

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2018

Influence of Professional Learning Communities on K-8 Teacher Responsibilities

Kristen Lynn Martello Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Educational Administration and Supervision Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Education

This is to certify that the doctoral study by

Kristen Martello

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Donald Poplau, Committee Chairperson, Education Faculty
Dr. JoeAnn Hinrichs, Committee Member, Education Faculty
Dr. Paul Englesberg, University Reviewer, Education Faculty

Chief Academic Officer Eric Riedel, Ph.D.

Walden University 2018

Abstract

Influence of Professional Learning Communities on K-8 Teacher Responsibilities

by

Kristen Lynn Martello

MA, New Jersey City University, 2006

BS, Pennsylvania State University, 1998

Doctoral Study Submitted in Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

June 2018

Abstract

Professional learning communities (PLCs) were established in a local suburban school district in 2010; however, since their inception, the value of the program has not been determined. In a K-8 school district, a qualitative case study was conducted to determine the influence of PLCs on the 4 domains of teacher responsibilities: preparation, classroom environment, teaching, and professional duties. The conceptual framework was based on Bandura's social learning theory and Danielson's framework for teaching. The research questions focused on how teacher participation and the allotment of time in a PLC, and the structure of a PLC, influence teacher classroom responsibilities. Data collected included interviews, written narratives by teachers, and a review of formative assessment documents. The participants were 5 teachers, selected through a purposeful sampling of teachers from across the grade levels of kindergarten to Grade 8, who had actively participated in a PLC for a minimum of 1 year. The data was analyzed to determine themes. The findings confirmed that PLCs allow for the exploration of ideas within a small group and that professional development is necessary to develop PLCs that influence teacher responsibilities in all 4 domains by Danielson. Based on the findings and supporting literature, a 3-day workshop was developed to provide teachers with an improved understanding of PLCs and how they can support teachers in implementing appropriate instructional practices for all students. This effort may result in a collaborative school culture for teachers and significant improvement in student achievement due to the recurring cycles of collective inquiry.

Influence of Professional Learning Communities on K-8 Teacher Responsibilities

by

Kristen Lynn Martello

MA, New Jersey City University, 2006 BS, Pennsylvania State University, 1998

Doctoral Study Submitted in Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

June 2018

Acknowledgments

I would like to acknowledge my parents for teaching me the importance of believing in myself and never giving up. My mother taught me the importance of staying positive, always seeing the best in others and myself, and praising all that I set out to do. To my father, who has always been my inspiration to reach my goals. To Matthew, my husband, for his encouragement and to Griffen, Corrine, and Brian, my three children, who understood how important the completion of my doctoral journey would be to me. Thank you for your support and making sure I made it to the completion of this goal!

Table of Contents

List of Tables	v
Section 1: The Problem	1
Introduction	1
Definition of the Problem	1
Rationale	2
Definition of Terms	4
Significance	4
Guiding/Research Question	5
Conceptual Framework	5
Review of the Literature	7
Student Achievement	7
Groundwork for PLCs	9
Virtual PLCs	10
Professional Growth	12
Teacher Leadership	14
Funding	15
Implications	16
Summary	16

Section 2: The Methodology	18
Introduction	18
Research Design and Approach	18
Participants	21
Data Collection	23
Role of the Researcher	26
Data Analysis	27
Procedures to Assure Reliability and Credibility	28
Limitations	29
Data Analysis Results	30
Domain 1: Planning and Preparation	34
Goal Development Based on Content and Pedagogy	35
Attaining a Deeper Understanding of Students	37
Utilizing Appropriate Resources	38
Domain 2: Classroom Environment	39
Domain 3: Instruction	41
Incorporating Questioning Techniques to Improve Engagement	42
Formative Assessments as Essential Components of Instruction	43
Domain 4: Professional Responsibilities	44

	Integrating Reflection to Improve Teaching and Learning	44
	Growing Professionally Through PLCs	46
	Summary of Findings on How PLCs Influence Teacher Responsibilities	47
	Research Question 2	50
	Common Planning Time Increases Teacher Effectiveness	50
	Setting Clear Expectations for PLC Success	52
	Establishing Goals Make an Impact on Teacher Effectiveness	53
	Summary of Findings Regarding Allotment of PLC Time and Structure	54
	Discussion of the Findings	54
Se	ction 3: The Project	58
	Introduction	58
	Rationale	59
	Review of the Literature	60
	Adult Learning Theories	60
	Administrative Leadership	62
	Reflection	63
	Professional Development	64
	Project Description.	66
	Project Evaluation Plan	68

Project Implications	70
Section 4: Reflections and Conclusions	72
Project Strengths and Limitations	72
Recommendations for Alternative Approaches	73
Scholarship, Project Development, and Leadership Change	74
Reflection on the Importance of the Work	75
Implications, Applications, and Directions for Future Research	76
Conclusion	77
References	78
Appendix A: The Project	90
Project Description	90
Appendix B: The Interview	101

List of Tables

Table 1. Su	Summary of Qualitative Data Collection	25
-------------	--	----

Section 1: The Problem

Introduction

In 2010, the New Jersey Department of Education began the process of seeking ways to improve teacher effectiveness (New Jersey Educator Effectiveness Task Force, 2011). The result was the creation of the New Jersey Educator Effectiveness Task Force (2011) formed to provide guidance to school districts about improving teacher effectiveness. The taskforce mandated that school districts develop continuous jobembedded professional development for teachers, or professional learning communities (PLCs), to provide teachers with opportunities to improve teaching strategies that promote an increase in student learning. According to the district superintendent, in order to increase teacher effectiveness, a New Jersey school district set a goal to establish PLCs in 2010 "because it was the only initiative that schools partake in that research shows works in improving teaching and learning –unequivocally."

Definition of the Problem

This study took place in a district consisting of one school, located in a suburban area in southern New Jersey, which serves approximately 270 students from pre-school to eighth grade. According to a New Jersey performance report, the district employs 20 certified teachers, eight paraprofessionals, and an administrative team consisting of the superintendent and child study team director. The same performance report listed the district's demographics with an enrollment of 83.3% White students, 1.1% Black, 9.3% Hispanic, 2.6% Asian, and 3.3% two or more races. According to the district's

superintendent, the district's initial support for the creation of PLCs began in 2010 and continues to be supported today. Early researchers of PLCs in other schools have stated, "Educators in a PLC engage in collective inquiry into 1) best practices about teaching and learning, 2) a candid clarification of their current practices, and 3) an honest assessment of their students' current levels of learning" (DuFour, DuFour, & Eaker, 2008, p. 16). The local school district adopted the PLC model in 2010 and negotiated a contractual, weekly, continuous, job-embedded professional development time for grade level teachers to meet in PLCs to enhance teacher responsibilities; however, there is currently no data available to link the district's PLC initiative to enhanced teacher responsibilities. In this study, I sought to determine whether a teachers' participation in a PLC at the district of study has resulted in improved teacher responsibilities.

Rationale

The United States is falling behind in student performance in math and reading when compared to other countries. The results of *The Nation's Report Card: 2014*, released on April 29, 2015, stated no significant changes had taken place in student achievement since 2010 (Carr, 2014). Grade 8 students scored an average of 267 on a 500-point scale in 2014, up just one point from the average score of 266 in 2010 (Carr, 2014). The Global Report Card (2012) indicated that student achievement performance in 2009 at the K-8 school of study, when compared to student achievement in 25 developed countries, ranked 61% in math and 66% in reading. When comparing the student achievement of those at the district of study to all students in the state, the district ranked 59% in math and 56% in reading (Global Report Card, 2012). According to the

district superintendent, the K-8 school of study is committed to increasing student achievement in both math and reading when compared to students across the state.

Since the implementation of PLCs during the 2011-2012 school year, the district has been faced with many state-mandated initiatives that have also required attention. As stated by the superintendent, "with Common Core, PARCC, ACHIEVE NJ, HIB-ABR, budget constraints, and other enterprises pressed upon schools since 2010, it has been difficult to direct our energies and attention towards effectively living the three big ideas of a learning community." According to DuFour et al. (2008), the three big ideas of a PLC are an emphasis on knowledge, creating a collegial environment, and staying focused on outcomes. In order to maintain the three big ideas of a PLC, the district provides time for the PLC teams to meet 3 out of every 4 weeks in a month. The PLC teams meet, submit minutes to the administrative team, and continue on with their daily routine. Additionally, PLC time has become the common place to discuss any and all issues that need to be addressed by a grade level.

The district continues to implement job-embedded PLCs; however, the value of the PLCs at the K-8 school of study has yet to be determined. In this qualitative case study, I sought to determine how a teachers' involvement in a PLC influences teacher responsibilities using Danielson's (1996) framework for teaching, which includes the four domains of, preparation, the classroom environment, teaching, and professional duties.

Definition of Terms

Collective inquiry: The construction and clarification of knowledge within a group exploration session (DuFour et al., 2008).

Professional learning community: A collaborative team of educators who routinely engage in action research, data review, and collective inquiry to improve student achievement (DuFour, DuFour, Eaker, & Many, 2010).

Teacher responsibilities: What teachers should know and be able to do in order to increase student achievement (The Danielson Group, 2013).

Significance

The purpose of this qualitative case study was to determine how teachers' participation in PLCs at the K-8 school of study influences teacher responsibilities in the classroom. The focus of the study was to reveal the current experiences of teachers regarding the PLC process and their perception of how PLCs affect the four domains of teaching. I asked teachers to provide qualitative feedback and to personally determine the current impact of the PLCs on their responsibilities within the domains of preparation, classroom environment, teaching, and professional duties. PLCs require that teachers develop an understanding that shared collective responsibility will result in greater student achievement (DuFour et al., 2008). The configuration of a PLC supports social change through the development of understanding and respecting others through the collaborative process. Working collaboratively with others over time creates well prepared teachers who feel appreciated by enabling a significant positive change in

student achievement (Callahan & Sadeghi, 2015). The findings of this study may help the district in the development of professional development training focused on PLCs that support teacher responsibilities, determining the frequency in which PLC teams should meet, and determining the resources teachers need to be successful within a PLC. This training will be shared with other local districts to further promote teacher responsibility, positive collaboration, and social change.

Guiding/Research Question

The purpose of this qualitative case study was to determine how teachers' participation in PLCs at the K-8 school of study influences teacher responsibilities. The research questions that guided this study were:

RQ 1: How does teacher participation in a PLC influence teacher responsibilities in the four domains of preparation, classroom environment, teaching, and professional duties?

RQ 2: How are current teacher experiences regarding the allotment of time in and the structure of a PLC perceived to alter teacher responsibilities at the K-8 school of study?

Conceptual Framework

The conceptual framework for this study was composed of the social learning theories of Bandura and the domains of teaching developed by Danielson. The work of Bandura highlights the social aspects in a PLC. The domains of teaching provide the framework for teacher responsibilities. The combination of Bandura's theory and

Danielson's framework provided a researched-based framework for the social collaboration necessary in a PLC while focusing on teacher responsibilities in the classroom

Observational learning, imitation, and self-regulation were all theories of interest to Bandura (Grusec, 1992). Observational learning refers to the modeling of others or adapting to the social environment individuals find themselves to be associated with (Bandura, 1983). Bandura (1963) also studied imitation or dictating the actions of others. By nature, people imitate the activities of others (Bandura, 1971). According to Bandura, self-regulation is the ability of an individual to control their own behaviors and how those behaviors change in the presence of children or adults (Grusec, 1992). An individual's actions contribute to the nature of the situation (Bandura, 1983).

Bandura (1983) concluded that individuals adapt their actions based on their circumstances. In conducting a case study of a PLC team, it is important to consider the experiences and personalities within the team (Merriam, 2009). In social settings, individuals are constantly noticing the actions of other individuals, often leading to imitation (Bandura, 1971). According to Bandura (1963), the imitation of behaviors can be either negative or positive. The social dynamics of team participants may impact or alter the ability of the team to address the four domains of teacher effectiveness either negatively or positively.

Danielson (2011) stated, "A framework for teaching offers educators a means of communicating about excellence" (p. 6). The framework for teaching by Danielson is divided into 22 research-based components, providing a roadmap for the advancement of

teaching responsibilities (The Danielson Group, 2013). PLCs provide the time for teachers to communicate about their profession and the framework for teaching as well as expand their knowledge base. The framework for teaching aids in the organization of conversations on how to exemplify the four domains of teaching: preparation, classroom environment, teaching, and professional duties (The Danielson Group, 2013).

Review of the Literature

I conducted a comprehensive search of the literature to identify and develop the conceptual framework, review current and historical literature on the topics of teacher collaboration and professional learning communities, and to identify professional development strategies that increase teacher responsibilities within the classroom. The Walden University Library was used to access databases, such as ERIC, Sage, and EBSCO-host, for my search. The ERIC database provided the most current and rich variety of research pertaining to PLCs. Key terms I used in my ERIC search were: professional learning communities, collaboration in teaching, professional development, teaching strategies, professional growth, professional responsibilities, Charlotte Danielson, teaching frameworks, collaboration, social connections, barriers to successful PLC implementation, and social learning theories.

Student Achievement

The demands of education today require teachers to work collaboratively in PLCs to ensure all students are learning at high levels (Eaker, 2015). The PLC process develops shared knowledge in which teachers support their peers to enhance instruction,

resulting in increased student achievement (DuFour et al., 2010). The idea of PLCs began in the early 1960s but did not gain momentum until the late 1980s and early 1990s as research began to validate the impact PLCs had on increasing student achievement (Sims & Penny, 2015). A postsecondary education will be required for 65% of all jobs by the year 2020 (Center on Education and the Workforce, 2013); therefore, teachers have an obligation to support each other in the PLC process to enhance teaching strategies that prepare students for success in higher education and their careers in the 21st century.

Learning and improving teacher responsibilities are the foundation of a PLC in order to enhance student achievement (Ermeling & Gillmore, 2013). PLCs offer opportunities for substantial gains in student achievement when they are job embedded and concentrated on active learning (Callahan & Sadeghi, 2015). Learning from colleagues or peers invested in the same content matter or practice creates a learning environment that results in the greatest impact on student achievement (Stewart, 2014). Additionally, schools structured with embedded PLCs are focused on developing teachers who are capable, well-informed, and cognizant of their practices, creating the ideal learning experiences supportive of increased student achievement (Paolini, 2015).

The development of specific, measureable, attainable, results-oriented, and time bound (SMART) goals are believed to keep PLC teams focused on student achievement (DuFour et al., 2008). SMART goals provide a direct and observable impact on student achievement (DuFour et al., 2008). Achievement scores are higher when teachers who

participate in PLCs use SMART goals since they are specific rather than general (Reed, Schifferdecker, & Turco, 2012).

Schools that demonstrate high growth in student achievement participate in PLCs. One Michigan high school revised their PLCs to focus on standards, monitoring of instructional practices, data review, and continuous feedback, which resulted in the high school moving from the bottom 5% on the state assessment in literacy to the 55th percentile in just 1 year (Wood & Burz, 2013). A study conducted on improving academic achievement in English language learners at one high school through the implementation of PLCs, focused on vocabulary, reflected on their assessment comprehension and communication in English state to state scores and showed an increase in achievement from 30% to 55% on the world-class instructional design assessment scale among those who scored a 3 or higher in 1 year (Schneider, Huss-Lederman, & Sherlock, 2012). These are just a few of the many studies to support the implementation of PLCs.

Groundwork for PLCs

The essential framework or structure required when establishing PLCs includes defining a mission and vision that all members of the school community can support (Dupree, 2012). Embracing a shared mission and vision allows for widespread unity across the school culture, a willingness to experiment with varied teaching strategies, and engaging in philosophical dialogue (Owen, 2014). The foundation of a PLC should have a clear mission and vision that supports collaboration through exploration and conversation about educational performance and goals (Sims & Penny, 2015). Adult

learners who are vested in understanding the mission and vision become intrinsically motivated to create a path to improvement (Mielke & Frontier, 2012). PLCs are the pathway toward common beliefs and shared visions that bring about educational change toward increased student achievement (Watson, 2014).

