THE DIFFERENCES BETWEEN PRINCIPAL AND TEACHER PERCEPTIONS OF
PROFESSIONAL LEARNING COMMUNITIES IN CALIFORNIA SCHOOLS

by

Michael Townsley Brown

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education

Liberty University

2018
THE DIFFERENCES BETWEEN PRINCIPAL AND TEACHER PERCEPTIONS OF PROFESSIONAL LEARNING COMMUNITIES IN CALIFORNIA SCHOOLS

by Michael Townsley Brown

A Dissertation Presented in Partial Fulfillment Of the Requirements for the Degree Doctor of Education

Liberty University, Lynchburg, VA

2018

APPROVED BY:

Kurt Y. Michael, Ph.D., Committee Chair

Ellen L. Black, Ed.D., Committee Member

Janet S. Richards, Ed.D., Committee Member
ABSTRACT

Effective Professional Learning Communities are one tool schools utilize to ensure that student achievement improvement is prioritized. Professional Learning Communities help educators increase their professional knowledge and minimize conflict amongst colleagues. Additionally, teachers who regularly participate in a Professional Learning Community have students who reach higher achievement benchmarks than the students of their non-participating peers. The purpose of this study was to determine whether a statistically significant difference existed between principal perceptions and teacher perceptions of Professional Learning Communities as measured by the Professional Learning Communities Assessment—Revised. A sample of 49 principals and 53 teachers from 49 schools in California participated in the study. A series of independent $t$-tests were utilized to test three null hypotheses to determine if any differences in perception were evident and if participant gender had any impact on the results. It was discovered that no statistically significant perception differences existed between male principals and female principals, male teachers and female teachers, and principals and teachers, regardless of gender identity or educational role. It was concluded that principals and teachers mirror perceptions of their Professional Learning Community, regardless of gender identity.

Conducting similar studies in varied geographical locations with demographic diversity and larger sample sizes is recommended to increase the breadth of knowledge of Professional Learning Communities.

Keywords: Professional Learning Community, principal, teacher, gender
Table of Contents

ABSTRACT .................................................................................................................. 3

List of Tables ............................................................................................................. 7

List of Figures .......................................................................................................... 8

List of Abbreviations ............................................................................................... 9

CHAPTER ONE: INTRODUCTION ............................................................................. 10

Overview .................................................................................................................. 10

Background ............................................................................................................. 10

Problem Statement ................................................................................................. 13

Purpose Statement ................................................................................................... 13

Significance of the Study ......................................................................................... 14

Research Questions ................................................................................................. 14

Null Hypotheses ...................................................................................................... 15

Definitions ................................................................................................................ 15

CHAPTER TWO: LITERATURE REVIEW ................................................................. 18

Overview .................................................................................................................. 18

Introduction ............................................................................................................. 18

Theoretical Framework ............................................................................................. 19

Related Literature ................................................................................................... 21

Professional Learning Communities (PLC) ............................................................ 21

Characteristics of Dysfunctional PLCs ................................................................. 27

Characteristics of Functional PLCs .......................................................................... 30

Supporting Characteristics of Professional Learning Communities ................ 35
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Roles in Professional Learning Communities</td>
<td>37</td>
</tr>
<tr>
<td>Effectiveness of Professional Learning Communities</td>
<td>37</td>
</tr>
<tr>
<td>Charter vs. Public Schools</td>
<td>38</td>
</tr>
<tr>
<td>Challenges to Implementation of Professional Learning Communities</td>
<td>39</td>
</tr>
<tr>
<td>Problems and Failures of Professional Learning Environments</td>
<td>40</td>
</tr>
<tr>
<td>Summary</td>
<td>40</td>
</tr>
<tr>
<td>Conclusion</td>
<td>41</td>
</tr>
<tr>
<td>CHAPTER THREE: METHODS</td>
<td>43</td>
</tr>
<tr>
<td>Overview</td>
<td>43</td>
</tr>
<tr>
<td>Design</td>
<td>43</td>
</tr>
<tr>
<td>Research Questions</td>
<td>44</td>
</tr>
<tr>
<td>Null Hypotheses</td>
<td>44</td>
</tr>
<tr>
<td>Participants and Setting</td>
<td>45</td>
</tr>
<tr>
<td>Population</td>
<td>45</td>
</tr>
<tr>
<td>Sample Teachers</td>
<td>45</td>
</tr>
<tr>
<td>Sample Principals</td>
<td>46</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>46</td>
</tr>
<tr>
<td>Procedures</td>
<td>51</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>51</td>
</tr>
<tr>
<td>CHAPTER FOUR: FINDINGS</td>
<td>52</td>
</tr>
<tr>
<td>Overview</td>
<td>52</td>
</tr>
<tr>
<td>Research Questions</td>
<td>52</td>
</tr>
<tr>
<td>Null Hypotheses</td>
<td>52</td>
</tr>
</tbody>
</table>
Descriptive Statistics...........................................................................................................53

Results...............................................................................................................................54

Null Hypothesis One ...........................................................................................................54

Null Hypothesis Two ..........................................................................................................56

Null Hypothesis Three ......................................................................................................58

CHAPTER FIVE: CONCLUSIONS ......................................................................................61

Discussion ..........................................................................................................................61

Null Hypothesis One ...........................................................................................................61

Null Hypothesis Two ..........................................................................................................62

Null Hypothesis Three ......................................................................................................63

Conclusions.......................................................................................................................64

Implications.......................................................................................................................64

Limitations .........................................................................................................................65

Recommendations for Future Research ...........................................................................66

REFERENCES ...................................................................................................................68

APPENDIX A .....................................................................................................................77

APPENDIX B .....................................................................................................................78

APPENDIX C .....................................................................................................................79

APPENDIX D .....................................................................................................................81
List of Tables

Table 1: Descriptive Statistics .................................................................................. 54
List of Figures

Figure 1: Box and Whisker Plot for Principal Based on Gender.................................55
Figure 2: Box and Whisker Plot for Teacher Based on Gender..................................57
Figure 3: Box and Whisker Plot for Principals vs. Teachers.................................59
List of Abbreviations

Institutional Review Board (IRB)

Professional Learning Communities (PLCs)

Professional Learning Community Assessment (PLCA)

Professional Learning Communities Assessment, Revised (PLCA-R)

Standards Inventory Assessment (SIA)

Virtual Learning Community (VLC)
CHAPTER ONE: INTRODUCTION

Overview

Chapter One includes three sections, including a background section aimed in orienting the reader to the most relevant literature regarding Professional Learning Communities. The second section discusses how current research has not completely addressed principal and teacher perceptions of Professional Learning Communities. Finally, the purpose and significance of the study close the chapter, guiding readers to continue in their study of this topic. Research questions and definitions are included to allow the reader to better understand the scope and sequence of the project.

Background

Professional Learning Communities (PLCs) help ensure learning is taking place, increase professional knowledge, and aid in conflict amongst educational colleagues (Chen, Lee, Lin, & Zhang, 2016). Schools that focus on collaboration and communication within PLCs typically have students who achieve at a higher academic level than schools who do not (Bausmith & Barry, 2011; Botha, 2012; Graham & Ferriter, 2010). DuFour (2014) suggested that schools must implement PLCs to be as efficient and as effective as possible.

PLCs and their associated collaboration is not a new idea. PLCs evolved from learning communities and were first introduced during the pre-professional age to improve student achievement (Hargreaves, 2000). Between 1900 and 1960, collaboration in schools was a topic of rhetorical discourse. Students were taught in a factory-like system (silo-teaching) where all were taught in the same way (Blankstein, 2004). In conflict to what most scholars claimed, Dewey (1933) suggested that teachers and students should share in the learning process. Dewey’s (1933) model engaged the student in the learning process and instilled the importance
of creating lifelong learners. In the 1920’s, Meiklejohn (1932) discovered the importance of conferencing between students and teachers during his work with an experimental college in Wisconsin. At this college, Meiklejohn (1932) found that students were more academically successful when conferencing between the student and teacher was evident. This framework laid the groundwork for how PLCs operate today to improve student achievement.

As the race to explore space became prominent, particularly within the 1960s, students were expected to excel at higher levels in mathematics and science (Hargreaves, 2000). To compete with Russia, classroom rigor, and consequently, teacher isolation, became more evident (Hargreaves, 2000). Joyce (2004) noted that there was little change, and teachers remained isolated in their classrooms with no fear of consequences from practicing silo-teaching. Administration, government officials, and legislation writers simply had no way to hold teachers accountable (Joyce, 2004).

Between 1970 and 1980, globalization required teachers to educate students so that they were prepared for a new world (Murphy & Adams, 1998). Education needed to be improved as college enrollment increased (Stamper, 2015). Standardized testing became prominent, and schools were forced to collaborate to improve student achievement (Hargreaves, 2000; Murphy & Adams, 1998). Teachers were no longer allowed to freely choose what to teach and how to teach it (Hord & Sommers, 2008; Joyce, 2004).

In 2004, Schmoker (2004) created a school in Illinois whose focus was on collaboration. This school helped address the society-at-large concerns for education and student achievement by proving that when teachers work together, students are positively impacted (DuFour & Eacker, 2005). Conflict within the school building and throughout the country was increasing (Fisher & Frey, 2012). Communication within the school building was poor and students were
underachieving (Hord, 2009). According to Joyce (2004), collaboration being heavily utilized in schools impacts minority students and their achievement more than it does other similar practices.

DuFour and Eaker (2005) believed that PLCs were derived from the social cognitive theory. Building upon the work of Dewey (1933), DuFour (2004) argued that the environment, participants, and behavior play a valid role in the achievement of students nationwide. In 1986, Bandura coined the term observational learning. Directly integrated within the social cognitive theory, Bandura (1986) believed that if students were observed by different people, collaboration could help increase their learning. Thus, this cognitive theory brought about the modern PLC.

