The Principal's Role in Developing and Sustaining Professional Learning Communities: A Mixed Methods Case Study

Ginger Mink Teague

University of Tennessee - Knoxville, gteague1@utk.edu

Recommended Citation
https://trace.tennessee.edu/utk_graddiss/1356
To the Graduate Council:

I am submitting herewith a dissertation written by Ginger Mink Teague entitled "The Principal's Role in Developing and Sustaining Professional Learning Communities: A Mixed Methods Case Study." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Vincent A. Anfara, Jr., Major Professor

We have read this dissertation and recommend its acceptance:

Pamela Angelle, Colleen Gilrane, Jason Huff

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
THE PRINCIPAL’S ROLE IN DEVELOPING AND SUSTAINING
PROFESSIONAL LEARNING COMMUNITIES: A MIXED METHODS CASE
STUDY

A Dissertation Presented for the
Doctor of Philosophy
The University of Tennessee, Knoxville

Ginger Mink Teague
May 2012
DEDICATION

Without constant support and encouragement from my husband, Tim Teague, I would have never begun nor completed this journey. Thank you for enduring long nights wondering when (or if) I would make it to bed before the alarm went off for work. Thank you for listening and trying to put your arms around my studies and my research. Thank you for knowing me so deeply that you realize that learning and being challenged causes “my heart to stand on tiptoes!” I am deeply grateful for your belief in me as a teacher, as a student, as a mother and grandmother, and most importantly as your partner in life.

I have been humbled at the encouragement and grace I have received from my children and their spouses—Lindsay and Daniel Mizell and Drew and Molly Teague. Thank you for understanding when I was buried in the study far too often! I am thankful for the many times Campbell and Graham brought the gift of life and laughter when I needed a break! I am blessed beyond measure.

To my amazing mother, Mildred Mink, I owe a debt of gratitude that can never be repaid. Thank you for living a life of sacrifice that taught me anything less than my best effort was not enough. Your example of one who has maintained a long obedience in the same direction is a treasure. Thank you loving me, praying for me, and pointing me to Jesus.
ACKNOWLEDGMENTS

Words seem inadequate to express the deep gratitude I have for the members of my dissertation committee: Dr. Vincent A. Anfara, Jr., Dr. Pamela Angelle, Dr. Colleen Gilrane, and Dr. Jason Huff. You have challenged me to search, to question, and to learn in ways that I could never have imagined before this endeavor. I am thankful for the direction, challenge, and encouragement provided by Dr. Anfara throughout forum, coursework, my year as a Graff Scholar, and the entire dissertation process. Thank you for countless hours spent reading, editing, and discussing my work. From the first day that Dr. Angelle sat in my classroom as I explored this program, she has continued to push me to “expand the scope of my influence.” My sincere thanks are due for the ways you have taught me, believed in me, and have given me opportunities to pursue and present research. I am grateful to Dr. Gilrane for facilitating a class in which educators from multiple disciplines learned from one another and for offering encouragement in my studies and in my life. I am deeply indebted to Dr. Huff for the ways in which he has led me to think outside of my box.

I must also acknowledge Dr. Dianne Olivier for not only granting permission to use the PLCA—R instrument, but for also providing valuable input for my research. I am also grateful for the statistical help and advice offered by Mike O’Neil.

My most treasured gift from my doctoral program is the amazing group of women who became my dear friends as we shared the adventure as a cohort: Nicole
Wilson, Cherie Gaines, Jennifer Beavers, Tori Henley, and Rosemary Spivey. Thank you for not only sharing our Ph.D. work, but also your lives and families as well! You will always be dear to my heart.
ABSTRACT

With research supporting the benefits of professional learning communities in transforming schools, school leaders need insight and understanding into how to lead the organization toward successful implementation. The purpose of this study was to examine the role of the principal in developing and sustaining professional learning communities in elementary school settings. The exploratory, sequential, mixed method case study was conducted using Hord’s (1997, 1998, 2008) Five Dimensions of a Professional Learning Community as the theoretical framework. The research design was a quan→QUAL sequential approach, with priority or dominance given to the qualitative phase (Greene, 2008; Johnson & Onwuegbuzie, 2004). Triangulation of data sources and methods added strength to the findings.

In the initial phase, 107 teachers from eight elementary schools from one school district in a southeastern state responded to the PLCA—R instrument (Olivier & Hipp, 2010a). The PLCA—R data provided insight into teachers’ perceptions of the extent to which PLC practices are found in elementary schools. The quantitative data analysis led to the selection of two elementary schools with strong evidence of PLC practices to serve as cases for the qualitative phase.

In the qualitative phase data collection at the elementary schools included interviews with principals and teachers, observations of PLCs, and artifacts. Both within case and cross-case analyses were conducted to determine the extent of PLC practices and findings related to the role of the principal. With strong evidence of
PLC practices, three themes were developed concerning the principal’s role in developing and sustaining PLCs: relationships matter; principal support is critical; and structure is important. The themes fall within the supportive conditions dimension of PLCs (Hord, 1997, 1998, 2008). As elementary principals lead their schools in developing PLC practices, they can benefit by recognizing the impact of principal support on the process. Principals can also foster PLCs by building trusting and caring relationships and by developing structures that support the collaborative work found in PLCs.
# TABLE OF CONTENTS

Abstract........................................................................................................................................ vi

TABLE OF CONTENTS.................................................................................................................. viii

CHAPTER 1 ...................................................................................................................................... 1

Introduction.................................................................................................................................... 1

Introduction to the Study ................................................................................................................ 1

Statement of the Problem ................................................................................................................ 4

Purpose of the Study ....................................................................................................................... 5

Research Questions ....................................................................................................................... 6

Definitions of the Terms ................................................................................................................ 7

Delimitations and Limitations of the Study ................................................................................... 8

Delimitations .................................................................................................................................. 8

Limitations of the Study ................................................................................................................. 9

Assumptions of the Study ............................................................................................................. 10

Significance of the Study ............................................................................................................. 10

Organization of the Study ........................................................................................................... 12

Conclusion .................................................................................................................................... 13

CHAPTER 2 .................................................................................................................................... 15

Review of the Literature .............................................................................................................. 15

Introduction to the Chapter ......................................................................................................... 15

The Search Process ...................................................................................................................... 15
A Historic Look at Professional Learning Communities.............................. 18
The Call for Reform..................................................................................... 18
The Roots of Professional Learning Communities ..................................... 21
Senge’s Five Disciplines............................................................................ 27
Early Research on Learning Communities .............................................. 29
Dimensions of Professional Learning Communities ............................... 34
Shared Beliefs, Values, and Vision............................................................ 37
Shared and Supportive Leadership ............................................................ 41
Collective Learning and Application ....................................................... 44
Shared Personal Practice........................................................................... 46
Supportive Conditions ............................................................................. 47
Barriers to Developing and Sustaining Effective PLCs ............................. 51
Summary of Literature on Professional Learning Communities .............. 54
The Role of the Principal........................................................................... 55
Summary of the Principal’s Role .............................................................. 63
Theoretical Framework............................................................................. 64
Senge’s Five Disciplines........................................................................... 66
Five Dimensions of a Learning Community............................................. 67
Summary of the Chapter........................................................................... 68
Chapter 3................................................................................................. 71
Methodology............................................................................................. 71
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the Chapter</td>
<td>71</td>
</tr>
<tr>
<td>Type of Design</td>
<td>72</td>
</tr>
<tr>
<td>Rationale for a Mixed Methods Design</td>
<td>73</td>
</tr>
<tr>
<td>Methodology Follows Inquiry Purposes</td>
<td>73</td>
</tr>
<tr>
<td>Mixing the Best of Both</td>
<td>77</td>
</tr>
<tr>
<td>Priority and Sequencing</td>
<td>78</td>
</tr>
<tr>
<td>Case Study Rationale</td>
<td>79</td>
</tr>
<tr>
<td>Role of the Researcher</td>
<td>81</td>
</tr>
<tr>
<td>Site and Sample</td>
<td>82</td>
</tr>
<tr>
<td>Quantitative Sampling Procedures</td>
<td>83</td>
</tr>
<tr>
<td>Participants in the Quantitative Phase</td>
<td>88</td>
</tr>
<tr>
<td>Qualitative Sampling Procedures</td>
<td>93</td>
</tr>
<tr>
<td>Data Collection</td>
<td>98</td>
</tr>
<tr>
<td>Quantitative Data Collection</td>
<td>98</td>
</tr>
<tr>
<td>Qualitative Data Collection</td>
<td>102</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>106</td>
</tr>
<tr>
<td>Quantitative Data Analysis</td>
<td>106</td>
</tr>
<tr>
<td>Qualitative Data Analysis</td>
<td>107</td>
</tr>
<tr>
<td>Method of Verification</td>
<td>114</td>
</tr>
<tr>
<td>Multiple Sites</td>
<td>116</td>
</tr>
<tr>
<td>Potential Ethical Issues</td>
<td>118</td>
</tr>
</tbody>
</table>
Conclusion ........................................................................................................... 119

Chapter 4 ........................................................................................................... 121
Analysis of the Quantitative Data .................................................................... 121
Introduction to the Chapter .............................................................................. 121
Analysis of the Quantitative Data .................................................................... 122
Demographic Data of the Participants ............................................................ 122
Analysis of the PLCA – R Data by Dimension for the Total Sample .......... 126
Analysis of PLCA – R Means for Items Directly Related to the Principal ..... 128
Analysis of the PLCA – R Data by Dimension and by School .................... 130
Comparison of the Data for the Eight Participating Schools ......................... 137
Selection of the Two Cases for Phase 2 .......................................................... 142
Comparison of the PLCA – R Means for Bradford and Campbell Elementary
Schools .............................................................................................................. 143
Summary of the Quantitative Findings ............................................................. 147
Summary of the Chapter .................................................................................. 148