Norms are further groundwork or guidelines established to provide ways for a group of individuals to participate in a collegial environment despite diverse personalities. PLC teams that develop norms have a deeper understanding of support for team members and allow for open dialogue (Rhoads, 2011). Developing PLC norms assists in social unity and readiness to share (Owen, 2014). PLC norms that support a successful PLC include meeting 4 to 6 hours per month, requiring each member to contribute artifacts that lead to improvement, reviewing student performance, and consistent job-embedded PLC work (Carmichael & Martens, 2012). PLC team norms should also consider timeframes, how to encourage and support listening without interruption, maintaining confidentiality, how to reach consensus, and the level of participation and expectations from each member during each meeting (DuFour et al., 2010). Maintaining these norms within a PLC will build collegial relationships and enhance problem solving, peer teaching, and the development of strategies to increase student learning and teacher effectiveness (Lieberman & Miller, 2011).

Virtual PLCs

Another avenue for the creation of PLCs is to extend beyond the walls of the building and to develop PLCs in a virtual or on-line format. The digital age supports virtual collaborative learning environments focused on continued professional growth,

resulting in increased teacher performance and ultimately increased student achievement (Evans, 2015). Virtual or on-line PLCs are an option for some of the teachers in a school district who are anomalies in a content area. Examples of this would be at a school that includes only one art teacher, one music teacher, one computer teacher, and one engineering teacher.

In the state of New Jersey, 243 schools have a population under 8,000, limiting their number of students and often resulting in a single teacher for many content areas (Proximity, 2016). In a virtual PLC, individuals engage in an online environment in order to have meaningful discussions related to common ideas and thoughts on teaching and learning (Heo & Lee, 2013). Empowering teachers to engage in learning environments focused on a clear vision will improve their expertise within their field (Mielke & Frontier, 2012).

On-line PLCs are meant to join 21st century technology with the familiar practice of social and collaborative learning environments to improve teaching and learning (Evans, 2015). Web 2.0 or social media professional development (PD) opportunities create opportunities for varied interaction and participation in PLCs, creating different dimensions of learning opportunities (Heo & Lee, 2013). The confines of the building walls are taken down in a virtual PLC, providing opportunities for all teachers, no matter what school they are employed at, or what schedule they keep, the opportunity to engage in collegial conversation based on improving teaching and learning (Evans, 2015).

Professional Growth

Schools are learning places for not only students but for teachers as well (Ermeling & Gallimore, 2013). Educators in effective learning communities grow within the profession by expanding their point of view and enhancing their teaching techniques, resulting in increased student achievement (Tobia & Hord, 2012). Additionally, effective PLCs allow teachers opportunities to gain varied perspectives, sharpen practices, improve student success, and advance in knowledge and skills (Tobia & Hord, 2012). Within a PLC, teachers have opportunities to become experts in curriculum, assessment, and classroom management (Farris-Berg, 2014).

Due to economic and political pressures, educational reform has made PD a priority to ensure teaching practices are continually updated due to the changing demands of the 21st century (Owen, 2014). DuFour et al. (2010) stated, "We have seen the evidence of improved learning and heard the testimonials of teachers and principals who have been renewed by establishing common ground, clear purpose, effective monitoring, and collaborative processes that lead to better results" (p. 7). PLCs provide opportunities for perpetual learning and hold every member in an organization responsible for student achievement (DuFour et al., 2008).

Just as educators seek to meet the diverse needs of students, PLC teams should seek to meet the diverse needs of adult learners (Adams & Vescio, 2015). Most teachers are self-directed pupils who diagnose their own education needs and strategies to be successful (Hemphill & Leskowitz, 2013). Others are transformational learners, meaning learning occurs when they change their point of view or mindset as a result of

collaboration with others (Morntountak, 2013). Ultimately, it is important to remember that no one learning style is functional for all adults (Adams & Vescio, 2015).

Developing an individual's confidence is influenced by allowing educators to share experiences in areas of interest, relate to similar tasks, and receive encouragement from others (Moriarty, 2014). As confidence grows, so does openness to new ideas and readiness to join in conversations to explore ideas regarding student achievement (Saliga, Daviso, Stuart, & Pachnowski, 2015). Social and collaborative learning, on a continual basis, supports professional growth resulting in increased teacher efficiency and student achievement (Evans, 2015).

PD should be relevant to teachers' experiences, well-timed, and effectively presented in order to improve confidence, accountability, and enhance classroom practice (Callahan & Sadeghi, 2015). Too often PD is not meaningful to teachers, resulting in absenteeism on in-service days (Smylie, 2014). For example, a school district's PD opportunities are often designed for large groups and do not provide for personalized PD (Callahan et al., 2015). PD that is not valued will never improve teaching practices (Smylie, 2014). Teacher development should be specific to a teacher's subject matter and interests in order to make an impact on teaching practices (Paolini, 2015).

All New Jersey teachers are required to complete 20 hours of PD each school year (New Jersey Department of Education, 2014a). Establishing PLCs embedded within the school day allows for consistent PD opportunities for teachers and meets the state requirements. Districts that provide job-embedded PLCs provide opportunities for teachers to align their goals with the goals of the district (DuFour et al., 2008). PLCs

provide significant benefits for individual growth in teacher PD and increases student' learning (Owen, 2014).

Teacher Leadership

Empowering teachers to be instructional leaders and agents of change will ensure the PLC process becomes embedded into the school culture and not just another program (Watson, 2014). Teachers who are empowered to lead will influence classrooms and change the culture of their school environment (Farris-Berg, 2014). Giving teachers opportunities to deepen their understanding regarding best practices and instructional theories provides them with a level of independence to make decisions regarding initiatives in the classroom (Hargreaves et al., 2012). This will allow a culture of rigorous, high quality instructional practices become the norm within a school culture (Cook, 2014).

Even though the benefits of teacher leadership are evident, building teacher leadership can be challenging. A teacher's perception of leadership may not be positive, or teachers may lack the qualities essential for leadership (Campbell-Evans, Stamopoulos, & Maloney, 2014). Additionally, school norms or disparities in fairness within a school culture may preclude teachers from accepting their role as a teacher leader (Eargle, 2013). School administrators need to understand their role in supporting teachers. A common concern of school administrators is the willingness to relinquish and delegate responsibility when they know they are ultimately responsible for student achievement (Barth, 2013). School administrators are limited in their areas of expertise; therefore, school leaders who support teacher leadership will develop schools with

widespread confidence, enthusiasm, and optimism (Danielson, 2011). Leaders should display transformational leadership and display a vision supportive of teacher success and leadership (Clayton, 2014).

Funding

The best practice to meet teacher needs, promote reflective awareness, improve PD, and keep costs down in the school district is the successful implementation of PLCs (Attard, 2012). In 2011, New Jersey was allocated "Race to the Top" funds in the amount of \$38 million to improve education (Callahan & Sadeghi, 2015). As a result, Achieve NJ was established to ensure high quality teachers in every classroom in New Jersey (New Jersey Educator Effectiveness Task Force, 2011). A highly-qualified teacher is best defined as a teacher who possesses a full certification and demonstrates proficiency in a field of study (Adamson & Darling-Hammond, 2012). Due to school funding, highly-qualified teachers have been unevenly distributed throughout school districts requiring job-embedded PD or PLCs (Adamson & Darling-Hammond, 2012).

School funding allows for each and every district in New Jersey to allocate a different cost per pupil to maintain the needs of students. The cost per pupil spending at the district of study is \$13,682 (New Jersey Department of Education, 2014b). The most money allocated by a district in the state is \$43,775 per pupil, and the average cost per pupil spending across the state per district is \$18,891 (McGlone, 2014). The district of study maintains one of the lowest costs per pupil ratios in the state (New Jersey Department of Education, 2014b).

Achieve NJ requires improved PD which targets the needs of individual teachers (New Jersey Educator Effectiveness Task Force, 2011). PLCs create job-embedded PD as a means to support teacher growth while minimizing costs (Hazi & Arredondo Rucinski, 2014). The local district continually seeks ways to keep these costs down to reduce the burden on taxpayers yet maintain highly qualified teachers.

Implications

In this qualitative case study, I sought to determine whether or not the PLCs are making a significant difference in teacher classroom responsibilities. Based on the findings of the study, a 3-day professional development program was created. The purpose of the PD training is to provide certificated teachers an understanding of PLCs and their influence on implementing best practices in the classroom which can result in improved teacher responsibility. The 3-day PD training can be shared with other school districts in order to promote collaboration and the improvement of teachers' classroom responsibilities.

Summary

The purpose of this qualitative case study was to determine how teachers' participation in PLCs at the K-8 school of study influences teacher responsibilities. The conceptual framework for this study was focused on the social learning theories of Bandura's social learning theory and Danielson's framework for teaching. This combination provided a research-based framework for social collaboration necessary in a PLC while focused on both student learning improvement and teacher responsibilities.

In Section 1, I sought to describe the local problem and rational for the study. To provide clarity, key terms associated with the study were defined. The research questions were listed and a review of the literature was provided. Finally, the implications of the study were addressed.

In Section 2, the methodology, I provided a detailed description of the research design and the findings of the study. The justification for the study is explained and the guiding questions outlined. Further information outlining the outcomes and performance measures are also described. The process for the selection of participants, data collection, data analysis, ethical protection of participants, role of the researcher, and limitations of the study are described.

In Section 3, I provided justification for the project. A literature review focused on the project which resulted from the study is explored. The project's description, an evaluation plan and project implications are also developed.

In Section 4, I focus on my personal reflection and conclusions. The strengths and limitations of the study are detailed. Additionally, recommendations for alternative approaches are discussed. An evaluation of the impact on project development and social change are presented. Finally, a review of the study regarding its importance and the impact of the study on future similar research is enumerated.

Section 2: The Methodology

Introduction

The purpose of this qualitative case study was to determine how teachers' participation in PLCs at the K-8 school of study influenced teacher responsibilities. In this case study, I used qualitative data elicited from a purposeful sampling of 7 teachers regarding their experiences in PLCs as they related to teacher responsibilities based on the four domains of teaching identified by Danielson: preparation, classroom environment, teaching, and professional duties (The Danielson Group, 2013). In Section 2, I will outline the design and approach of the study, the selection and criteria of participants, the steps involved in data collection, how the data were analyzed, the limitations of the study, and the results.

Research Design and Approach

I used a qualitative case study approach in this study in order to explore the current PLCs and their influence on teacher responsibilities based on the four domains of teaching established by The Danielson Group (2013). I gathered data from the participants regarding the current PLC process. In this qualitative case study, I sought to determine the answers to the following:

RQ 1: How does participation in the PLC influence teacher responsibilities within the four domains: preparation, classroom environment, teaching, and professional duties?

RQ 2: How are current teacher experiences regarding the allotment of time in and the structure of a PLC perceived to influence teacher responsibilities at the K-8 school of study?

I determined a qualitative case study approach to be the best suited for this study. Other research approaches, such as quantitative and mixed methods, offer a variety of research options but none as appropriate as a qualitative case study. Quantitative research requires measurement of variables and summarizing results numerically (Gottfert, 2015). Characteristics of quantitative research include analyzing trends, developing relationships among variables, and statistical analysis (Gog, 2015). For the purpose of this study, the associations of neither variables nor statistical analysis were deemed necessary. Mixed methods research incorporates both quantitative and qualitative methods and provides for a strong foundation based on theory and allows for cross analysis (Dasgupta, 2015). However, numerical data collection and evaluation were not required to develop an understanding and conduct a review of the PLCs at the research site. Qualitative data collection allows the researcher to learn from the participants and gain a deeper understanding of a specific problem, phenomenon, or program; collect data from a small number of participants; and incorporate themes from data collection to develop a holistic understanding (Creswell, 2012). Therefore, quantitative and mixed methods research methods were eliminated as possibilities for this study.

Qualitative research studies also provide a variety of options to meet a variety of approaches in research (Gottfert, 2015). In looking at the varied options of qualitative

research, it became evident to me that a case study was most appropriate for this study. For example, ethnographic research is specific to developing meaning about a culture rather than a program currently in operation (Lodico et al., 2010). Ethnographic research is a method of inquiry in which the researcher explores the complex social world of the participant (Nuttall, Shankar, Beverland, & Hooper, 2011); therefore, ethnographic research would not be suited for this study which was focused on a specific component of a program. Grounded theory uses comparative data to generalize findings that can be used to create broad theories to develop an understanding of other settings (Merriam, 2009). The data collected from this study were specific to the PLC process at the research site.

Case studies are designed to discover meaning and acquire a depth of understanding on a particular setting (Creswell, 2012). Case studies include real-life settings and environmental influences (Gottfert, 2015). My rationale for conducting a case study was due to the design of the research questions, the specific focus on evaluation of a single program, and the need to develop a more in-depth understanding of the experiences that take place in the real-life setting of PLCs at the research site (see Lodico et al., 2010). After completing a careful review of all types of research methods and designs, I determined that a qualitative case study would provide the data necessary to support a comprehensive evaluation of the PLCs in order to determine teacher responsibilities.

Participants

The selection of participants was critical to the success of this study. Purposefully selected, criterion-based participants from varied grade levels throughout the school provided information to the study from varied classroom experiences (see Dasgupta, 2015). The criterion base for participant selection included: possession of a New Jersey standard teaching certificate, employment by the K-8 school of study for a minimum of 1 school year, and participation in the PLC process for a minimum of 1 full school year. The district had one grade level PLC for each grade, from kindergarten to eighth grade, and one PLC comprised of all related arts teachers. Kindergarten through Grade 5 PLCs had two teachers per each PLC. The PLC teams in Grades 6 through 8 consisted of two to three teachers per PLC. PLC experiences varied per each individual involved. I sought to obtain the participation of teachers across multiple PLCs at the K-8 school of study in order to obtain a minimum of five teachers who would provide insight from a variety of PLC teams in order to answer the questions posed within the study (see Nuttall et al., 2011). Ensuring participants across multiple PLCs was possible due to my use of purposeful sampling of those who agreed to participate (see Creswell, 2012).

Participants involved ranged in experience from 2 to all 5 years involved in the PLCs at the district of study as well as ranged in teaching level experiences from elementary to middle school and varied content areas. My initial request for participation was sent via e-mail. This e-mail contained the background of the research, procedures, voluntary nature of the study, risks and benefits to participation, non-payment, privacy, contact information, and consent.

I informed the board of education of the study and asked for their permission so I could gain access to participants and collect the data required for completion of the study. After obtaining consent, I requested an e-mail list of teachers from the K-8 school of study. The e-mail list was used to send an introductory letter providing my brief history and the intent and goals of the study.

The researcher-participant relationship in this study was limited to interviews. I did not obtain any information without participants' consent, and no information I used impacted the professional status of the participants. Consent was acquired through e-mail with all essential documents attached so that participants could learn the details of the study, review the consent form, and give their consent via e-mail. No requests for participation occurred until after I received Institutional Review Board approval to conduct the study from Walden University.

After receiving Walden University IRB approval (Approval No.1487054), I began the process of establishing a researcher-participant relationship and taking steps to ensure confidentiality. An e-mail containing the background of the research, procedures, voluntary nature of the study, risks and benefits to participation, non-payment, privacy, contact information, and requested consent was sent to all eligible participants. As consent emails were received, I began developing the researcher-participant relationship by thanking each participant for their time and commitment to the study. I then provided the participants with information on how to create a Google e-mail account. The Google e-mail account was necessary in order to establish a safe and secure way to communicate with the participants. It was important that each participant's identity be protected. In

order to do so, participants created new accounts. Each participant e-mailed me using the new account they created, which began the secure participant-researcher relationship.

This way, participants had security from the district accessing their information and their identities were protected.

Data Collection

After approval was obtained from Walden University IRB and the school district, I notified teachers of the full intent of the study and requested their participation via email. Those teachers willing to engage in the study were asked to establish a meeting time to participate in an interview consisting of open-ended questions, which I developed, pertaining to their experiences in a PLC (see Appendix C). The interviews allowed me to gain a deeper understanding pertaining to participants' perception, drives, and views (see Gottfert, 2015).