Additionally, principal gender may have affected the teacher’s perception of the PLCs. Brinia (2012) identified that females typically struggle to earn leadership positions within the educational environment. However, teachers often respond more positively to female leaders than male leaders in K-12 schools (Brinia, 2012). Campbell (2011) concluded that males were more effective and efficient in their leadership practices than females. Male principals consistently have a higher turnover rate than female principals, and female principals and teachers typically prefer to work for other females (Thaler, 2013).

PLCs have a rich history dating back to the 1960s. However, PLCs did not gain popularity until the late 1980s and early 1990s (Watson, 2014). PLCs are particularly unique in that they enable teachers to collaborate, a practice which is beneficial in the development of student programs and lessons that will enrich the education of students. It is also suggested that PLCs encourage collective improvement within the school as opposed to individual improvement (Watson, 2014). At the same time, through the use of PLCs, teachers are able to brainstorm ideas in order to resolve problems within the classroom and difficult content mastery
for students (Wang, 2015). PLCs, therefore, may provide mechanisms for teachers to meet the changing needs of students as well as meet the expectations of school administrators. PLCs are becoming increasingly important in today’s educational system and may help improve student achievement and school culture.

**Problem Statement**

DuFour (2007) and Hord (2009) noted that effective Professional Learning Communities (PLCs) significantly improve student achievement and school culture. Stamper (2015) claimed that principal perceptions of PLCs dramatically affect teacher perceptions of PLCs; however, Stamper cited no information to support this position. An existing body of qualitative literature exists regarding perceptions of PLCs, but few quantitative studies are accessible for practitioners to review (Blankstein, 2004; DuFour, 2008). Quantitative studies are needed to accurately assess perceptions of PLCs (Murphy, Jost, & Shipman, 2000; Hord & Sommers, 2008; Stamper, 2015; Vescio, Ross, & Adams, 2008). The problem addressed in this study is that there is a lack of quantitative research that studies the differences between teacher and principal perceptions of PLCs.

**Purpose Statement**

The purpose of this causal comparative study was to determine the differences between the dependent variable, perception of the Professional Learning Community (PLC), in relation to beliefs, values, vision, leadership, collective learning, supportive conditions, and personal practice and the independent variables, principal gender and teacher gender, in California schools. Additionally, this study was also conducted to determine if there was a difference between principal perceptions and teacher perceptions of the PLCs, regardless of gender classification.
Significance of the Study

Professional Learning Communities (PLCs) may increase student achievement and significantly impact school culture (DuFour, 2014). Barton (2004) noted that the achievement gap continues to be an extensive problem in the United States. Students from minority and economically-disadvantaged backgrounds continue to achieve at lower levels than their White counterparts (Barton, 2004). Chen et al. (2016) noted that PLCs are an excellent way for minority and exceptional students to increase their learning. In addition, Botha (2012) noted that teacher efficacy can be improved using PLCs. As Stamper (2015) stated, there are very few quantitative studies regarding PLCs and none examining how roles and gender affect principal and teacher perceptions of the PLC environment. By studying PLCs and using quantitative data, the findings from this study may help to improve working conditions for teachers as well as improve student achievement due to increased knowledge and collaboration by their teachers.

Research Questions

RQ1: Are there statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools?

RQ2: Are there statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools?

RQ3: Are there statistically significant differences between teacher perceptions of Professional Learning Communities and principal perceptions of Professional Learning Communities in California schools?
Null Hypotheses

**H₀₁**: There are no statistically significant differences between *male* principal perceptions of Professional Learning Communities and *female* principal perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

**H₀₂**: There are no statistically significant differences between *male* teacher perceptions of Professional Learning Communities and *female* teacher perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

**H₀₃**: There are no statistically significant differences between *teacher* perceptions of Professional Learning Communities and *principal* perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

Definitions

Terms pertinent to the study are listed and defined below.

1. *Professional Learning Community* - A professional learning community (PLC) is a group of individuals in an educational setting committed to improving student achievement (Graham & Ferriter, 2010).

2. *Professional Learning Communities Assessment, Revised* - The Professional Learning Communities Assessment, Revised (PLCA-R) is an instrument written by Oliver, Hipp, and Huffman, and is used to assess and evaluate every day classroom and school practices (Oliver, 2009).
3. *Charter Schools* - The charter school is a publicly-funded school that operates independently from the established public-school system and is, essentially, formed via a contract established between the school itself and the authorizing agency, allowing operations to begin (Wells, Stayton, & Scott, 2002).

4. *Professional Learning Community Beliefs* - The professional learning community beliefs are a set of beliefs that are shared by the participants, such as focusing on common purposes to improve their respective educational institutions (Timperley, Wilson, Barrar, & Fung, 2008).

5. *Professional Learning Community Collective Learning* - The professional learning community collective learning focuses on action research and continuous collaboration between group members to meet shared goals (Hord, 2009).

6. *Professional Learning Community Leadership* - The professional learning community leadership relates to those that head the group, facilitate discussions regarding goals, and provide leadership to collaborative teams on team-specific goals (Stoll, Bola, McMahon, Wallace, & Thomas, 2006).

7. *Professional Learning Community Personal Practice* - The professional learning community personal practice considers the unique practices brought to the group by the individual members, which could potentially allow other members to adopt practices they feel would be beneficial in their classrooms (DuFour & Eaker, 2005).

8. *Professional Learning Community Supportive Conditions* - The professional learning community supportive conditions consider the collaborative nature of the group, which allows them to work as a team and individually to meet common goals and gain support from other group members in their endeavors (Dexter, Seasboro, & Anderson, 2002).
9. *Professional Learning Community Values* - The professional learning community values are a set of values that suggest the specific focuses of the group, such as the specific goals (Vescio et al., 2008).

10. *Professional Learning Community Vision* - The professional learning community vision is the overarching goal of the group, which is based on the values as well as long term plans and objectives for the group (Wald & Castleberry, 2000).
CHAPTER TWO: LITERATURE REVIEW

Overview

The following literature review focuses on understanding PLCs and their benefits to the entire school community. Some beneficiaries include students, teachers, school administrators, and board members. This literature review also provides the framework for the theoretical foundations of the study, which is the social cognitive theory. Other literature review sections include but are not limited to providing information regarding the development of PLCs as well as the beneficiaries of these communities. The chapter also includes an analysis of PLC models, characteristics of PLCs, PLC impact on both students and teachers, and problems that exist within PLCs.

Introduction

According to Stoll et al. (2006), international evidence suggests that the progress established through educational reform is dependent upon the individual and collective capacity of teachers. The capacity of teachers can be linked to the capacity of the school in the promotion of learning for students. Based on this information, it is evident that capacity building is a critical part of the success of the school, particularly as capacity focuses on tenets from support infrastructures, skill, motivation, organizational conditions (such as availability of resources), culture, and positive learning (Stoll et al., 2006). As a cohesive unit, school communities, systems, groups, and individuals have the power and ability to be involved in sustainable learning opportunities. As a result, many schools focus on the development of Professional Learning Communities for capacity building purposes to improve conditions within the educational system. Stoll (2010) argued that PLCs are inclusive and involve mutually-supportive individuals focusing on a reflective, growth-oriented, and collaborative approach.
towards the investigation and learning of teaching practices so that the learning process is improved for students. Policymakers view PLCs as crucial to capacity building that allows for educational reform implementation. Vescio’s et al. (2008) research shows that the establishment of PLCs that are well-developed have yielded positive results in relation to teaching practices as well as student achievement.

According to Graham and Ferriter (2010), it is imperative to student success that teachers communicate and collaborate daily. Shared students, shared content, and shared objectives within a school building can lead to an immediate increase in student achievement (Graham & Ferriter, 2010). Meeting about these objectives are important but sometimes cause conflict. This conflict can be caused by lack of norms, lack of team goals, lack of trust, lack of communication, and lack of student objectives. To eliminate this conflict, respect and empathy must be modeled always by all stakeholders involved.

**Theoretical Framework**

Professional Learning Communities help ensure that learning is taking place, increase professional knowledge, and aid in conflict resolution amongst educational colleagues (Chen et al., 2016). Schools that focus on collaboration and communication within PLCs typically have students who achieve at a higher academic level than those who do not (Bausmith & Barry, 2011; Botha, 2012; Graham & Ferriter, 2010). DuFour (2014) suggested that schools must implement PLCs to be as efficient and as effective as possible.

PLCs and their associated collaboration is not a new idea. PLCs evolved from learning communities and were first introduced during the pre-professional age to improve student achievement (Hargreaves, 2000). Between 1900 and 1960, collaboration in schools was a topic of rhetorical discourse. Students were taught in a factory-like system (silo-teaching) where all
were taught in the same way (Blankstein, 2004). In conflict to what most scholars claimed, Dewey (1933) suggested that teachers and students should share in the learning process. Dewey’s (1933) model engaged the student in the learning process and instilled the importance of creating lifelong learners. In the 1920’s, Meiklejohn (1932) discovered the importance of conferencing between students and teachers during his work with an experimental college in Wisconsin. At this college, Meiklejohn (1932) found that students were more academically successful when conferencing between the student and teacher was evident. This framework laid the groundwork for how PLCs operate today to improve student achievement.

As the race to explore space became prominent, students were expected to excel at higher levels in mathematics and science (Hargreaves, 2000). To compete with Russia, classroom rigor, and consequently, teacher isolation, became more popular (Hargreaves, 2000). Joyce (2004) noted that there was little change, and teachers remained isolated in their classrooms with no fear of consequences from practicing silo-teaching. Administration, government officials, and legislation writers simply had no way to hold teachers accountable (Joyce, 2004).

Between 1970 and 1980, globalization required teachers to educate students so that they were prepared for a new world (Murphy & Adams, 1998). Education needed to be improved as college enrollment increased (Stamper, 2015). Standardized testing became prominent, and schools were forced to collaborate to improve student achievement (Hargreaves, 2000; Murphy & Adams, 1998). Teachers were no longer allowed to freely choose what to teach and how to teach it (Hord & Sommers, 2008; Joyce, 2004).

