreement rate).

2) Staff members provide feedback to peers related to instructional practices (38% agreement rate).

**Propitious Structures and Conditions for Implementation.**

1) Participant 3 stated:
We were top in the county in 5th grade math PSSA achievement (77% proficient and advanced). When we learned that we were top in the county in PSSA - Our PLC asked the question - What changed? What changed is that teachers worked as a cohesive group in building our assessments and collaborating.

2) Shared personal practice as a dimension is rooted in collaborative efforts amongst teachers while focusing on increasing student achievement.

**Supportive Conditions – Relationships**

The fifth dimension had a mean score of 2.90 and indicated a level of agreement.

Findings are as follows.

**Perceptions.**

1) Survey comment: “The teachers in our school district go above and beyond to teach our students and to have respectful and trusting relationships with our students and their families.”

2) Caring relationships exist among staff and students that are built on trust and respect (93% agreement rate).

3) A culture of trust and respect exists for taking risks (90% agreement rate).

**Challenges and Benefits.**

1) Relationships among staff members support honest and respectful examination of data to enhance teaching and learning (81% agreement rate).

2) Participant #2 stated:

Some challenges of PLCs - so much work needs to be done and the time constraints are sometimes and impediment. We are fortunate enough to have a thirty-minute teacher collaboration block, while our students are at recess to complete curricular work.
Propitious Structures and Conditions for Implementation.

1) Participant #3 stated:

Let us do it. Let it be teacher run. Obviously, we have to have guidelines so that we stay within time constraints and that we stay focused. If you have a good group then it should be ok and choose their topic let them choose the format of analyzing the data if you want the data reported on fine.

2) Participant #3 stated, “This interview respondent does get to the core of the PLC, discussing trust and relationship building.”

Supportive Conditions – Structures

The sixth and final dimension had a mean score of 2.67 which placed the mean score closer to agreement than disagreement. Findings are as follows.

Perceptions.

1) Participant #2 stated:

Common meeting time is an essential component to the structure of a PLC. One goal is to have everybody on the same page in the PLC so that we don't end up just sitting there and talking about non-school related topics.

2) Time is provided to facilitate collaborative work (79% agreement rate).

3) Data are organized and made available to provide easy access to staff members (69% agreement rate).

Challenges and Benefits.

1) Participant #3 stated, “It’s challenging to deal with limited time constraints especially when we are really getting into something and we suddenly have to stop and go back to teaching the students.”
2) Time is provided to facilitate collaborative work (81% agreement rate).

**Propitious Structures and Conditions for Implementation.**

1) The school facility is clean, attractive and inviting and the proximity of grade level and department personnel allows for ease in collaborating with colleagues are structures that have agreement rates of 60% or higher.

2) Communication systems promote a flow of information among staff members (58% agreement rate).

3) Resource people provide expertise and support for continuous learning (49% agreement rate).

**Andragogy, Transformative Leadership and Constructivism: Application to Findings**

The lens through with I view this data is built around andragogy, transformative leadership, and constructivism. In short, I review these concepts and theories and how they shape my vision of the findings in this study.

**Andragogy**

Mezirow (1981) defined andragogy as “an organized and sustained effort to assist adults to learn in a way that enhances their capacity to function as self-directed learners” (p. 46). Knowles (1989), known as “the father of adult” learning, got this nickname due to his research with adult learning. Knowles (1989) claimed that education for children differed from the conditions for learning needed by adult learners by the following andragogy conditions:

1) The learners feel a need to learn;

2) The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences;

3) The learners perceive the goals of a learner's experience as their goals;
4) The learners accept a share of the responsibility for planning and operationalizing a learning experience and therefore have a feeling of commitment toward it;
5) The learners participate actively in the learning process;
6) The learning process is relevant to and makes use of the experiences of the learner; and
7) The learners have a sense of progress toward their goals. (p. 85-87)

Connecting to Knowles’ work regarding andragogy are the works of Zepeda (1999) whom stated, “adult learners tend to feel uncommitted to any decision or activity when they feel the event is being imposed on them without their input in the learning process” (p. 26). If an event is being imposed on a learner without input from the learner, the leader or teacher in this scenario is not leading from a transformational leadership perspective.

The conditions of andragogy will be applied to the research questions outlined in chapter 1. The PLCA-R survey is able to quantify teacher perceptions of PLCs for an andragogical interpretation of data after which recommendations for school improvement can be made. Of the six dimensions outlined in the PLCA-R survey, the andrological lens will be applied to Collective Learning and Application, Shared Personal Practice, and Supportive Conditions – Relationships. Using Knowles’ seven criteria of andragogy within these aforementioned dimensions I am able to offer conclusions by applying the theoretical framework to the data.

**The Learners Feel a Need to Learn.** This is the first criteria Knowles identified regarding andragogy. The data from the PLCA-R survey indicates a mean with an inconsistent level of agreement between Collective Learning and Application with a mean score of 2.89,
Shared Personal Practice with a mean score of 2.47, and Supportive Conditions – Relationships with a mean score of 2.90. Within the Collective Learning and Application dimension are survey statements that suggest teachers at EIS want to engage in new learning: “School staff members are committed to programs that enhance learning” (87% strongly agree/agreement rate).

Next, the Shared Personal Practice dimension, which had the lowest mean score of 2.47, included a statement that reflected agreement with adults feeling the need to learn: “Individuals and teams have the opportunity to apply learning and share the results of their practices” (73% agreement rate). This data indicates that teacher learners want to apply new learning and share results with peers.

Supportive Conditions – Relationships, which had the highest mean score of 2.90, is the last dimension in which data findings are analyzed through this andrological criteria. An interview statement that implied the learners feel a need to learn articulated the want for learner independence:

Let the teachers show you how we are going to dig further into data or common assessments. Let the teachers create a framework to further analyze a standard. We want to do the work well and our work is rooted in benefiting the kids. (Participant #3)

The research findings suggest that teachers at EIS want to learn and apply new learnings. This is a strong area of andragogy at EIS; teachers feel the need to learn.

The Learning Environment is Characterized by Physical Comfort, Mutual Trust and Respect, Mutual Helpfulness, Freedom of Expression, and Acceptance of Differences. Within the Collective Learning and Application dimension survey statements connect with physical comfort, mutual trust, respect, helpfulness, freedom, and acceptance: “Collegial
relationships exist among staff members that reflect commitment to school improvement efforts” (91% strongly agree/agreement rate). Next, the survey statement, “Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry” had a strongly agree/agreement rate of 81%. This data reflects EIS teachers’ physical comfort, mutual respect, and helpfulness.

Next, Shared Personal Practice, which had the lowest mean score of all the dimensions, suggest the staff at EIS wants more “opportunities exist for staff members to observe peers and offer encouragement” (24% agreement rate). These data findings suggest that administration at EIS needs to incorporate a structure for teacher to teacher observation and encouragement. This is an area of andragogy that has mixed findings. Some adult learning components indicate that the staff at EIS have very positive collegial relationships and reflective dialogue. However, the andragogy of shared personal practice, namely, peer observation and the offering of engorgement is a structure of andragogy that EIS should consider implementing.