Chapter 5 ........................................................................................................... 150
Analysis of the Qualitative Data for a Single Site: Bradford Elementary School .... 150
Introduction to the Chapter .............................................................................. 150
Bradford Elementary School .......................................................................... 152
School History .................................................................................................. 153
A Project GRAD and a TAP School .................................................................. 154
PLCs at Campbell Elementary .............................................................. 230
The Principal: Dr. Mizell ....................................................................... 231
Qualitative Data Analysis: Campbell Elementary ................................... 232
The Extent of PLC Practices .................................................................. 234
The Role of the Principal ....................................................................... 261
Summary of the Chapter ....................................................................... 280
Chapter 7 .............................................................................................. 283
Cross-Case Analysis of the Case study Data ......................................... 283
Introduction to the Chapter ................................................................... 283
Research Question One: The Extent of PLC Practices ......................... 285
Shared Values and Vision ...................................................................... 286
Shared and Supportive Leadership ......................................................... 292
Collective Learning ................................................................................ 298
Shared Personal Practice ....................................................................... 302
Supportive Conditions .......................................................................... 307
Summary of the Extent of PLC Practices .............................................. 315
Research Question Two: The Role of the Principal ............................... 316
Relationships Matter ............................................................................. 317
Principal Support is Critical ................................................................... 324
Structure is Necessary .......................................................................... 330
Summary of the Role of the Principal .................................................... 334

xiii
Summary of the Chapter ................................. 335
Chapter 8 ....................................................... 337
Conclusions and Implications .......................... 337
Conclusions ................................................... 339
Relationships Matter ...................................... 346
Principal Support is Critical ............................ 349
Structure is Necessary .................................... 351
Implications for Practice ................................. 353
The Role of the Principal ................................ 353
Does the Name PLC Matter? ......................... 356
Implications for Research ............................... 357
Summary ..................................................... 359
References ................................................... 361
Appendices .................................................. 380
Appendix A .................................................... 381
Summary of Empirical Studies Reviewed for Chapter 2 ................................. 381
Appendix B .................................................... 388
Professional Learning Community Assessment Instrument ......................... 388
Appendix C .................................................... 396
Permission to Use PLCA – R ......................... 396
Appendix D .................................................... 399
Teacher Interview Protocol................................................................. 399
Appendix E ............................................................................................ 402
Principal Interview Protocol ................................................................. 402
Appendix F ............................................................................................. 405
Letter Sent to Principals......................................................................... 405
Appendix G............................................................................................... 408
Descriptive Statistics of PLCA – R by Descriptor and by PLC Dimension...... 408
Appendix H............................................................................................... 413
Descriptive Statistics of PLCA – R for Case Study Sites.............................. 413
Vita........................................................................................................... 422
LIST OF TABLES

Table 1 Attributes of the Five Dimensions of Professional Learning Communities . 33
Table 2 Comparison of Traditional Schools and PLCs ........................................ 36
Table 3 Conditions that Foster Teacher Leadership Development ...................... 49
Table 4 Research Questions in Relation to Data Collection Sources ................. 76
Table 5 Demographic Data of Students in the Participating School District and the County It Serves ........................................................................................................ 85
Table 6 Academic Progress Since Third Grade of Current Eighth Graders in Participating School District ........................................................................................................ 87
Table 7 Frequency Counts of Teacher Participants by School ......................... 90
Table 8 Demographic Data for Schools Participating in Quantitative Phase .... 92
Table 9 Demographic Information for Interview Participants by School Site ...... 96
Table 10 Relationships Between the PLCA—R and the Five Dimensions of a Professional Learning Community ........................................................................................................ 99
Table 11 Code Mapping: Three Iterations of Qualitative Data Analysis ......... 109
Table 12 Components of Categorization/Temporal Designation ...................... 111
Table 13 Quantitative and Qualitative Criteria for Assessing Research Quality and Rigor ........................................................................................................................................ 116
Table 14 Frequency Counts of Participants’ Experience as an Educator for Total Sample ........................................................................................................................................ 123
Table 15 Frequency Counts of Demographic Data by Participating Schools ....... 125
Table 16  Mean and Standard Deviation Scores for PLCA—R Dimensions for Total Sample.............................................................................................................................................................. 128

Table 17  PLCA—R Items Directly Linked to Principals: Means and Standard Deviations........................................................................................................................................................................ 129

Table 18  Comparison of the Means and Standard Deviations of the PLCA—R Data by School and by PLC Dimension ........................................................................................................................................................................ 131

Table 19  Presentation of Top Three Highest Means and Standard Deviations for Each PLCA—R Dimension........................................................................................................................................................................ 138

Table 20  Comparison of the PLCA—R Items Directly Linked to Principals for School 3, School 7, and School 8 ........................................................................................................................................................................ 141

Table 21  Summary of the PLCA—R Data for Bradford Elementary and Campbell Elementary ........................................................................................................................................................................ 144

Table 22  Experience of Bradford Elementary Staff .......................................................................................................................................................................................................................... 164

Table 23  Value-Added Test Data for Bradford Elementary School ....................................................................................................................................................................................................... 168

Table 24  Campbell Elementary Students Receiving Special Services ........................................................................................................................................................................................................ 224

Table 25  Teaching and Educational Attainment of Campbell Elementary School Professional Staff.................................................................................................................................................................... 225

Table 26  Value-Added Test Data for Campbell Elementary School ...................................................................................................................................................................................................... 229

Table 27  Interview Participants by Elementary School .................................................................................................................................................................................................................. 285

Table 28  Comparisons of the Belief Statements of Bradford and Campbell Elementary Schools ........................................................................................................................................................................................................ 288
Table 29  PLCA—R Data for Shared Values and Vision by School......................... 289

Table 30  PLCA—R Data Analysis for Shared and Supportive Leadership by School

Table 31  PLCA—R Data Analysis for Collective Learning and Application by School

Table 32  PLCA—R Data Analysis for Shared Personal Practice by School ........ 303

Table 33  PLCA—R Data Analysis for Supportive Conditions: Structures by School

Table 34  PLCA—R Data Analysis for Supportive Conditions: Relationships by School
LIST OF FIGURES

Figure 1. Research Design Flowchart .............................................................................. 73

Figure 2. Sample Items from PLCA – R Instrument ......................................................... 100

Figure 3. Comparison of Bradford and Campbell Elementary Schools’ PLCA – R Means .................................................................................................................................. 145

Figure 4. Components of the Project GRAD Program ....................................................... 156

Figure 5. Components of TAP™ ....................................................................................... 159
CHAPTER 1

INTRODUCTION

Introduction to the Study

Educators today face the daunting task of increased accountability for student learning in an era of high stakes testing and within the context of a global society that is changing in exponential ways. As principals and teachers consider how to improve learning for all students, the imperative for effective school reform surfaces (DuFour, DuFour, & Eaker; 2008; DuFour & Eaker, 1998; Huffman & Hipp, 2003). Growing numbers of schools have implemented professional learning communities as a means of bringing about sustainable change. McLaughlin and Talbert (2006) defined professional learning communities as follows:

Professional communities where teachers work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes. (pp. 3-4)

Professional learning communities provide a setting for educators to collaboratively face the demands for school reform that positively impacts student learning. Schools utilizing professional learning communities have the capacity for transforming their school (DuFour, 2007).

Studies from the business world devoted to both organizational change and communities of practice paved the path for educators to examine the current operating forces in schools and to better understand why so many traditional methods and structures are ineffective in improving student learning (Cowan, 2003; Senge, 1990;
Wenger 2000). From Senge’s work defining learning communities in organizations, educators discovered how collective learning can lead to change that produces desired outcomes (Cowan; Senge). Wenger, McDermott, and Snyder (2002) posited that developing communities of practice where groups can deepen their knowledge and expertise through collective practice are “foundational structures on which to build organizations” (p. 21). The ideas of shared vision, shared purpose, trust, and mutual respect that are inherent in Senge’s learning communities and Wenger’s communities of practice laid the groundwork for developing the professional learning community concept in many schools that are seeking to bring about organizational change.

At the core of the professional learning community concept lies the belief that it is not enough to simply provide instruction, but to ensure students are learning as well (DuFour, 2004). The collective work of educators evidenced in professional learning communities has been found to increase the capacity of all members to help all students achieve academically (Bezzina, 2008; Boyd-Dimock & Hord, 1994; Cawalti, 2003; Cowan, 2010; Eaker & Keating, 2008; Hipp & Huffman, 2010; Hord, 1997, 2008; Huffman, 2003; Kruse & Louis, 1995; McLaughlin & Talbert, 2006, 2010; McREL, 2003; Olivier & Hipp, 2010b; Pankake and Huffman, 2010; Roundtree & Hipp, 2010; Underwood, 2007). Collegial relationships among educators working in professional learning organizations led to opportunities for shared decision-making as they worked toward the common goal of improving student learning (Cowan, 2003; Hord, 2008; Hord & Sommers, 2008; Senge, 1990). When educators work in professional learning communities, they build capacity for creating change in schools that can impact students in a positive way (Hord, 1998; McLaughlin & Talbert, 2003, 2010; Senge).
Developing and sustaining professional learning communities in schools requires leadership and direction. As administrators, principals have the opportunity to play a vital role in developing this concept in order to bring about transformation that can lead to school improvement. Huffman and Jacobson (2003) asserted, “As visionary leaders, administrators can incorporate the professional learning community model in their schools to increase understanding and communication, improve problem-solving capacities, and develop an organized change process for collectively building ‘community’ in the organizational structure of the school” (p. 248). Principals have the positional power to either foster or hinder the development of professional learning communities. With research supporting the benefits of professional learning communities in transforming schools, school leaders need insight and understanding into how to lead the organization toward successful implementation.

Thus, the rationale for research designed to examine the role of the principal in the developing and sustaining of professional learning communities in schools has been outlined in Chapter 1. The statement of the problem and the purpose of the study are presented. Research questions will be set forth to guide the study. Definitions of terms, assumptions, delimitations, and limitations provide greater understanding of the confines of the proposed study. The significance of the study to contribute to the literature on professional learning communities will be revealed. An overview of the study’s organization can also be found. The chapter will then conclude with a summary of the information presented.
Statement of the Problem

The benefits of professional learning communities in transforming schools have been extolled throughout the literature. Foremost in the appraisal of the impact of professional learning communities was the increased focus on student learning (DuFour et al., 2004; Hord, 2008; Louis, Marks, & Kruse, 1996; Stoll & Louis, 2007). In addition to the impact on student learning, researchers have noted benefits derived from developing collegiality as educators work collaboratively with a shared vision and utilizing shared leadership (Hipp & Huffman, 2007; Hord, 2008; Hord & Sommers, 2008; Louis et al., 1996; Pankake & Moller, 2003). While the supportive role of the principal was hailed as an important aspect of successful implementation of a professional learning community, most of the literature is focused primarily on the impact for students and teachers.