I also requested additional data in the form of archived formative assessments that were developed as a result of the PLC process. As PLCs began at the district of study, PLC teams maintained yearly binders with weekly minutes, formative assessments, benchmark assessments, and student' achievement records. These documents were requested from the participants and I established a drop off location in the central office of the school for the documents to be collected. Unfortunately, the yearly binders no longer existed. Only three of the participants were able to provide their current math formative assessments for review. The review of formative assessments was limited to determining if the assessments generated during PLC time were supporting the curriculum which did not provide data to support the research questions.

The final source of information I collected was a self-narrative reflection by the study participants. Participants were asked to reflect on their teaching practices, using the critical attributes associated with the four domains of teaching by Danielson, to determine whether they believed that their experiences mirrored Danielson's four domains. The self-narrative reflection allowed the participants to provide candid and authentic responses affording an in-depth reality of the participants' true feelings on their impact on the PLCs at the K-8 school of study (see Lodico, Spaulding, & Voegtle, 2010). The participants were asked to complete their reflection using electronic tools so I could easily transcribe and code the data in a spreadsheet to help determine themes within their responses. Their submission of electronic answers also helped ensure confidentiality. Participants had 2 weeks to complete their reflection. I sent an e-mail reminder 1 week prior to the end of the timeline, again 3 days prior to the end of the timeline, and one last reminder the day prior to the due date to maximize participation.

Table 1
Summary of Qualitative Data Collection

Form of Data Collection	Type of Data	Definition
Interviews	Open-ended	Created by researcher to determine teacher perceptions and experiences within a PLC.
Document review	Formative assessments	Review of assessments to determine the quality of questions developed; number of assessment created per year as a result of the PLC model.
Narrative via Google Documents	Teacher self-narrative reflection	Using the critical attributes associated with the four domains of teaching by Danielson, teachers will determine whether or not they believe that they mirror Danielson's four domains of teaching.

I used research logs to track the data and develop themes throughout the study. The logs contained my research steps, results, and struggles throughout the study. Additional strategies incorporated in this qualitative case study included coding and member checking. Coding provided for identification of varied segments of the data in order to develop broad categories (Dasgupta, 2015). Member checking allowed the participants an opportunity to review the themes and findings to conclude accuracy (Boesch et al., 2013). My incorporation of all aforementioned strategies provided for a comprehensive qualitative case study.

Role of the Researcher

I had a vested interest in seeing the PLC process improve teacher performance as a result of my serving as a former administrator at the K-8 school of study and the similarities that exist between the study site school district and the current district where I now serve as superintendent. As a result of ongoing collaboration with the research site, I had preconceived ideas regarding how the PLC process should be established to promote teacher responsibilities. I may have been blind to critical elements of the PLC process due to following the PLC process since its inception. However, I brought firsthand knowledge of the schedules and past practices used in the district. I clearly stated my bias, which was critical to the success of the study. This fact was important to note in order to ensure that all participants understood the steps taken to eliminate bias, including clearly stating the bias and allowing for a peer review (see Creswell, 2012). I informed the participants of the potential bias prior to any data collection.

I identified the need for the study based on my prior experience at the K-8 school of study. I served previously as a teacher for 1 year, the principal for 3 years' and the interim superintendent for 6 months in the district. I collected the data after my term of employment with the district. Currently, I have no association with the district; however, I do continue to serve as superintendent in nearby school district. The participants understood my knowledge of the school culture and interest in the success of their PLC program. I only reviewed documents and artifacts which protected the rights of the participants involved. My role as the researcher was to gather information already

archived by the district and to collect new data providing both past and current information and insight into the existing program.

I have been involved with the PLCs at the K-8 school of study since their inception. This involvement provided a depth of knowledge regarding PLCs at the K-8 school of study. I was able to frame the research questions based on past experience and observations.

Data Analysis

The data collected from the qualitative case study allowed me to develop themes and patterns to better understand the impact of PLCs on teacher responsibilities. Initial analysis of the data for the study included the process of coding. Coding allowed for identification of varied segments of the data which designated related occurrences to develop broad categories (Dasgupta, 2015). The codes were sorted by categories such as setting, perspectives, emotions, relationships, and teaching domains. The Coding Analysis Toolkit was reviewed as a tool to assist in coding and organizing the data (Texifter, 2016). Coding allowed for blending of information to better compare the varied categories for easy interpretation (Dasgupta, 2015).

Themes provided the big picture or major ideas used to interpret and analyze the data (Dasgupta, 2015). I analyzed the codes in order to determine appropriate themes associated with the data. Additionally, I organized the themes for interpretation, explanation, and possible conclusion of the study (Merriam, 2009). Themes ranged from outcomes, familiarity of students, expectations, communication, and reflection. Multiple

perspectives or viewpoints from different individuals assisted in the development of themes (Gottfert, 2015).

Procedures to Assure Reliability and Credibility

Qualitative research requires reliability and credibility of the findings. Increasing reliability and credibility occurs when the researcher in a qualitative study ensures transparency as well as provides clear evidence and thorough descriptions of the research process (Nuttall et al., 2011). Further validity was determined when instruments measure what was intended to be measured (Boesch, , Weber, & Scholz, 2013). Researchers can also use negative cases to build theory and increase validity (Nuttall et al., 2011). Strategies incorporated in this qualitative case study to increase reliability and credibility included triangulation, member checking, clarifying bias, and noting negative or discrepant information.

Triangulation or comparison of the different data sources confirmed the evidence and assisted in further findings to support the research (Boesch et al., 2013). The data sources used in the triangulation were interviews, an evaluation of formative assessments, and participant self-reflections on their PLC experience. Finding consistent themes as a result of examining evidence from the aforementioned sources added validity to the study (Creswell, 2012).

Member checking is the process of allowing the participants an opportunity to review the themes and findings to determine their accuracy (Boesch et al., 2013). The findings of the study were provided to the participants prior to completing the final report

so they had a chance to comment. Participant feedback increased the reliability and credibility of the data (Merriam, 2009).

As a former employee of the district, I made sure to clarify my bias to increase reliability and credibility. The interpretations of the findings were influenced by my connections with the K-8 school of study (Lodico et al., 2010). I was cognizant of my interpretations and was transparent regarding my bias. Only then was I able to increase the reliability of the study.

Limitations

Limitations existed with this study. The study was limited to a one school district containing approximately 270 students and 20 certified teachers. The purposeful, criterion-based, sampling of teachers also limited the amount of information that could be obtained regarding the PLC process at the K-8 school of study. The limited amount of certified teachers per PLC varied from two to three teachers, restricting the amount of data within each PLC that could be obtained. Furthermore, obtaining consent from just five participants reduced the representation of the total population of teachers.

Additionally, since the PLC process began in 2010 in the local school district, many teachers have left the district due to retirement or employment in other districts. This presented limitations on gaining a perspective on the evolution of the PLCs within the district.

Protecting the identity of participants by assuring that the information remained confidential was a priority throughout the study. Ethical protection of participants was imperative (Dasgupta, 2015). I maintained sensitivity and respect for all individuals

involved throughout the research. In the writing process, I avoided demeaning attitudes, sought ways to eliminate bias assumptions, and was conscious of references regarding distinguishing characteristics of participants (Lodico et al., 2010).

Data Analysis Results

The qualitative case study was conducted in order to answer the following research questions:

RQ1: How does participation in the PLC influence teacher responsibilities in the four domains: preparation, classroom environment, teaching, and professional duties?

RQ2: How are current teacher experiences regarding allotment of time and structure of a PLC perceived to influence teacher responsibilities at the K-8 school of study?

A study was conducted to collect data in a one school district in a suburban area in southern New Jersey. The school district contains approximately 270 students ranging from Pre-School to Grade 8. The school district employs 20 certificated teachers, eight paraprofessional's and two administrative team members. The building is charming and well maintained. The double locking door system provides security as all who enter the building must be verified and then allowed into the building by the secretary after stating their purpose. The main office is open and contains the office of the chief school administrator, a conference room, two secretaries, and the office of the business administrator. Just inside the building is an updated library with a glass wall facing the main road. The entry floor of the building contains the elementary classrooms, PS to

Grade 5. The stairs take you to the lower level which consists of the middle school classrooms, science lab, music room, art room, and the all-purpose room. The all-purpose room, in the lower rear of the building, serves the needs of physical education classes, lunch, theatre and opens to the newly updated playground, ball fields, and basketball courts for all students to enjoy. The overall feel of the school district is one of pride and community.

After obtaining consent from the IRB at Walden University and the board of education at the K-8 school of study, the process of gaining participants was conducted. The superintendent of the research site was requested to provide the email addresses of the individuals who met the criteria of the study. The criterion for participation included possession of a New Jersey standard teaching certificate; employment by the K-8 school of study for a minimum of 1 school year; and participation in the PLC process for a minimum of 1 full school year. The purposefully selected teachers were e-mailed an introductory letter stating the background of the research, history of the researcher, intent and goals of the study, procedures, and voluntary nature of the study, risks and benefits to participation, payment, privacy, contact information, and request for consent to participate.

Interested teachers responded via email. Upon consent, teachers were sent, via email, details of the study and directions to establish a secure e-mail account which was used for private and secure communication. Five out of 20 eligible teachers provided consent to participate in the study. Those five participants then created secure e-mail

accounts. The new email allowed for easy communication in order to establish a date, time and place to conduct the in-person interview.

All interviews were conducted at the K-8 school of study as requested by the participants. Participants selected the secure location of the interview within the school. One interview was conducted in the school library and the other four interviews were conducted in the conference room within the main office of the school. The library and the conference room provided secure locations in which participants could speak freely about their experiences. The interviews were recorded with the permission of the participants, so I could complete an accurate transcription. Once the transcription of each interview was complete, it was sent to the participant for member checking and acceptance to be incorporated into the study.

The second collection of information was a self-narrative reflection. Participants were requested, via email, to complete a self-narrative reflection utilizing web-based tools. The web-based tools were created and shared with each individual participant and included directions for completion and the Danielson's framework for teaching to utilize as a reference. All self-narrative reflections were completed within 2 weeks.

The final data collection piece included previously established formative assessments. Three of the five participants provided current math formative assessments. The other two participants did not conduct math formative assessments. I intended to analyze how the formative assessments have changed over the course of the 5 years the K-8 school of study had participated in PLCs. Unfortunately, with the change in administration at the district, the archived formative assessments no longer exist. The

formative assessments that were shared for analysis were the most recent available; therefore, the analysis of these assessments was limited to determining if the assessments generated during PLC time supported the curriculum. The formative assessments were provided to me from the participants via the secure email account and/or printed and placed in a mailbox located within the main office of the district of study for me to collect.

The analysis of the data was conducted in several steps. The initial analysis conducted required the information collected to be read and re-read to determine the consistencies and discrepancies within the data. Each response was evaluated for commonalities and discrepancies across the participant feedback.

Discrepant information is conflicting data to the developed themes and patterns (Nuttall, 2011). When discrepant cases emerged, the information was re-examined and re-evaluated in search of new themes that could create different outcomes. Different perspectives were addressed in the study when discrepant cases were noted. A total data review of discrepant cases provided added clarity to the study (Nuttal et al., 2012).

The similarities within the data led to open coding of the self-narrative reflection and the interviews conducted (Lodico et al., 2010). Open coding allowed for preliminary notes to be taken on the feedback submitted to gain meaning of the information. The open codes led to axial and selective coding. Axial and selective coding allowed for identification of relationships within the information. Each response, to each domain of The Danielson Group (2013) framework, from each participant, of the self-narrative reflection and the interview questions was coded.

The findings of the project study are based on an analysis of data from participants and their participation in an elementary PLC compared to participation in a middle school PLC. Elementary PLCs share responsibility for all subject areas; whereas, middle school teachers are content specific. This variation in the PLC presented different results when analyzing the data. Three of the participants participated in an elementary PLC and two of the participants participated in a middle school PLC.

The four domains of The Danielson Group (2013) framework identify the aspects of teacher responsibilities which improve student learning. The four domains of the framework are divided into 22 components which further define the domains and provide a comprehensive framework (Danielson, 2011). The findings of the study demonstrated PLCs influence teacher responsibilities within each domain but not every component within each domain. The components supported within each domain appear in the findings as a theme and are clearly defined by sub-headings in the following text.

Research Question 1: How does participation in the PLC influence teacher responsibilities within the four domains; preparation, classroom environment, instruction, and professional duties?

Domain 1: Planning and Preparation

The Danielson Group (2013) framework contains six components within Domain 1. Based on the findings, PLCs enhance three of the six components. Those components include demonstrating knowledge of content and pedagogy, demonstrating knowledge of students, and demonstrating knowledge of resources.

Goal Development Based on Content and Pedagogy

The findings suggest that PLCs have an impact on goal development based on content and pedagogy. Participants agreed that collaboration on content and pedagogy presented to students was required for student success. Developing common goals for students to achieve based on the content and pedagogy during PLCs will lead to increased student achievement as mentioned by all participants.

Further findings suggest that differences exist within the elementary PLC and the middle school PLC. The interview data revealed that the elementary PLC primarily focused on targeted math and language arts goals to improve teacher effectiveness and student performance. The middle school PLC focused on broader goals which can be adapted across content areas. The self-narrative reflection data confirmed that the elementary PLCs assisted in adapting goals based on content and pedagogy in order to meet the varied needs of each individual student. The elementary PLC provided teachers time to adapt specific goals and target instructional needs for all students to complete during reinforcement and enrichment (R & E) time; a time of no new instruction rather targeted activities to increase achievement. In the middle school PLC, the goals based on content and pedagogy were adapted as a result of learning objectives. The middle school PLC members sought to find common learning goals that are cross-curricular.

Specific evidence from participant interviews supports the findings that PLCs have an impact on goal development based on content and pedagogy. Participant A stated that each week the PLC team would review test scores and content then set goals to be reached for the following week. According to The Danielson Group (2013),

distinguished teachers build on prior student knowledge and recognize student misconceptions. Participant D mentioned that goals were based on cross-curricular content that students needed to accomplish. Teacher plans should be developed based on a broad base of content knowledge.

Examples of the data collected from the self-narrative reflection also supported the theme of goal development based on content and pedagogy. Participant B mentioned that planning and preparation based on content is a large part of making each lesson a success. Participant C specified, over the past years in a PLC, the materials that were developed were based on learning objectives. Participants stated they sought to make connections in planning, cross-curricular relations, and prior student knowledge. In a PLC, time is available to further discuss knowledge of individual students and build assessments based on content and student needs as stated by Participant A. Highly effective teachers plan for student misconceptions and provide consistent feedback that furthers develops learning (The Danielson Group, 2013). Participant E commented that PLCs provided opportunities to discuss specific student needs and modify goals accordingly.

The review of current formative assessments provided did further validate the culture of collaboration in a PLC. The review of the formative assessments was limited to the current year and did not allow for how the PLC has, if any, allowed for change in content over time. Further data would need to be collected to determine the transformation of formative assessments, as a result of the PLC, over time. The formative assessments that were analyzed revealed that the content of each assessment

was consistent among the teachers. These findings support PLCs as a resource for goal development based on content and pedagogy.

Attaining a Deeper Understanding of Students

The next theme in Domain 1 focused on attaining a deeper understanding of students. All participants expressed that attaining a deeper understanding of their students was necessary to provide targeted instruction. The PLC afforded teachers opportunities to group students based on cognitive levels, skill level, and that incorporated medical or learning requirements when they developed activities and assessments for students. This was true for all participants in both the elementary and middle school PLCs. The PLC proved essential for teachers as they modified lessons and adapted learning outcomes.

The interview data demonstrated that PLCs assisted in attaining a deeper understanding of students. Participant A noted that a PLC discussion of student skills is important so the students can gain the most from the R & E time. Students must be challenged during R & E time in order to adapt to their specific learning needs and strive to reach their full potential. Participant E also confirmed that PLCs provided an opportunity to discuss specific student needs in order to better understand students and appropriately modify learning tasks.