Within the Supportive Conditions – Relationship dimension staff at EIS reported, “Caring relationships exist among staff and students that are built on trust and respect” (94% strongly agree/agreement rate) and “A culture of trust and respect exists for taking risks” (91% strongly agree/agreement rate). The research findings suggest that teachers at EIS have collegial relationships and trust and respect each other as learners. One chief limitation is that EIS administrators lack having a structure for teacher to teacher observation. The Supportive Conditions – Relationships andragogy is an area of strength for EIS teaching staff.

**The Learners Perceive the Goals of a Learner's Experience as Their Goals and the Learners have a Sense of Progress Toward Their Goals.** These two criteria of andragogy connect the learner to the efficacy of the group. As such, shared goals and the learners
experience are interconnected. The term “goals” appeared six times during the semi-structured interviews. When applied to this criterion of andragogy, the Collective Learning and Application dimension does not directly cite learners’ goals. However, Participant #2 stated the following when asked about the structures and conditions most propitious for PLC implementation: “Common meeting time and group goal setting is very important to our grade level PLC. Goal setting lends itself to group collaboration and having goals guides our learning as a grade level team.” This participant likened group collaboration to goal setting: “Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices” (81% strongly agree/agreement rate). This survey statement, when linked to teacher collaboration, is strong area of andragogy. Teacher goal setting is an area of andragogy that needs to be supported by EIS administration. The term “goals” was brought up six times in three interviews; however, the participants never discussed how goal setting helped drive their learning. Having a sense of goals and a sense of progress towards teacher generated goals is an area of andragogy that needs attention.

The Shared Personal Practice dimension shares a similar theme of goal setting and improving group collaboration. The survey statement: “Staff members collaboratively review student work to share and improve instructional practices” has a strongly disagree/disagreement rate of 30%. This suggests that internal PLC collaboration regarding the sharing of student work to improve instructional practices is an area that will need administrative attention.

Lastly, Supportive Conditions – Relationships survey statement, “School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school” (strongly disagree/disagree rate of 37%) marks an examination of the school’s effort to embed change within the school community. Connecting these dimension results to andragogy
suggest EIS should examine the collective change culture and continue efforts assessing the effectiveness of instructional practices.

**The Learners Accept a Share of the Responsibility for Planning and Operationalizing a Learning Experience and Therefore have a Feeling of Commitment Toward it.** The Collective Learning and Application dimensional component of the PLCA-R lends itself to this criterion of andragogy. Terms such as shared responsibility, planning, learner experience, and commitment are all essential components to PLCs. The survey statement, “Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work,” had a strongly agree/agreement rate of 93%. Also, the survey statement “Professional development focuses on teaching and learning” (strongly agree/agreement rate of 86%) suggest that administration effectively plans and operationalizes professional learning.

The next dimension, Shared Personal Practice survey statement, “Staff members provide feedback to peers related to instructional practices,” had a strongly disagree and disagreement rate of 62%. This data indicates adult learning needs to incorporate structures or staff opportunities for feedback. Feedback to peers is an area EIS administration needs to address.

Finally, Supportive Conditions – Relationships lends itself to the elements of shared responsibility and internal teacher commitment. The survey statement, “Relationships among staff members support honest and respectful examination of data to enhance teaching and learning,” has a strongly agree/agreement rate of 81%. Of these three PLCA-R dimensional components within the andragogy criteria, EIS administration should continue to effectively plan and operationalizes professional learning; however, EIS administration needs to attend to the teacher to teacher feedback opportunities within the PLC.
The Learners Participate Actively in the Learning Process. Adult learning, which includes active adult participation throughout the learning process, is evident within the Collective Learning and Application dimension. The survey statement, “Staff members plan and work together to search for solutions to address diverse student needs,” had a strongly agree/agreement rate of 94%. In addition, connected to adult learning is the survey statement, “School staff members and stakeholders learn together and apply new knowledge to solve problems.” This statement, however, had a strongly disagree/disagree rate of 36%. Adults learning together and applying new knowledge connects to the administrative need to further investigate EIS’s want for teacher/peer feedback and teacher/peer observations. Staff members and stakeholders learning together and applying new knowledge is an area of andragogy that needs EIS support and attention.

“Opportunities exist for coaching and mentoring,” a survey statement within the Shared Personal Practice dimension, had a 51% strongly disagree and disagreement rate, suggesting adult learners want more coaching and mentoring opportunities from administration. This data suggests that administration should be put in more positions to be seen as a coach. This aspect of andragogy suggests that participants neither agree or disagree on wanting opportunities for coaching and mentoring.

The Supportive Conditions – Relationships dimension included qualitative findings pertaining to active adult learning participation and processes that extend beyond the school community. “The teachers in our school district go above and beyond to teach our students and to have respectful and trusting relationships with our students and their families” (survey comment). This statement implies that teachers go to extreme lengths for their students. This
would be a strong area of andragogy if teachers felt that they went above and beyond the call of duty for their students.

**The Learning Process is Relevant to and Makes Use of the Experiences of the Learner.** The last andragogy criteria component suggests the learning process should be relevant and makes use of prior learning. This is where constructivism and andragogy intersect.

**Constructivism**

Constructivism is a theory that states knowledge is constructed by a person, not just transmitted to the person via lecture or through a textbook. Hoover (1996) highlighted two ideas regarding the knowledge construction process: “(a) prior knowledge always influences the formation of new knowledge, and (b) learning is an active process” (p. 17). Hoover (1996) cites that learning is an active process and that prior knowledge is a prerequisite to future learning. This ideology of learning is supported through peer collaboration and teamwork by Bednar et al. (1991), who contends, “a major characteristic of constructivism is the importance of collaboration and social negotiation of meaning. Learning happens within a social context” (p. 88).

The qualitative interview data provided specific examples that connects to the tenants of andragogy and constructivism. Interview Participant #2 discussed her learned experiences leading and being a member of a PLC:

I think my experience in a PLC has evolved. I tapped into my prior learned experiences leading classrooms and transferred my approach with students to teachers. It has been a continued learning experience because the implementation of grade level PLCs this is a new thing. I think it's something where I have to evolve understanding of a PLC and the
more I read and practice, a routine will be established from my leadership experience.

(Participant #2)

Interview Participant # 3 alluded to her experience as a member of a PLC and described the inner workings of her team:

Within my math PLC everyone matters. Everyone has an equal voice; a facilitator records all the information but everyone's opinion, experience and voice matters. All prior and present experiences are taken into consideration when we make decisions that will impact the kids and adult learning. (Participant #3)

Clearly, this team is a high functioning PLC, and interview Participant #3 states:

We have the data to support our experience. We were top in the county in 5th grade PSSA achievement. When we learned that we were top in the county in PSSA - Our PLC asked the question - What changed? What changed is that teachers worked as a cohesive group in building our assessments and collaborating.