From the literature, the principal has been found to be a key player in “transforming the school into a learning community” (Hord, 1997). As leaders of schools, principals matter both in the “creation and the long-term maintenance of professional learning communities” (Sparks, 2005, p. 156). Lack of principal support was viewed as a roadblock for successful implementation (Wells & Feun, 2007). Principals share in the responsibility of developing the five dimensions of a professional learning community: shared values and vision; shared and supportive leadership; collective learning and application; shared personal practice; and supportive conditions (Hord, 1997; Hord & Sommers, 2008). The literature has paved the way for gaining insight into the importance of the principal’s role and even provided examples of how
principals play an important part in the implementation of professional learning communities.

Although literature devoted to the impact of professional learning communities revealed the importance of the role of the principal, I found focused examinations of the principal’s role lacking. Developing and sustaining the work of PLCs requires leadership and direction. As administrators, principals have the opportunity to play a vital role in building and extending the PLC concept to bring about transformation that can lead to school improvement. Greater insight and understanding into the ways in which a principal can foster or hinder the process could be gained from a focused look at the principal’s role. Thus, a closer inspection of the role of the principal in developing and sustaining professional learning communities was warranted.

Purpose of the Study

The purpose of the study was to examine the role of principal in developing and sustaining professional learning communities in elementary school settings. To achieve this purpose, it was necessary to first determine the extent to which professional learning communities’ practices are evidenced in multiple elementary schools that are implementing professional learning communities. Two elementary schools demonstrating high levels of PLC implementation were selected as cases for the mixed methods case study. Then, the role of the principal was closely examined in the two sites selected. Consideration was given to the role of the principal as a role model, learning leader, motivator, supporter, resource, provider of resources, and facilitator (Payne & Wolfson, 2000). Aspects of the role of the principal that foster or hinder developing and sustaining professional learning communities were explored.
Research Questions

This research employed a mixed methods case study design to examine the principal’s role in developing and sustaining a professional learning community. The study was guided by two research questions that were developed utilizing a theoretical framework of the five dimensions of a professional learning community as proposed by Hord (1997, 1998, 2008). In the quantitative phase of the study, research question one was explored to determine the level of immersion in practices of professional learning communities of the participating schools. The level of immersion guided the purposive sampling for the case study (Greene, Caracelli & Graham, 1989; Morgan, 1998). Additionally, the findings associated with question one “establish(ed) preliminary results to pursue in depth” and for triangulation of data collected in the qualitative phase (Morgan, p. 368). Question two was addressed qualitatively through interviews with principals and teachers.

In order to achieve the purpose of the study, the investigation was guided by the research questions presented below:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions
2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?

Definitions of the Terms

Defining terminology that is pertinent to the research can provide clarity for the reader. The study was conducted utilizing the following operational definitions:

1. *Learning organization:* an organization where “people continually expand their capacity to create the results they desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (Senge, 1990, p. 3).

2. *Professional learning community (PLC):* McLaughlin and Talbert (2006) defined a professional learning community as “a professional community where teachers work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes” (pp. 3-4).

3. *Five dimensions of professional learning communities:* The following five dimensions were proposed by Hord (1997, 1998, 2008) as elemental to professional learning communities:
   a. Shared values and vision
b. Shared and supportive leadership

c. Collective learning and application

d. Shared personal practice

e. Supportive conditions

An in-depth look at the five dimensions is presented in Chapter 2.

4. Professional Learning Community Assessment—Revised (PLCA – R):

Olivier and Hipp (2010a) revised the original Professional Learning Community Assessment (Olivier, Hipp, & Huffman, 2003) to “provide perceptions of the staff relating to shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions (Olivier & Hipp, p.31). The instrument consists of 52 descriptors utilizing a four-point forced choice Likert-type scale to assess the perceptions of educators regarding the level of implementation of the dimensions of professional learning communities as proposed by Hord (1997).

5. Principal: For the purposes of this study, the principal role was embodied by one person and does not include the role of other school administrators, such as assistant principals.

Delimitations and Limitations of the Study

Delimitations

The researcher has identified delimitations that bounded the study based on the mixed methods case study approach to data collection and analysis (Gay, Mills, & Airasian, 2009; Merriam, 2009; Yin, 2009). For both the quantitative and qualitative
phases of the research, participants were limited to principals, teachers, and other staff members directly involved in PLCs. The quantitative portion of the study was limited to a purposeful sample of public elementary schools in a southeastern state that were implementing the concept of professional learning communities. Schools were selected from suburban, urban, and rural areas.

Participants in the qualitative case study phase were limited to a purposeful sample selected from the participating elementary schools that completed the Professional Learning Community Assessment—Revised (PLCA – R) during the quantitative phase of the study (Olivier & Hipp, 2010a). Two elementary schools were selected based on the level of implementation of professional learning communities as assessed through the PLCA – R. The selection of cases included two schools demonstrating high levels of implementation of the five dimensions of professional learning communities.

Limitations of the Study

No research study is without limitations (Gay et al., 2009). The study was first limited by self-reported data gathered during the quantitative phase from the PLCA – R and through interviews during the qualitative portion of the study. Unknown factors could have contributed to the completed PLCA – R surveys not reflecting actual perceptions of the participants. In the qualitative phase of the study, the gathering of imprecise data from interviews was another limitation.

The nature of a mixed methods case study approach further limited the study by the lack of generalizability of the findings to the greater population of public elementary schools in the United States that are implementing professional learning communities.
(Firestone, 1993; Gay et al., 2009; Herriott & Firestone, 1983; Merriam, 2009; Yin, 2009). Another limitation of the research was due to the window of time for data collection that represented a “snap-shot in time.”

Assumptions of the Study

This mixed methods case study examined the role of the principal in developing and sustaining professional learning communities under the following assumptions:

1. The depth of immersion into a professional learning community can be indicated by practices related to the five dimensions of a professional learning community: (a) Shared beliefs, values and vision, (b) shared and supportive leadership, (c) supportive conditions, (d) collective learning and application, and (e) shared personal practice (Hord, 1997, 1998, 2008; Hord & Sommers, 2007; Olivier et al., 2003; Oliver & Hipp, 2010b).

2. The Professional Learning Community Assessment—Revised (PLCA – R) is a valid measure of teacher and principal perceptions concerning the implementation of the five dimensions of professional learning communities (Olivier & Hipp, 2010a; Olivier et al, 2003).

3. Participants responded to PLCA – R instrument with integrity. Interview participants spoke candidly about their perceptions of the role of the principal in developing and sustaining professional learning communities.

Significance of the Study

The attributes of professional learning communities were well documented in the research literature. With a focus on improving student learning, working in professional learning communities has been found to lead to changes that positively impact student
learning (Vescio, Ross, & Adams, 2007). Shared vision and beliefs, shared and supportive leadership, team learning, dialogue, supportive conditions, shared practice, and collegiality were found to be common components in schools that are utilizing learning communities (Andrews & Lewis, 2007; Hord, 1998, 2008; Hord & Sommers, 2008; Huffman & Hipp, 2003; Olivier et al., 2003; Roundtree & Hipp, 2010).

Throughout literature, the role of the principal was viewed as critical in creating and developing professional learning communities (Fleming & Leo, 1999; Hord, 1998; Hord & Sommers; Huffman & Hipp). Professional learning communities have the potential for contributing to lasting school reform.

With little evidence of focused examinations focused on the principal, the significance of this study is to address this gap in the literature by providing a deeper exploration of the principal’s role in developing and sustaining professional learning communities. A clearer picture of the principal’s impact is important for all who believe in the power of PLCs in school settings. For school leaders who are implementing or considering PLCs as a means to bring about school improvement, results from this study will offer information gleaned from the field about what has been identified as enabling or impeding PLC work. School staffs that are working in PLCS in schools will benefit from this study as the findings inform and influence the practice of their principals. Thus, school districts, school leaders, and teachers can profit from what the teachers and principals in this study have learned from their experience about principal roles that either foster or hinder PLCs.
Organization of the Study

In Chapter 2, a review of the literature examining the historical development of the professional learning community concept, the characteristics of a professional learning communities, and the role of principals will be presented. From the review of literature, the theoretical framework will be set forth that served as a guide for the collection, analysis, and interpretation of data. The information gained from the review of empirical studies served as a guide to achieve the purposes of the study.

Following the Review of the Literature, Chapter 3 will present the methodology utilized to achieve the purposes of the study. The study employed an exploratory, sequential, mixed methods case study approach to examine the role of the principal in developing and sustaining professional learning communities (Greene et al., 1989). The research method was a Quan→QUAL approach. The choice of a mixed methods design “can permit investigators to address more complicated research questions and collect a richer and stronger array of evidence than can be accomplished by any single method alone” (Yin, 2009, p. 63). Because the samples selected must include schools that are implementing professional learning communities, purposeful or non-probability sampling methods were utilized as is considered appropriate for mixed methods designs (Teddle & Yu, 2007). Methods for data collection, analysis, and interpretation will be presented to conclude Chapter 3 and set the stage for Chapters 4-7.

Due to the use of a mixed methods approach, the analysis of the data will be presented in multiple chapters. Chapter 4 will provide an in-depth analysis of the data from the quantitative phase of the mixed methods study. The quantitative data will be analyzed for the total sample and by school. The findings from the qualitative multi-site
case study will then be set forth in Chapters 5, 6, and 7. The within-case analyses of the two elementary schools will be detailed by school in Chapters 5 and 6. In order for the reader to have a clear understanding of the case study sites, the findings will include thick rich descriptions of the cases involved in the study (Merriam, 2009; Stake, 1995; Yin, 2009). A discussion of the themes found in the analysis of interviews, observations, and artifacts will be given. Chapter 7 will include the cross-case analysis of data from the two participating schools will also be included. Triangulation of the data will also be presented including both the use of multiple methods of inquiry and multiple sources of data (Greene et al., 1989; Merriam).

In Chapter 8, I will bring the discussion of the findings of the study back to the theoretical framework and to the review of literature. The theoretical framework will provide a lens for interpreting the data in light of the purpose of examining the role of the principal in developing and sustaining professional learning communities. Implications for practitioners will be presented in light of the findings. The chapter will conclude with suggestions for future research that arise from the findings.