In 2004, Schmoker (2004) created a school in Illinois whose focus was on collaboration. This school helped address the society-at-large concerns for education and student achievement by showing that when teachers work together, students are positively impacted (DuFour &
Eacker, 2005). Conflict within the school building and throughout the country was increasing (Fisher & Frey, 2012). Communication within the school building was poor and students were underachieving (Hord, 2008). According to Joyce (2004), this practice of collaboration impacted White students, minority students, and economically-disadvantaged students much more than earlier practices did.

DuFour et al. (2006) believed that PLCs were derived from the social cognitive theory. Building upon the work of Dewey (1933), DuFour (2014) argued that the environment, participants, and behavior played a vital role in the achievement of students nationwide. In 1986, Bandura coined the term observational learning. Directly integrated within the social cognitive theory, Bandura (1986) believed that if students were observed by different people, collaboration could help increase their learning. Thus, the social cognitive theory directly impacted the modern PLC.

**Related Literature**

**Professional Learning Communities (PLC)**

A PLC’s purpose is to ensure learning is taking place within the classroom (Botha, 2012; DuFour, 2014). Teachers meeting in PLCs enable the focus to be on learning rather than teaching. It places the accountability on all stakeholders rather than just a few. Administrators can be involved in the learning process and ensure that collaboration is taking place. PLCs define what students will learn, how teachers know they have learned, and how the team can help those students who are struggling (Eaton, 2015; Graham & Ferriter, 2010; Lippy & Zamora, 2012). In addition, student interventions are kept timely and directive, and professional knowledge is increased during every meeting.
PLCs also ensure collaboration and communication at the school level. When teachers work together, this improves student achievement and keeps educational opportunities equal. Barton (2004) noted that students from minority backgrounds continue to achieve at a lower level than their White counterparts. PLCs should plan for diversity, ensuring that all subgroups can achieve at the same level. In addition, PLCs should focus on results. Utilizing data to drive decisions is key in successful PLCs (Nadelson, Louis, Seifert, Hettinger, & Coats, 2013).

To achieve the goal of a successful Professional Learning Community, educators meet with a common purpose in mind and a plan to achieve it (Botha, 2012; DuFour, 2014; Graham & Ferriter, 2010; Lippy & Zamora, 2012; Spencer, 2016). Teams get together to collaborate, choosing what to teach in their classrooms (Graham & Ferriter, 2010). Despite these formed groups, individual teachers still decide how to teach their own students (Graham & Ferriter, 2010; Many & Ritchie, 2006; Nehring & Fitzsimons, 2011; Spencer, 2016; Tam, 2015). Most importantly, collective inquiry and action research are deeply embedded within the PLC landscape (Graham & Ferriter, 2010). The process of collective inquiry involves a process that allows educators to share knowledge and learn as a group (Kazemi & Franke, 2004). Action research is related to collective inquiry because collective inquiry can inform action research as well as promote different types of action research that need to be addressed (Cammarota & Fine, 2010). Thus, once the immediate problem is resolved through action research, collective inquiry can be used to inform further action work issues. According to Graham and Ferriter (2010), these two strategies enable instruction to be goal-driven and tested in practice, ensuring students are taught in the best way possible.

Furthermore, PLCs were developed to improve the systematic approach of schools by standardizing the content and assessments that students are exposed to in common courses. A
significant principle outlined in PLCs is related to the process of ensuring that students learn, which implies a simple shift from excessive teaching to learning with a profound understanding of particular subjects (Garmston & Wellman, 1999). As it has been illustrated in Professional Learning Communities and communities of practice, the flexible culture of collaboration has been recognized as an essential building element. In this way, teachers engage in teams to develop appropriate social climate and discipline, a practice which reflects in extensive improvement of the school environment (Wald & Castleberry, 2000). The focus on results has been identified as an important aspect of such communities, emphasizing the current level of student achievement and determining specific goals for future improvement. The collective ability of educators to help all individuals learn will increase as a result of the emphasis on extensive collaboration (Popp & Goldman, 2016).

**Professional Learning Community models.** The implementation of effective Professional Learning Community models is associated with a high level of collaborative professional learning as these models have been identified as studying, selecting, planning, implementing, analyzing, and adjusting to certain changes in the dynamic educational environment (Popp & Goldman, 2016). A common feature of these PLC models is teachers’ efforts demonstrated in their work in collaborative planning teams in which they discuss students’ learning expectations. Such models are characterized by a deconstruction of knowledge through reflection and analysis related to a specific educational context (Strunga, 2015). Having a shared vision and a strong sense of purpose is considered essential for the proper functioning of PLCs. At the same time, research has suggested that taking collective
responsibility for student learning is beneficial in the long term since the focus is on sustaining commitment and accountability.

Hattie (2008) suggested that challenges exist in the traditional format of K-12 schools because individual schools are focused on independent classrooms where autonomous teachers are responsible for activities within the classroom. Supervision plans for teachers are commonly established in the hopes that student performance will improve. This improvement may be shown through financial incentives for continuing education or workshop attendance. However, the traditional format of supervision has limited impact on teaching quality (Hattie, 2008).

Because of the inefficiencies of current strategies to improve teaching, the systems thinking model is commonly used to create horizontal teams, which rejects the culture of isolation and independence, instead emphasizing collaboration and interactions with the components (teachers) of a group (school district). School leadership teams utilize PLCs in an effort to emphasize collaboration and improve teaching (Giles & Hargreaves, 2006). In this approach, teachers are organized based on the grade level and specialty or as teams for common goal achievement purposes, allowing all members of the team to be accountable for meeting the objectives. Using systems thinking, a process is established to allow teams the ability to clarify essential learnings required for courses based on grade level and unit of instruction as well as the creation of common assessments to monitor learning based on a criterion established for monitoring student achievement. Since the criteria for individual students is the same, teachers are better able to determine the individual needs of students. Vertical teams can be constructed between grade levels to meet related goals (Giles & Hargreaves, 2006). However, individual
teaching styles are vastly different and must be reconciled to meet goals. Thus, while teachers may retain their individual styles, they must coincide with the overall goals.

The PLC within the education system focuses on systematic approaches for intervention, reproaching practices that focused on randomness, allowing all students to have equal opportunities for success. Ultimately, the PLC should be methodological, fluid, coordinated, and multi-layered to meet the needs of student intervention. The horizontal and vertical teams should focus on the provision of learning support for students who are underachieving, establish rapid interventions when the student begins underachieving to prevent further difficulties, and mandate that support be utilized (Hattie, 2008).

Not only does a PLC exist within individual schools, but it can also exist within the school district. The PLC at the school district level can occur in different scenarios, perhaps when leaders within the district argue that certain standards are required of all schools regardless of population (Knight, 2002). Common conditions include commitment to high learning levels for all students, adequate time for teacher team organization and collaboration, provision of a viable curriculum based on grade level and course (complete with assessments, leading to improvements of the team in its collaboration), and a plan for those students that desire or need challenging curriculum (Resnick, 2010).

**Primary characteristics of Professional Learning Communities.** Professional Learning Communities are characterized by demonstrating shared values and vision that have contributed to facilitating the learning process. Individual autonomy is perceived as limiting teacher effectiveness, thereby the emphasis on shared vision has been considered important in attaining better outcomes. Another characteristic of these communities is recognized as collective responsibility, which is beneficial for sustaining student commitment to learning
The characteristic of reflective professional inquiry implies that new knowledge can be applied in a rather sustained manner. In terms of collaboration, staff involvement in various developmental activities has led to improved teaching practices. Educators have linked such collaborative activities with the achievement of shared purposes in education. The fifth important characteristic of PLCs is individual and group learning (Popp & Goldman, 2016). The combination of these two forms of learning has resulted in better interactions within the school environment along with an open dialogue among different stakeholders in the field of education.

**Impact of PLCs on students.** Furthermore, PLCs can play an important part in students’ lives. Because of the emergence of various challenges in the contemporary world, students are unprepared to address such complexities. The ability of students to direct their own learning activities can help them develop efficient strategies to address different complex issues (Elmore, 2000). From the perspective of social constructivism, the importance of a knowledge-construction process should be persistently emphasized to enable students to learn in an effective, optimal manner. The surrounding community tends to play an important role in supporting the learning process, along with the goal to construct substantial knowledge. Research indicates that the utmost goal of learning communities refers to producing expert learners, which implies certain aspects of increasing knowledge (Garmston & Wellman, 1999). Due to the persistence of integration in today’s multicultural world, learning communities have become essential in constructing an effective learning environment. This practice promotes cultural diversity and students’ ability to work and learn with other individuals. In this way, the historical context of such learning communities implies a substantial focus on integration based on collaboration with prevailing culture.
Researchers have focused on the influence of learning organizations on learning communities by exploring the notions of the learning society, which is marked by the global, knowledge-based economy (Garmston & Wellman, 1999). Educators have concluded that students need to become adept at learning in order to contribute to the transformation of educational institutions in response to changing situations and requirements. In terms of knowledge generation and information processing, individuals are focused on expanding their capacity to learn new things and achieve the results they expect (Hord, 1997). The expansive patterns of thinking promoted by learning organizations positively impact the functioning of learning communities. In turn, such communities demonstrate their power derived from the collaboration of all learners, along with their strong willingness to progress to a further level. The shared educational values and principles can be adequately promoted under the paradigm of learning organizations that link individual and organizational performance (Senge, 1990). Both individual and collective forms of learning can be beneficial as they are associated with substantial change and transformation.

**Characteristics of Dysfunctional PLCs**

PLCs are sometimes dysfunctional. In fact, regardless of the positive aspects of the community, all PLCs may become dysfunctional at one time or another (Servage, 2008). The goal of the PLC is to facilitate collaboration within the community members. However, when transitioning from isolation to a collaborative environment, issues can develop due to differing ideas. At the same time, most educators typically must fight for available resources and are accustomed to a lack of resources available to complete tasks (Schlager & Fusco, 2003).

**Lack of norms.** To combat conflict, norms should be set at an initial PLC meeting (Weber, 2011). Teams should operate within the set of norms, ensuring that each member
understands the expectations set forth by the group (Weber, 2011). Norms can include meeting
dates and times, attendance expectations, positive attitude practices, and protocol for handling
conflict (Weber, 2011). It is important that norms are revisited and revised regularly so that they
line up with current team goals (Weber, 2011).