In connecting the seven criteria of andragogy and constructivism, the research findings suggest many areas of strength within the quantitative data, but they have also uncovered some tensions that are also evident in the data. The findings suggest that EIS have adult learners who have a strong desire to learn. EIS does an adequate job of planning professional learning that meets most of the teachers’ needs; however, some areas that need further investigation are EIS’s adult learning staff desire for teacher/peer feedback, teacher/peer observations, and teacher/peer coaching and mentoring. The next section describes the research findings within the theoretical
framework of transformative leadership. The PLCA-R dimensions covered within the transformative leadership framework will be Shared and Supportive Leadership, Shared Values and Vision, and Supportive Conditions – Structures.

**Transformative Leadership**

Hallinger (2003) cites transformational leadership as an essential component to the creation and sustainability of PLCs. “Transformational leaders create a climate in which teachers engage in continuous learning and in which they routinely share their learning with others” (Hallinger, 2003, p. 329). This statement connects to the tenets of andragogy in how learners have a sense of connection and commitment to the work. Advancing the transformative leadership theory is the concept of essential leadership qualities; “Transformational leaders motivate and inspire people by helping group members see the importance and higher purpose of the task” (Charry, 2012, p. 2) This statement articulates how transformational leaders inspire adult learners and align the tasks to common shared goals. Conversely, transactional leaders, Bass (1990) stated, include “organizations whose leaders are transactional are less effective than those whose leaders are transformational particularly if much of the transactional leadership is passive management-by-exception” (p. 22-23).

Transformational leadership theory, when applied to the analysis of the research findings as an educational leader, promotes a theoretical framework for PLC implementation and refinement. Transformational leadership research connects to the works of DuFour and Eaker (1998) and their discussion of how transformative leadership theory can positively influence an elementary school’s professional learning.

*Transformational and Transactional Leadership.*
**Shared and Inspired Leadership.** The Shared and Inspired Leadership dimension’s findings included a mean score of 2.52. As such, participants’ scores leaned slightly towards agreement. However, the mean score is approximately in an area where participants neither agreed or disagreed on average with the statements within this dimension. The findings point to specific areas that should be addressed during the implementation and development of EIS’s PLC framework. The statement, “Staff members are consistently involved in discussing and making decisions about most school issues,” had an overall strongly disagree/disagree score of 69%. These data suggest that a collaborative and continuous learning environment needs to be supported with more teacher input regarding school issues. Staff members’ involvement in decision making of school issues is an aspect of transformational leadership in which EIS administration needs to attend.

Of the seven survey comments, one teacher stated, “I am looking at this as overall administration - not one single principal.” This is important to note as the data from this individual teacher views “the principal” as the entire administrative team at EIS, which is comprised of one lead principal and two assistant principals. A second survey statement states:

> Select few (teachers) are chosen from principals to have the responsibility and rewards for curriculum, changes, etc. Teachers are told what decisions are. When they try to have an open discussion, teachers feel they are pushed aside and not listened to.

For this teacher, the feeling of *not being listened too* is evident and the leadership team may want to further investigate how some teachers are chosen for leadership positions. This survey statement alludes to transactional leadership practices, which is the opposite of transformational leadership. As stated in Chapter Two, transactional leadership is comprised of expectations,
rewards, consequences, and exchanges between leaders and followers. The aforementioned survey statement points to EIS, which does not have an internal candidate application process in which supplemental positions are posted through human resources. Teacher leadership and curricular opportunities are posted and/or found internally. This data would suggest that EIS administration has some components of transactional leadership.

Connecting to EIS’s personnel collaboration data is the survey statement, “the principal is proactive and addresses areas where support is needed.” This survey statement had a strongly disagree and disagree score of 68%. This data score conflicts with the survey statement, “leadership is promoted and nurtured among staff members.” This statement had a strongly agree/agreement rate of 77%. These components, when applied to a transformative leadership lens, suggest that the leadership team at EIS promotes and nurtures leadership amongst staff members; however, there are areas that suggest the leadership team needs to further build capacity with EIS teachers. “The principal participates democratically with staff sharing power and authority,” had a strongly disagree/disagree mean score of 69%. Marks and Printy (2003) stated that transformative leadership “focuses on problem finding, problem solving, and collaboration with stakeholders with the goal of improving organizational performance” (p. 377). The data within the Shared Leadership suggest that the EIS leadership team needs to continue to promote leadership amongst staff members and improve building internal PLC teacher capacity, as seen with data points regarding principal proactiveness, stakeholder school decision input, and democratically sharing power and authority.

**Shared Values and Visions.** This dimension, when applied to transformative leadership, specifically, a collaborative and continuous learning environment, indicated a mean score of 2.70, which was a score that trended closer to overall agreement. There were four survey
comments within the Shared Values and Visions dimension of the PLCA-R. One teacher comment points to how shared values are decided:

> Shared values are decided for us. Teachers do their best to follow the given shared values and core values developed by the school community. However, data analysis is a huge component and can become too much of an emphasis. Priority is placed on the PSSA.  
> (Survey comment)

The teacher survey comment suggested that a collaborative learning process may not exist at EIS. Connecting to this survey comment is the 44% strongly disagree and disagree rate regarding learning and assessment, specifically, “school goals focus on student learning beyond test scores and grades.” This is an aspect of transformational leadership that has mixed results. However, survey data suggest areas of strength with EIS’s Shared Values and Visions dimension. The statement, “A collaborative process exists for developing a shared sense of values among staff,” had a strongly agree/agree rate of 79%. This overall survey data conflict with the aforementioned survey comment relating to EIS’s leadership shared vision and values. The research findings overall, which included quantitative and qualitative data, suggest that teachers at EIS believe a collaborative and continuous learning environment exists, but administration should focus on student learning beyond test scores. There are components of transformational and transactional leadership within the EIS administration team, specifically with the collaborative process data and shared sense of values. There is conflicting data and this is an area that EIS administration should consider.

**Supportive Conditions – Structures.** This dimension had an overall mean score of 2.67, which leaned more towards overall agreement. The last dimension analyzes facilities, structures,
and communication. A total of 80% of the EIS teaching staff agree, “the school facility is clean, attractive and inviting.” Regarding grade level proximity, “the proximity of grade level and department personnel allows for ease in collaborating with colleagues,” had an 63% strongly agree/agreement rate. EIS is separated into four grade levels and has two floors. The administrative team at EIS created a building master schedule which includes a daily 30-minute “teacher collaboration time,” which occurs during the student’s recess. A total of 66% strongly agreed that “the school schedule promotes collective learning and shared practice.” An area that EIS should consider further investigation is within the scope of school communication. Transformative leadership focuses on inspiring and motivating all stakeholders within a school community and if communication is an area of concern, a transformative leader should build capacity amongst the teaching staff to solve this issue. The next two survey statements regard EIS communication are as follows:

- Communication systems promote a flow of information among staff members.
- Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.