Conclusion

In Chapter 1, the statement of the problem, the purpose and significance of the study were presented. Definitions of applicable terms, delimitations, limitations, and assumptions related to the study were set forth. Research questions were posed to guide the study. A description of the organization of the mixed methods design was proposed. Chapter 2 will now present the review of the literature on professional learning communities and the role of the principal. The theoretical framework that guided the
study to achieve the purpose of examining the role of the principal in developing and sustaining professional learning communities will be explained.
CHAPTER 2

REVIEW OF THE LITERATURE

Introduction to the Chapter

To achieve the purpose of examining the role of principal in developing and sustaining professional learning communities (PLCs), it is imperative to review bodies of literature on professional learning communities and leadership roles of a school administrator to identify recurring themes and trends. The review of the literature will provide insight into the historical background of professional learning communities derived from research and theories from the field of education and from sources outside of education. The historical background will present the groundwork for understanding the development of the professional learning community concept. After presenting the historical context, a review of bodies of literature related to the professional learning communities will follow. Included in this review will be an in-depth review of the five dimensions of a professional learning community. Additionally, a review of literature related to the role of the principal will be presented. The presentation of the theoretical framework that emerges from the discussion of the findings from literature will then be presented. The review of literature concludes with a clear picture of the gap found in the literature to be addressed by this study.

The Search Process

In order to complete this review of literature, the search process encompassed multiple data sources. A search for books related to the topic of professional learning communities and principal roles involved searching the library catalog from the University of Tennessee and its interlibrary loan resources as well as searches on
websites of the following: Amazon, ASCD, the Center on Organization and Restructuring of Schools (CORS), Mid-continent Research for Education and Learning (McREL), SEDL, the U.S. Department of Education (USDOE), and The Wallace Foundation. Search terms included professional learning communities, learning communities, professional communities, communities of practice, principals, role of the principal, administrators, principal leadership, school improvement, school reform, and distributed leadership. Due to the volume of literature related to the principalship, linking terms related to principals with terms related to learning communities narrowed the search. A review of books related to professional learning communities included empirical research as well as works which synthesized research related to PLCs. In order to gain understanding of the historical foundation of PLCs, books proved to be valuable sources of information. Books that offered insight into the role of the principal were also found using the library catalog resources.

Searches were also conducted using databases including ERIC, Educational Full Text, the Web of Science, Google Scholar, and Dissertation Abstracts International to locate articles and documents on both professional learning communities and principal roles. Utilizing the same search terms that were used with the library catalog searches yielded volumes of literature. In order to filter the results, abstracts provided information that revealed possible connections to the research topic. Resources located by utilizing these databases included empirical research reported in peer-reviewed journals as well as popular literature journal articles related to the research topic.

In addition to the databases available through the library resources, a review of websites including ASCD, McREL, SEDL, The Wallace Foundation, and the U.S.
Department of Education (USDOE) also proved to be valuable sources of information on the historical background of professional learning communities as well as for sources of research related to PLCs and to administrator roles. As the literature was reviewed, additional searches were then conducted to find the works of various authors that were often cited by others. The reference lists for each piece of literature provided connections to related studies and the historical context of PLCs and the role of principals. The search for literature related to professional learning communities and principal roles provided insight and understanding to the research topics and led to a theoretical framework.

The vast majority of the research found employed qualitative research methods. Case studies comprised most of the research reviewed on professional learning communities. A small number of mixed methods studies were examined that combined survey research with qualitative methods. Only two quantitative designs were reviewed. As the literature on professional learning communities was reviewed, it became more apparent why most of the research was qualitative. While quantifiable data provide a measure of some aspects of professional learning communities, such data do not provide deep rich explanations of this social collaborative phenomenon. By far, the majority of the research reviewed was designed to gain an understanding into the attributes of PLCs, how they are developed in schools, the link between PLCs and school improvement or reform, or how to sustain the learning community. A compilation of the research reports reviewed can be found in Appendix A.
A Historic Look at Professional Learning Communities

The Call for Reform

With the release of *A Nation at Risk*, the National Commission on Excellence in Education (1983) provided a dismal picture of the state of education in America as it proclaimed: “The educational foundations of our society are presently being eroded by a rising tide of mediocrity” (p. 5). As a result of the report, school reform initiatives began to take shape across the United States (Cohen & Hill, 2001; DuFour & Eaker, 1998; DuFour, DuFour, & Eaker, 2008; Hord, 1997). The “excellence movement” that followed failed to provide new direction, but instead, required schools to simply do more—more days, more hours, more credits, more rigorous courses, more homework, more frequent testing, and more for teachers (DuFour et al., p. 34). While this movement sought to move American public schools to new heights of achievement, it ultimately failed. The top-down mandates for improvement “tended toward standardization, increased reliance on rules and regulations, and detailed specifications of school practices at the expense of local autonomy” (DuFour et al., p. 35).

A new round of reform initiatives was soon to follow that sustained the imperative for change in American schools. In 1989, President George H. W. Bush held an education summit with the nation’s governors, which led to the development of “Goals 2000.” Six national educational goals, designed to initiate reform in American schools, were proposed as a result of the summit (DuFour & Eaker, 1998). The restructuring movement that followed focused on developing national goals and standards as well as “providing site-based local autonomy to achieve these goals” (DuFour et al., 2008, p. 35). Cohen and Hill (2001) reported that despite the enactment of new standards and the effort
to hold schools accountable for the performance of students, problems with reform efforts and anxiety about their impact continue to grow until the present. While accountability was called for, there was “little consensus on what standards should be used to evaluate student performance” and “specific incentives or sanctions used to motivate students, teachers and administrators (were) yet to be clarified” (Newmann, 1991). The quest for successful and sustainable reform became an issue for schools and school districts around the country. Fullan (2006) posited that reform efforts, even those with “millions of dollars and political will behind them… have failed to make much of an impact in the classroom” (p. 2). Fullan goes on to conclude that transformation of schools will come only through systems change.

As many schools and school districts began to explore effective schools research and the related school improvement process, school change became a center of focus (Hord, 1997). Hord described the prevalent response of many schools and school districts as part of “a quick fix mentality” that led to many “schools being poorly prepared for their plans for change and therefore implementing change in a superficial and less-than-high-quality way” (p. iv). Six valued outcomes of restructuring were outlined by Newmann (1991) as: authentic student achievement, equity, empowerment, communities of learning, reflective dialogue, accountability, and structure and culture. Barth (1990) described many of the cries for reform as having “a vision of school as a place where students learn and adults teach, where the role of educators is to serve, not be served” (p. 46). Barth called for developing a learning community for teachers because “only a school that is hospitable to adult learning can be a good place for students to learn” (p. 46). As educators muddled through many failed attempts at effective and
sustainable school change, the idea of professional learning communities began to emerge as a hopeful concept for transformation (DuFour & Eaker, 1998; Hord, 1997; Huffman & Hipp, 2003; Newmann, 1991, 1996).

With the enactment of No Child Left Behind legislation, the call for accountability was met with implications for funding tied to the success or failure in meeting Adequate Yearly Progress (No Child Left Behind Act [NCLB], 2001). NCLB has “compelled educators to examine what they do, how they do it and the effects it has on students” (Hord & Sommers, 2008, p. 58). In 2010, the Common Core Standards Initiative (2010) moved to the educational forefront as states work toward developing core standards in math and in English language arts and reading (ELAR) that would better prepare American students for college and/or career. Porter, McMaken, Hwang, and Yang (2011) asserted, “The Common Core standards represent considerable change from what states currently call for in their standards and in what they assess” (p114). With this initiative, educators were faced with the ongoing push for increase student achievement (NCLB) and the new call for curriculum realignment. Hipp and Huffman (2010) summarized the impact of the current demands on schools as follows:

With increased expectations for accountability in schools, concerns about administrator and teacher morale and retention, and the continuing challenge to address the needs of diverse and marginalized learners, the urgency of school reform calls school leaders to seek alternative ways to address these issues. (p. 1)

The question of how to bring about reform in the standards movement continues to be of primary concern to school personnel.
Research leads to the conclusion that school reform is more prone to occur if discussions about current practices include questioning what is worth continuing and the presence of shared purposes are created (Hipp & Huffman, 2007). The Center for Comprehensive School Reform and Improvement (2009) purposed that “in the context of school improvement, Professional Learning Communities (PLCs) shift the focus of school reform from restructuring to reculturing” (p. 1). Reculturing does not happen through fragmented attempts at change, but needs to be embedded within the daily work of educators (Hipp & Huffman).

From the review of the historical calls to school reform, the idea of professional learning communities has surfaced as a means for bringing about desirable and sustainable change. Before exploring the research and literature on professional learning communities, an examination of foundational theory and research that preceded the concept is necessary to support PLCs as a valid means of reforming a school from within. The roots of professional learning communities are discovered in bodies of literature from the business world as well as the world of academia.

The Roots of Professional Learning Communities

In order to understand the concept of professional learning communities, one must look at both research and theory from within and outside the realm of education. The concept of professional learning communities has roots that can be traced to literature that represents the work of individuals such as Judith Little (1982), Peter Senge (1990), Susan Rosenholtz (1989a, 1989b), and Etienne Wenger (1998). From these bodies of literature, the foundational concepts of professional learning communities were derived.
One branch of the literature that forms the roots of the PLC concept is found in research on the relationship between school improvement efforts and the relationships among teachers in the workplace (Little, 1982, 2006). In a focused ethnographic study of six urban, desegregated schools, Little’s (1982) seminal research examined school as a workplace and specifically considered “organizational characteristics conducive to continue ‘learning on the job’” (p. 325). The schools involved in the study were selected based on involvement in school-wide staff development and with varying ranges of success based on average achievement schools. Little (1982) found that professional development that is continuous in nature is more likely achieved when

- Teachers engage in frequent, continuous, and increasingly concrete and precise talk about teacher practice.
- Teachers are frequently observed and provided with useful (if potentially frightening) critiques of their teaching.
- Teachers plan, design, research, evaluate, and prepare teaching materials together.
- Teachers teach each other the practice of teaching. (p. 331)

In schools that are more successful and adaptable, the Little (1982) found that “interaction about teaching is consciously and steadily focused on practice, on what teachers do, with what aims, in what situations, with what materials, and with what apparent results” (p. 334). By-products of such interactions included respect and fewer barriers to discussion among teachers. These findings represent foundational aspects of professional learning communities.
From Little’s research, we also discover other characteristics that would later be linked to PLCs. Little (1982) indicated that professional development that was considered to be relevant and integral to teaching was evidenced in successful schools. An avoidance of talk centered on teaching was found in less successful schools and appeared to be tied to lack of reciprocity among teachers in matters as small as lending/borrowing supplies. Another aspect of successful schools was the inclusive nature of the faculties in their collective work. In schools in which the staff demonstrated a high degree of collegiality, the principals were found to endorse and participate in the collegial work of the staff. Kagan (1990) described these effective schools as ones that “share a common professional culture,” which is demonstrated by the interactions of teachers on a daily basis (p. 46). One of the contributions of Little’s research was the revelation that teacher isolation was not conducive to school improvement, but that successful schools were often characterized by professional collaboration. Schmoker (2005) described this seminal research as the beginnings of making a case for learning communities. The influence of Little’s research continues to be found in literature on learning communities.