**Lack of team goals.** According to Weber (2011), teams should establish goals to avoid
conflict. Revisiting goals to assess their success is imperative to PLC success and improving
student achievement (Weber, 2011). Goals can be long-term or short-term; they should be
celebrated within the group when success occurs (Weber, 2011).

**Lack of trust.** Lack of trust within the PLC environment often leads to teacher conflict (Weber, 2011). Team members must know that they will make mistakes and should accept
others when they make theirs (Weber, 2011). According to Weber (2011), teachers should focus
on things that they struggle with regarding the profession and openly discuss them within the
group. Team members should feel comfortable discussing their student struggles as well
(Weber, 2011). Modeling trust is an important strategy to avoid conflict within the professional
environment.

**Lack of communication.** According to Weber (2011), lack of communication is the
biggest conflict issue within PLCs. Establishing firm norms and goals is important, but only if
they are communicated regularly (Weber, 2011). Communication does not have to be in a face-
to-face format on the job location (or school site). Utilizing 21st century tools such as email,
discussion threads, and Google docs is appropriate and effective.

**Lack of essential learning outcomes.** It is integral to student success that essential
learning outcomes are distinguished within the PLC environment (Weber, 2011). Often teachers
argue about what students should be able to do upon passing a lesson, unit, or course. According
to Weber (2011), learning outcomes should be obtainable. Teachers must trust, compromise, and form a consensus so that content is equal throughout the school (Weber, 2011). Outcomes must be specific, including the knowledge and skills that students take away from a course or program upon completion (Weber, 2011).

**Conflict resolution within PLCs.** When people collaborate in groups, some evidence of conflict will always be evident. Chetkow-Yanoov (as cited in Barsky, 2014) identified many roles that helping professionals, such as teachers, can assume to assist people in conflict. Those roles include but are not limited to: negotiator, mediator, advocate, facilitator, expert/consultant, administrator, buffer, and penalizer (Barsky, 2014). For example, to help with conflict resolution in a PLC, the role of the negotiator is to facilitate the negotiation process, which focuses on reaching an agreement between the involved parties. The mediator acts as the middle person between the two parties, which allows communication to continue between the parties, as well as establish possible resolutions (Barsky, 2014). The advocate acts for each of the parties and represents that party’s best interest, like a lawyer. The facilitator is a neutral party who has no stake in the dispute, allowing for the exchange of ideas between the parties. The expert/consultant reduces the instances of negative communication (such as bullying) that can occur by the involved parties (Barsky, 2014). The administrator manages the conflict resolution process to ensure that it is conducted fairly and without bias. The buffer ensures that the parties are following the established communication rules. The penalizer focuses on the provision of constructive, rather than destructive, conflict resolution (Barsky, 2014).

For PLCs to be effective and efficient, these roles and responsibilities must be assigned as part of the stated norms and associated trust and communication. As education requires its
employees to complete a myriad of tasks, it is acceptable that some members of the PLC take responsibility for more than one role.

To resolve and avoid conflicts within a PLC environment, roles must be defined as part of the norms the PLC adheres to. Adhering to the norms in general is an excellent strategy to avoid conflict within a PLC. Abiding to norms enables members to communicate effectively and stay within their role’s scope when communicating. In addition, members must model empathy and respect during all communication. Members must feel respected and worthy, or they will not work as efficiently as possible.

**Characteristics of Functional PLCs**

Just as PLCs can be dysfunctional, they can also be functional. In fact, the goal of all PLCs is to be functional because functional PLCs allow for improved student achievement (Richmond & Manokore, 2011). Functional PLCs focus on improving teaching strategies through collaboration, which enable them to determine student needs as well as resolve conflicts that may exist regarding meeting objectives associated with educational plans. Through the functional PLC, it is possible to establish new standards within the educational system that serve to meet the objectives of the school (Richmond & Manokore, 2011).

**Shared and supportive leadership.** The school change and educational leadership literature provides sufficient evidence on the role of shared and supportive leadership in education. School principals tend to guide and support the educational institution by specifying new goals and milestones as well as certain alternative directions (Vanblaere & Devos, 2016). In shared leadership, the focus is on expanding the number of individuals involved in important decision-making processes related to school operations and academics. This expansion of those involved in important decision-making processes implies that shared leadership is broadly
distributed across different school levels. In relation to supportive leadership in education, it can be pointed out that the main principles of this leadership style are found in the path-goal theory that was created by Robert House in 1971. Supportive leaders are significantly focused on decreasing employee stress in the workplace by providing them adequate and personally-focused assistance and support. Demonstrating the understanding of students’ needs and expectations can lead to the creation of a more flexible and transparent vision for leaders in the dynamically-developing educational environment. The path-goal theory is important in its thorough, multi-faceted approach to leadership. It can be broken down into four main approaches to leadership that apply to both the workplace and in educational settings. Supportive leadership has a focus on relationships through understanding individual’s needs. Directive leadership allows for educators to create a more structured environment for students, particularly when a complex project is being introduced. In participative leadership, educators assume an active role with the objective of being an actual part of an activity as an equal. This method promotes unity in students and minimizes the authoritarian nature of the traditional student/teacher relationship. Among the most effective aspects of the path-goal theory is in achievement-oriented leadership. Setting challenging goals with the expectation that students will rise to meet the goals is especially effective when motivation is low and there is a lack of a team mentality. With these methods, most learning situations can be managed effectively.

**Shared values and vision.** The shared values and vision communicated by school personnel represent certain principles pertaining to the process of teaching and student learning. In this case, such values and vision are perceived as a total quality focus in the sense that the respective PLCs aim at engaging and developing the talents of all learners (Trust et al., 2016). As a result, solid norms of self-awareness are created, which may lead to learning of high
intellectual quality. It is important to note that the notion of shared values and vision is directly related to persistent renewal and improvement. The engagement of the learning community is believed to contribute to greater effectiveness and reliability in the functioning of modern educational institutions (Strunga, 2015).

**Collective learning and application.** It has been indicated that Professional Learning Communities engage their personnel in collective processes of creating and seeking new forms of knowledge to improve their own teaching and learning principles. This practice can result in appropriate, creative solutions to emerging problems; thereby, the relationship between teachers and principals can be significantly strengthened over time (Trust et al., 2016). The application of collective learning principles implies the adoption of relevant high standards in different content areas. In this way, educators have considered their responsibility to ensure high levels of achievement for all learners (Popp & Goldman, 2016). Teachers tend to use a wide range of pedagogical methods in developing a comprehensive curriculum that corresponds to the needs of students. Researchers have emphasized that educators need to utilize optimal strategies and instructional practices that can engage a more substantial number of students in learning (Trust et al., 2016). Considering the extensive diversity in education is important in adjusting students’ diverse learning needs.

**Virtual learning communities.** The importance of integrating useful technology into the classroom has become as critical in creating an effective learning atmosphere as textbooks and worksheets. A virtual learning community (VLC) is advantageous for several reasons. The benefits include permanent access to information, higher performance in educational settings, enhanced creativity, and potentially better professional identity, particularly for preparation at
the university level. An efficient knowledge management model is needed to enact an effective VLC since it promotes independent study (Strunga, 2015).

**Shared personal practice.** In understanding the implications of shared personal practice, it is important to recognize various inquiry-oriented practices derived from the extensive interactions among educators. In turn, these interactions have led to increasing the standards of student performance, instilling a significant interest in students to expand their learning capacities. Research shows that shared personal practice is crucial for confronting the aspects of isolation in PLCs (Strunga, 2015). The ongoing interaction taking place among educators has enabled them with an opportunity to create an open culture of mutual respect, tolerance for personal differences, and trustworthiness for individual and school improvement. However, it is noted that shared personal practice tends to be limited despite the appropriate functioning of PLCs. To make shared personal practice successful, modern educators need to reconsider and modify their traditional roles in the field of education (Wald & Castleberry, 2000). It has been argued that PLCs produce rather high levels of achievement for all students, which indicates the effectiveness of the approaches adopted by such communities. The shared purpose of improving the broad learning outcomes for students has become an important component of PLCs, which aim at helping students succeed at different stages of their education (Senge, 2000).

**Supportive conditions: relationships.** The creation of supportive conditions has been indicated in research as one of the most important factors for school improvement. Two types of supportive conditions are found within Professional Learning Communities: structural conditions and collegial relationships (Senge, 1999). The structural conditions refer to the use of time, proximity of teachers, and various communication procedures. In the development of collegial
relationships, positive educator attitudes emerge as important in creating a supportive learning environment, which fosters an open approach towards learning (Little, 1997). Innovation has been persistently emphasized as an essential element of positive, caring relationships, implying educators’ potential to present rather innovative solutions to emerging problems. As a result, a higher level of respect and trust can be developed within PLCs considering the substantial efforts of stakeholders to enrich the learning environment with new methods and strategies fostering a flexible, innovative approach towards education (Trust et al., 2016). Improving the problem-solving and decision-making skills of school staff has become a significant concern of principals in modern education with the goal to support the development of a strong community of professional learners.

**Supportive conditions: structures.** Structures that support the vision of schools as well as Professional Learning Communities, are essential in contributing to the effectiveness and innovation of teaching methods. Without having appropriate structures in places, Professional Learning Communities may function improperly by failing to address the diverse learning needs of all students (Little, 1997). It is important to develop and promote a holistic approach towards the education models used in similar communities as the underlying aspect is on improving teaching and learning to help schools become stronger and students more confident in their knowledge about different subjects (Garmston & Wellman, 1999). By recognizing schools as a significant ground for learning, educators have stressed the importance of individual and group learning that can lead to more substantial expansion of learners’ awareness and critical thinking capabilities.