These communication statements each had strongly disagree/disagree scores in the 40% range. This data suggests that this is an area that needs to be furthered investigated as it directly correlates to school communication.

**Discussion of Results**

**Teacher Perceptions of PLCs**

Compiling the quantitative survey data, qualitative interviews, and survey comments, the research findings regarding teacher perceptions of PLCs are clear and themes are presented. PLC
perception data suggest that there is still work that needs to be done regarding PLCs at EIS with the following survey comments:

- There is a want for collaboration from administrators and students; however, not every group of teachers in the schools are given the opportunity to collaborate together on a regular basis.
- I placed a disagree next to several of these items because I think we can improve the frequency with which these teachers to teacher collaboration opportunities are offered. At this point I do not see this occurring on a regular basis.

Survey data aligning to the survey comments suggest that the administration needs to involve more stakeholders with PLC decisions: “Staff members are consistently involved in discussing and making decisions about most school issues,” and “The principal participates democratically with staff sharing power and authority.” Each survey statement had a 69% disagreement rate.

This perception data suggest that the principal and administrative team have structures in place for teachers to collaborate and lead grade level PLCs. However, the staff at EIS feel that the principal and administrative team need to include more teacher input regarding school decisions and sharing authority.

Teacher perception findings regarding relationship with administration and peers suggest that the staff at EIS have positive relationships. “Collegial relationships exist among staff members that reflect commitment to school improvement efforts,” had an agreement rate of 90% and “Caring relationships exist among staff and students that are built on trust and respect,” had an agreement rate of 93%. Connecting to this relationship data is the teacher perception of culture and trust. “A culture of trust and respect exists for taking risks,” had an agreement rate of
90%. EIS teacher perception data is clear regarding the school’s culture of trust, risk taking, and caring relationships.

Teacher perception data regarding PLC teacher leadership structures suggest the EIS administrative team should consider creating a teacher leader mentoring supports. Participant #2 discussed her perception of leading a grade level PLC:

I'm still learning. I'm definitely not an expert at leading a PLC. I still feel terrified a lot and a little bit self-conscious. I don't want it to be me leading and dictating all the work that needs to be accomplished. I want to try to get to a point where it's a shared responsibility. That shared responsibility and purpose I found is the most difficult to try to build.

This qualitative data is a critical teacher perception concerning the supports necessary for PLC leaders. Administration will need to consider this data as EIS’s PLC structuring continues to evolve.

Time, and more time, was a resounding theme that was mentioned 56 times. As EIS continues to evolve the PLC structures, much consideration should be discussed regarding time. Participant #2 discussed the structure of common meeting time:

Common meeting time is an essential component to the structure of a PLC. One goal is to have everybody on the same page in the PLC so that we don't end up just sitting there and talking about non-school related topics.

Participant #2 refers to common meeting time, not just time in general, which can only be accomplished through systemic school master scheduling. The data on time suggest EIS should
consider master scheduling implications when establishing grade level PLC time. Staff at EIS do state that, “Time is provided to facilitate collaborative work,” with an agreement rate of 81% and that “Data are organized and made available to provide easy access to staff members,” with an agreement rate of 69%. The leadership team at EIS has provided the time, as a result of investigating teacher needs, for daily teacher collaboration. This points to a strength in transformational leadership.

PLC teacher participants revealed findings regarding EIS administration, teacher learning, collaboration, relationships, trust, structures, and time. When asked, *Do you think the book by Robert DuFour and Michael Fullan “Cultures Built to Last Systemic PLCs at Work” helped you lead PLC vision?* The response was grounded in the need for foundational learning, in this case a PLC text to guide the learning process:

*Absolutely, I think without that book I would still be kind of be floundering with the vision of our PLC. Last year I didn’t understand what we’re supposed to doing on a day to day basis. Now, much improvement in the goals and vision of our plc helps us understand the structure and then I try to be a leader our PLC by facilitating a collaborative vision.*

( Participant #2)

Participant #2 references her experience from last year and cited that the common PLC text helps guide her PLC learning and leadership.

Lastly, EIS administration, a term used throughout this dissertation refers to EIS lead principal and two assistant principals that help facilitate PLC work. Teacher perceptions of the *leadership is promoted and nurtured and a collaborative process exists for developing a shared sense of values among staff* is evident. This data suggests the EIA leadership have PLC structures
in place that provides a forum for PLC norm and value setting. Also, staff members perceive peer collaboration, when investigating solutions to address diverse student needs to be an area of strength.

**Challenges and Benefits**

Compiling the quantitative survey data, qualitative interviews, and survey comments, the research findings regarding the challenges and benefits of PLCs are clear. PLC themes regarding the challenges and benefits of PLCs are as follows: principal support and leadership, peer observation, peer support, and time.

Participant #3 discussed the concept of an equal voice and that everyone’s opinion mattered, which connects to PLC feedback data. Connecting to the interview comment are the findings with the following survey statements: “Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry,” and “Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.” Both had an agreement rate of 81%.

Survey statements regarding the challenges and benefits of PLC feedback suggested an area of need at EIS. “Opportunities exist for staff members to observe peers and offer encouragement,” had an agreement rate 23% and “Staff members provide feedback to peers related to instructional practices,” had an agreement rate of 38%. This data connects with the Shared Personal Practice dimension of a PLC, which had the lowest mean score of 2.47. Interview participants 2 and 3 discussed the challenge of time:

Some challenges of PLCs - so much work needs to be done and the time constraints are sometimes and impediment. We are fortunate enough to have a thirty-minute teacher
collaboration block, while our students are at recess to complete curricular work.

(Participant #2)

“It’s challenging to deal with limited time constraints especially when we are really getting into something and we suddenly have to stop and go back to teaching the students” (Interview Participant #3). These comments connect to overall teacher perception data suggesting that EIS should consider time as an area of need for PLC implementation. However, Participant #1 noticed a structure that EIS principal put in place when discussing time:

This year PLC leads are able to fill in the TCT (Teacher Collaboration Time) calendar, which has given more power to the team PLC leads. We have the autonomy to be able to set the agenda. Also, administration has fostered an environment that enable teams to differentiate at each grade level. (Participant #1)

This statement refers to a TCT (Teacher Collaboration Time) calendar that team leads can utilize to disseminate information to administration and team leads. EIS administration should consider including more organizational structures that can streamline systems, thus saving time.