Another influential study conducted by Rosenholtz (1989a, 1989b) provided foundational support for the development of collaborative structures in the school setting. Rosenholtz’s study demonstrated that achieving high levels of collaboration among teachers benefited schools (Rozenholtz, 1989a, 1989b). One of the fundamental assumptions of the study was that “attitudes and behaviors among teachers are the direct results of the social organization of their workplace” (Kagan, 1990, p. 47). From the study of 78 elementary schools in Tennessee, Rosenholtz (1989a) identified schools as
high consensus schools and low consensus schools. In high-consensus schools, there was evidence of shared purposes and goals as well as collaboration in the development of policies and criteria for performance (Kagan). Collaboration in problem solving was found to be a key element for developing what Rosenholtz (1989a) referred to as a common technical culture. Low-consensus schools, in contrast, lacked the elements of collaborative practice that develops a shared technical culture. The result in low-consensus schools was an isolation of teachers in their classroom that leads to developing “insulating barriers around their working lives” (Rosenholtz, 1989b, p. 430). Supportive working conditions, shared values and goals, collaboration among teachers and administrators, and a focus on student learning emerged as common characteristics of successful schools. The attributes of high-consensus schools found in Rosenholtz’s research mirror many of the aspects of what would eventually be known as professional learning communities.

Rosenholtz’s research provided other insights that impacted the work on PLCs. Motivation and commitment are impacted more by the design and organization of work related tasks than by the personalities and qualities of the workers. Principals were identified as playing a significant role in shaping the organization of the school. In most schools that were successful academically, principal actions demonstrated a belief that teacher and student learning are closely related. Setting clear goals for student learning in successful schools was frequently found to be the result of “principals who enable and ensure frequent opportunities for discussion among colleagues about the school’s instructional priorities” (Rosenholtz, 1989b, p. 428). Rosenholtz’s data on the role of
principals in shaping an organization have also been influential in the development of the professional learning community concept.

An examination of the roots of professional learning communities also leads to the work of Etienne Wenger (1998) on communities of practice at the Institute for Research on Learning. Wenger, McDermott, and Snyder (2002) defined communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). Communities of practice were not a novel idea, but can be found throughout history from cavemen “gathered around a fire to discuss strategies for concerning prey, the shape of arrowheads, or which roots were edible” to guilds of artisans found in the Middle Ages to parents at soccer games discussing parenthood (Wenger et al., p. 5). While they occur naturally in organizations, “leading knowledge organizations are increasingly likely to view communities of practice not merely as useful auxiliary structures, but as foundational structures on which to build organizations” (Wenger et al., p. 21). Through the work of communities of practice in driving strategies, solving problems, spreading best practices, and developing skills, value is added to the organization (Wenger et al.). Wenger et al. observe that participants share ideas, experiences, and knowledge that lead to new approaches to solving problems. For the long haul, communities of practice have been linked to developing capabilities of the organization and fostering professional development for participants (Wenger et al.).

The concept of communities of practice rings true with many aspects that are foundational in professional learning communities. Wenger et al. (2002) described “connecting the personal development and professional identities of practitioners to the
strategy of the organizations” as one of the most important aspects of communities of practice (p. 17). Growth experienced in communities of practice was tied to the development of value, both to the individuals and to the organization (Wenger et al.). Other inherent elements of communities of practice that are also foundational to professional learning communities include shared practice and purpose, trust, and mutual respect. These essential elements have been found to build both relationships and interactions that can lead to learning (Wenger et al.). Sergiovanni (2000) also described communities of practice as a “benchmark for defining how deep community is in a school” (p. 138). Wenger’s work on communities of practice provides insight into many foundational concepts attributed to successful professional learning communities.

Theories on learning organizations and systems thinking provide another powerful conceptual foundation for professional learning communities. Senge (1990) formulated a model of a learning organization encompassing five disciplines to bring about change in organizations: (a) Systems Thinking, (b) Personal Mastery, (c) Mental Models, (d) Building Shared Vision, and (e) Team Learning. Systems thinking has been described as the “backbone of organizational learning” that can lead from a bureaucratic sense of “power over to power through” (Snyder, Acker-Hocevar, & Snyder, 2008, p. 131). The development of learning organizations requires a change in mental models that can lead organizations away from past thinking of top down dominance to developing team learning and shared vision through collaboration (Snyder et al.). Senge, Kleiner, Roberts, Ross, and Smith (1994) proposed, “Every successful learning initiative requires key people to allocate hours to new types of activities; reflection, planning, collaborative work, and training” (p. 67). Senge’s work on learning communities is so foundational to
the development of the professional learning community concept that a closer
examination is warranted.

*Senge’s Five Disciplines*

Senge (1990) proposed five disciplines that afford “a vital dimension in building
organizations that can truly ‘learn,’ that can continually enhance their capacity to realize
their highest aspirations” (p. 6). From his monumental work, Senge provided a model of
a learning organization that has greatly impacted schools as the ideas have been
incorporated into the educational setting. The five disciplines are: (a) Systems Thinking,
(b) Personal Mastery, (c) Mental Models, (d) Building Shared Vision, and (e) Team
Learning (Senge).

Incorporation of systems thinking requires a conceptual framework developed to
enable members of the organization to view the larger system in a clearer way and thus
provide vision for more effective change (Fullan, 2006; Senge, 1990). In her interview
with Senge, Newcomb (2003) provided this quote:

Only by changing how we think can we change deeply embedded policies and
practices. Only be changing how we interact, can shared visions, shared
understandings and new capacities for coordinated action be established. (p. 1)

Systems thinking encourages teachers and administrators to look beyond their
own part of the school and see the larger system as a whole. In order for a learning
organization to thrive, individuals must have opportunity to grow as well. Senge (1990)
proposed that the capacity for learning within an organization can only be as great as the
learning of the individuals that make up the organization. The discipline of mental
models involves bringing assumptions to the surface for reflection and discussion that can
lead to shared understanding or putting aside those that stand in the way of the change process (Senge). Integration of systems thinking and mental models can lead to better mental models and also changes in thinking.

Building shared vision moves beyond dictating a mission statement that organization members would be expected to follow (Senge, 1990). Through dialogue and collaboration, individual visions can evolve into a shared vision of the future that “fosters commitment and enrollment rather than compliance” (p. 9). Just as evidenced in sports, teams can learn collectively. Dialogue is a key component of team learning which moves a group beyond the individual’s own understanding. By letting go of one’s own assumptions, viewing group members as colleagues, and having a group facilitator, dialogue can occur. The trust and relationships built through dialogue and discussion foster an atmosphere where teams with many points of view can consider complex issues. Within this framework, systems thinking is the means of integrating the disciplines as it allows the learning organization to consider the bigger system as they work collaboratively (Senge).

According to Hord (1997), a learning organization, as proposed by Senge, “emphasizes the importance of nurturing and celebrating the work of each individual staff person and of supporting the collective engagement of staff in such activities as shared vision development, problem identification, learning, and problem resolution” (p. 12). Senge’s (1990) learning organization theory provided a conceptual framework for the development of learning communities in the school setting. As educators began to explore the idea of a learning community in schools, the term “professional learning community” emerged.
Early Research on Learning Communities

In addition to the foundational concepts discovered from the literature, several noteworthy studies were conducted during the 1990s that provided insight into the idea of professional learning communities in schools. The two studies presented provide two different paths to professional learning communities. The Center on Organization and Restructuring of Schools conducted a study on school restructuring that identified professional communities as a common aspect of many successful schools, while the Southwest Educational Laboratory conducted a study designed to look at professional learning communities from a conceptual standpoint. From these studies, the concept began to take shape as a promising practice for schools.

From 1990-1995, The Center on Organization and Restructuring of Schools (CORS) conducted a nationwide study of school restructuring. CORS analyzed data from 18 studies that involved over 1,500 elementary, middle, and high schools across the United States (Newmann, 1996). In one of the studies, the School Restructuring Study, twenty-four public schools (eight elementary, eight middle, and eight high schools) that had been involved in restructuring were selected to “develop new knowledge on how organizational features of schools can be changed to improve education for students” (Newmann, 1991, p. 1). Newmann (1991, 1994, 1996) and Kruse and Louis (1995) identified learning communities as valued outcomes or qualities of schools that were most successful with restructuring efforts. In successful schools, the professional communities discovered “ways to channel staff and student efforts toward a clear, commonly shared purpose for student learning” (Newmann, 1996, p. 7). A well-defined mission, collaboration, and collective responsibility for learning were also common
elements found in schools with strong professional communities. Newmann (1996) identified conditions that fostered the development of professional communities as:

- Shared governance that increases teachers’ influence over school policy and practice.
- Interdependent work structures, such as teaching teams, that encourages collaboration.
- Staff development that enhances technical skills consistent with the school’s mission.
- Deregulation that provides autonomy for school to pursue a vision of high intellectual standards.
- Small school size, which increases communication and trust.
- Parent involvement in a broad range of school affairs. (p. 8)

The data from the CORS study also indicated that teachers and administrators in strong professional communities “continually examine their practice and the conditions that affect their work, with the shared goal of improving student performance” (Kruse & Louis, 1995, p. 2). A sense of mutual support was also found among the members of strong professional communities (Kruse & Louis). Kruse and Louis identified the following elements of practice found in professional learning communities: reflective dialogue, deprivatization of practice, a collective focus on student learning, collaboration, and shared norms and values. Although the CORS study focused on restructuring efforts, the data that surfaced on professional communities came to be foundational for future research and implementation of professional learning communities.
The Southwest Educational Development Laboratory (SEDL) conducted a significant study of the concept of professional learning communities from 1995-2000 (Cowan & Capers, 2000; Hipp & Huffman, 2003, 2010; Hord, 1997, 2008; Kruse & Louis, 1995; Kruse, Louis, & Bryk, 1994; Leo & Cowan, 2000). The study, *Creating Communities of Continuous Inquiry and Improvement* (CCCII), provided deeper understanding of the attributes of a professional learning community and also insight into their creation (Cowan & Capers; Hord; Kruse & Louis; Kruse et al., Leo & Cowan). In the initial stage of the federally funded project, Hord (1997) identified five dimensions of professional learning communities from her review of literature that provided a framework for research. The five dimensions are: (a) shared values and vision, (b) shared and supportive leadership, (c) collective learning, (d) shared personal practice, and (e) supportive conditions (Hipp & Huffman; Hord, 1997, 1998, 2008; Hord & Sommers, 2008).