Further evidence from the self-narrative reflections was collected regarding knowledge of students. All five participants, in the self-narrative reflection, referenced that knowledge of the students was an essential component to planning and preparation.

As pointed out by Participant A, "In PLC we are able to further discuss our knowledge of

my students such as the students' interests and levels." Distinguished teachers recognize the value of knowing the interest and cultural background of their students (The Danielson Group, 2013). Participant D explained, "I am usually familiar with the students and this familiarity aids me in learning more about them." The last component of Domain 1, utilizing appropriate resources for assessment, was found to be an important component to enhancing teacher effectiveness that resulted from peer collaboration in a PLC.

Utilizing Appropriate Resources

Utilizing appropriate resources for assessment was noted as the last theme in Domain 1. All five participants commented within the self-narrative reflection on the importance of utilizing appropriate resources. Although all five participants emphasized the importance of utilizing appropriate resources, one difference was noted between the elementary PLC and the middle school PLC. The elementary PLC focused specifically on utilizing appropriate resources to ensure that the scope and sequence of the curriculum was followed and learning objectives were met. Whereas the middle school PLC demonstrated that resources could support student learning across curriculums. The resources reviewed within the middle school PLC were developed as the result of PLC discussions and subsequent planning in order to identify resources that would broaden student learning outcomes.

The interview data provided supporting evidence. For example, Participant D indicated that PLCs had broadened the vision on what students should be learning in every class and how to assist in supporting other subjects through various shared

resources. Participant C offered that PLCs provided time for discussion, meaning and planning of resources. Building PLC time into the structure of the school day safeguards the quality time teachers need to determine appropriate resources (Callahan & Sadeghi, 2015). Participant E described PLCs as an opportunity to review the scope and sequence of curriculum and how to best meet the specific needs of students.

The findings of the self-narrative reflection also revealed that PLCs do have an impact on utilizing appropriate resources to create assessments. As explained by Participant B, "I plan coherent lessons for all students to learn using a variety of materials." Participant E declared, "I work to set clear and concise instructional outcomes and incorporate a variety of resources and materials." Incorporating common materials and instructional practices aid discussions on teaching and learning and provide consistency amongst the grade level (Eaker, 2015). Additionally, Participant D mentioned using many resources to prepare lessons that will benefit all learners as well as incorporate a variety of instructional tools into each lesson. Combining the data of the interviews and the self-narrative reflection supported the concept that PLCs assisted teachers in providing a broader view of content, shared ideas, and team planning when utilizing appropriate resources.

Domain 2: Classroom Environment

Developing strong relationships with students is a priority of the district of study.

The district earned the distinction of State and National School of Character in 2014 by

Character.org. The district is committed to supporting strong self-esteem, ethical values,

and respect for diversity. The data clearly revealed the theme creating an environment of respect and rapport as the component supported by the PLC process highlighted in Domain 2

The theme developed from the data within Domain 2 is the creation of an environment of respect and rapport. The majority of the participants felt that PLCs provide opportunities for teachers to develop common expectations which can be communicated to the students. The majority of the participants expressed that consistent expectations help to create respect and a rapport between teachers and students and eliminate misunderstandings and the need to discipline students.

The data demonstrated that teachers in both the elementary and middle school PLCs agreed that common expectations and the handling of discipline procedures are supported through the PLC and enhanced a classroom environment of respect and rapport. All participants agreed that establishing clear expectations for students is important to creating a classroom environment of respect and rapport. In the narrative reflections, Participant E stated, "We wanted to do groups during R & E that we would plan for and we wanted the kids to be able to go from each classroom and know that the expectations and the rules are exactly the same." Participant B stated, "I feel like we feed on each other as far as strategies we use in the classroom." Participant E further commented that PLCs provided common time for teachers to make decisions and then take action. The data suggested that providing common operations, strategies, and expectations reduces the loss of instructional time and provides clear expectations for the students.

Additional evidence supports PLCs as a strategy to reduce discipline through common expectations. "Discipline has come up in terms of making sure the students have common focus and expectations," stated Participant C. "In PLCs sometimes we discuss student behaviors regarding respect which leads to brainstorming some different ideas on how to promote respect in the classroom," was mentioned by Participant E.

Comments from Participants C and D suggested that PLCs provide the opportunity for the collaborative teams to develop a shared, collective agreement regarding student discipline. Participant E stated, "If you have a difficult student or maybe one that just isn't fitting into the culture of the school then you have PLC to talk and brainstorm some different ideas." Further information provided by Participant D was associated with creating common behavior expectations so that all students could be addressed fairly and equally.

Setting clear expectations also provides a comfort level to students and the confidence to complete their own tasks within the classroom. As Participant D pointed out that, "rapport in the classroom is important to make students feel comfortable in asking questions and moving around the room." The data clearly revealed that PLCs assisted teachers in their responsibilities of creating a classroom environment of respect and rapport.

Domain 3: Instruction

Domain 3 is the core of the framework which describes the critical work teachers do to bring learning to life (Danielson, 2011). The findings indicated two components of Domain 3 supported PLCs which were questioning and discussion techniques and using

assessment in instruction. The majority of the participants agreed that questioning techniques improve engagement and all participants agreed that using assessments in instruction is enhanced through the PLC.

Incorporating Questioning Techniques to Improve Engagement

The first theme of Domain 3 developed was incorporating questioning techniques to improve engagement. Variation was noted between the elementary and the middle school PLC. All three participants in the elementary PLC referred to incorporating questioning techniques as important to the PLC as well as increased student engagement. One of the two participants in the middle school PLC specifically addressed questioning techniques. The elementary PLC self-narrative reflection data revealed the need for questioning techniques that could be developed in the PLC as a way to initiate more challenging, thought provoking questions. The middle school self- narrative reflection data revealed that PLCs often utilize questioning techniques as a way to encourage students to make connections to previously learned concepts and content areas.

Evidence from the participants supported the findings that questioning techniques developed during PLC meetings improved engagement. Participant B indicated during the self-narrative reflection, "I communicate and question students at all levels to ensure the students are learning during each lesson." PLCs allow collaborative teams to plan critical thinking questions, varied techniques to incorporate questioning, and the sharing of ideas to promote engagement. Participant D stated, "My questioning techniques are based in getting the students to think beyond what is being taught." Participant E stated, "We practice active listening and responding appropriately." Participant A expressed that

questioning techniques are used during the discussion session within a lesson. The evidence suggested that PLCs assisted in improving engagement through questioning techniques; however, additional information would need to be gathered to determine the extent to which PLCs make an impact on teacher responsibilities in the classroom regarding engagement and questioning techniques.

Formative Assessments as Essential Components of Instruction

The second theme in Domain 3 is formative assessments as essential components of instruction. All five participants mentioned formative assessments as essential components of instruction. The elementary PLC data revealed that assessments are continually revised based on student outcomes. The findings suggested that PLC time is necessary to review student performance on the formative assessments and to determine if any questions provoked inconsistent responses from students. The elementary PLC adapted the assessments to ensure that quality formative assessments were presented to all students. In the middle school PLC, the PLC afforded teachers with opportunities to review more data. The middle school PLC members also noted collaboration regarding formative assessments assisted teachers in creating cross-curricular, high quality assessments.

Evidence collected demonstrated that formative assessments are an essential component of instruction. As identified by Participant C, "In weekly PLC meetings, instruction, scope and sequence, and assessments are discussed." Creating shared formative assessments during the PLC provides essential data to determine if all students, no matter who is teaching the class, have learned the intended material (DuFour et al.,

2008). Participant E specified, "It's nice to have at least one or a group of people to bounce ideas off and making sure you are thinking along the same lines, especially when you are talking about what you want students to get out of something." Three of the five participants felt that working collaboratively within a PLC provided an opportunity to develop comprehensive formative assessments. Participant A stated that in a PLC teachers are able to build assessments based on the student's needs. Participant D utilized the PLC to learn how other colleagues developed their formative assessments and modeled the information shared. PLCs can assist teachers in their responsibilities of developing formative assessments within the PLC.

Domain 4: Professional Responsibilities

Reflecting on teaching and growing professionally are the two components of Domain 4 that proved to be supported by PLCs based on the data. According to Danielson (2011), professional responsibilities refer to the work that teachers do to validate their commitment to their profession and maintain ethical responsibilities. The findings showed that reflection occurs more regularly in the elementary PLC than the middle school PLC. Additionally, PLCs do support professional growth based on the findings.

Integrating Reflection to Improve Teaching and Learning

Integrating reflection will improve teaching and learning based on the findings.

Reflection is the process of looking back to determine if students learned the intended outcome (DuFour et al., 2010). The majority of the participants commented that

reflection was a part of the PLC process. All three participants in the elementary PLC commented on reflection as an important component of the PLC. One of the two middle school PLC participants specifically commented on the prominence of reflection as a part of the PLC.

The findings revealed PLC members in the elementary and middle school PLC provided different responses regarding the use of reflection to improve teaching and learning. Reflection in the elementary PLC was stated by all three participants as a routine practice. Reflection on lessons allows for the sharing of strategies. The elementary PLC members often reviewed assessment data to determine if any discrepancies existed between the grade levels. If any discrepancies are noted, the elementary PLC members reflected on what occurred and how the teaching and learning can be adapted to eliminate the discrepancies. The elementary PLC members are continuously reviewing what was taught, how it was taught and what can be done to improve their instruction. Reflection in the middle school PLC was a way to gather input from the other members and to discuss how to utilize what was learned to improve instruction. The findings suggest that the elementary PLC members regularly reflected on teaching and learning while the middle school PLC reflection was limited.

The following evidence supports reflection as part of the PLC process.

Reflection, according to Participant E, is necessary in order to continually go back and think about what was taught and note any discrepancies between classes. Participant E concluded, "I reflect on daily teaching by making adjustments on lessons for the following day, altering lesson plans as needed, and by meeting with my PLC team on a

weekly basis." Additionally, Participant D identified reflection as going back and seeing what worked and did not work and discussing it with the other teachers to gain ideas for improvement. Reflection can be accomplished as a part of the PLC process in order to enhance teacher effectiveness.

Reflection, in a PLC or individually, allows for a review to determine if a lesson needs to be retaught. In the self-narrative reflection, Participant B stated, "I regularly reflect on my teaching which helps me become a better professional each year." Incorporating reflection can become a self-regulated behavior for teachers. Participants stated that adjustments are often made to their teaching as a result of reflection. Additional data need to be collected to determine the impact reflection has on the middle PLC school members.

Growing Professionally Through PLCs

Growing professionally as a result of PLCs is the last theme in Domain 4. Teachers who seek to grow professionally maintain an open mind and are willing to try new approaches (Danielson, 2011). PLCs are new approaches to professional growth through collaboration with colleagues while exploring honest investigations of teaching and learning (DuFour, DuFour, & Eaker, 2008). The majority of the participants referenced PLCs as an opportunity to grow professionally.

Four of the five participants shared how they grow as professionals in a PLC. All three elementary PLC participants focused on the importance of collaboration as a key to professional growth. Those participants stated that they collaborate on teaching and learning all the time, not just during the PLC. Learning from each other was considered

an important aspect of professional growth. The middle school PLC members expressed growing professionally from the PLC can happen when the PLC is operating efficiently. The middle school PLC members felt that maintaining a focus and expectations were necessary to grow professionally.

The interview data support the idea of growing professionally through PLCs.

Participant B noted that being a member of the PLC assisted in professional growth.

Participant E said that PLCs can assist all teachers to grow professionally as long as there is a clear focus or path, knowing the endpoint and the overall goal, and having enough time to reach the goal. Participant D stated during the interview that PD does occur as a result of the PLC but it was an area that was in need of improvement.

The self-narrative reflection data supported PD as a way to maintain records. Participant B conveyed that keeping impeccable records was a personal goal and that detailed records allow for deep discussion within the PLC. According to the participants, detailed records allow for an immediate review of assessment scores, participation, and the ability to adapt the classroom environment and instruction based on the review of student data during the time set aside for a PLC. Participant C stated that the PLC process has provided an opportunity to keep detailed records to support PD. The interview and self-narrative reflection data demonstrated that teachers can grow and develop professionally as a result of participation in PLCs.

Summary of Findings on How PLCs Influence Teacher Responsibilities

After a thorough review of the data in regards to RQ-1, the data suggested that PLCs do influence teacher responsibilities within several components of the four domains

of teaching. Each domain was analyzed to determine any differences between those who participate in the elementary PLC versus the middle school PLC participants. The differences between the PLCs are a result of elementary PLC members consistently teaching all subject matter and middle school PLC members teaching content specific subject matter. Commonalities such as teaching strategies and instructional supports used by elementary PLC members are more prevalent than found among middle school PLC members.

In Domain 1, planning and preparation, the components of goal development based on content and pedagogy, attaining a deeper understanding of students, and utilizing appropriate resources, proved to be supported through PLCs. The elementary PLC members focused on targeted goals to improve instruction while the middle school PLC members developed broader goals to increase student achievement based on content and pedagogy. Gaining a deeper understanding of students through the PLC was important to all participants. All participants agreed that having a deeper understanding of their students allowed for targeted instruction based on interest and skill level in order to maximize engagement resulting in the greatest increase in achievement. All participants also referenced the need to utilize appropriate resources. The elementary PLC was structured on maintaining the pacing of scope and sequence through the use of appropriate resources to develop deeper student understanding. The middle school PLC members sought to discover cross-curricular resources to enhance instruction in the PLC. The findings support all three components of Domain 1 as a way to increase teacher responsibilities within the PLC.

Creating an environment of respect and rapport was the one component supported by the PLC to enhance teacher responsibilities. All participants felt strongly that creating and maintaining an environment of respect and rapport was paramount. Participants stated that setting clear expectations assist with student behaviors and confidence within the classroom which also supports respect and rapport between students and teachers.

The findings for Domain 3 support the conclusion that PLCs assist teachers in their responsibilities that can lead to incorporating questioning techniques to improve engagement and formative assessments. The three participants in the elementary PLC referred to incorporating questioning techniques to improve engagement as a component of the PLC. The elementary PLC members collaborate on making questions thought provoking and challenging. One participant in the middle school PLC referenced questioning techniques as a result of the PLC. Further information needs to be obtained to determine the extent to which the middle school PLC addresses and impacts questioning techniques. All participants supported PLCs as a way to improve teacher effectiveness regarding the development of formative assessments. Formative assessments created within the PLC are routinely adapted within the elementary PLC to promote student achievement and the middle school PLC uses data to create crosscurricular formative assessments.

Domain 4, professional responsibilities, supported reflection and growing professionally as the two components that increase teacher responsibilities as a result of PLCs. The findings indicate that reflection occurs more regularly in the elementary PLC than in the middle school PLC. Further research is necessary to study the extent to which

reflection in the middle school PLC improves teacher effectiveness. The majority of the participants confirmed growing professionally as a result of their active participation in a PLC

Overall, PLCs provide many opportunities to influence teacher responsibilities within the classroom. The findings revealed that all Domains of the Danielson framework (The Danielson Group, 2013) are positively impacted as a result of PLCs. More research should be done to determine the extent to which the function and focus of the elementary PLC varies from the middle school PLC in regards to influencing teacher responsibilities within the classroom.

Research Question 2

The themes developed from the combination of the interview data and the self-narrative reflective data were common planning time, setting clear expectations, and establishing goals. The review of formative assessments did not provide data to support how the allotment of time and structure of a PLC influence teacher responsibilities; therefore, triangulation of the data did not include the formative assessments. Discrepant cases did not exist within the data. The following themes presented are a combination of data from both the interviews and self-narrative reflections.