**Structures and Conditions for Propitious Implementation**

Structures for propitious PLC implementation are clear. Themes from the research findings include teacher autonomy, collaboration, communication, and relationships. “The principal participates democratically with staff sharing power and authority,” and “The principal is proactive and addresses areas where support is needed” each had a 69% disagree rate. This data suggest the EIS administrative team should put structures in place that will provide a forum for sharing power and authority with EIS staff and proactively support areas of the PLC.
Participant #3 alluded to a possible solution or framework for sharing authority when asked about the structure of her PLC. Her response was clear, “everyone’s voice matters” (Participant #3).

Participant #3 discusses the concept of teacher autonomy as a propitious structure of PLCs:

*Let us do it. Let it be teacher run.* Obviously, we have to have guidelines so that we stay within time constraints and that we stay focused. If you have a good group then it should be ok and choose their topic let them choose the format of analyzing the data if you want the data reported on fine. (Participant #3)

This statement connects with a second statement made by Participant #3 regarding administrative support:

*I think our biggest obstacle when implementing our PLC is when administrators want to teachers to fill in protocol-type documents of student data.* Some compliance pieces hold up our work and we feel that we need to backtrack to fill in this form that needs to be filled in that no one needs and no one looks at it after we leave the PLC. It's just filled in for administrators out of compliance. (Participant #3)

Participant #3 equates the obstacle of completing compliance protocols and how they slowed down the work of a PLC. This interview data suggests administration should consider differentiating support to EIS PLCs.

Collaboration and open dialogue was a theme that was uncovered through gathering research findings. Survey statement, “A variety of opportunities and structures exist for
collective learning through open dialogue,” had an agreement rate of 64%, which suggest that collaboration and dialogue should be an area that administration may need to consider while implementing PLCs and EIS. The term collaboration was mentioned 19 times during the three, 10-minute semi-structured interviews. Participant #3 articulated how their grade level PLC collaborates and the positive results from effective collaboration:

We were top in the county in 5th grade math PSSA achievement (77% proficient and advanced). When we learned that we were top in the county in PSSA - Our PLC asked the question - What changed? What changed is that teachers worked as a cohesive group in building our assessments and collaborating. (Participant #3)

Continued findings suggest that an essential propitious condition for PLC implementation is streamlined, effective collaboration. Research data suggest that this is an area of need at EIS.

“Decision-making takes place through committees and communication across grade and subject areas,” had an agreement rate 52% and “staff members have accessibility to key information,” had an agreement rate 64%. These data points indicate that EIS administration needs to consider internal communication. Extending the research findings regarding communication are the survey statements, “Communication systems promote a flow of information among staff members,” had an agreement rate of 58% and “Resource people provide expertise and support for continuous learning,” had an agreement rate 49%. The team at EIS should consider PLCs structures relating to continuous learning and effectively disseminating the flow of communication systems throughout the building.

Lastly, Participant #2 discusses the conditions and structures that work for her as a member of a PLC:
There is a lot more that works than what doesn't. I like having the time to meet with people who all have a common goal of PLC implementation and teacher learning. For grade level teachers to be able to collaborate with everyone who's teaching similar subjects like language arts and social studies that connectedness is already there. We're all doing the same thing and we get to discuss collectively what's been working well for students and make sure we're all doing the best thing for the kids.

Participant #2 articulated the inner workings of her grade level PLC and in her concluding remarks discusses the purpose of teacher collaboration, grounded in the assumption of always doing what is best for kids. Through teacher collaboration, meeting the needs of students is a team effort.

**Limitations**

There are some limitations that need to be noted in addition to those articulated in Chapters One and Three. They are in the areas of methodology, analysis, and generalizability.

**Limitations in Methodology**

A potential limitation to this research study was that I am an assistant principal conducting research my school of employment. My position may have compromised the data collection and analysis given my position of relative power. I must also note a comment Participant #3 made to me during the interview/research process when asked about obstacles she faced during PLC work, “administrators...I’m sorry but you’re clueless. We have curricular timelines that we have to meet and then you come in and tell us to complete a protocol.” Suffice it to say, teachers at EIS proudly share their opinion and this is why this research data is accurate and relevant in creating knowledge. The chief concern I had was that the data would be skewed
all positive because of my position of relative power. I did not find this to be true. However, the completion of the survey and interview participation were voluntary in nature. There was a high response rate with the PLCA-R survey. A total of 63 participants completed the survey and 85 teachers at EIS were sent the survey, achieving saturation within the survey data. Another point to consider regarding limitations within the research was the survey comments and semi-structured interview responses did not paint a rosy picture of all things PLC. Teachers at EIS were not afraid to share their opinions regarding professional learning.

One duty as an assistant principal at the research site is an overseer of curriculum, instruction, and assessment. My role has me directly working with teachers in the capacity of leading and facilitating PLC work by training teachers to become teacher leaders of their PLCs. I am close to the work that is being researched in terms of direct job responsibilities; however, my questions were crafted in a way that gets to the root of how teachers felt about PLCs and were not supervisory in any fashion. Next, the interviews were conducted in the school professional learning classroom in lieu of my office. This setting was a neutral location that was not in an evaluative space.

**Limitations in Analysis**

Even though the response rate was high (74% completion rate) limitations in the analysis include the perspective of the researcher, namely the assistant principal at EIS. Of the three semi-structured interview participants, two were grade level PLC leaders and the other was a teacher within a PLC.

**Limitations in Generalizability**

The recommendations made within this chapter can be applied to other elementary schools with confidence. More research must be done in determining teacher perceptions of
PLCs and how to effectively implement them as a structure of continued professional learning. Further research should be done in comparing the perception data from elementary teachers with that of secondary teachers.

**Implications for Future Educational Research**

The findings from this study answered the research questions, but they also advance other implications and questions for future research. Some questions that need further investigation are: *Do PLCs have a direct correlation in student achievement on state standardized assessments?* If I were talking to interview Participant #3, she would say yes. However, if systemic PLC change initiatives started at the district office, systemic common practices would result. Interestingly, as pointed out in Chapter Two of the review of literature, Canada has made it a law to implement PLCs in the schools throughout their country (Fullan, 2007).

*Are these findings consistent with similar school(s) in the second year of implementation?* PLCs are not entirely occurring in all four schools at the school district that encompasses EIS. Both schools are in the second year of PLC implementation. It would be interesting to compare the teacher perception data from the neighboring school, which could lead to internal school district collaboration. *Regarding PLC sustainability; What factors contribute to the sustainability of PLCs? What impact(s) does school district wide implementation of PLCs have on student growth and achievement? Is there a need for a position within a school district for Lead PLC Facilitator, or Director of Professional Learning?* This position could potentially streamline professional learning initiatives and be responsible for district wide professional learning communities.
Summary

The PLC data presented in Chapter Five is compelling. Findings suggest that teacher perceptions data revealed findings regarding EIS administration, teacher learning, collaboration, relationships, trust, structures, and time. Of the teacher perception themes, teacher learning and meaningful collaboration have been identified as vital aspects of PLCs. Trust, PLC structures, and time have been identified as areas that have conflicting data. Administration at EIS should consider the incorporation of systemic teacher input on school decisions and not leave them to team leaders and administration.