**Sanger High School (California).** Sanger High School was a low-achieving school during the 1998-99 school year. Their Academic Performance Index score of 576 was not
competitive with schools in neighboring school districts. After a poor performance on their 2003 Western Association Schools and Colleges report, the school leadership team took to address concerns with graduation rates, test scores, expectations, rigor, and the achievement gap. In response to both scores, school leaders were committed to finding solutions for inconsistent student progress monitoring, poor student performance, and inequitable curricula. School leaders and teachers at Sangar High School in California agreed that the implementation of Professional Learning Communities had the most impact on their growth to a 794 score in 2013. Sanger High School also increased their graduation rate from 95.4% to 98.6% during this time period.

School leaders and teachers embraced the implementation of Professional Learning Communities at the school in 2004. Teachers and leaders welcomed the opportunity to collaborate and learn. Teachers at the school began working in teams, sharing best practices, and frequently reviewed student data. Teacher leaders were identified and supported by local administration and the school district. Protected time was available for teachers to meet in content and grade-level teams. Meeting protocols, agenda items, student data, and topics to discuss were provided by local administration.

As teachers committed to the PLC model, administrators began releasing control of the agenda to the teachers. Teachers took ownership of their curricula, utilized common assessments, and team-planned shared student interventions.

**Supporting Characteristics of Professional Learning Communities**

Exploring the supporting characteristics of Professional Learning Communities is important in presenting relevant insights into the ways contemporary educational models and practices can be improved (Trust et al., 2016). The authority and power position assumed by
principals have been discussed in the literature available regarding Professional Learning Communities as the emphasis is upon the dynamic contributions of school personnel in changing the overall direction taken by schools in reforming their values and practices. Elmore (2000) suggested that principals play an important role in ensuring sufficient support for different educational problems and that principals are constantly seeking efficient models for school improvement. Principals’ collaboration with students and teachers is perceived as a positive aspect that can further expand professional development opportunities.

**Professional development.** PLC development is related to professional development elements, which emphasize how collaborative listening and learning can result in the generation of quite effective forms of education. Contemporary educational institutions need to rethink their vision and objectives to create relevant conditions for professional development and collective wisdom (Hord, 1997). Such a process can be adequately supported through the practice of continuous inquiry and improvement. For instance, the introduction of new programs and practices in the dynamic educational field has its risks and advantages. On one side, similar programs can motivate stakeholders to embrace the principles of open and flexible learning, which can deepen students’ commitment to learning (Hord, 1992). Alternatively, new programs and practices involving professional development can be rejected by principals and educators due to the ambiguous elements of power relations that may be included (Little, 1997). Finding optimal solutions to support professional development within modern learning communities can promote to individuals and practitioners the importance of flexibility and transparency in lifelong learning.
Gender Roles in Professional Learning Communities

Within Professional Learning Communities, there are no gender roles (Hord, 2009). Rather, the focus of the PLC is based on common goals shared by the members. However, these goals are commonly similar for most if not all schools regardless of their location or type. For instance, teacher isolation is reduced when the use of PLCs and increased commitment to the school’s mission, values, and goals are emphasized. The responsibility for meeting these expectations is shared by both genders, focusing on student development and success as a collective responsibility. Learning is emphasized, allowing for increased knowledge regarding teaching practices and learners in general. There is a greater understanding of teaching material and the roles played in assisting in meeting student achievement expectations, which may be prompted through renewed energy and inspiration provided through collaboration (Wahlstrom & Louis, 2008).

Effectiveness of Professional Learning Communities

The effectiveness of Professional Learning Communities can be measured quantitatively. The influences of PLCs are impactful to their effectiveness. In many instances, these influencers include the content of the implementation plan, process used for implementation, and content for implementation (Johnson, 2011). According to the study by Johnson (2011), the Standards Inventory Assessment (SIA) can be used to evaluate the perceptions of teachers regarding the effectiveness of PLCs. The survey was administered anonymously using an online Likert scale then analyzed through statistical methods, which suggested that the Professional Learning Community model did not significantly impact the areas studied (Johnson, 2011). This finding corroborated an earlier study by Hord (1997), which argued that PLCs could be continually improved.
Per research by Ratts et al. (2015), the PLC process is highly beneficial for student achievement. Educators who participated in the collaborative PLC study had feedback provided frequently on their instructional practices and analyzed student work. In their study, the research team found a correlation that concluded students who had teachers who had worked in a PLC achieved higher on a standardized test in Georgia than the students whose teachers did not. Due to accountability increases, Professional Learning Communities have been increasing in number to establish increased collaboration between teachers to promote learning of their craft as well as facilitate student achievement opportunities. A quantitative study was conducted among elementary school teachers to determine if the Professional Learning Community principles were influential on student achievement. The study was conducted using 194 participants regarding PLC dimensions within their schools as well as the use of data to measure the achievement of students. Descriptive and influential statistics were used for the determination of relationships between the variables, finding that teachers who were involved in collaboration were more likely to improve their teaching practices. Moreover, collaboration was increased based on grade level and experience level (Ratts et al., 2015). Again, it was shown that PLCs led to increased student achievement based on standardized assessments.

**Charter vs. Public Schools**

As of 2013, charter schools had been in existence for 21 years, operated in 41 states, and enrolled over 2 million students (Fryer, 2014). Despite the length of time of implementation, there is an ongoing debate regarding whether students in charter schools learn more than those in public schools. Generally, it is shown that most students within charter schools perform no better than they would in public schools, while some were doing worse, and about a third were doing better (Teske, Schneider, Buckley, & Clark, 2000). This conclusion has been particularly
true for English Language Learners. Part of the reason for this improvement is because charter school students typically have three to 10 additional weeks of instruction as compared to public school students. Generally, charter schools are established by private organizations that contract with the government to establish “private” public schools, which are funded by the government and subject to regulations as well as bound by the charter (Bettinger, 2005; Wells, 2002).

**Challenges to Implementation of Professional Learning Communities**

There are various challenges associated with the implementation of Professional Learning Communities in schools and school districts. Despite a wide range of differences in the backgrounds of educators, there are similar challenges faced during the implementation process regardless of position, education, race, gender, or ethnicity. Per Dooner, Mandzuk, and Clifton (2008), challenges are found in relation to resource availability. In fact in many cases, there are limited resources, which limits the collaboration that can be achieved by the teams. Limited resources also mean that, commonly, teachers are not provided with adequate preparation for the plan. These teachers are not trained adequately, nor do they receive the necessary support to meet the implementation objectives. Moreover, the implementation plan is commonly unclear, which leads to increased confusion among teachers, causing them to work in a disjointed way and causing the plan to become fragmented and not beneficial for students. Since there is a wide range of skill sets among teachers and experience levels differ, many staff members are commonly resistant to the implementation of the Professional Learning Community, primarily
because it represents an “unknown,” which may induce fear and aversion to the change (Dooner et al., 2008).

**Problems and Failures of Professional Learning Environments**

While there are numerous positive aspects of PLCs, there are also negative aspects that lead to problems and failure at times. For instance, early initial successes commonly mask problems that may become apparent later in time. Despite early positive signs, it is commonly recognized that during the early stages of PLCs, the change initiative is fragile for different reasons (Wood, 2007). At times, some superintendents and principals are not supportive of PLCs. Since these individuals are some of the most influential leaders within a school system, it is necessary to have their support in maintaining PLCs. In other cases, academic underachievement may cause emphasis to be placed on test scores, prompting the PLC to be reorganized, which may lead to a loss of focus and community. Therefore, in order to be successful, growth areas of PLCs need to be addressed by leaders as early as possible (Wood, 2007). Many proponents argue that those involved with PLCs are unaware of the benefits, such as the improvement of student learning. This means that the rationale for PLC usage must be understood by all members, particularly internal coaches. At the same time, proponents argue that theoretical principles associated with PLCs are not fully understood, suggesting that without the understanding of principles, it is impossible to move past the elementary stages of a PLC (Wood, 2007).

**Summary**

The full and successful implementation of Professional Learning Communities depends on many factors. The most critical factor is a formal outline of goals. Many school systems fall short due to lack of structure, and it becomes increasingly harder to keep sight of the original
goals if they are not constructed in a simple way with major points staying in focus. As with any reform program, it is important to involve parents and the community at large during the entire process of implementing lasting reforms, along with ensuring that principals and teachers have a firm understanding of the objectives. Making note of the historical context of Professional Learning Communities can help bolster future success and ensure that past failures are not repeated. The process should be all-encompassing from administrators, to teachers, to students, to parents and stakeholders. When the new policies reach the students, there should be a clear understanding of the goals that are to be achieved so that students are not further confused or exposed to new stresses that often accompany aggressive reform programs.

**Conclusion**

With student learning and achievement as the focus of Professional Learning Communities, there is no limit to the effectiveness of reform. Willingness on the part of the entire community to evolve and adapt to cultural and policy changes is necessary to succeed. Taking the mission statement of “learning for all” is the only true way to ensure that students are not only being taught, but that they are learning (DuFour, 2004). The challenges of education reform are great, but they will only succeed when there is an all-encompassing effort on the parts of the entire community. Meaningful reform depends upon more than curriculum updates and demands the understanding and participation of administrators, teachers, and parents to ensure that their children are learning at the highest level possible. Constant and lasting collaboration is imperative to the process. Meaningful change depends on a willingness on the teachers’ part to change the way they teach. This is also important for tutors and will only work when there is a coherent and structured formula to follow. When the community works in concert toward a clear and common goal and under a clear set of structures, the results should always be positive, and
one success can be replicated in any school system that is willing to commit to a true and tested Professional Learning Community.
CHAPTER THREE: METHODS

Overview

The focus of this chapter is to provide information regarding how the study was conducted. This chapter includes information regarding the design of the study, research questions, null hypotheses, participants and setting, instrument for data collection, data collection methods, and data analysis methods.