Common Planning Time Increases Teacher Effectiveness

Feedback from the participants regarding common planning time was that it is essential to the development and completion of meeting goals. PLCs can address all domains of the Danielson framework; however, the findings support Domains 1, planning

and preparation, and Domain 4, professional responsibilities, provide the greatest influence on teacher responsibilities as a result of PLCs. Teachers are given opportunities to gain different perspectives from peers when planning lessons in order to advance their teaching skills (Tobia & Hord, 2012). Social and collaborative learning, on a continual basis, supports professional growth resulting in increased teacher responsibilities (Evans, 2015).

Participants expressed that common planning time provides opportunities for teachers to review and adapt their curriculum, establish targeted R & E activities, and build formative assessments. All participants commented that common planning time allows for a review of the New Jersey Student Learning Standards are properly aligned to the curriculum to enhance student achievement. Additionally, as mentioned by Participant E, PLCs provide time to plan for grouping of students during R & E. The classroom environment may be adapted based on the shared ideas of colleagues. As stated by Participant B, "I feel like we feed on each other as far as strategies we use in the classroom." Furthermore, common planning time provides an opportunity to create formative assessments. As previously mentioned, all participants commented PLCs improve teacher effectiveness in developing common formative assessments. Developing common formative assessments provides for consistency in assessing student outcomes and achievement across the grade level. Teachers can adapt lessons based on the data collected from the formative assessments and make determinations on whether or not lessons and instruction need to be adapted.

The findings demonstrated that common planning time is essential to the PLC process and to the improvement of teacher responsibilities. District leaders who invest in PLCs need to create opportunities for teachers to have common planning time built into their regular day. Investing time for PLCs will increase teacher responsibilities and student achievement.

Setting Clear Expectations for PLC Success

Participant expectations of the PLC were noted as an important component of successful PLCs. Expectations refer to the establishment of norms, defining roles, and holding each member accountable for an aspect of the PLC. PLCs must have, as stated by Participant E, "A clear focus or clear path." If each member knows their role and responsibility to the PLC and goals or outcomes of each PLC are established, the PLC members will find more success. Participant C stated, "The focus needs to be looked at and each meeting focused on exactly what we need to do." The PLC expectations, as stated by Participant D, "Do keep you focused and make it a safe place for open discussion to happen."

Four of the five participants referenced a need for more information, direction or guidance in regards to the implementation and expectations of PLCs. Participant A referenced the need for overall training so that all staff members know what they should be doing as well as the need to create videos to assist staff members in gaining a better understanding of how a true PLC should operate. "Not all staff is aware of the way a PLC should be structured," was expressed by Participant D. PD in this area would provide clarity for all PLC members. Participant E confirmed the need to know the

endpoint or goal and know the expectation of the PLC. "Anything can have a great impact on the school; it's just all about how you do it," was stated by Participant C. The data confirmed that setting clear expectations within a PLC will lead to improved teacher responsibilities.

Establishing Goals Make an Impact on Teacher Effectiveness

All participants determined establishing goals make an impact on teacher effectiveness. Although establishing goals proved to be essential to the PLC, only two of the five participants felt Specific, Measurable, Attainable, Reliable, and Time-bound (SMART) goals made an impact. Participant A specified, "Each week we would set goals about what to talk about depending on what was coming up. Yes, it had an impact." Participant B referenced the need for teachers to develop student growth objectives (SGO) and the SMART goal should align with the SGO. According to the New Jersey Educator Effectiveness Task Force (2011), all teachers are required to establish two SGOs annually. Aligning SMART goals and SGOs provides continual review of goals throughout the year. Participant E stated the PLC team aligns SGOs with the SMART goal and had created one for reading and one for math. The development of goals showed variances in the elementary and middle school PLC.

Development of goals produces different outcomes in the PLCs. The elementary PLC can align goals based on mathematics and language arts literature as all teachers are responsible for the same content. The middle school PLC members seek to find common ground to develop and support goals and develop SGOs as the content level for each individual varies. As Participant C indicated, difficulty exists in determining a SMART

goal as the PLC is comprised of varied content areas. All participants agreed that the development of goals were essential to the PLC process; how to develop SMART goals that truly make an impact needs to be better understood and developed further.

Summary of Findings Regarding Allotment of PLC Time and Structure

RQ-2 pertained to how teacher experiences regarding the allotment of time and structure of a PLC influenced teacher responsibilities. The data revealed that PLCs provide for a common planning time which is necessary to ensure alignment of lessons to New Jersey Student Learning Standards, curriculum pacing, and creating formative assessments. PLCs allow opportunities for teachers to have conversations around teaching and learning. Having clear expectations, guidelines, focus and goals are necessary to the structure of a PLC. PLCs also assist teachers in creating SMART and SGO goals. The development of goals were supported in the PLC even though the alignment of goals may vary in each PLC. The data confirmed that when PLCs are understood and developed, they make an impact on each domain of teaching as outlined in Danielson's (2013) framework for teaching.

Discussion of the Findings

The purpose of this qualitative case study was to determine how teacher participation in PLCs at the district of study influenced teacher's responsibilities. The conceptual framework for this study was focused on the social learning theories of Bandura and Danielson's framework for teaching. The combination of Bandura's social learning theory and Danielson's framework for teaching provided a researched-based

framework for a study of collaboration necessary for a PLC to influence teacher's responsibilities within the classroom.

The qualitative case study on PLCs at a local suburban school district in Southern New Jersey answered some questions but did raise additional questions. The data supported that PLCs do make an impact on teacher effectiveness in the classroom. The school of study is taking the first step toward improvement, "A key step in any effective improvement process is an honest assessment of the current reality" (DuFour et al., 2010 p. 16). PLCs embedded in the school day allow for a change in school culture and the implementation of best practices within the classroom (Dillon et al., 2015). Changes in school culture happen as a result of what is learned through observation and imitation (Connolly, 2017). Bandura's social learning theory supports how change occurs in school culture.

Bandura believed that people model or imitate the actions of others (Bandura, 1963). Effective PLCs are those that trust, share a common vision, and create partnerships that allow for openness and professional growth as a collective group (Watson, 2012). Providing training on how to organize and support PLCs within a school will increase teacher responsibilities. Individuals will adapt their actions based on their circumstances (Bandura, 1983).

The study provided limited answers on the development and implementation of formative assessments. Further data collection and analysis would need to be conducted to fully understand the relationship of formative assessments to the PLC. A review of the formative assessments revealed that teachers use data to better understand their students'

knowledge base. Such assessments also lead to developing what to do when they haven't learned the intended outcome (DuFour et al., 2010).

One discrepant case appeared in this data collection. Participant A stated in the interview that PLCs are not necessary in order to create formative assessments; however, in the self-narrative reflection, the participant concluded that PLCs are used to build assessments based on student needs. The review of the data showed Participant A is using the PLC to build assessments based on student needs but the creation of formative assessments could be accomplished alone and not as a component within the PLC.

According to teacher experiences at the K-8 school of study, PLCs provide the necessary time for teachers to plan and collaborate. Instruction is significantly impacted in a positive way by their participation in PLCs from deepening questioning and discussion techniques to the development of common assessments and engagement strategies within the classroom. Further research in this area is needed to determine just how much time is needed for teachers in a PLC to increase teacher effectiveness.

Professional responsibilities can also be enhanced as a result of the PLC when teachers reflect together to adapt lessons and communicate learning goals and student progress with parents. Research supports ongoing, personalized PD as the most effective way to increase teacher effectiveness (Callahan & Sadeghi, 2015). The research study conducted by Farris-Berg (2014) corroborated this research, concluding that PLCs do provide teachers opportunities to become experts in curriculum, assessment, and teacher responsibilities. Growing professionally through PD can be done collaboratively within the PLC team. To assist school districts with the implementation of PLCs, its proper

organization and guidelines, and how to continue to maintain successful PLCs, I have developed a 3-day PD plan which is highlighted in Section 3.

Conducting this project study resulted in valuable gained experiences in research. For example, some components could be changed to produce greater results. Alignment of the interview questions and expectations of the self-narrative reflections would have produced more commonalities within the data. The expectation of the self-narrative reflection was very broad. Specifying more detail on the intended outcome may have produced longer, more thorough reflections. Asking participants to elaborate further on their explanations would have produced additional evidence to review and interpret. The number of participants also limited the study. Conducting the research within a larger district may have resulted in the inclusion of a greater number of study participants, resulting in a greater depth of data to analyze.

Section 3: The Project

Introduction

The focus of this project study was to determine how teachers' participation in PLCs at the K-8 school of study influences teacher responsibility. I based teacher responsibilities on Danielson's four domains of teaching: preparation, classroom environment, teaching, and professional duties (The Danielson Group, 2013). I conducted the study in a suburban, public school that serves approximately 250 students in grades PS to 8. Twenty participants, who matched the criteria of the study, were asked to participate, and of those 20, five agreed to. Based on the findings of the research, I created a 3-day PD training for certificated staff members as my project.

The purpose of the PD training is to provide certificated teachers an understanding of PLCs and their impact on implementing best practices in the classroom that can positively influence teacher responsibility. The target audience for the PD project was certificated teachers in any year of their profession. The learning outcomes are:

- Participants will gain a better understanding of how participation in a PLC can influence teacher responsibilities within the four domains: preparation, classroom environment, teaching, and professional duties.
- 2. Participants will learn the importance of establishing structure, organization, and guidelines of a PLC in order to influence teacher responsibilities.

Rationale

The creation of a 3-day professional development program was the most appropriate project genre based on the data findings. As I stated in Section 2, four of the five participants referenced a need for more information and guidance regarding the implementation of PLCs. Participant A referenced the need for overall training so that all staff members know what they should be doing as well as the need to create informational videos that would provide staff members a better understanding of how a true PLC should operate. Participant D stated that not all staff were aware of the way a PLC should be structured. PD on this topic would provide clarity for all PLC members. Participant E confirmed that all participants in a PLC need to know the endpoint or goal as well as the expectation for the PLC, in order to be successful. Participant C stated, "Anything can have a great impact on the school; it's just all about how you do it." Developing a 3-day workshop on how to successfully implement PLCs had the potential to make a great impact among teachers and students.

I addressed the structure, organization, and guidelines of PLCs first in the PD workshop in order to provide continuity within all PLC teams. The project was titled, "How to make PLCs work in your district." Day 1 is an interactive work session for teachers on the introduction of the PLC concept, the need to clarify the mission and vision, development of norms and team commitments, creating a leadership team, and taking a look at the first two domains of The Danielson Group's (2013) framework on planning and preparation and the classroom environment. Day 2 begins with a reflection on lessons learned in Day 1 following an interactive work session on the next two

domains of The Danielson Group framework: instruction and professional responsibilities: and how to analyze student data and SMART goals. The third and final day of the workshop begins with time set aside for reflection on the prior knowledge gained from the training followed by questioning and discussion techniques, intervention strategies, formative assessments, and personalized learning. The workshop concludes with a reflection and celebration. Clear expectations of a PLC, including the anticipated outcomes, will assist school districts in making an impact on their overall culture.

Review of the Literature

I used the Walden University Library to search the ERIC, Sage, and EBSCO databases to locate current information on PD. The databases were used to find peer-reviewed journal articles for my research. A comprehensive search was conducted using the following key terms: adult learning theories, teacher responsibilities, professional development, collaboration amongst peers, reflection, professional growth, and professionalism.

Adult Learning Theories

Adults learn differently than children. Adult learning is influenced by experiences and self-concept (Bates, 2017). As stated by Knowles, Holton, and Swanson (2012), "Learning is the act or process by which behavioral change, knowledge, skills, and attitudes are acquired" (p.10). Teaching adults requires an understanding of building upon the learner's personal experience, prior knowledge, and cultural background (Bates, 2017).

Knowles' (1975) theories suggested that learners are self-directed. The concept of andragogy, made popular by Knowles, consists of four principles including the need for an adult to be motivated to learn (Malik, 2016). Motivation is enhanced through experiences that deepen an individual's knowledge base (Knowles et al., 2012). PD experiences allow for individuals to embrace their past experiences to drive their motivation and direct their own learning. Every social experience affects the willingness of adults to embrace learning (McCray, 2016).

PD should be relevant to the learner. Increasing relevancy can be developed when using a person's prior knowledge or prior perceptions to process meaning (Christie, Carey, Robertson, & Grainger, 2015). Adults learn to adapt prior thinking and knowledge to examine how new knowledge can decode or change a previously interpreted concept (John, 2016). Embracing new ideas and increasing relevancy will enrich the learning process.

Every adult will approach the learning process differently. Gardner's theory of multiple intelligences (MIs) supports the idea that all individuals can learn provided they have opportunities to engage in their own unique capabilities and skills during the learning process (Gardner & Moran, 2006). MI is designed to capture the strengths of each individual and allow opportunities to share their knowledge with others in terms they understand (Moran, Kornhaber, & Gardner, 2006). PD workshops should incorporate different learning styles in order to maximize the potential of all teachers. Incorporating a variety of approaches to learning will assist the adult student with engagement and transfer of knowledge (Almuhammadi, 2017). The transfer of

knowledge does not occur from a variety of targeted lessons, rather an open-ended approach to learning that allows individuals to engage with the content to best fit their learning needs (Gardner, 1996).

Learning through observation and imitation emerged from the work of Bandura (1963). Bandura (1971) believed that imitation of another's behavior can influence an individual's identity. Children and adults are influenced by others and model behaviors in which they are exposed (Connolly, 2017). Emergent PD opportunities that include best practices in teaching and learning can be adapted or modeled by teachers for implementation within their classrooms. According to the work of Bandura (1983), teachers have the ability to increase their own self-efficacy promoting positive feelings and persisting through challenges. Teachers working in teams have the ability to alter learning through modeling best practices (Graham & Arshad-Ayaz, 2016). Empowering teachers through PD will lead to enhancements within the classroom.

Administrative Leadership

The administrative leadership of a school is pivotal to the success of any PD program or workshop created for teachers. Administrative leaders are often inundated with state mandates and accountability requirements; however, they learn to rise above the pressure of the mandates and look to create PD opportunities that focus on the collective responsibility of teachers working together (DuFour & Mattos, 2013). Administrative leaders are not just managers, but instructional leaders charged with creating a school culture that supports teaching and learning (Barth, 2013).

A critical component to the successful implementation of a 3-day PD program is providing an explicit vision of the district that is well communicated to all stakeholders by the administrative leadership team (Huffman et al., 2016). The purpose and focus of each PD experience should be clearly understood and aligned to the overall mission and vision of the school in order to be successful (Schiola, 2013). Agendas created by administrative leaders need to be clear and explicit to maximize learning opportunities (Owen, 2014).

Inability to relinquish administrative control can deter the success of any PD experience. Teachers need to feel empowered (Ferguson, 2013). Administrative leaders need to remember that PD is a way to distribute leadership roles, nurture knowledge and motivation, empower teachers, and create a culture of learning and support (Owen, 2014). Allowing grade level principals or leadership chairs to implement ideas generated by their team demonstrates administrative support and can assist in the implementation of an institution supportive of learning (Ahn, 2017).

Reflection

Reflective practice is an essential element of the PD process. Reflection assists individuals in making meaning of new information because it is through reflection that an individual can think critically to fully understand a concept (Núñez Pardo & Tellez, 2016). When teachers reflect critically, learning reaches the highest level (De Groot, Endedijk, Jaarsma, Simons, & Van Beukelen, 2014). Reflection fosters growth, changes mindsets, and boosts ideas (Steeg, 2016). The greatest growth in learning is through reflection (Graziano, Schlesinger, Kahn, & Singer, 2016). Continual reflection by

teachers informs decisions, planning, and practices (Núñez Pardo & Tellez, 2016). It is important to make time available to allow teachers to reflect on all PD learning and experiences.

Reflection also provides the ability to gain knowledge through experience while changing an individual's mindset (Kelly & Cherkowski, 2015). When teachers reflect on their practice, they make a shift in assumptions (Kelly & Cherkowski, 2015). The shift in mindset and assumptions through reflection is a significant way that teachers can change their instructional practices (Steeg, 2016). Teachers need to be willing to embrace new understandings and implement new ideas.