Themes reported regarding the challenges and benefits of PLCs are principal support and leadership, peer observation, peer support, and time. The challenges that teachers at EIS report are the proactiveness of the EIS principal and administration team regarding the supporting of PLC work. Also, a chief finding is the need for administration at EIS to develop and implement peer observation practices and structures that promote Shared Personal Practice.

Lastly, themes from research findings regarding propitious structures of PLC implementation include teacher autonomy, collaboration, communication, and relationships. Increased opportunities for collaboration amongst stakeholder groups within EIS was reported to be a significant need. Teachers at EIS report with resounding agreement that effective, trusting relationships are evident and are part of the school culture. As EIS continues to support the implementation of PLCs as a structure for teacher collaboration, feedback, and curricular support, it is essential that EIS collaborates with other schools and districts that have fully implemented PLCs. The research findings support the need for collaboration amongst teachers and administrators, and other aspects of collaboration is that EIS administration should seek opportunities to further investigate PLCs at other schools.
References


Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Southwest Educational Development Laboratory, Austin, Texas


Stoll, L., & Louis, K. S. (2008). Professional learning communities: Divergence, depth and


Appendix A: IRB approval

TO: Michael Garvin and David Backer
FROM: Nicole M. Cattano, Ph.D.
Co-Chair, WCU Institutional Review Board (IRB)
DATE: 8/7/2019

Project Title: Professional Learning Communities at an Elementary School: Perceptions, Implementation and Impacts
Date of Approval: 8/7/2019

☑ Expedited Approval
This protocol has been approved under the new updated 45 CFR 46 common rule that went into effect January 21, 2019. As a result, this project will not require continuing review. Any revisions to this protocol that are needed will require approval by the WCU IRB. Upon completion of the project, you are expected to submit appropriate closure documentation. Please see www.wcupa.edu/research/irb.aspx for more information.

Any adverse reaction by a research subject is to be reported immediately through the Office of Research and Sponsored Programs via email at irb@wcupa.edu.

Signature:

Co-Chair of WCU IRB
WCU Institutional Review Board (IRB)

IORG#: IORG00004242
IRB#: IRB00005030
FWA#: FWA00014155

Protocol ID # 20190807C
This Protocol ID number must be used in all communications about this project with the IRB.
Appendix B: Survey

The Professional Learning Community Assessment-Revised (PLCA-R) (2010)

Directions:
This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement. Comments after each dimension section are optional.

Key Terms:
- Principal = Principal, not Associate or Assistant Principal
- Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders = Parents and community members

Scale:
1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Agree (A) 4 = Strongly Agree (SA)

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<tr>
<th>STATEMENTS</th>
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<tr>
<td><strong>Shared and Supportive Leadership</strong></td>
<td>SD</td>
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<tr>
<td>1. Staff members are consistently involved in discussing and making</td>
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<td>decisions about most school issues.</td>
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<td>2. The principal incorporates advice from staff members to make decisions.</td>
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<td>3. Staff members have accessibility to key information.</td>
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<td>4. The principal is proactive and addresses areas where support is needed.</td>
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<td>5. Opportunities are provided for staff members to initiate change.</td>
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<td>6. The principal shares responsibility and rewards for innovative actions.</td>
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<td>7. The principal participates democratically with staff sharing power and</td>
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<td>authority.</td>
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<tr>
<td>8. Leadership is promoted and nurtured among staff members.</td>
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<td>9. Decision-making takes place through committees and communication</td>
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<td>across grade and subject areas.</td>
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<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
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11. Staff members use multiple sources of data to make decisions about teaching and learning.  

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<th>Shared Values and Vision</th>
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<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
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<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
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<td>14. Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
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<td>15. Decisions are made in alignment with the school’s values and vision.</td>
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<td>16. A collaborative process exists for developing a shared vision among staff.</td>
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<td>17. School goals focus on student learning beyond test scores and grades.</td>
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<td>18. Policies and programs are aligned to the school’s vision.</td>
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<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
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<td>0 0 0 0</td>
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<td>20. Data are used to prioritize actions to reach a shared vision.</td>
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| 21. Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work. |
| 0 0 0 0 |
| 22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts. |
| 0 0 0 0 |
| 23. Staff members plan and work together to search for solutions to address diverse student needs. |
| 0 0 0 0 |
| 0 0 0 0 |
| 25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry. |
| 0 0 0 0 |

27. School staff members and stakeholders learn together and apply new knowledge to solve problems.  

28. School staff members are committed to programs that enhance learning.  

29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.  

30. Staff members collaboratively analyze student work to improve teaching and learning.  

COMMENTS:

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Personal Practice</strong></td>
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<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
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</tr>
<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
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</tr>
<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
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</tr>
<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
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</tr>
<tr>
<td>35. Opportunities exist for coaching and mentoring.</td>
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</tr>
<tr>
<td>36. Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
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</tr>
<tr>
<td>37. Staff members regularly share student work to guide overall school improvement.</td>
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COMMENTS:

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<tr>
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<tr>
<td>38. Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0</td>
</tr>
<tr>
<td>39. A culture of trust and respect exists for taking risks.</td>
<td>0</td>
</tr>
<tr>
<td>40. Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>41.</td>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
</tr>
<tr>
<td>42.</td>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
</tr>
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<td><strong>SD</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td>43.</td>
<td>Time is provided to facilitate collaborative work.</td>
</tr>
<tr>
<td>44.</td>
<td>The school schedule promotes collective learning and shared practice.</td>
</tr>
<tr>
<td>45.</td>
<td>Fiscal resources are available for professional development.</td>
</tr>
<tr>
<td>46.</td>
<td>Appropriate technology and instructional materials are available to staff.</td>
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</table>

<table>
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<tr>
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<th><strong>SCALE</strong></th>
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<td><strong>SD</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td>47.</td>
<td>Resource people provide expertise and support for continuous learning.</td>
</tr>
<tr>
<td>48.</td>
<td>The school facility is clean, attractive and inviting.</td>
</tr>
<tr>
<td>49.</td>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
</tr>
<tr>
<td>50.</td>
<td>Communication systems promote a flow of information among staff members.</td>
</tr>
<tr>
<td>51.</td>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
</tr>
<tr>
<td>52.</td>
<td>Data are organized and made available to provide easy access to staff members.</td>
</tr>
</tbody>
</table>

| **COMMENTS:** | |

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Appendix C:

June 2, 2019

Michael
Garvin
Landenberg,
PA 19350

Dear Michael Garvin:

This correspondence is to grant permission to utilize the *Professional Learning Community Assessment- Revised* (PLCA-R) as an instrument for data collection in your doctoral research at West Chester University of Pennsylvania. This research examining teachers’ perceptions of implementation, impact, and sustainability of professional learning communities in a large intermediate school, grades 3-6 will contribute to the PLC literature and identify findings to support sustainability within the PLC process. I am pleased you are interested in using the PLCA-R measure in your research.