In the second phase of CCCII, the research included identifying sites, conducting interviews, and administering a questionnaire on the five dimensions. By phase three, final data were collected from twelve U.S. schools, six of which exhibited the characteristics of many of the dimensions of a professional learning community. The data analysis allowed the researchers to identify “exemplars and non-exemplars that promote or hinder school efforts under each of the dimensions of a PLC” (Hipp & Huffman, 2003, p. 5). A summary of the critical attributes that were found to promote the development of professional learning communities is found in Table 1. An in depth examination of the literature on the five dimensions of a professional learning community will also be presented in the following section. Hipp and Huffman described the findings
of this study as revealing “a new approach for school improvement that involves the entire professional staff in continuous learning and collaboration” (p. 9). From this study, a framework was developed to guide both the research and development of professional learning communities.
### Table 1

**Attributes of the Five Dimensions of Professional Learning Communities**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Critical Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Values and Vision</td>
<td>▪ Espoused values and norms</td>
</tr>
<tr>
<td></td>
<td>▪ Focus on student learning</td>
</tr>
<tr>
<td></td>
<td>▪ High expectations</td>
</tr>
<tr>
<td></td>
<td>▪ Shared vision that guides teaching and learning</td>
</tr>
<tr>
<td>Shared and Supportive Leadership</td>
<td>▪ Nurturing leadership</td>
</tr>
<tr>
<td></td>
<td>▪ Shared power, authority, and responsibility</td>
</tr>
<tr>
<td></td>
<td>▪ Broad-based decision-making that reflects commitment and responsibility</td>
</tr>
<tr>
<td>Collective Learning and</td>
<td>▪ Sharing information</td>
</tr>
<tr>
<td>Application</td>
<td>▪ Seeking new knowledge, skills, and strategies</td>
</tr>
<tr>
<td></td>
<td>▪ Working collaboratively to plan, solve problems, and improve learning opportunities</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>▪ Peer observations</td>
</tr>
<tr>
<td></td>
<td>▪ Feedback to improve instructional practice</td>
</tr>
<tr>
<td></td>
<td>▪ Sharing outcomes of instructional practice</td>
</tr>
<tr>
<td></td>
<td>▪ Coaching and mentoring</td>
</tr>
<tr>
<td>Supportive Conditions</td>
<td>Relationships</td>
</tr>
<tr>
<td></td>
<td>▪ Caring</td>
</tr>
<tr>
<td></td>
<td>▪ Trust and respect</td>
</tr>
<tr>
<td></td>
<td>▪ Recognition and celebration</td>
</tr>
<tr>
<td></td>
<td>▪ Risk-taking</td>
</tr>
<tr>
<td></td>
<td>▪ Unified effort to embed change</td>
</tr>
<tr>
<td></td>
<td>Structures</td>
</tr>
<tr>
<td></td>
<td>▪ Resources (time, money, materials, people)</td>
</tr>
<tr>
<td></td>
<td>▪ Facilities</td>
</tr>
<tr>
<td></td>
<td>▪ Communication systems</td>
</tr>
</tbody>
</table>

Following this presentation of the roots of professional learning communities, an in-depth review of the literature and research on PLCs is presented. For the purpose of organization, the five dimensions of a professional learning community proposed by Hord (1997, 1998, 2008) will be utilized to synthesize the findings. In addition to the dimensions of professional learning communities, a review of the literature concerning the role of the principal leadership in developing and sustaining professional learning communities will be included. The theoretical framework that will guide the research study will then follow.

Dimensions of Professional Learning Communities

The term professional learning community (PLC) has been widely used in educational circles to represent various groups that are assembled to work together for a variety of reasons. These groups often included departmental and grade level groups that work on managerial tasks such as ordering books, coordinating schedules, and other organizational tasks (Hord, 2008). Even when the groups met for training, the focus was primarily on the teacher’s learning and skill development rather than on student learning (Stoll & Louis, 2007; Vescio et al., 2007). A shift in the paradigm of learning communities has led to models of professional learning communities that move beyond professional development and managerial tasks to “opportunities for intentional learning, preparing them to enable students to reach high standards” (Hord, 2008, p. 12). As shown in Table 2, Eaker, DuFour, and DuFour (2002) indicated that changes abound in professional learning communities when compared to traditional approaches to school. Five components of true research-based professional learning communities have been found to include: (a) shared beliefs, values and vision; (b) shared and supportive
leadership; (c) supportive conditions; (d) collective learning and application; and (e) shared personal practice (Hord, 1997, 1998, 2008).
<table>
<thead>
<tr>
<th></th>
<th>Traditional Schools</th>
<th>Professional Learning Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher isolation</td>
<td>Collaborative teams</td>
<td></td>
</tr>
<tr>
<td>Generic mission and belief statements</td>
<td>Mission statements clarify what students will learn, how it will be assessed, and how school will respond if not learned</td>
<td>Mission statements clarify what students will learn, how it will be assessed, and how school will respond if not learned</td>
</tr>
<tr>
<td>Vision statements, often developed by only a few, more like wish lists, and may be ignored</td>
<td>Research based vision statements developed through collaboration and provide blueprint for improvement</td>
<td>Research based vision statements developed through collaboration and provide blueprint for improvement</td>
</tr>
<tr>
<td>Goal statements that are random, focused on means rather than ends, may be difficult to assess</td>
<td>Goals stated with measurable performance standards linked to vision</td>
<td>Goals stated with measurable performance standards linked to vision</td>
</tr>
<tr>
<td>Culture focused primarily on teaching</td>
<td>Culture focused primarily on learning</td>
<td></td>
</tr>
<tr>
<td>Curriculum overload is common; teachers independently decide what to teach</td>
<td>Collaboration used to develop curriculum that is focused on student learning expectations</td>
<td>Collaboration used to develop curriculum that is focused on student learning expectations</td>
</tr>
<tr>
<td>Improvement decisions made by “averaging opinions”</td>
<td>Improvement decision made through collaboration and based on “best practices”</td>
<td>Improvement decision made through collaboration and based on “best practices”</td>
</tr>
<tr>
<td>Effectiveness of improvement strategies externally validated; an emphasis on teacher opinions of strategies</td>
<td>Effectiveness of improvement strategies internally validated based on student learning outcomes</td>
<td>Effectiveness of improvement strategies internally validated based on student learning outcomes</td>
</tr>
<tr>
<td>Administrators—“leaders”</td>
<td>Administrators—“leaders of leaders”</td>
<td></td>
</tr>
<tr>
<td>Teachers—“implementers”</td>
<td>Teachers—“transformational leaders”</td>
<td></td>
</tr>
<tr>
<td>School Improvement Plan focused on wide variety of issues; plan may be set aside after developed</td>
<td>School Improvement focused on fewer goals developed collaboratively and designed to affect student learning; plan is vehicle for change</td>
<td>School Improvement focused on fewer goals developed collaboratively and designed to affect student learning; plan is vehicle for change</td>
</tr>
<tr>
<td>Improvement initiatives follow latest trends/fads</td>
<td>Improvement initiatives tied to vision statement</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Adapted from Getting Started: Reculturing schools to Become Professional Learning Communities, by R. Eaker, R. DuFour, and R. DuFour, 2002, National Educational Service.*
While PLC has become one of the buzzwords in educational circles, the concept is not just a fad (Schmoker, 2005). Schmoker asserted, “On the contrary, it may represent the richest, most unprecedented culmination of the best we know about authentic school improvement” (p. 136). This strong assertion was substantiated throughout the literature on professional learning communities. In order to gain greater understanding to this popular concept, an analysis of the research and literature on PLCs will now be presented. Hord’s five dimensions of professional learning communities will be utilized as a means of organizing the data. The research and popular literature reviewed provided insight into the characteristics of schools that are immersed in the development, implementation, and sustaining of PLCs. An overview of the research reviewed, including type of research approach and type of sample, can be found in Appendix 1. The five dimensions provided the lens for uncovering the characteristics of successful PLCs as found in literature

*Shared Beliefs, Values, and Vision*

Senge (1990) stated, “You cannot have a learning organization without shared vision” (p. 209). Shared beliefs, values, and vision imply more than a mission statement that is handed down to a learning group. A vision statement imposed upon a group by the school leader does not provide the impetus to move the group forward in meeting its goals, according to research (DuFour & Eaker, 1998; DuFour, DuFour, Eaker & Karhanek, 2004; Pankake & Moller, 2003; Senge, 1990). Developing a vision that is “characterized by an undeviating focus on student learning” has been identified as a “hallmark of a true professional learning community” (Pankake & Moller, p. 8). This focal point on student learning has been confirmed by research as central to the beliefs...
and vision of schools implementing professional learning communities. (Bezzina, 2008; Boyd-Dimock & Hord, 1994; Cawalti, 2003; Cowan, 2010; Eaker & Keating, 2008; Hipp & Huffman, 2010; Hord, 1997; Huffman, 2003; Kruse & Louis, 1995; McLaughlin & Talbert, 2006, 2010; McREL, 2003; Olivier & Hipp, 2010b; Pankake and Huffman, 2010; Roundtree & Hipp, 2010; Underwood, 2007). Barth (2005) suggested, “A most fundamental best practice in a professional learning community is to promote the qualities and dispositions of insatiable, lifelong learning in every member of the school community—young people and adults alike—so that when the school experience concludes, learning will not” (p. 119).

Implementation of the five dimensions of a professional learning community was found to lead to a paradigm shift from a focus on teaching to a focus on learning (Eaker & Keating, 2008). From Senge’s (1990) work, a vision leads to the collective courage to take risks, to new thinking, and serves as a rudder for direction. Shared beliefs and vision impact the ways in which the teachers work individually and together toward common goals. Printy and Marks (2006) found that when teachers and principals share the belief of providing an excellent education for their students, “the schools do not undertake innovation purely for the sake of change” (p. 131). From their review of literature on teacher professional learning, Oper and Pedder (2011) noted evidence of reciprocity between collective beliefs and school practices:

That is, school practices can and do enable collective beliefs, whereas collective beliefs can also result in more enabling school-level practices and structures. In this way, the collective capacity of the school affects collective goals and
enabling structures for organizational growth that affect, and are affected by, collective norms and practices. (p. 393)

Researchers (Graham, 2007; McLaughlin & Talbert, 2006) concluded that shared language and understandings arise from a common set of values and vision. The presence of this common language and understanding is noted in schools that demonstrated a greater measure of a professional learning community (Louis et al., 1996). Hord (2008) asserted that a shared vision guided the work of a learning organization as they considered changes and improvements that were essential for greater student learning. From the work of the Center on Organization and Restructuring of Schools research, Huffman (2003) found that shared vision and collective beliefs provided a foundation on which “informed leadership, staff member commitment, student success, and sustained school” can emerge (p. 32).