Looking back on a situation allows an individual to extract new meaning. Ideas are generated through the reflection of experiences and PD opportunities that allow for the emergence of new discoveries (Hutchinson & Tracey, 2015). Reflection supports inquiry and self-critique which leads to changes in outcomes (Núñez Pardo & Tellez, 2016). Linking new experiences to prior learning allows for readjustment or a scaffolding of events to make enhancements in teaching practice (Steeg, 2016).

Professional Development

Teaching is a profession that benefits from continued PD. In recent years, the ability to generate and preserve high quality teachers has caused apprehension (Yoo & Carter, 2017), and PD for teachers has become an integral component of school reform (Covay Minor et al., 2016). PD has become an important aspect to review in order to have an impact on retaining teachers; however, many PD experiences are still ineffective on changing teacher practice (Dos Santos, 2017). The research shows that PD should be

meaningful and relevant, job embedded and continuous, and should encompass the motivation and emotions of teachers (Yoo & Carter, 2017).

PD can improve the quality of teaching and learning as long as it is meaningful and relevant. The individual and preceding experiences of a teacher can alter a PD experience and should be considered when developing PD (Dos Santos, 2017).

Translation of knowledge into practice from PD experiences will also be enhanced when the PD is directly related to a teacher's content area (Covay Minor et al., 2016).

Connecting meaningful and relevant PD experiences will make an impact on altering teachers' responsibilities within the classroom. An additional way to alter teacher responsibility is to provide PD that is ongoing.

In order to sustain high quality teachers, PD should be job embedded and continuous. The most effective PD for teachers includes those that are embedded in the work day providing for continuous dialogue and feedback (Covay Minor et al., 2016). When PD is continued over a period of time, it provides opportunities for active learning, motivation, and peer support making PD experiences more successful (Dos Santos, 2017). Engaging teachers in authentic PD learning experiences will stimulate increased knowledge and understanding, which in turn will alter teacher practice (Yoo & Carter, 2017). PD experiences can only be successful if a teacher has the motivation to adapt as a result of the PD.

Motivation and emotions are essential components to consider when creating PD opportunities for teachers. PD supported by the culture of the school can positively impact the professional growth and motivation of a teacher (Covay Minor et al., 2016). If

a teacher is unwilling to participate in PD, learning will not take place (Dos Santos, 2017). PD experiences are typically designed to treat all participants similarly which can cause obstacles to an individual's learning experience (Gonczi, Maeng & Bell, 2017). Teacher PD is complex and needs to be treated as such. PD should be teacher centered, connected to interest, and designed to build on prior knowledge which will increase motivation and support emotions (Covay Minor et al., 2016).

Project Description

The developed project is a 3-day professional development that can be implemented in any school district to improve teacher's responsibilities based on The Danielson Group (2013) framework. Participants of the 3-day PD should be certified teachers who are beginning the PLC journey or who are entering into a new PLC team. The PD workshop encompasses three topic areas: PLCs, teacher responsibilities, and adult learning theories. The objectives of the workshop include: all participants will understand the meaning of a PLC and how they are organized; all participants will know how PLCs impact teacher responsibilities based on The Danielson Group framework; and all participants will learn how to collect and analyze data in order to create SMART goals.

PLCs will be explained in the workshop, starting with the basics on how to sustain a PLC. The workshop will include an interactive session on how teachers can utilize the PLC process to improve teacher responsibilities based on The Danielson Group (2013) framework for teaching. Finally, adult learning theories will be addressed in order to understand the impact personal relationships have on the PLC process. In

order for the skills developed during the 3-day PD workshop to transfer into practice, several activities and authentic experiences must be incorporated (Yoo & Carter, 2017). The 3-day PD chart (see Appendix A) outlines the specific timelines, topics, and activities to be conducted for each day. The combination of the three topic areas and objectives creates a solid foundation to support the successful implementation of PLCs.

The following resources were used for the development of the 3-day PD focused on the foundation of a PLC: Graham and Ferriter (2010), which provided the foundation on how to establish PLCs. This is a critical resource in understanding the initial process of developing PLCs and will be provided to all participants. DuFour et al., (2010) created a handbook which is a powerful tool for teachers to gain insights into the essential components of a PLC. Sections of the handbook will be provided to teachers attending the workshop in order to allow teachers to take notes and engage with the essential material during the training. Lindsey, Jungwirth, Pahl, and Lindsey (2009) provided an understanding on embracing the differences within others. PLC teams may be comprised of individuals from many different cultural backgrounds. Teachers need to develop an understanding of different cultures in order to cohesively work together.

A few alternate resources will be suggested for participants of the 3-day PD to review prior to the PD in order to enhance their understanding of the project's topic area of teachers' responsibilities. The first resource is The Danielson Group (2013). The framework included in this text outlines the Domains associated with teacher's responsibilities. Danielson (2007) provided clarity on how The Danielson Group framework was developed including the background information on teachers'

responsibilities within each domain of teaching. Lemov (2015) provided strategies to assist teachers in supporting their responsibilities within the classroom specifically in the domains of classroom environment and instruction.

Development of the adult learning theory topic, which will be provided to participants, includes resources from peer-reviewed journal articles based on the work of Bandura as well as two additional books. The journal articles by Bandura demonstrated the effects of social interactions. The conclusions of Bandura's (1973, 1983) work showed social interaction can adapt perceptions, attitude, and self-efficacy and how forethought can enhance the social interactions. The first book by the National Academy Press (2000), offered insight on the process of learning. The findings of this book will assist in an understanding the connections that teachers make as a result of their instruction. The second book by Knowles, Holton, and Swanson (2012) provided ideas on tailoring education for adult learners. The impact of life experiences is explored as well as the concept that adults and children learn differently.

Project Evaluation Plan

The ideal time for this 3-day PD would be at the start of the school year.

Teachers often spend the first few days of each school year engaged in PD. This PD opportunity would be applicable to all teachers no matter the content area or expertise and may cultivate a school environment supportive of collaborative teaching and learning. The chief school administrator or principal would be the individual responsible for conducting the PD. The PD should be conducted in a large space which can

accommodate the staff, such as the library, and allow for movement of groups and activities.

A potential barrier to the implementation of the PD would be the availability in the calendar to conduct 3 days of PD prior to the start of a new school year. The amount of in-service time varies per school district. The current district of study starts the year with just 2 days of in-service training. A way to overcome this barrier would be to complete the third day of training spread out each week during scheduled PLC time until all PD requirements are met. Another potential solution would be to provide substitute teachers for teams of teachers so that they could spend the day in PD. Each PLC team could be given one day of substitute coverage to participate in the training.

In the large group setting of the library, the 3-day PD will continually move from whole group instruction, to individual reading and comprehending, to small group work within PLC teams. All members of the school community should be involved in the PD to promote a positive school culture and understanding of PLCs (Svanbjornsdottir, Macdonal, & Frimannsson, 2016). The best practice would be to have the PLCs that will work together throughout the school year participate together in the 3-day PD to begin learning to work together as a PLC team.

As the 3-day PD workshop is conducted, a continual evaluation of the positive and negative aspects of the workshop will be conducted. Incorporating a simple formative assessment at the close of each workshop day and a summative at the conclusion of the 3-day PD will provide essential feedback to the presenter on how to adapt the program. The formative assessment at the end of each day will provide an

opportunity for the presenter to immediately revise the PD workshop to ensure the intended outcome is reached. The three question formative assessment will be delivered to participants via an online survey tool in order to quickly generate data to inform what revising may or may not need to occur. The three questions include: How can the PD program be changed to make the experience better? Did the content presented today meet your needs? If not, please explain. Are the activities engaging and appropriate to your learning needs? If not, please explain. The responses will be reviewed by the leader of the workshop to determine positives and negatives of the day. These results will be shared with the participants at the start of each workshop day. Formative evaluations allow for continual improvement of the workshop (Peterson, 2016). Using the data from the formative assessment will allow the workshop leader to address any concerns, review any material if requested, and highlight the positive responses. The summative questions at the end of the workshop will include: Please rate the quality of your experience regarding the overall workshop by selecting below average, average, or excellent experience. What do you feel needs to be changed or added to the program to fit your needs? Will you use what you have learned to adapt your teaching strategies in the classroom? The data collected from the assessments will allow for a reflection of the workshop by the presenter in order to continue to adapt the program to meet the needs of all who attend (Lemov, 2015).

Project Implications

The objective of the 3-day PD workshop is to increase teachers' responsibilities within the classroom based on The Danielson Group (2013) framework. Implementation

of PLCs, designed to fit the specific needs of a school district, can make a significant impact on the school culture, teacher responsibilities within the classroom and student achievement (Svanbjörnsdóttir et al., 2016). PLCs are opportunities for educators to engage in social dialogue revolving around their specific area of expertise (Adams & Vescio, 2015). The sharing of ideas and a review of materials within a team brings consistency among educators and student achievement. A critical component of the PLC process is to embed time within the daily structure for PD and teacher collaboration (DuFour et al., 2010). Having a dedicated time for PD and teacher collaboration demonstrates the school's commitment to the process. Maintaining PD as a priority within a school will change the culture of the school towards a more positive and productive environment (DuFour et al., 2008).

PLCs impact every aspect of teacher responsibilities that are outlined in The Danielson Group (2013) framework. The findings and development of the project study may have a widespread influence. The 3-day PD plan developed could be shared with other school districts interested in making the change toward a more collegial professional culture. School districts could engage in district-wide PLC development. Time could be allocated for cross-district PLCs on common professional development days. This would be extremely beneficial to those teachers who are in small districts and do not have another member within their same content area. Additionally, formative assessments could be created to ensure that all schools and grade level teams within a district move at the same pace and grow over time within the PLC process.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The strength of this project study was in the engagement of the participants. I was able to complete a comprehensive analysis of the detailed information that the participants involved in the study provided me with. In their responses, I found a variety of similarities while analyzing the data, which allowed for theme generation to develop logically. They also engaged in member checking which increased the validity of the study. The similarities within the themes and the validity of the member checking made it easy to determine the need for the 3-day PD experience for the faculty.

I identified several limitations to this project study as well. The sample size of the study was the first limitation. The district contained 20 eligible participants, and a total of five teachers agreed to participate, limiting the amount of data that could be collected. Additionally, the small number of participants did not fully represent the district population of teachers who participate in a PLC. Of the five participants, only three taught elementary math and were able to provide formative assessments to be included as part of the data used for this study. The second limitation was the scant amount of data I was able to collect to review the formative assessments for changes within each assessment regarding the wording of questions, number of questions, etc., that occurred on each formative assessment, as a result of the PLC, over the 5 years of existence of the PLCs at the K-8 school of study. Furthermore, the formative assessments were adapted

from year to year within the PLCs, but the original assessments were not saved, leading to a limited ability to review the data.

I also identified both strengths and weaknesses concerning my project. ON of the strengths of the PD workshop is the ability to implement it in any school district. The workshop is comprehensive from the initial implementation or revitalization each year of PLCs to the ability to sustain PLCs in any district. Finally, the workshop provides opportunities for reflection and celebration which are key components to sustaining a PLC program. One limitation of the 3-day PD workshop was the need for the district to purchase resources to fully develop a PLC program. Additionally, districts may find it difficult to spend 3 days on one initiative. Finally, the 3-day workshop was based on The Danielson Group (2013) framework, and districts may want to use other teacher observation tools and not focus only on the Danielson Group.

Recommendations for Alternative Approaches

My intent with this project study was specific to the impact PLCs have on teacher responsibilities based on the Danielson Group's (2013) framework. Alternative approaches to the study could have included the observation of the PLC meetings. Recording of the PLC meetings would have provided the ability to analyze the collaboration in action. The live meetings would also have provided an insight into the specific interactions within each PLC team, the amount of work included at each meeting, and the implementation of the norms and expectations that are developed at the start of each PLC school year. Conducting interviews after observing a PLC meeting

would provide the ability to ask follow-up questions to responses in order to gain additional knowledge.

Another alternative approach could include analyzing the impact PLCs have on student's achievement as a result of enhanced teacher responsibilities. This approach could be carried out by conducting a study in a local school currently without PLCs. The study could be used to implement PLCs and monitor student achievement at the school over time.

Alternative approaches could also be made to the 3-day PD workshop. I felt a 3-day PD was necessary to gain a full understanding of the PLC process based on the Danielson Group's (2013) framework. However, the workshop could be limited to 1day if the focus was only on the implementation of PLCs. PD that is relevant, embedded, and sustained over time allows for a change in practice that increases teacher confidence and ultimately increases student achievement (Covay Minor et al., 2016). If teachers understand and except the PLC process, change will take place.

Scholarship, Project Development, and Leadership Change

Conducting research proved to be a complex but very rewarding process.

Ensuring attention to detail in regards to each step of the research and its correlation to the research questions had to be at the forefront of every step along my path of discovery. The protection of the participants needed to be a priority, and for this reason, I asked participants to establish e-mail accounts to protect their identities, and select their locations to be interviewed and I have kept their names and private. My recording of the interviews proved to be essential in capturing the essence of each interview. Member

checking was important to increase the validity of the data. Having the assistance of a peer review was critical in seeing the project study through to completion. My review of the literature broadened my understanding of the importance of the PLC process and my overall intent with this project study.

I underwent significant growth as a scholar as a result of this project study. I began with developing questions and making assumptions, and through those assumptions, I was able to formulate specific research questions that allowed me to deepen my understanding of PLCs and their impact on teacher responsibilities. I have also developed an understanding of the importance of reflection, rethinking and reconstructing ideas and meaning through a review of the literature and a data analysis. I have discovered the importance of perseverance and grit. Through the development of this project study, I have become more innovative and productive. I believe that the results of this project study will positively impact others.

Reflection on the Importance of the Work

Proper implementation of PLCs in a district can transform the culture of a school. This project study has the potential to empower teachers to embrace a culture of learning on a daily basis. According to the Danielson Group, PLCs significantly impact the four domains of teaching. The results of this study demonstrated how each domain can be enhanced through the PLC process. Teacher responsibilities are strengthened as a result of the PLC and collaboration within the PLC is critical to the success of teaching and learning (DuFour et al., 2010).

Overall, the end result of this project study was establishing the importance of guiding the PLC process from its inception to conclusion in order to ensure its success. I developed strong foundations, starting with dedicated PLC time during the school day, the consideration of team dynamics, and support for team norms and SMART goals that are monitored for success, as the critical elements of this project study.

Implications, Applications, and Directions for Future Research

PLCs, when embedded in the school day, provide opportunities for teachers to reach their full potential. PLCs can directly impact the lives of those involved toward positive professional relationships because by their very nature, PLCs require a social connection with others. The greatest impact for teachers, the results of this project study, can have would occur on the local level. Through the 3-day PD workshop, teachers in a district could create professional relationships that support each other in shared learning and responsibilities. PLCs provide opportunities for teachers to develop a deeper understanding of the various cultural background and learning preferences of individuals as they work in small groups toward increased teacher effectiveness and student achievement (DuFour et al., 2008). The impact of professional relationships could extend beyond the local level if teachers engage in virtual PLCs and share the knowledge and experiences they have developed as a result of the 3-day PD workshop.

Future research would allow for a deeper understanding of the impact PLCs may have on a district. In this study, I focused on the impact that PLCs have on teacher responsibilities. Additional data could be collected on the impact PLCs have on student achievement. Another possibility would be implementing PLCs in a district that did not

previously engage in PLCs, and providing the 3-day PD, and monitoring student achievement through Measures of Academic Progress assessments and state assessments over the course of 3 years to collect rich data on student achievement as a result of implementing PLCs.

Conclusion

Changes in education are occurring rapidly. The job description of a teacher today is remarkably different than in the past. The influx of technology has created students who need to be navigators of information. Teachers need to learn to be navigational and innovative coaches. Creating collaborative teams such as PLCs provides teachers with opportunities to engage in bold moves in education. Teachers should strive to create extraordinary learning environments in order to engage the learners of the future. PLCs allow for the exploration of ideas within a small group, to determine best practices in teaching and learning and implementation of those ideas into their classrooms.