Permission offers use of the online version of the PLCA-R administered through PLC Associates. While this letter provides permission to use the measure in your study, authorship of the measure will remain as Olivier, Hipp, and Huffman (exact citation on the following page). This permission does not allow renaming the measure or claiming authorship.

Upon completion of your study, I would be interested in learning about your entire study and would welcome the opportunity to receive an electronic version of your findings.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. For additional information on PLC research, refer to [www.plcassociates.org](http://www.plcassociates.org). Should you require any additional information, please feel free to contact me.

Sincerely,

*Dianne F. Olivier*

Dianne F. Olivier, Ph. D.
Professor and Coordinator of the Doctoral Program Joan D. and Alexander S. Haig/BORSF Professor Department of Educational Foundations and Leadership College of Education University of Louisiana at Lafayette P.O. Box 43091 Lafayette, LA 70504-3091 (337) 482-6408 (Office)
Appendix D: District Permission Letter to Conduct Research

June 6, 2019

Michael Garvin
Doctoral Candidate
West Chester University

Mike,

I hereby grant permission for you to conduct a research study in the [redacted] School District. Specifically, by collecting data at the [redacted] School to understand how professional learning communities (PLCs) influence a school community and teacher perceptions of PLCs. As part of your approval, we would request one copy (Electronic PDF) of your final dissertation, once defended and approved by the University.

Should you require anything further, do not hesitate to contact me.

Regards,

M. Christopher Marchese, Ed.D.
Superintendent of Schools
Appendix E: Survey Invoice

PLC Associates, LLC  
230 Catfish Trail  
Whitney, TX 76692

Bill To:  
Name: Michael Garvin  
Organization: West Chester University of PA/Avon Grove School District  
City, State, Zip: Landenberg, PA  
Phone:

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>90 PLCA-R online surveys @ $2.00 each</td>
<td>$180.00</td>
</tr>
</tbody>
</table>

Subtotal: $180.00  
Sales Tax

TOTAL DUE: $180.00

Make all checks payable to  
PLC Associates, LLC  
Or, remit via PayPal  
plcassociates1997@gmail.com

Survey(s) will be authorized upon payment.  
Thank You for Creating Professional Learning Communities!
Appendix F: Informed Consent Form

Project Title: Professional Learning Communities at an Elementary School: Perceptions, Implementation, and Impacts

Investigator(s): Michael Garvin; David Backer

Mr. Michael G. Garvin
Assistant Principal
Avon Grove Intermediate School
Ph#: 610-869-2010 ext. 20003
Mg372984@wcupa.edu

Dr. David Backer
Assistant Professor of Education
Department of Ed. Foundations
Policy Studies West Chester
Pennsylvania
Wayne Hall 930
Ph#: 203-917-7416
dbacker@wcupa.edu

Project Overview:

Participation in this research project is voluntary and is being done by Michael Garvin as part of his Doctoral Dissertation. The goal of the study is to understand teachers’ perceptions of professional learning communities (PLCs) impact a school community and how educational leaders can set conditions for professional learning based on teacher perception data. I believe that the results of this study will add to current literature about PLCs. The results of this study will be beneficial for educational leaders, school board members, and teachers that are involved in collaborative school settings. General Questions: 1) What are teachers’ perceptions of professional learning communities (PLCs)? 2) When it comes to PLCs, what challenges and benefits do teachers perceive? 3) What conditions and structures need to exist for collective learning through open dialogue? Your participation will take about 60 Minutes total (30 Minutes for Interview and 30 Minutes for Survey). The researcher will email the survey out to 90 teachers. The survey is 52 questions. The researcher will review survey results and invite teachers to participate in an interview. The interview will be audio recorded, transcribed, coded, and compared to the descriptive statistics results from the survey. Teachers perceptions of PLCs will be articulated and recommendations for implementation will be made. There is a minimal risk to teachers. Teachers may feel anxiety about participating in the interviews to share their experiences with me (supervisor). Teachers may withdraw from participation at any time. Interviews will be conducted in a large group instruction room within the school; not my administrative offices. This research is not designed to provide teachers with any personal benefits. However, by participating in this study, data will be collected which may inform school district stakeholders i.e. Principals, Directors, Supervisors, Teachers about teachers’ perceptions of PLCs. Teacher leaders may experience professional growth by participating in the survey/interview process as they specifically relate to teacher professional learning. This research project will add to the current literature in regards to professional learning communities in an elementary setting,
and adult learning theory, transformative learning theory and constructivism learning will be the theoretical framework for this research.

The research project is being done by Michael Garvin as part of his Doctoral Dissertation. The goal of the study is to understand how teachers’ perceptions of (PLCs) influence a school community and how educational leaders can set conditions for professional learning based on teacher perception data. I believe that the results of this study will add to current literature about PLCs. The results of this study will be beneficial for educational leaders, school board members, and teachers that are involved collaborative school settings. General Questions: 1) What are teachers’ perceptions of professional learning communities (PLCs)? 2) When it comes to PLCs, what challenges and benefits do teachers perceive? 3) What conditions and structures need to exist for collective learning through open dialogue? If you would like to take part in this study, West Chester University requires that you agree and sign this consent form. You may ask Michael Garvin any questions to help you understand this study. If you do not want to be a part of this study, it will not affect any services from West Chester University. If you choose to be a part of this study, you have the right to change your mind and stop being a part of the study at any time.

1) What is the purpose of this study?

- The goal of the study is to understand how teachers perceptions of (PLCs) influence a school community and how educational leaders can set conditions for professional learning based on teacher perception data. I believe that the results of this study will add to current literature about PLCs. The results of this study will be beneficial for educational leaders, school board members, and teachers that are involved collaborative school settings. General Questions: 1) What are teachers’ perceptions of professional learning communities (PLCs)? 2) When it comes to PLCs, what challenges and benefits do teachers perceive? What conditions and structures need to exist for collective learning through open dialogue?

2) If you decide to be a part of this study, you will be asked to do the following:

- Agree to participate in this study by signing informed consent
- Complete 52 question survey
- Invited to participate in interview
- Interviews will be audio recorded for coding purposes
- This study will take 30 minutes to complete the survey. The interview will take 30 minutes if you participate

3) Are there any experimental medical treatments?

- No

4) Is there any risk to me?
o Possible risks or sources of discomfort include: Teachers may feel anxiety about participating in the interviews to share their experiences with me (supervisor). Teachers may withdraw from participation at any time. Interviews will be conducted in a large group instruction room within the school; not my administrative offices.
o If you experience discomfort, you have the right to withdraw at any time.