Design

A quantitative causal comparative design comparing two independent groups of participants was utilized for this study. A causal comparative design was an appropriate choice for this study because the researcher did not manipulate the independent variables (Gall, Gall, & Borg, 2007). The dependent variable was perception of the Professional Learning Community (PLC) in relation to beliefs, values, vision, leadership, collective learning, supportive conditions, and personal practice (Hipp & Huffman, 2010). The Professional Learning Community Assessment Revised (PLCA-R) was used to measure the dependent variable. The independent variable for the first hypothesis was principals’ gender. The independent variable for the second hypothesis was teachers’ gender. Gender was self-reported and had two values: males and females. The independent variable for the third hypothesis was position status either as a principal or teacher. The third hypothesis compared overall principal perception and overall teacher perception, regardless of gender classification.
Research Questions

RQ1: Are there statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools?

RQ2: Are there statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools?

RQ3: Are there statistically significant differences between teacher perceptions of Professional Learning Communities and principal perceptions of Professional Learning Communities in California schools?

Null Hypotheses

H₀₁: There are no statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

H₀₂: There are no statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

H₀₃: There are no statistically significant differences between teacher perceptions of Professional Learning Communities and principal perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.
Participants and Setting

Population

Participants for this study were drawn from a sample of school principals and teachers located in California during the 2017-2018 school year. Multiple school types who hosted PLCs were used because, unlike most traditional public schools, teachers from charter schools and private schools were more often engaged in alternative collaboration styles such as PLCs at the time of this study. Moreover, charter and private schools were not studied as extensively as public schools. Principals and teachers were from 49 different schools across multiple school districts in California who were willing to volunteer for the study. The school districts served approximately 30,000 K-12 students and employed approximately 1300 faculty members; demographic breakdown of the school districts was as follows: 54% were Latino students, 24% were white students; 9% were Asian students, 6% were African-American, and 7% classified themselves as other. Further, the districts reported that 70% of its student constituents were economically disadvantaged. Most California schools did not publicly report gender demographics for student population at the time of this study.

Sample Teachers

Demographics for teachers’ sample were as follows: 66% Caucasian, 13.2% African American, 9.4% Latino, 3.8 % Asian, and 7.5% classified themselves as other. 39.6% of the teachers were male \((n = 21)\) and 60.4% were female \((n = 32)\). A sample of 53 teachers was used \((N = 53)\). Teacher experience years of service breakdown was as follows: At the time of this study, 34% had been teachers for 0-5 years, 20.8% for 6-10 years, 20.8% for 11-15 years, 11.3% for 16-20 years, and 13.2% for 21+ years. At the time of the study, 47.2% had earned a bachelor’s degree, 41.5% had earned a master’s degree; 7.5% had earned an educational
specialist degree, and 3.8% had earned a terminal degree. Participants were chosen based on their district’s protocol and personal willingness to participate as a volunteer in the study.

Sample Principals

Demographics for principal sample were as follows: 67.3% Caucasian, 10.2% African American, 16.3% Latino, 4.1% Asian, and 2% classified themselves as other. 14.3% of the principals were male \( (n = 7) \) and 85.7% were female \( (n = 42) \). The sample included a total of 49 principals \( (N = 49) \). Principals’ experience years of service breakdown was as follows: 22.4% had been principals for 0-5 years, 16.3% for 6-10 years, 12.2% for 11-15 years, 14.3% for 16-20 years, and 34.7% for 21+ years. At the time of the study, 12.2% had earned a bachelor’s degree, 61.2% had earned a master’s degree, 2% had earned an educational specialist degree, and 24.5% had earned a terminal degree. A minimum sample of 49 principals was used in order to satisfy requirements of the study (Gall, Gall, & Borg, 2007). Participants were chosen based on their district’s protocol and personal willingness to participate as a volunteer in the study.

Instrumentation

The survey instrument that was utilized in this study was the Professional Learning Community Assessment Revised (PLCA-R) instrument. The instrument has been used in multiple studies, including studies conducted by Blacklock (2009), Oliver (2009), and Stamper (2015). The researcher received permission to use the PLCA-R instrument prior to beginning the research study. The original Professional Learning Community Assessment (PLCA) was designed to assess school-level and classroom practices based on PLC dimensions as described by Hord (Oliver, Hipp, & Huffman, 2003). The PLCA instrument has been administered throughout the United States in several schools across all grade levels to determine the following practices within each PLC dimension: (a) shared vision, (b) shared and supportive leadership, (c)
collective learning, (d) supportive conditions, and (e) shared personal practice (Hipp & Huffman, 2010, p. 30).

Additional research showed that important components were missing from the original PLC instrument. Hord and Hirsh (2008) noted that the process of collection, analysis, and use of data to improve instructional practices is an essential component of effective PLCs. As a result, the new PLCA-R was composed. The revised instrument still used a four-point Likert scale ranging from one (Strongly Disagree) to four (Strongly Agree). The original 45 questions from the PLCA remained with an additional seven questions being added to complete the PLCA-R. Prior to adding the seven questions, an expert panel of administrators, teachers, support staff, professors, and educational consultants was formed. Cronbach’s alpha for all 52 questions was 0.972, which meant that the internal consistency of the questionnaire was very high.

Findings from the questionnaire were positive and all seven items were added to form the PLCA-R instrument (Hipp & Huffman, 2010). According to Hipp and Huffman (2010), this instrument illustrates school-level practices and descriptive statistical analyses that determine the strength and weaknesses of PLCs. The PLCA-R is divided into the following subcategories: (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions-relationships, and (f) supportive conditions-structures. The combined possible score of the instrument ranges from 52-208. A score of 52 is the lowest score, and it means that the participant has a negative perception of PLCs. A score of 208 points is the highest score, and it means that the participant has a positive perception of PLCs.

The dimension of Shared and Supportive Leadership is comprised of the following items: (1) staff members are consistently involved in discussing and making decisions about most
school issues, (2) the principal incorporates advice from staff members to make decisions, (3) staff members have accessibility to key information, (4) the principal is proactive and addresses areas where support is needed, (5) opportunities are provided for staff members to initiate change, (6) the principal shares responsibility and rewards for innovative actions, (7) the principal participates democratically with staff sharing power and authority, (8) leadership is promoted and nurtured among staff members, (9) decision-making takes place through committees and communication across grade and subject areas, (10) stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority, and (11) staff members use multiple sources of data to make decisions about teaching and learning.

The dimension of Shared Values and Vision is comprised of the following items: (12) a collaborative process exists for developing a shared sense of values among staff, (13) shared values support norms of behavior that guide decisions about teaching and learning, (14) staff members share visions for school improvement that have undeviating focus on student learning, (15) decisions are made in alignment with the school’s values and vision, (16) a collaborative process exists for developing a shared vision among staff, (17) school goals focus on student learning beyond test scores and grades, (18) policies and programs are aligned to the school’s vision, (19) stakeholders are actively involved in creating high expectations that serve to increase student achievement, and (20) data are used to prioritize actions to reach a shared vision.

The dimension of Collective Learning and Application is comprised of the following items: (21) staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work, (22) collegial relationships exist among staff members that reflect commitment to school improvement efforts, (23) staff members plan and work together to search
for solutions to address diverse student needs, (24) a variety of opportunities and structures exist for collective learning through open dialogue, (25) staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry, (26) professional development focuses on teaching and learning, (27) school staff members and stakeholders learn together and apply new knowledge to solve problems, (28) school staff members are committed to programs that enhance learning, (29) staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices, and (30) staff members collaboratively analyze student work to improve teaching and learning.

The dimension of Shared Personal Practice is comprised of the following items: (31) opportunities exist for staff members to observe peers and offer encouragement, (32) staff members provide feedback to peers related to instructional practices, (33) staff members informally share ideas and suggestions for improving student learning, (34) staff members collaboratively review student work to share and improve instructional practices, (35) opportunities exist for coaching and mentoring, (36) individuals and teams can apply learning and share the results of their practices, and (37) staff members regularly share student work to guide overall school improvement.

The dimension of Supportive Conditions- Relationships is comprised of the following items: (38) caring relationships exist among staff and students that are built on trust and respect, (39) a culture of trust and respect exists for taking risks, (40) outstanding achievement is recognized and celebrated regularly in our school, (41) school staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school, and (42) relationships among staff members support honest and respectful examination of data to enhance teaching and learning.
The dimension of Supportive Conditions-Structures is comprised of the following items: (43) time is provided to facilitate collaborative work, (44) the school schedule promotes collective learning and shared practice, (45) fiscal resources are available for professional development, (46) appropriate technology and instructional materials are available to staff, (47) resource people provide expertise and support for continuous learning, (48) the school facility is clean, attractive, and inviting, (49) the proximity of grade level and department personnel allows for ease in collaborating with colleagues, (50) communication systems promote a flow of information among staff members, (51) communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members, and (52) data are organized and made available to provide easy access to staff members.

Widespread use of the instrument (Blacklock, 2009; Oliver, 2009; Stamper 2015) and reliability and validity testing provided ample opportunities for internal consistency testing. In the most recent analysis of the PLCA-R, internal consistency was confirmed using Cronbach’s alpha reliability coefficients for factored subscales ($N = 1209$), Shared and Supportive Leadership (.94), Shared Values and Vision (.92), Collective Learning and Application (.91), Shared Personal Practice (.87), Supportive Conditions-Relationships (.82), Supportive Conditions-Structures (.88), and one factor solution (.97) (Hipp & Huffman, 2010, p. 30). Research using this instrument indicated results with the highest mean score of 3.27 within the Collective Learning and Application dimension and the lowest mean score of 2.74 within the Shared Personal Practice dimension (Hipp & Huffman, 2010, p. 30).
Procedures

The research study was submitted to the Institutional Review Board (IRB) and was granted approval. The approved Liberty University Institutional Review Board reference number was 2923.081417. The researcher emailed each principal an informational note that included instructions for volunteers willing to be participants. The consent page that explained the risks to the study was embedded into the survey, and participants had to agree to it before they could access the survey. Teachers and principals accessed the online instrument survey via a direct link specific to their school, provided an electronic signature for consent, and completed the survey. The survey was administered directly from the publication website. Participants clicked the link the researcher emailed them. Next, participants signed the consent form electronically by clicking a box and hitting submit. Next, participants answered each of the 52 questions. When all questions had been answered, participants selected finish. Participants then exited the browser. The researcher sent reminder emails to each principal three times before the survey closed to ensure maximum participation. Data was collected, recorded, and analyzed using IBM SPSS 24.0 statistical software.