Effective PLCs require PD. Providing teachers with PD on the varied elements of PLCs may allow for improvement of the PLC process to occur over time. Districts should invest, not only in the PLC process, but in a PD program that supports the process. Making PLCs a priority in a school district may lead to improved teaching and learning as well as increased student achievement.

References

- Adams, A., & Vescio, V. (2015). Tailored to fit: Structure professional learning communities to meet individual needs. *Journal of Staff Development*, *36*(2), 26-28.
- Adamson, F., & Darling-Hammond, L. (2012). Funding disparities and the inequitable distribution of teachers: Evaluating sources and solutions. *Education Policy Analysis Archives*, 20(37).
- Ahn, J. (2017). Taking a step to identify how to create professional learning communities--Report of a case study of a Korean public high school on how to create and sustain a school-based teacher professional learning community. *International Education Studies*, 10(1), 82-92.
- Almuhammadi, A. (2017). EFL professional development: Discussion of effective models in literature. *English Language Teaching*, *10*(6), 118-127.
- Attard, K. (2012). Public reflection within learning communities: An incessant type of professional development. *European Journal of Teacher Education*, *35*(2), 199-211.
- Bandura, A. (1963). The role of imitation in personality development. *The Journal of Nursery Education*, 18(3).
- Bandura, A. (1971). *Vicarious and self-reinforcement processes*. New York, NY: Academic Press, Inc.
- Bandura, A. (1983). Temporal dynamics and decomposition of reciprocal determinism: A reply to Phillips and Orton. *Psychological Review*, *90*(2), 166-170.

- Barth, R. S. (2013). The time is ripe (Again). Educational Leadership, 71(2), 10-16.
- Bates, L. (2017). Stepping over the line: Applying the theories of adult learning in a GED math class. *Journal of Research and Practice for Adult Literacy*, *Secondary*, *and Basic Education*, 6(1), 40-44.
- Boesch, I., Schwaninger, M., Weber, M., & Scholz, R. (2013). Enhancing validity and reliability through feedback-driven exploration: A study in the context of conjoint analysis. *Systemic Practice & Action Research*, 26(3), 217-238. doi:10.1007/s11213-012-9248-6
- Callahan, K., & Sadeghi, L. (2015). Teacher perceptions of the value of teacher evaluations: New Jersey's ACHIEVE NJ. *International Journal of Educational Leadership Preparation*, *10*(1), 46-59.
- Campbell-Evans, G., Stamopoulos, E., & Maloney, C. (2014). Building leadership capacity in early childhood pre-service teachers. *Australian Journal of Teacher Education*, 39(5).
- Carmichael, D. L., & Martens, R. P. (2012). Midwestern magic: Iowa's statewide initiative engages teachers, encourages leadership, and energizes student learning. *Journal of Staff Development*, 33(3), 22-26.
- Carr, P. (2014). *The nations' report card: 2014 U.S. history, geography, and civics at Grade 8.* Retrieved from http://nces.ed.gov/whatsnew/commissioner/remarks2015/04 29 2015.asp
- Center on Education and the Workforce. (2013). *Jobs recovery? Not so much*. Retrieved from http://chinagorman.com/tag/center-on-education-and-the-workforce/

- Christie, M., Carey, M., Robertson, A., & Grainger, P. (2015). Putting transformative learning theory into practice. *Australian Journal of Adult Learning*, 55(1), 9-30.
- Clayton, J. K. (2014). The leadership lens: Perspectives on leadership from school district personnel and university faculty. *International Journal of Educational Leadership Preparation*, *9*(1).
- Connolly, G. J. (2017). Applying social cognitive theory in coaching athletes: The power of positive role models strategies. *A Journal for Physical and Sport Educators*, 30(3), 23-29.
- Conzemius, A., & O'Neill, J. (2002). *The handbook for SMART school teams*. Bloomington, IN: Solution Tree Press.
- Cook, J. W. (2014). Sustainable school leadership: The teachers' perspective.

 International Journal of Educational Leadership Preparation, 9(1).
- Covay Minor, E., Desimone, L., Caines Lee, J., & Hochberg, E. D. (2016). Insights on how to shape teacher learning policy: The role of teacher content knowledge in explaining differential effects of professional development. *Education Policy Analysis Archives*, 24(61).
- Creswell, J. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (Laureate Education, Inc., 4th ed.). Boston, MA: Pearson.
- Danielson, C. (2011). Enhancing professional practice: A framework for teaching (2nd ed.) Alexandria, VA: ASCD.

- The Danielson Group. (2013). *The framework*. Retrieved from http://www.danielsongroup.org/framework/
- Dasgupta, M. (2015). Exploring the relevance of case study research. *Vision*, *19*(2), 147-160. doi:10.1177/0972262915575661
- De Groot, E., Endedijk, M. D., Jaarsma, A. C., Simons, P. R., & van Beukelen, P. (2014). Critically reflective dialogues in learning communities of professionals. *Studies in Continuing Education*, *36*(1), 15-37. doi:10.1080/0305764X.2012.749214
- Dillon, P., Erkens, C., Sanna, D., & Savastano, L. F. (2015). Crowd learning: 8 districts pool resources to focus on assessment literacy. *Journal of Staff Development*, *36*(3), 28-32.
- Dos Santos, L. M. (2017). How do teachers make sense of peer observation professional development in an urban school. *International Education Studies*, 10(1), 255-265.
- Dupree, D. (2012). A case story: A new school and PLCs. *School Library Monthly*, 28(7), 11-17.
- DuFour, R., DuFour, R., & Eaker, R. (2008). Revisiting professional learning communities at work: New insights for improving schools. Bloomington, IN: Solution Tree Press.
- DuFour, R, DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work* (2nd ed.). Bloomington, IN:

 Solution Tree Press.
- DuFour, R., & Mattos, M. (2013). How do principals really improve schools? *Educational Leadership*, 70(7), 34-40.

- Eaker, R. (2015). *Kid by kid, skill by skill: Becoming a professional learning community.*Bloomington, IN: Solution Tree Press.
- Eargle, J. C. (2013). "I'm Not a Bystander": Developing teacher leadership in a rural school-university collaboration. *Rural Educator*, *35*(1).
- Ermeling, B. A., & Gallimore, R. (2013). Learning to be a community: Schools need adaptable models to create successful programs. *Journal of Staff*Development, 34(2), 42-45.
- Evans, P. (2015). Open online spaces of professional learning: Context, personalization and facilitation. *Techtrends: Linking Research and Practice to Improve Learning*, 59(1), 31-36.
- Farris-Berg, K. (2014). A different model for school success: Empower teachers. *Phi Delta Kappan*, 95(7), 31-36.
- Ferguson, K. (2013). Organizing for professional learning communities: Embedding professional learning during the school day. *Canadian Journal of Educational Administration and Policy*, Issue#142, 50-68.
- Gardner, H. (1996). Probing more deeply into the theory of multiple intelligences. *NASSP Bulletin*, 80(583), 1-7.
- Gardner, H., & Moran, S. (2006). The science of multiple intelligences theory: A response to Lynn Waterhouse. *Educational Psychologist*, 41(4), 227-232.
- Gee, D., & Whaley, J. (2016). Learning together: Practice-centered professional development to enhance mathematics instruction. *Mathematics Teacher Education and Development*, 18(1), 87-99.

- Global Report Card. (2012). *District vs. international education achievement*. Retrieved from http://globalreportcard.org/map.html#bottom-results
- Gonczi, A., Maeng, J., & Bell, R. (2017). Elementary teachers' simulation adoption and inquiry-based use following professional development. *Journal of Technology* and *Teacher Education*, 25(2), 155-184.
- Göttfert, E. (2015). Embedding case study research into the research context.

 *International Journal of Sales, Retailing & Marketing, 4(9), 23-32. Graham, P., & Arshad-Ayaz, A. (2016). Learned unsustainability: Bandura's Bobo doll revisited.

 *Journal of Education for Sustainable Development, 10(2), 262-273.
- Graham, P., & Ferriter, W. (2010). *Building a professional learning community at work:*A guide to the first year. Bloomington, IN: Solution Tree Press.
- Graziano, J., Schlesinger, M. R., Kahn, G., & Singer, R. (2016). A workbook for designing, building, and sustaining learning communities. *Learning Communities:*Research & Practice, 4(1).
- Grusec, J. (1992). Social learning theory and development psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology*, 28(5), 776-786.
- Hargreaves, E., Berry, R., Lai, Y. C., Leung, P., Scott, D., & Stobart, G. (2013).
 Experiences of autonomy in continuing professional development: Teacher learning communities in London and Hong Kong. *Teacher Development*, 17(1), 19-34.
- Hazi, H. M., & Arredondo Rucinski, D. (2014). Policy meets practice: Districts feel the impact of state regulations. *Journal of Staff Development*, 35(6), 44-47.

- Hemphill, D., & Leskowitz, S. (2013). DIY activists: Communities of practice, cultural dialogism, and radical knowledge sharing. *Adult Education Quarterly: A Journal of Research and Theory*, 63(1), 57-77.
- Heo, G. M., & Lee, R. (2013). Blogs and social network sites as activity systems:

 Exploring adult informal learning process through activity theory framework.

 Educational Technology & Society, 16(4), 133-145.
- Huffman, J. B., Olivier, D. F., Wang, T., Chen, P., Hairon, S., & Pang, N. (2016). Global conceptualization of the professional learning community process: Transitioning from country perspectives to international commonalities. *International Journal of Leadership in Education*, 19(3), 327-351.
- Hutchinson, A., & Tracey, M. W. (2015). Design ideas, reflection, and professional identity: How graduate students explore the idea generation process. *Instructional Science: An International Journal of the Learning Sciences*, 43(5), 527-544.
- John, V. M. (2016). Transformative learning challenges in a context of trauma and fear:

 An educator's story. *Australian Journal of Adult Learning*, *56*(2), 268-288.
- Kelly, J., & Cherkowski, S. (2015). Collaboration, collegiality, and collective reflection:

 A case study of professional development for teachers. *Canadian Journal of Educational Administration and Policy*, Issue#169, 1-27.
- Knowles, M. S. (1975) *Self-directed learning. A guide for learners and teachers*. Englewood Cliffs, NJ: Cambridge Adult Education.
- Knowles, M., Holton, E., & Swanson, R. (2012). *The adult learner*. New York, NY: Routledge.

- Lemov, D. (2015). Teach like a champion 2.0: 62 techniques that put students on the path to college. San Francisco, CA: Jossey-Bass.
- Lieberman, A., & Miller, L. (2011). Learning communities: The starting point for professional learning is in schools and classrooms. *Journal of Staff Development*, 32(4), 16-20.
- Lindsey, B., Jungwirth, L., Pahl, J., & Lindsey, R. (2009). *Culturally proficient learning communities*. Thousand Oaks, CA: Sage.
- Lodico, M., Spaulding, D., & Voegtle, K. (2010). *Methods in educational research:*From theory to practice (Laureate Education, Inc., custom ed.). San Francisco,
 CA: John Wiley & Sons.
- Malik, M. (2016). Assessment of a professional development program on adult learning theory. *Portal: Libraries and the Academy, 16*(1), 47-70.
- McCray, K. H. (2016). Gallery educators as adult learners: The active application of adult learning theory. *Journal of Museum Education*, *41*(1), 10-21.
- McGlone, P. (2014). Average NJ per-student spending is close to \$19K, new report finds.

 Retrieved from

 http://www.nj.com/education/2014/05/average_nj_per_pupil_spending_almost_1
 9k_new_report_finds.html
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass
- Mielke, P., & Frontier, T. (2012). Keeping improvement in mind. *Educational Leadership*, 70(3), 10-13.

- Moran, S., Kornhaber, M., & Gardner, H. (2006). Orchestrating multiple intelligences. *Educational Leadership*, *64*(1), 22-27.
- Moriarty, B. (2014). Research design and the predictive power of measures of self-efficacy. *Issues in Educational Research*, 24(1), 55-66.
- Morntountak, A. (2013). Grief as learning and change: Revelations from "The Shack".

 New Horizons in Adult Education & Human Resource Development, 25(1), 46-55.
- National Research Council (2000). *How people learn: Brain, mind, experience, and School: Expanded Edition.* Washington, DC: The National Academy Press.
- New Jersey Department of Education. (2014a). *Overview of revised professional development regulations*. Retrieved from http://www.nj.gov/education/profdev/regs/pdoverview.pdf
- New Jersey Department of Education. (2014b). *Taxpayers' guide to education spending* 2014. Retrieved from http://www.nj.gov/cgi-bin/education/csg/14/csg.pl?string=dist_code0330&maxhits=650
- New Jersey Department of Education. (2017). *New Jersey state assessments*. Retrieved from http://www.state.nj.us/education/assessment/
- New Jersey Educator Effectiveness Task Force. (2011). *Interim report*. Retrieved from http://www.state.nj.us/education/educators/effectiveness.pdf
- Núñez Pardo, A., & Téllez Téllez, M. F. (2016). Reflection on teachers' personal and professional growth through a materials development seminar. *How*, *22*(2), 54-74.
- Nuttall, P., Shankar, A., & Beverland, M. B. (2011). Mapping the unarticulated potential of qualitative research. *Journal of Advertising Research*, *51*153-163.

- Owen, S. (2014). Teacher professional learning communities: Going beyond contrived collegiality toward challenging debate and collegial learning and professional growth. *Australian Journal of Adult Learning*, *54*(2), 54-77.
- Paolini, A. (2015). Enhancing teaching effectiveness and student learning outcomes. *Journal of Effective Teaching*, 15(1), 20-33.
- Peterson, J. L. (2016). Formative evaluations in online classes. *Journal of Educators Online*, 13(1).
- Promixity. (2016). New Jersey school district demographic characteristics. Retrieved from http://proximityone.com/sd_nj.htm
- Reed, V. A., Schifferdecker, K. E., & Turco, M. G. (2012). Motivating learning and assessing outcomes in continuing medical education using a personal learning plan. *Journal of Continuing Education in the Health Professions*, 32(4), 287-294.
- Rhoads, K. (2011). Despite rough seas, teachers in rural Maine swim together. *Journal of Staff Development*, 32(2), 22-26.
- Ryoo, J., Goode, J., & Margolis, J. (2015). It takes a village: Supporting inquiry- and equity-oriented computer science pedagogy through a professional learning community. *Computer Science Education*, *25*(4), 351-370. doi:10.1080/08993408.2015.1130952
- Saliga, L. M., Daviso, A., Stuart, D., & Pachnowski, L. (2015). Steps forward and back in adult numeracy teacher professional development: A reflection on a teacher workshop experience. *Journal of Research and Practice for Adult Literacy,*Secondary, and Basic Education, 4(1), 48-54.

- Schiola, S. A. (2013). Top skills for tough conversations: Spark effective dialogue to solve complex issues. *Journal of Staff Development*, *34*(5), 54-56.
- Schneider, M., Huss-Lederman, S., & Sherlock, W. (2012). Charting new waters:

 Collaborating for school improvement in U.S. high schools. *TESOL Journal*, *3*(3), 373-401.
- Sims, R. L., & Penny, G. R. (2015). Examination of a failed professional learning community. *Journal of Education and Training Studies*, *3*(1), 39-45.
- Smylie, M. A. (2014). Teacher evaluation and the problem of professional development. *Mid-Western Educational Researcher*, 26(2), 97-111.
- Snyder, S., & Fisk, T. (2016). Applying Banduras model to identifying sources of self-efficacy of teaching artists. *Research in the Schools*, 23(2), 38-50.
- Solution Tree. (2015). *History of PLC*. Retrieved from http://www.allthingsplc.info/about/history-of-plc.
- Steeg, S. M. (2016). A case study of teacher reflection: Examining teacher participation in a video-based professional learning community. *Journal of Language and Literacy Education*, *12*(1), 122-141.
- Stewart, C. (2014). Transforming professional development to professional learning. *Journal of Adult Education*, 43(1), 28-33.
- Svanbjörnsdóttir, B. M., Macdonald, A., & Frímannsson, G. H. (2016). Views of learning and a sense of community among students, paraprofessionals and parents in developing a school culture towards a professional learning community. *Professional Development in Education*, 42(4), 589-609.