5) Is there any benefit to me?

o Benefits to you may include: This research is not designed to provide teachers with any personal benefits. However, by participating in this study, data will be collected which may inform school district stakeholders i.e. Principals, Directors, Supervisors, Teachers about teachers perceptions of PLCs. Teacher’s leaders may experience professional growth by participating in the survey/interview process as they specifically relate to teacher professional learning.
o Other benefits may include: This research project will add to the literature in regards to professional learning communities in an elementary setting, adult learning theory, transformative learning theory and constructivism learning and leadership theories.

6) How will you protect my privacy?

o Audio recording during interview process only.
o Your records will be private. Only Michael Garvin, David Backer, and the IRB will have access to your name and responses.
o Your name will not be used in any reports.
o Records will be stored:
  • in a locked cabinet in [redacted] School Room 255.8, which will also be kept locked.
  • Password Protected File/Computer
  o Records will be destroyed Three Years After Study Completion

7) Do I get paid to take part in this study?

o No

8) Who do I contact in case of research related injury?

o For any questions with this study, contact:
  • **Primary Investigator:** Michael Garvin at 610-357-4486 or mg372984@wcupa.edu
  • **Faculty Sponsor:** David Backer at 203-917-7416 or dbacker@wcupa.edu

9) What will you do with my Identifiable Information/Bio specimens?
Not applicable.

For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

I, _________________________________ (your name), have read this form and I understand the statements in this form. I know that if I am uncomfortable with this study, I can stop at any time. I know that it is not possible to know all possible risks in a study, and I think that reasonable safety measures have been taken to decrease any risk.

_________________________________
Subject/Participant Signature                Date:

____________________________

_________________________________
Witness Signature                   Date:

____________________________
Appendix E: Qualitative Semi-Structured Interview Questions

The qualitative design portion will include these questions to ask teachers used in this study. However, utilizing the semi-structured narrative inquiry methodology of research as a foundation. The teachers that I will conduct interviews with will be audio recorded and the transcribing process will take place afterwards. Below are questions to generate a starting point conversation regarding the implementation of PLCs and their impacts in an intermediate school setting.

The general research questions that I will investigate are as follows:

1) When it comes to PLCs, what challenges and benefits, do you perceive?
2) What structures and conditions are most propitious for the implementation of PLCs?
3) Describe your experience as a member of a PLC?
Follow up - In what ways have your opinions about PLCs changed over time?
4) What did you think of teacher collaboration prior to the implementation of PLCs?
Follow up - Are there ways teachers we have done PLCs better than the current model?
5) What works for you as a member of a PLC?
Follow up – What does not work for you as a member of a PLC?
6) What obstacles are present when collaborating with teachers or administrators?
Follow up – How do you think collaboration amongst teachers and administrators could improve PLCs?.
7) Describe teacher preparedness of facilitating and leading a PLC. How do you think teachers can be more prepared to lead PLC work?
Follow up – Why do you think some teachers become teacher leaders of their PLC and others do not?
8) How are grade level PLCs held responsible for PLC work?
9) How do you feel PLCs impact classroom instruction?

Follow up - How do you think elementary schools can improve PLCs?
Appendix F: CITI Forms

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM) COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- Name: David Backer (ID: 2702811)
- Institution Affiliation: West Chester University of Pennsylvania (ID: 3022)
- Institution Email: dbacker@wcupa.edu
- Institution Unit: Professional and Secondary Education

- Curriculum Group: Social & Behavioral Research - Basic/Refresher
- Course Learner Group: Same as Curriculum Group
- Stage: Stage 2 - Refresher Course
- Description: Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

- Record ID: 23860510
- Completion Date: 14-Jul-2017
- Expiration Date: 13-Jul-2020
- Minimum Passing: 80
- Reported Score*: 100

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<th>SCORE</th>
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<td>SBE Refresher 1 - History and Ethical Principles (ID: 936)</td>
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For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k52bc3b1d-036d-4c0a-879d-0fd623c16f7-23860510

Collaborative Institutional Training Initiative (CITI Program)

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Phone: 888-529-5929
Web: https://www.citiprogram.org
COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- Name: David Backer (ID: 2702811)
- Institution Affiliation: West Chester University of Pennsylvania (ID: 3022)
- Institution Email: dbacker@wcupa.edu
- Institution Unit: Professional and Secondary Education

- Curriculum Group: Social & Behavioral Research - Basic/Refresher
- Course Learner Group: Same as Curriculum Group
- Stage: Stage 2 - Refresher Course
- Description: Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

- Record ID: 23860510
- Report Date: 01-Jul-2019
- Current Score**: 100

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For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Michael Garvin (ID: 6999365)
- **Institution Affiliation:** West Chester University of Pennsylvania (ID: 3022)
- **Institution Email:** mg372984@wcupa.edu
- **Institution Unit:** Education
- **Curriculum Group:** Social & Behavioral Research - Basic/Refresher
- **Course Learner Group:** Same as Curriculum Group
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.
- **Record ID:** 26210515
- **Completion Date:** 07-Mar-2018
- **Expiration Date:** 06-Mar-2021
- **Minimum Passing:** 80
- **Reported Score**: 90

**REQUIRED AND ELECTIVE MODULES ONLY**

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For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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Web: [https://www.citiprogram.org](https://www.citiprogram.org)
COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM) COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Michael Garvin (ID: 6999365)
- **Institution Affiliation:** West Chester University of Pennsylvania (ID: 3022)
- **Institution Email:** mg372984@wcupa.edu
- **Institution Unit:** Education
- **Curriculum Group:** Social & Behavioral Research - Basic/Refresher
- **Course Learner Group:** Same as Curriculum Group
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.
- **Record ID:** 26210515
- **Report Date:** 04-Mar-2019
- **Current Score**

### REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES

<table>
<thead>
<tr>
<th>Module</th>
<th>Most Recent Date</th>
<th>Score</th>
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<tbody>
<tr>
<td>Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)</td>
<td>07-Mar-2018</td>
<td>4/5 (80%)</td>
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<tr>
<td>Defining Research with Human Subjects - SBE (ID: 491)</td>
<td>07-Mar-2018</td>
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<tr>
<td>The Federal Regulations - SBE (ID: 502)</td>
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<td>Assessing Risk - SBE (ID: 503)</td>
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<td>Informed Consent - SBE (ID: 504)</td>
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<td>Privacy and Confidentiality - SBE (ID: 505)</td>
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<tr>
<td>Research with Prisoners - SBE (ID: 506)</td>
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<td>Research with Children - SBE (ID: 507)</td>
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<td>Research in Public Elementary and Secondary Schools - SBE (ID: 508)</td>
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<td>International Research - SBE (ID: 509)</td>
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<td>History and Ethical Principles - SBE (ID: 490)</td>
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<td>Conflicts of Interest in Human Subjects Research (ID: 17464)</td>
<td>07-Mar-2018</td>
<td>5/5 (100%)</td>
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For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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Phone: 888-529-5929

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