Data Analysis

A series of t-tests were utilized to test the three null hypotheses at the 95% confidence level. Data screening was conducted to check for missing data, errors, inconsistencies, and outliers. Box and whisker plots were run to identify potential outliers. The researcher checked for normality using the Shapiro-Wilk test. Furthermore, the researcher conducted a Levene’s test of equality of variance to determine if distributions consisted of the same variances. The alpha level for each null hypothesis was set at .05. Eta squared was used to calculate effect size. IBM SPSS statistical software was used to conduct the t-tests.
CHAPTER FOUR: FINDINGS

Overview

The purpose of this study was to see if there were differences in principals’ perceptions of Professional Learning Communities and teachers’ perceptions of Professional Learning Communities in California schools based on their gender. The findings, including the research questions, null hypotheses, descriptive statistics, and results are discussed below.

Research Questions

RQ1: Are there statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools?

RQ2: Are there statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools?

RQ3: Are there statistically significant differences between teacher perceptions of Professional Learning Communities and principal perceptions of Professional Learning Communities in California schools?

Null Hypotheses

H01: There are no statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

H02: There are no statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools.
Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

**H03:** There are no statistically significant differences between *teacher* perceptions of Professional Learning Communities and *principal* perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment-Revised.

**Descriptive Statistics**

The means and standard deviations obtained for the dependent variables (principal perception and teacher perception) and for the independent variables (gender and position) were calculated. The mean for overall *principal* perceptions of Professional Learning Communities was \( M = 165.20, \text{SD} = 20.48 \). The mean for overall *teacher* perception of Professional Learning Communities was \( M = 165.49, \text{SD} = 29.38 \). Based on these descriptive statistics, the principals and teachers had nearly identical perceptions of the Professional Learning Communities.

The means for *male* teacher perceptions of Professional Learning Communities was \( M = 171.05, \text{SD} = 28.56 \), and the means for *female* teacher perceptions of Professional Learning Communities was \( M = 161.84, \text{SD} = 29.79 \). Based on these descriptive statistics, the male teachers had a more positive perception of learning communities than their female counterparts.

Finally, the means for *male* principal perceptions of Professional Learning Communities was \( M = 159.57, \text{SD} = 23.437 \), and the means for *female* principal perceptions of Professional Learning Communities was \( M = 166.14, \text{SD} = 20.108 \). Based on these descriptive statistics, the female principals had a more positive perception of learning communities than their male counterparts.
Table 1

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M</th>
<th>S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Principal Perceptions</td>
<td>49</td>
<td>165.20</td>
<td>20.480</td>
</tr>
<tr>
<td>Overall Teacher Perceptions</td>
<td>53</td>
<td>165.49</td>
<td>29.38</td>
</tr>
<tr>
<td>Male Teacher Perceptions</td>
<td>21</td>
<td>171.05</td>
<td>28.56</td>
</tr>
<tr>
<td>Female Teacher Perceptions</td>
<td>32</td>
<td>161.84</td>
<td>29.79</td>
</tr>
<tr>
<td>Male Principal Perceptions</td>
<td>7</td>
<td>159.57</td>
<td>23.437</td>
</tr>
<tr>
<td>Female Principal Perceptions</td>
<td>42</td>
<td>166.14</td>
<td>20.108</td>
</tr>
</tbody>
</table>

**Results**

**Null Hypothesis One**

The first hypothesis was utilized to determine if there were statistically significant differences between *male* principal perceptions of Professional Learning Communities and *female* principal perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment—Revised.

**Data screening.** Data screening was conducted to ensure that no outliers or inconsistencies were present. A box and whisker plot was utilized to determine if there were any outliers (see Figure 1). No outliers were identified.
Assumptions. Assumption testing was also conducted. Independent $t$-tests require that the assumption of normal distribution and the assumption of equal variance are met. To determine whether the assumption of normality was met, the Shapiro-Wilk test was utilized. The Shapiro-Wilk test indicated that there were no violations of the normality assumption for each of the groups: male principals ($p = .377$); female principals ($p = .905$). The assumption of equal variances was determined using the Levene’s test of equality of variances. The Levene’s test of equality of variances indicated that there were no violations of variance where ($p = 0.517$) for both groups. No additional data errors or inconsistencies were found.
Results. An independent samples t-test was performed to test the null hypothesis that there are no statistically significant differences between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools. The null hypothesis was tested at a 95% confidence level. The researcher did not find a statistically significant difference between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools where $t(47) = .78, p = .44$. $\eta^2 = 0.013$. Therefore, the researcher failed to reject the null hypothesis. The effect size was ($\eta^2 = 0.013$).

Null Hypothesis Two

The second hypothesis was utilized to determine if there were statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment—Revised.

Data screening. Data screening was conducted to check if outliers or inconsistencies were present. A box and whisker plot was utilized to determine if there were any outliers. The box and whisker plot showed one outlier, and therefore it was not taken into consideration in the further analyses. The outlier was deleted from the analyses because of the participant’s lack of involvement and incomplete survey (see Figure 2).
Assumptions. Assumption testing was also conducted. Independent $t$-tests require that the assumption of normal distribution and the assumption of equal variance are met. To determine whether the assumption of normality was met, the Shapiro-Wilk test was utilized. The Shapiro-Wilk test indicated that there were no violations of the normality assumption for each of the groups: male teachers ($p = .657$); female teachers ($p = .281$). The assumption of equal variances was determined using the Levene’s test of equality of variances. The Levene’s test of equality of variances indicated that there were no violations of variance where ($p = 0.137$). No additional data errors or inconsistencies were found.

Figure 2. Box and whisker plot for teacher based on gender.
**Results.** An independent samples *t*-test was performed to test the null hypothesis that there are no statistically significant differences between *male* teacher perceptions of Professional Learning Communities and *female* teacher perceptions of Professional Learning Communities in California schools. The null hypothesis was tested at a 95% confidence level. The researcher did not find a statistically significant difference between *male* teacher perceptions of Professional Learning Communities and *female* teacher perceptions of Professional Learning Communities in California schools where $t(51) = -1.79, p = .08, \eta^2 = .06$. Therefore, the researcher failed to reject the null hypothesis. The effect size was medium ($\eta^2 = .06$).

**Null Hypothesis Three**

The third hypothesis was utilized to determine if there were statistically significant differences between *principal* perceptions of Professional Learning Communities and *teacher* perceptions of Professional Learning Communities in California schools as shown by the Professional Learning Communities Assessment—Revised.

**Data screening.** Data screening was conducted to check if any outliers or inconsistencies were present. A box and whisker plot was utilized to determine if there were any outliers. The box and whisker plot showed two outliers and therefore were not taken into consideration in the further analyses. The outliers were deleted from the analyses because these participants did not submit completed surveys (see Figure 3).
Assumptions. Assumption testing was also conducted. Independent $t$-tests require that the assumption of normal distribution and the assumption of equal variance are met. To determine whether the assumption of normality was met, the Shapiro-Wilk test was utilized. The Shapiro-Wilk test indicated that there were no violations of the normality assumption for each of the groups: principals ($p = .668$) and teachers ($p = .148$). The assumption of equal variances was determined using the Levene’s test of equality of variances. The Levene’s test of equality of variances indicated that there were no violations of variance where ($p = 0.066$). No additional data errors or inconsistencies were found.

*Figure 3.* Box and whisker plot for principals vs. teachers.
Results. An independent samples $t$-test was performed to test the null hypothesis that there are no statistically significant differences between principal perceptions of Professional Learning Communities and teacher perceptions of Professional Learning Communities in California schools. The null hypothesis was tested at a 95% confidence level. The researcher did not find a statistically significant difference between principal perceptions of Professional Learning Communities and teacher perceptions of Professional Learning Communities in California schools where $t(100) = -.790, p = .432, \eta^2 = .006$. Therefore, the researcher failed to reject the null hypothesis. The effect size was small ($\eta^2 = .006$).
CHAPTER FIVE: CONCLUSIONS

Discussion

Despite Professional Learning Communities becoming more popular in educational practice, few quantitative projects existed at the time of this study (Murphy et al., 2000; Hord & Sommers, 2008; Stamper, 2015; Vescio et al., 2008). In order to accurately assess PLC perception, more quantitative studies were needed (Murphy et al., 2000; Hord & Sommers, 2008; Stamper, 2015; Vescio et al., 2008). Due to a limitation of his study, Stamper (2015) recommended a focus on gender and professional roles within Professional Learning Communities in different geographical areas around the world.

The purpose of this study was to determine if statistically significant differences existed between principal perceptions and teacher perceptions of Professional Learning Communities in California schools. In addition, the researcher studied if there were differences between male perceptions and female perceptions of PLCs. This study utilized the Professional Learning Community Assessment—Revised (PLCA-R) constructed by Olivier and Hipp (2010). The questionnaire assesses perceptions from principals, teachers, and stakeholders about Professional Learning Communities and related attributes.

A quantitative causal comparative design comparing two independent groups of participants was utilized for this study. A causal comparative design was an appropriate choice for this study because the researcher did not manipulate the independent variables (Gall et al., 2007).

Null Hypothesis One

An independent samples t-test was performed to test the null hypothesis that there were no statistically significant differences between male principal perceptions of Professional
Learning Communities and female principal perceptions of Professional Learning Communities in California schools. The researcher did not find a statistically significant difference between male principal perceptions of Professional Learning Communities and female principal perceptions of Professional Learning Communities in California schools, and therefore, failed to reject the null hypothesis.

In this study, male principals and female principals had similar perceptions about their Professional Learning Communities. Often times, males and females view their school communities different than each other (Berkovich, 2018; Eckman, 2004). Males and females often experience the principal role and leading the learning community differently, which impacts how they view PLCs (Eckman, 2004). The results of this study directly contradict these claims. Population, sample size, and geographical location may have an impact on the difference between these results. No other studies were found that determined differences or relationships between principals based on their gender that utilized the PLCA-R.