Eaker and Keating (2008) stated, “When schools passionately and sincerely adopt the mission of ensuring high levels of learning for all students, they are driven to pursue fundamentally different questions and work in significantly different ways” (p. 15). As a result of this change in thinking, research on schools implementing professional learning communities has found an increase in student achievement (Andrews & Lewis, 2007; Cohen & Hill, 2001; Hipp & Huffman, 2010; Hord & Sommer; 2008; McLaughlin & Talbert, 2010; Vescio et al., 2007). Teachers working in professional learning communities utilized systems thinking that built capacity for creating change in school beliefs and vision that impacted students in a positive way (Hord, 1998; Senge, 1990). DuFour et al. (2004) posited that schools “developed a shared sense of the school they hope to become to better fulfill the purpose of learning for all” (p. 3). Throughout the
research, shared vision was linked to affirmative impact on student learning and achievement.

Developing a shared purpose, values, beliefs and vision has also been found to increase the efficacy of teachers and administrator (Hipp & Huffman, 2010; Olivier & Hipp, 2010a, 2010b; Roundtree & Hipp, 2010; Sergiovanni, 2000). Efficacy is defined as the power to produce a desired result. In their study, Roundtree and Hipp noted, “Creating a sense of hope in the adults motivates them to develop and maintain confidence and high expectations for increasing student achievement” (p. 114). When top down power is exchanged for empowering administrators, teachers, parents, and students based on shared beliefs and purposes, individual and collective efficacy is developed (Sergiovanni). Sergiovanni puts forward the following factors that contribute to teachers’ sense of efficacy, motivation, and commitment: supportive school climate; presence of shared values and decision making; and purpose-driven culture based on shared beliefs and accountability. These factors have been demonstrated in schools involved in professional learning communities (DuFour & Eaker, 1998; Hord 1997, 1998, 2008; Huffman & Hipp, 2003, Little, 2006; Louis et al., 1996; McREL, 200; Roundtree & Hipp).

The process of developing shared vision and beliefs does not happen automatically, but requires the intentional effort of the learning community members. Huffman (2003) reported that in professional learning communities that were considered more mature, educators “understand the deep need to develop a vision” and have the capacity to “connect it with important overarching concerns such as goals for student achievement, school improvement, and lifelong learning” (p. 28). In contrast, less mature
PLCs often struggled with getting everyone involved in the process or were impeded by the “principal’s failure to recognize the importance of a vision to guide the school” (Huffman, p. 28). Wells and Feun (2007) reported that resistant and negative individuals (or groups), the lack of administrative direction, and inadequate time allowances presented stumbling blocks to successful professional learning communities in the schools they studied. While professional learning communities produce valuable results in schools, they are not without hurdles that impede success.

In her research on professional learning organizations, Huffman (2003) found that while all of the five dimensions are foundational to the concept, shared vision was the most crucial. She stated, “It is critical, however, to understand that the emergence of a strong, shared vision based on collective values provides the foundation for informed leadership, staff member commitments, student success, and sustained school growth” (p. 32). Thus, the work of professional learning communities springs from this sense of shared vision and purpose.

* Shared and Supportive Leadership

Schools immersed in the professional learning community concept have utilized shared leadership and decision-making to bring about school improvement positively impacted the learning of students (Cowan, 2003; Fleming & Leo, 1999; Huffman & Hipp 2003). Such leadership did not resemble that of the factory model found in the early part of the twentieth century. According to research (Huffman & Hipp, 2003, 2010; Hord, 1997; Richardson, 2003), administrators participated in nurturing relationships within the school that allowed for shared leadership, shared power, shared authority, and shared responsibility. O’Malley (2010) concluded that “a principal who was willing to initiative
structure and share responsibilities” contributed to the development of a PLC. In their research, Hipp and Huffman (2007) reported:

Schools involved in sincere efforts to broaden the base of leadership to include teachers and administrators, to define shared vision based on student learning, and to provide a culture of continual support, are much more likely to make great strides in becoming learning organizations and addressing critical student needs.

(p. 130)

Distributed leadership was a means of fostering successful PLCs.

Boyd-Dimock and Hord (1994) described leadership as essential, but found that it came from many leaders, not just one source in schools with strong professional learning communities. The research of Printy and Marks (2006) supported this finding as they concluded that “principals alone cannot provide sufficient leadership influence to systematically improve the quality of instruction or the level of student achievement” (p. 130). In their case study analysis, Fleming and Leo (1999) reported that principals were serving alongside their teachers and working “elbow to elbow to meet to identify and meet the needs of their students” (p. 4). PLCs, when functioning at their best, have been found to “embody the most positive features of distributed leadership, bringing the energy and ability of the whole community forward to serve the best interests of all students” (Hargreaves & Fink, 2006, p. 128). The principal is not the authoritative manager in a PLC, but one who involves his/her staff in the decision making process (DuFour & Eaker, 1998). A synthesis of five case studies conducted by Louis, Marks, and Kruse (1996) revealed that principals in schools that were effectively implementing professional learning communities positioned themselves in the center of their staff rather
than on top of them. Incorporating leadership practices that utilize shared power has been found in research to create greater motivation, a sense of community, efficacy, trust, and even risk taking (Wahlstrom & Louis, 2008). Shared leadership also implies that principals provide guidance and resources needed for teachers and other staff members to make critical decisions (DuFour & Eaker, 1998).

Supportive leadership has been found in research (Boyd-Domick & Hord, 1994; Graham, 2007; Hord, 1997; Louis et al., 1996) to be necessary in order for the community to emerge as a professional learning community. Administrators have the critical opportunity to build the capacity of teachers and direct the focus of that capacity on student learning (Sergiovanni, 1990). Cowan (2010) identified three essential leadership responsibilities: communicating clear expectations, building capacity, and monitoring and reviewing. Research in schools has demonstrated that capacity building included “empowerment—a deliberate effort on the part of the district to provide the direction, support, resources, training, and other means to enable teacher to use their discretion successfully for kids” (Sergiovanni, p. 141). Hord (1997) found that leaders in schools immersed in PLCs provided “attention to staff who would share broadly in making decisions for the school and who would be supported by continuous staff development to ensure wise decision making” (p. 31). When strong leaders also facilitate teacher leadership, positive results are evidenced (Printy & Marks, 2006). Overall, research supported shared and supportive leadership as one of the pillars of successful professional learning communities.
Collective Learning and Application

As schools faced the challenge of meeting the needs of students in a diverse global society, change required learning in order for a transformation of attitude and practice to take place (Huffman & Hipp, 2003). Increasing the capacity for collective learning and application of learning is one of the critical elements of professional learning communities. Hord (2009) described the learning within PLCs as “a habitual activity where the group learns how to learn together continually” (p. 40). Collective learning has been found to promote seeking answers to questions about what students need to learn, how will we know it has been learned, and how will we act when students struggle (Cohen & Hill, 2001; DuFour, 2004; Lovett & Cameron, 2011). Fleming and Leo (1999) found that research, synthesis of data, and discussion of instructional and operational topics were visible in schools that were successfully implementing PLCs. Senge (1990) stated, “Team learning also involves learning how to deal creatively with the powerful forces opposing productive dialogue and discussion in working teams” (p. 237). In order to build strong professional learning communities that can impact student learning, collective learning was found to be essential (Hord, 1997, 1998, 2008).

In order to incorporate collective learning, the capacity for dialogue among the members must be fostered. The professional learning community is a democratic environment which “allows dissent and debate among its members, and this can result in increased understanding and learning of the members” (Hord, 1997, p. 37). Being open to innovation was found to be vital to create an atmosphere that promotes risk-taking by the members (Louis et al., 1996). Studies (Graham, 2007; Wells & Feun, 2007) revealed that initial conversations in learning communities focused on sharing resources, but
discussion of the critical issues of student learning were not found as often (if found at all) in the beginning stages of development of a PLC. In one middle school study, Graham (2007) discovered that as a sense of community developed, growth was seen in the substantive conversations and learning that took place in meetings. Collaboration among teachers and administrators, which focuses on identified student learning needs, has been found to be a key to bringing about effective change (DuFour, 2004; Hord, 1997, 1998, 2008; Huffman & Hipp, 2003; Louis et al., 1996). Other studies (DuFour, 2004; Graham, 2007; Kruse et al., 1994) have concluded that the development of a sense of community precedes shared practice.

When educators were learning together, new skills and strategies evolved as they questioned the status quo in search of best practices (DuFour & Eaker, 1998; Hord, 1997). It is important to understand that this team learning does not happen automatically by working together, but must be practiced (Senge, 1990). In his study, O’Malley (2010) found that teachers’ willingness to “transition from spectators to participants” and a desire to learn from their experience contributed to a successful PLC (p. 326). Louis, Marks, and Kruse (1996) described the collective work of teachers in their research on PLCs as “discussing instruction and curriculum in ways that promote individual student’s growth, development, and engagement in the core issues of a lesson, rather than focusing on activities or strategies that may be fun but, in the end, unproductive as learning tools” (p. 4). Kanold, Toncheff, and Douglas (2008) reported that in professional learning communities that are highly effective, “teams of teachers evaluate the effectiveness of instruction and curriculum by establishing student achievement goals” (p. 24). Collective learning builds capacity for the learning
organization to achieve the goals and results that are desired (Hord 1997; Louis et al., 1996; Senge, 1990).

**Shared Personal Practice**

Shared personal practice requires mutual respect and a development of trust (Cockrell et al., 1999; Huffman & Hipp, 2003). The work of professional learning communities has paved the way for teachers to implement more peer observations, sharing feedback and outcomes, and coaching or mentoring roles (Huffman & Hipp; Hord, 1997). Hord (2008) stated, “Research informs us about the significance of the coaching that educators use to support each other in deepening their learning and implementing new practices” (p. 13). In order for shared practice to be implemented, team members have to let go of mental models and build the capacity for change (Senge, 1990). DuFour (2004) posited that shared practice requires “team members to make public what has been traditionally been private—goals, strategies, materials, pacing, questions, concerns, and results” (p. 4). Collective learning leads to developing and testing new strategies that can be strengthened through shared reflection (DuFour & Eaker, 1998).