- Teaching Excellence in Adult Literacy. (2011). *TEAL center fact sheet No.11: Adult learning theories*. Retrieved from https://teal.ed.gov/sites/default/files/Fact-Sheets/11_%20TEAL_Adult_Learning_Theory.pdf
- Texifter, LLC. (2016). *Welcome to the coding analysis toolkit* (CAT). Retrieved from http://cat.texifter.com/?utm_source=PredictiveAnalyticsToday&utm_medium=Re view&utm_campaign=PAT
- Tobia, E., & Hord, S. (2012). I am a professional: Learning communities elevate teachers' knowledge, skills and identity. *Journal of Staff Development*, *33*(3), 16-26.
- Watson, C. (2012). Effective professional learning communities? The possibilities for teachers as agents of change in schools. *British Educational Research Journal*, 40(1), 18-29.
- Wood, R. E., & Burz, H. L. (2013). Literacy gets "a" makeover: Engaged learning boosts student achievement at Michigan High School. *Journal of Staff Development*, 34(4), 38-41.
- Yoo, J., & Carter, D. (2017). Teacher emotion and learning as praxis: Professional development that matters. *Australian Journal of Teacher Education*, 42(3), 38-52.

Appendix A: The Project

Project Description

My name is Kristen Martello. I have been in the field of education for 18 years. During that time, I have been a teacher and administrator and I have witnessed many changes in education over the years. I am currently serving as a Superintendent of a suburban PS to Grade 8 district. The implementation of PLCs has appeared to bring great value to the districts in which I have been able to be a part of PLCs in action. Watching teachers collaborate, learn and grow from each other, and improve teaching and learning through PLCs has been an exciting shift in education that I had a desire to learn more about. I wanted to determine if my assumptions of PLCs were correct, and so I conducted a qualitative case study on the PLCs within your district. As a former employee, I am excited to present a 3-day professional development grounded on my research findings that can be implemented to improve teachers' responsibilities based on The Danielson Group (2013) framework.

The objective of the 3-day PD workshop is to increase teachers' responsibilities within the classroom based on The Danielson Group (2013) framework. The 3-day PD will serve to assist all certified teachers who are either beginning the PLC journey or who are entering into a new PLC team, or have been in the same PLC team for years and are looking to be more productive. The PD workshop encompasses three topic areas: PLCs, teacher responsibilities, and adult learning theories. The objectives of the workshop include:

- All participants will understand the meaning of a PLC and how they are organized;
- All participants will know how PLCs impact teacher responsibilities based on
 The Danielson Group (2013) framework;
- All participants will learn how to collect and analyze data in order to create SMART goals.

PLCs will be explained starting with the basics on how to sustain a PLC. The workshop will include an interactive session on how teachers can utilize the PLC process to improve teacher responsibilities based on The Danielson Group (2013) framework for teaching. Finally, adult learning theories will be addressed in order to understand the impact personal relationships have on the PLC process. In order for the skills developed during the 3-day PD workshop to transfer into practice, several activities and authentic experiences will be incorporated (Yoo & Carter, 2017). The 3-day PD chart below outlines the specific timelines, topics, and activities to be conducted for each day. The combination of the three topic areas and objectives creates a solid foundation to support the successful implementation of PLCs.

The following resources were used for the development of the PD focused on the foundation of a PLC: Graham and Ferriter (2010), which provides the foundation on how to establish PLCs. This is a critical resource in understanding the initial process of developing PLCs and will be provided to all participants. DuFour et al. (2010), created a handbook which is a powerful tool for teachers to gain insights into the essential components of a PLC. Sections of the handbook will be provided to teachers attending

the workshop in order to allow teachers to take notes and engage with the essential material during the training. Lindsey, Jungwirth, Pahl, and Lindsey (2009) provides an understanding on embracing the differences within others. PLC teams may be comprised of individuals from many different cultural backgrounds. Teachers need to develop an understanding of different cultures in order to cohesively work together.

A few alternate resources have been suggested for all participants to review prior to the PD in order to enhance your understanding of the project's topic area of teachers' responsibilities. The first resource is The Danielson Group (2013). The framework included in this text outlines the Domains associated with teacher's responsibilities.

Danielson (2011), provides clarity on how The Danielson Group framework was developed including the background information on teacher's responsibilities within each Domain of teaching. Lemov (2015) provides strategies to assist teachers in supporting their responsibilities within the classroom specifically in the Domains of classroom environment and instruction.

Development of the adult learning theory topic includes resources from several peer-reviewed journal articles based on the work of Bandura as well as two additional books. The first book by the National Academy Press (2000), offers insight on the process of learning. The findings of this book will assist in an understanding the connections that teachers make as a result of their instruction. The second book by Knowles, Holton, and Swanson (2012) provides ideas on tailoring education for adult learners. The impact of life experiences is explored as well as the concept that adults and children learn differently.

The ideal time for this 3-day PD would be at the start of the school year. The PD should be conducted in the library to allow for movement of groups and activities. In the large group setting of the library, the 3-day PD will continually move from whole group instruction, to individual reading and comprehending, to small group work within PLC teams.

3 Day PD Workshop: "How To Make PLCs Work In Your District!"

Time	Торіс	Activity
8:00-9:00	Introduction: What is a PLC? How are	All staff members use post-it notes to write their ideas about
AM	they organized?	PLCs. What do they wonder? What do they know?
		Instructor will ask volunteers to present definition and/or
	(DuFour, DuFour & Eaker, 2008)	concept of PLCs and structure. The instructor will provide
	Chapter 1	the definition and structure of PLCs. Specific PLC teams
		should be stated at this time so all staff knows who they will
		be working with.
9:00-9:45	Review of Mission/Vision;	Instructor Led: Present the Mission & Vision of the District.
	Administrations Expectations of PLCs &	PLCs must be supported through a commitment within the
	Commitments to the Process	work week for PLCs (dedicated time for staff members
		within their schedules). The commitments must be
	Specific to each district and led by the	presented as well as the expectations of the district. The
	CSA.	CSA and administration must develop this on their own.
9:45-10:00	BREAK☺	
10:00-	Norms/Commitments/Team	The concept of team norms & examples will be provided by
11:30	Expectations/Ensuring Focus	the instructor. The instructor will ask the PLC teams working
	How do we make the most of every	together for the school year to find a space to sit together
	meeting?	and engage in developing their own norms and expectations.
		Emphasis on always having a focus of each & every meeting,
	(DuFour, DuFour, Eaker & Many, 2010)	prior to concluding a meeting, must be a priority. Each PLC
	Chapter 2	team will turn their norms into the instructor at the end of
		this activity.
11:30-	PLC Leadership Team: What is this?	Each PLC created for the upcoming school year will be given
12:00	Why is it important?	time to select a leader. The leader understands that they
		are then committing to participating in a PLC leadership
	(Graham & Ferriter, 2010, p.29)	team who meets quarterly throughout the school year. The
		quarterly meetings are to share out the great things taking
		place in each PLC. The leader reports back to their team.
12:00-1:00	Lunch. Feed your curiosity	On Your Own
1:00-2:45	PLCs impact the 4 Domains of Teaching	Day 1 will focus on Planning & Preparation & the Classroom
2:45-3: 00	by Danielson.	Environment. Participants will engage in a brainstorming
Complete	The Danielson Framework (2013) will	activity on how PLCs will impact Domain 1 and 2 and list on
formative	be provided & DuFour, DuFour &	chart paper. Charts should be hung on the walls and all staff
assessment	Eaker, 2010: Chapters 7 & 11	"walk the walls" to learn from each other. Teams share out.

Day 2 PLC PD:

Time-Frame	Topic	Activity
8:00-8:30 AM	Review: Lessons	Participants should be given time to reflect on
	Learned/Questions?	the prior day. Ask any questions for clarity.
		Debrief on what was learned the previous day.
		Instructor should provide results of formative
		assessment from the prior day.
8:30-10:30	PLCs impact on Domains 3 & 4	Day 2 will focus on Instruction & Professional
	by The Danielson Group (2013).	Responsibilities. Participants should
	The Danielson Framework	brainstorm how PLCs will impact each Domain
	(2013) will be provided &	and list on chart paper. Charts should be hung
	DuFour, DuFour & Eaker, 2010:	on the walls and all staff "walk the walls" to
	Chapters 8, 9, & 10.	learn from each other. Teams share out in the
		end what they learned.
10:30-10:45	BREAK☺	
10:45-12:00	Data Review/Analysis:	PLC teams will be given State Assessment data
	Completed in Grade Level (PLC)	in Math and ELA to analyze (PARCC scores).
	Teams	What trends do they notice? What academic
		strengths? Challenges? Anomalies? (See
		*PARCC Analysis Worksheet)
12:00-1:00 PM	Tunch	On Your Own
	Feed your curiosity [™]	
1:00-2:45	SMART Goals (Yearly & 6 week	What is a SMART goal? How do I create a
	progress)	SMART goal? Instructor will provide handout.
2:45: Complete 3		PLC Teams will take the data analysis from the
question formative	Handout: Conzemius & O'Neill,	morning session to create SMART goals. One
assessment	2002.	SMART goal to provide an overarching yearly
		goal should be developed as well as the 1st 6
		week SMART goal to begin the journey. Teams
		will pair off and share goals.

Day 3 PLC PD:

Time	Topic	Activity
8:00-8:30 AM	Review: Lessons Learned/Questions?	Participants should be given time to reflect on the prior day. Ask any questions for clarity. Debrief on what was learned the previous day. Instructor should provide results of formative assessment from the prior day.
8:30-10:00	Intervention strategies: How do I know the intended outcome was not learned? What do I do when students don't learn what I expected them to learn? DuFour, DuFour, & Eaker, 2008: Chapter 1	Using the data to implement interventions; Developing Reinforcement and Enrichment activities.
10:00-10:15	BREAK☺	
10:15-12:00	Creating Formative Assessments: How will common formative assessments assist us? DuFour, DuFour, Eaker, & Many, 2010: Chapters 4, 6, & 7	PLC teams should determine the frequency of assessments; critical information necessary in each assessment; an assessment cycle; how to utilize PLC time to create common formative assessments.
12:00-1:00 PM	Lunch. Feed your curiosity	On Your Own
1:00-2:00	Getting to know your students: How do they learn best?	Individual time: teachers should review their individual student needs. A review of all IEPs, 504's, prior report cards, etc. should be conducted. Do teachers see any relations with students? Perhaps create a survey to send home to learn more about student interests and how they learn.
2:00-2:30	Celebrate Take time at faculty meetings, in-service training, etc. for PLC teams to showcase their accomplishments!	All staff will demonstrate an understanding of the importance of celebrating their success. This is a great time for a team-building activity and sharing of successes that were developed throughout the 3 day workshop. Celebration throughout the year must also occur.
2:30-3:00 Summative Assessment	Reflection: How will I make the most of my PLC time? Questions or concerns?	Individual reflection time; submit Google Doc of reflection to instructor.

Formative Assessment

The following three questions should be given at the conclusion of the first and second day:

- 1. How can the PD program be changed to make the experience better?
- 2. Did the content presented today meet your needs? If not, please explain.
- 3. Are the activities engaging and appropriate to your learning needs? If not, please explain.

Summative Assessment

The following questions should be asked of the participants at the end of the full three day workshop:

- 1. Please rate the quality of your experience regarding the overall workshop by selecting below average, average, or excellent experience.
- 2. What do you feel needs to be changed or added to the program to fit your needs?
- 3. Will you use what you have learned to adapt your teaching strategies in the classroom?

*PARCC Data Analysis Worksheet- Grade Level:

Strengths: (2 math, 2 ELA)

Standard/Evidence Statement	Description				
Standard/ Evidence Statement	Description				
Challenges: (2 math, 2 ELA)					
Standard/Evidence Statement	Description				
Anomalies: (2 math, 2 ELA)					
Standard/Evidence Statement	Description				
Goals: (2 math, 2 ELA)					
Standard/Evidence Statement					
IDEA BOX: curriculum resources, lesson ideas, activities, benchmarks, learning products, etc.					

References

- Analyzing Student Work: Using Peer Feedback to Improve Instruction Retrieved from, https://www.youtube.com/watch?v=a2UgtgyEDss
- Avocet Resources Retrieved from, http://avocet.pearson.com/PARCC/Home#17442
- Conzemius, A., O'Neill, J. (2002). *The handbook for SMART school teams*.

 Bloomington, IN: Solution Tree Press.
- Danielson, C. (2011). Enhancing professional practice: A framework for teaching: (2nd ed.) Alexandria, VA: ASCD.
- Danielson Group (2013). *The framework*. Retrieved from, http://www.danielsongroup.org/framework/
- DuFour, R., DuFour, R., & Eaker, R. (2008). Revisiting professional learning

 communities at work: New insights for improving schools. Bloomington, IN:

 Solution Tree Press.
- DuFour, R, DuFour, R., Eaker, R., & Many. (2010). *Learning by doing: A handbook for professional learning communities at work:* (2nd ed.). Bloomington, IN: Solution Tree Press.
- Graham, P., Ferriter, W. (2010). *Building a professional learning community at work*: A *guide to the first year*. Bloomington, IN: Solution Tree Press.
- Knowles, M. S. (1975) *Self-Directed Learning. A guide for learners and teachers*.

 Englewood Cliffs, NJ: Cambridge Adult Education.
- Lemov, D. (2015). Teach like a champion 2.0: 62 techniques that put students on the path to college. San Francisco, CA: Jossey-Bass.

NJ ELA Curriculum Frameworks Retrieved from,

http://www.state.nj.us/education/cccs/frameworks/ela/

NJ Digital Learning and Assessment Portal Retrieved from, http://njdigitallearning.org

NJ Student Learning Standards (NJSLS) Retrieved from,

http://www.state.nj.us/education/cccs/

PARCC home page http://parcc-assessment.org/

PARCC Released Items: ELA and Math Retrieved from,

https://prc.parcconline.org/assessments/parcc-released-items

PARCC ELA Test Specifications Documents Retrieved from, http://parcc-assessment.org/assessments/test-design/ela-literacy/test-specifications-

PARCC Instructional Tools (Requires Educator Sign-In) Retrieved from, https://prc.parcconline.org/instructional-tools

PARCC Practice Tests http://parcc-assessment.org/assessments/practice-tests

PARCC's Testing Terminology: EBSR and TECR, Dea Conrad-Curry, EdD February 4, 2015 https://www.linkedin.com/pulse/parccs-testing-terminology-ebsr-tecr-dea-conrad-curry-edd

Teaching Channel Videos Retrieved from,

https://www.teachingchannel.org/blog/2015/01/09/planning-to-assess-parcc/

Appendix B: The Interview

Please answer the following open-ended questions with detail and description in each response. Thank you.

- 1. What are your experiences and perceptions regarding establishing PLC norms at the start of each academic year?
- 2. Please explain your experiences with creating Specific, Measurable, Attainable, and Time-bound (S.M.A.R.T.) goals with your PLC team?
- 3. How has your participation in a PLC influenced your lesson planning?
- 4. How has your participation in a PLC influenced establishing a culture for learning; creating an environment of respect; managing classroom procedures; and organizing the physical space?
- 5. How has your participation in a PLC influenced your reflecting on your lessons; maintaining accurate records; and communicating with families?
- 6. How have your experiences in a PLC influenced your ability to create formative assessments?
- 7. What social situations or relationships with peers in your PLC have impacted your work within the PLC? Can you provide any specific examples?
- 8. Currently PLC teams meet for 40 minutes once a week for three out of every four weeks in a month. Based on your experience, how much time should teachers spend in a PLC to influence teacher responsibilities within the classroom?

9. Is there any other information regarding your PLC experience that you would like to researcher to know? Please explain.