Null Hypothesis Two

An independent samples t-test was performed to test the null hypothesis that there were no statistically significant differences between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools. The researcher did not find a statistically significant difference between male teacher perceptions of Professional Learning Communities and female teacher perceptions of Professional Learning Communities in California schools, and therefore, failed to reject the null hypothesis.

In this study, male teachers and female teachers had similar perceptions about their Professional Learning Communities. When PLCs were gaining popularity, Wood (2007)
claimed that teachers had a negative view of educational reform and saw PLCs as a waste of time. Moreover, female teachers claimed to be happier at work. In direct contrast to those claims, this study showed males and females typically experience work and the view of the Professional Learning Community in a similar manner (Barsky, 2014; Bausmith & Barry, 2011; Botha, 2012). No other studies were found that determined differences or relationships between teachers based on their gender that utilized the PLCA-R.

**Null Hypothesis Three**

An independent samples $t$-test was performed to test the null hypothesis that there were no statistically significant differences between principal perceptions of Professional Learning Communities and teacher perceptions of Professional Learning Communities in California schools. The researcher did not find a statistically significant difference between principal perceptions of Professional Learning Communities and teacher perceptions of Professional Learning Communities in California schools, and therefore, failed to reject the null hypothesis.

In this study, principals and teachers had nearly identical perceptions about their Professional Learning Communities. Stamper (2015) claimed that all principal and teacher perceptions are correlated and assumed that they often differ despite designing a study that did not seek to measure either of those informational claims, nor did Stamper provide empirical evidence to substantiate them. The results of this study directly contradicted his unsubstantiated claims. While some would assume that a principal attitude could impact a teacher attitude, a correlational design study is needed to support that claim. No other studies were found that determined differences or relationships between principals and teachers based on their gender that utilized the PLCA-R.
Conclusions

At the onset of this study, the researcher predicted that there would not be statistically significant differences between principal perceptions of PLCs and teacher perceptions of PLCs. After analyzing the data, it was discovered that there was not a statistically significant difference between principal perceptions of PLCs and teacher perceptions of PLCs. In actuality, these two groups had nearly identical perceptions of Professional Learning Communities during the 2017-2018 school year. In addition, gender played little to no role in the results of the study. Considering that these conclusions directly contradict several other studies, it can be concluded that the limitations of the study may have skewed the results. The most significant concern was the group sizes and small sample size. Future quantitative studies paired with qualitative analyses may help determine the validity and reliability of this study.

Implications

According to Stamper (2015), more quantitative studies were needed to identify potential differences of perception related to Professional Learning Communities. This recommendation was in agreement with several other studies since the turn of the millennium (Murphy et al., 2000; Hord & Sommers, 2008; Vescio et al., 2008). Since the sample size and population were difficult to garner, the researcher had to expand his sampling outside of the original scope and sequence of the project. Because of this, the gap in the research has not been closed. The researcher noted several limitations and recommended future designs to help adequately measure if principals and teachers view Professional Learning Communities differently and if gender has any impact between the two values.
Limitations

The purpose of this study was to determine whether a statistically significant difference existed between principal perceptions and teacher perceptions of Professional Learning Communities as measured by the Professional Learning Communities Assessment—Revised. The research questions were designed to achieve the aforementioned purpose, but several limitations of this study became evident during the planning and implementation stages of this project. In an effort to increase internal and external validity, replication and redesign of this study in future research should reduce or eliminate the following limitations:

(a) First, this study utilized a specific sample population and may not be generalizable to other populations. The study’s sample size ($N = 102$) was small and lacked diversity; 66% of the tested population were Caucasian and 72% identified as female. In addition, the study only sought participants who were principals or teachers in California public schools or California charter schools. A testable population in a specific proximity could not be obtained. Teachers from private and alternative schools were not included in this study.

(b) Second, this study assumed that all participants had participated in a Professional Learning Community. While the researcher was confident that the entire population had experience with PLCs, it is possible that a selected participant had not.

(c) Third, this study was a self-administered survey. The researcher did not monitor participants and was unable to ensure responses were not shared.

(d) Next, data from this study was reported for the state of California and not specific to a geographical region or disaggregated by individual school districts.
(e) Finally, this study did not pair principals with their own teachers but measured perceptions of the overall groups. Specific sample populations (same school; same school level, etc.) may be over represented.

**Recommendations for Future Research**

The following are recommendations for future research:

(a) Researchers should conduct a study with a different sample, consider a larger and more diverse testable population within a more intimate proximity, and attempt to seek an increase in participants with a specific focus on males and teachers with extensive experience.

(b) Researchers should conduct a study with a different methodology, consider a correlation study between principals and teachers to measure if a relationship between the variables is evident, and attempt to determine if principal gender impacts teacher attitude.

(c) Researchers should conduct a study to include school district support staff, consider utilizing superintendents, directors, and instructional coaches, and attempt to determine if district support impacts principal and teacher perception of Professional Learning Communities.

(d) Researchers should conduct a study to include assistant principals and consider seeking assistant principals who directly manage, coach, and evaluate teachers who participate in a Professional Learning Community.

(e) Researchers should conduct a study to determine if 21st-century educators are willing to participate in live research and attempt to determine if principals and other high-
level leaders are supportive of educational research at this time, and what, if any, reservations are evident.
REFERENCES


Oxford University Press.


college readiness: The importance of pedagogical content knowledge. Educational 
Researcher, 40(4), 175-178.

Berkovich, I. (2018). Typology of trust relationships: Profiles of teachers’ trust in principal and 
their implications. Teachers and Teaching: Theory and Practice, 23(1).

Bettinger, E. P. (2005). The effect of charter schools on charter students and public schools, 
Economics of Education Review, 24(2), 133-147.

Blacklock, P. J. (2009). The five dimensions of professional learning communities in improving 
exemplary Texas elementary schools: A descriptive study (Unpublished doctoral 
dissertation). Denton, TX: University of North Texas.

Blankenstein, A.M. (2004). Six principles that guide student achievement in high-performing 

Botha, E. M. (2012). Turning the tide: Creating professional learning communities (plc) to 
improve teaching practice and learning in South African public schools. Africa Education 
Review, 9(2), 395-411.

Brinia, V. (2012). Men vs. women: Educational leadership in primary schools in Greece: An 


*Teacher Education Quarterly, 35*(1), 63-77.


APPENDIX A

PERMISSION TO USE INSTRUMENT

Hi [retracted],

My name is Michael Brown, and I am a doctoral student at Liberty University. Over the course of the last year, I have been designing a research project for my dissertation to utilize this instrument and this online system. I have defended the proposal and went to submit IRB approval this evening as the final milestone. At that time, I noticed the instrument was no longer available to new customers.

Luckily, I have an account with SEDL and have all ten permissions left for the instrument from where I first confirmed availability. I will be done with the research by September 2017 and will not need to administer the survey again. What should my next step be to ensure I can utilize the online service for my project? Is it still .10 per use?

Thank you for your help!

Sincerely,
Michael Brown

Hi Michael,

We no longer sell that product, but I just added 1,000 surveys (free) to your account, and you are free to use them until the system is retired. We expect to retire the system at the end of this year, but I will contact all site users before cutoff to ensure we don't harm anyone in the middle of data collection.

[retracted]

Hi [retracted],

Thank you so much! You have been an incredible blessing to me today, and I appreciate you very much.

Have a great summer!

Sincerely,
Michael Brown
APPENDIX B
IRB APPROVAL LETTER

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

August 14, 2017

Michael Brown
IRB Exemption 2923.081417: The Relationship Between Principal and Teacher Perceptions of Professional Learning Communities in California Charter Schools

Dear Michael Brown,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu

Sincerely,

Retracted

LIBERTY UNIVERSITY

Liberty University | Training Champions for Christ since 1971
CONSENT FORM

The Difference Between Principal and Teacher Perceptions of Professional Learning Communities in California Schools

Michael Brown
Liberty University
School of Education

You are invited to be in a research study about Professional Learning Communities in California. You were selected as a possible participant because you are a principal or teacher serving in a school in one of these roles. Please read this form and ask any questions you may have before agreeing to be in the study.

Michael Brown, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this research is to study the difference between principal’s perceptions of Professional Learning Communities and teacher’s perceptions of Professional Learning Communities.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. After providing consent, you will answer a series of questions regarding your eligibility for the study, and if applicable, 52 questions directly applicable to the study. This survey should not take longer than 10 minutes to complete.

**Risks and Benefits of Participation:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. Participation in this study may not benefit you personally. However, you may help us learn how to increase the effectiveness and efficiency of principals who utilize Professional Learning Communities within their academic environment.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.
How to Withdraw from the Study: If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Michael Brown. You may ask any questions you have by contacting him at mtbrown2@liberty.edu. You may also contact the researcher’s faculty advisor, Dr. Kurt Y. Michael at kmichael9@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have had the opportunity to ask questions and receive answers. I consent to participate in the study.
Dear Principal,

Hello-- my name is Michael Brown, and I am currently a doctoral candidate at Liberty University. For my dissertation, I am seeking to determine if a relationship exists between principal perceptions and teacher perceptions of Professional Learning Communities in California Schools. I will also look for a statistical difference between public schools and charter schools. Would you consider participating and allowing your teachers to participate in a ten minute survey to help me complete my degree? If so, simply reply “Yes.” If not, kindly reply “No.” so I may remove your email from any future mailings. Additional directions will be sent to those who agree to participating. Please note-- identifiable data (names of district, principal, school, teacher, etc.) will not be included in the published results and will remain strictly confidential. That information will only be reviewed by you (for your personal school), myself, and, if requested, the Dean of Education at Liberty. The information will be promptly destroyed at the end of the study.

As a former charter school and public school administrator, I encourage you to consider participating in this study. These results may improve principal effectiveness, teacher efficacy, better allocation of public school funds, and increased student achievement. For your convenience, I have attached the survey for your review.

Thank you for your consideration,

Michael Brown