In order to incorporate shared personal practice, teachers and administrators must address the traditional practice of teacher isolation. Clinging to teacher isolation posed a “formidable barrier to those hoping to implement PLC concepts in their schools” (DuFour, Eaker, & DuFour, 2005, p. 18). A paradigm shift proved necessary to create a culture where shared practice was the new norm (DuFour et al.). Kruse, Louis, and Byrk (1994) found that professional learning communities in a school can actually “offer support and motivation to teachers as they work overcome the tight resources, isolation,
time constraints, and other obstacles they commonly encounter in today’s schools” (p. 4). Reeves (2005) contended, “Recognizing that organizational culture and structure will influence behavior, the leaders of professional learning communities balance the desire for professional autonomy with the fundamental principles and values that drive collaboration and mutual accountability” (p. 48).

Sergiovanni (2000) reported, “Within communities of practice, individual practices of teachers are not abandoned but are connected to each other in such a way that a single shared practice of teachers emerges” (p. 140). Other studies (DuFour, 2003, 2004; Kanold et al., 2008; Kruse et al., 1994; McREL, 2003; Wahlstrom & Louis, 2008) also found the need for a deprivatization of personal practice in order to do the work of professional learning communities. According research from McREL, “Shared practice and collective inquiry help sustain improvement by strengthening connections among teachers, stimulating discussion about personal practice, and helping teachers to build on one another’s expertise” (p. 2). In a national study, Wahlstrom and Louis noted that supportive teacher interactions in PLCs enabled the teachers to assume roles such as “mentor, mentee, coach, specialist, advisor, facilitator, and so on” (p. 463). In their study of teachers participating in PLC literature circles, Monroe-Baillargeon and Shema (2010) concluded that shared participation in a supportive environment fostered reflection on personal practice and the sharing of constructive ideas. True professional learning communities utilize shared practice to improve student learning.

**Supportive Conditions**

From their research, Huffman and Hipp (2003) concluded that supportive conditions are the “glue that is critical to hold the other dimensions together” (p. 146).
Supportive conditions found in schools implementing a professional learning community included both supportive relational conditions and supportive structural conditions (Hord, 1997, 2008; Hord & Sommers, 2008; Huffman & Hipp, 2003; Leo & Cowan, 2000). Relational conditions found to nurture the development of PLCs included trust, respect, caring relationships, recognition, celebration, risk-taking, and reflective dialogue (DuFour & Eaker, 1998; Hord, 1997; Hord & Sommers; Huffman & Hipp; Louis et al., 1996). Hord and Sommers stated, “Trust provides the basis for giving and accepting feedback in order to work toward improvement” (p. 14). Conditions that support and foster teacher leadership found in a meta-analysis on teacher leadership (York-Barr & Duke, 2004) are summarized in Table 3.
Table 3

Conditions that Foster Development of Teacher Leadership

<table>
<thead>
<tr>
<th>Conditions Fostering Teacher Leader Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School culture and context</strong></td>
</tr>
<tr>
<td>- School wide focus on learning, inquiry, and reflective practice</td>
</tr>
<tr>
<td>- Encouragement for taking initiative</td>
</tr>
<tr>
<td>- Expectation of team work and shared responsibility, decision making, and leadership</td>
</tr>
<tr>
<td>- Teachers valued as role models</td>
</tr>
<tr>
<td>- Strong sense of community among teacher that fosters professionalism</td>
</tr>
<tr>
<td><strong>Roles and Relationships</strong></td>
</tr>
<tr>
<td>- Colleagues recognize and respect teacher leadership</td>
</tr>
<tr>
<td>- High trust and positive working relationships both among teacher peers and with administrators</td>
</tr>
<tr>
<td>- Teacher leadership work central to teaching and learning process (as opposed to managerial tasks)</td>
</tr>
<tr>
<td>- Teacher-leaders and administrator-leader domains clearly defined including shared leadership responsibilities</td>
</tr>
<tr>
<td><strong>Structures</strong></td>
</tr>
<tr>
<td>- Providing adequate access to materials, time, and space for activities that facilitate teacher leadership</td>
</tr>
</tbody>
</table>

Supportive conditions or the lack thereof, impact the development of professional learning communities. In a study of five schools conducted by Louis, Marks and Kruse (1991) indicated that in schools that were less successful, leaders did not give adequate attention to the needs of teachers for improving classroom skills. The reduction of normal boundaries found between teachers and departments in schools resulted from efforts concentrated on reducing isolation of teachers, providing opportunities to develop the capacity of the staff, and building a caring, collaborative environment (Boyd-Domick, & Hord, 1994; Hord, 1997). In their study, Roundtree and Hipp (2010) discovered a “noticeable change in staff and student morale” when the staff was confident of needed support (p. 112). When supportive conditions are present, Leo and Cowan (2000) found that collegial relationships are fostered.

Structural conditions exhibited in mature professional learning communities included time and space for collaborative work (Hord & Sommers, 2008). Teachers often reported that time and the pressure to meet other demands of the job were stumbling blocks to PLC development (Hord & Sommers; Wells & Feun, 2007). Drawing from PLC literature and research, the Ontario Principal’s Council (2009), concluded, “Time for collaboration and teamwork is essential to establishing a school culture that supports a professional learning community” (p. 46). In order for schools to have successful learning communities, resources such as materials, finances, training, and people were found in research to be essential (Huffman & Hipp, 2003). Louis, Marks, and Kruse (1996) found that time set aside to meet and talk, both as teaching teams and as a staff, was critical for growth of PLCs. Proximity of people, consideration of the schedule, and common planning times were reported to be structural considerations that
impacted PLC success (Hord, 1997; Huffman & Hipp). Supportive conditions set the stage for the work of professional learning communities to happen.

The literature also revealed stumbling blocks that stood in the way of successful implementation and sustainability of professional learning communities. External and internal forces can undermine the greatest efforts at building conditions that are supportive for learning communities. District, state, or federal demands may stand in opposition or impede the work of learning communities. Giles and Hargreaves (2006) found that the greatest barrier discovered in the schools they studied was the standards movement. Internal forces such as negative individuals, scheduling complexities, and lack of resources are also hurdles. Implementation of PLCs impacted the building of capacity to “halt the evolutionary attrition of change by renewing their teacher cultures, distributing leadership, and planning for leadership succession” (Giles and Hargreaves, p. 152). Hipp and Huffman (2007) stated, “Schools that are operating as PLCs must foster a culture in which learning by all is valued, encouraged, and supported” (p. 122).

**Barriers to Developing and Sustaining Effective PLCs**

While the positive impacts of professional learning community practices are found throughout the literature on PLCs, the reality is that drawbacks exist as well. With a wealth of evidence from over a decade of research, one may understand why Schmoker (2005) referred to PLCs as “the most unprecedented culmination of the best we know about authentic school improvement” (p. 136). Developing and sustaining PLCs may appear to be the cure-all, but the development of PLC practices requires much significant change for traditional school staffs. Schools that are not as successful with PLCs may struggle most with the need to re-culture the organization (McLaughlin & Talbert, 2001).
Oper and Pedder (2011) stated, “Creating systems, supports, and norms that encourage both individual and organizational learning and getting the balance between internal and external resources of learning are difficult for most schools” (p. 392). Translating the work of PLCs into change in practice is both complex and essential. As noted by Cowan (2010), “change efforts that do little or nothing to affect what occurs in classrooms will have little or no effect on student achievement” (p. 67). Building PLCs that will bring about change in the classroom and thus student achievement is challenging due to the amount of work, the time involved, and the culture changes that are necessary (Fullan, 2006; Wells & Feun, 2007; Wells & Keane, 2008).

Beyond the development of PLCs, one of the great challenges faced by schools involved in the implementation of the PLC process is sustainability (Olivier & Hipp, 2010b; Richmond & Manokore, 2010; Roundtree & Hipp, 2010; Wells & Keane, 2008). Fullan (2006) noted, “Professional learning communities will not be sustained unless the district and other levels of the system actively foster and maintain their development (p. 88). In one study, Maloney and Konza (2011) found that the sense of shared vision perceived initially waned as the group faced challenges. The researchers noted, “When differences in philosophical perspectives arose, some teachers did not appear to have the confidence to voice their opinions or challenge the more dominant views’ (p. 83).

While school leaders may build a collaborative culture and provide supportive conditions (e.g., time, scheduling, communication structures, proximity), the success of PLCs is not automatic. Huggins, Scheurich, and Morgan (2011) concluded, “Specifically when teachers are not being successful, situations may arise where, without the inclusion of outside assistance, collaboration simply cannot occur due to the lack of
sufficient pedagogical and content knowledge within the community” (p. 85). Thus, principals may need to be more actively “engaged in the instructional process and practices of teachers to ensure that teacher learning about student learning is indeed occurring” (Huggins et al, p. 85). Levine (2011) noted the need to include both experienced and newer educators as valued members of PLCs. In a case study of two schools in the midst of reform, Levine (2011) found more positive impacts of PLCs in the high school in which the collaborative work of PLCs evolved over time. This school developed resources such as “widely shared objectives; trust; some degree of continuity with the past; respect for experienced teachers; and traditions promoting morale” (Levine, p. 31). On the contrary, Levine noted, “When school leaders seek to engineer a ‘professional learning community’ too rapidly, however, schools may lack such resources, reducing experienced teachers’ willingness and ability to change” (p. 31).

As previously presented, barriers to the success of PLCs include external and internal forces that are can undermine even the best efforts at building conditions that are supportive for learning communities. An example of an outside force that impacts the work of PLCs would be the Common Core Standards Initiative (2010). Bausmith and Barry (2011) asserted, “…although PLC structures are perhaps necessary for effective schools, they are likely insufficient for meeting the new expectations of the Common Core State Standards” (p. 175). The argument offered by Bausmith and Barry is that pedagogical content knowledge cannot be adequately developed in a way that will impact student achievement in school-based PLC structures. Hiebert, Gallimore, Seigler (2002) addressed similar concerns:
There is no guarantee that the knowledge generated at local sites is correct or even useful. Teachers working together or teachers working with his or her students might generate knowledge that turns out to undermine rather than improve teacher effectiveness. Local knowledge is immediate and concrete but almost always incomplete and sometimes blind and insular. (p. 8)

Bausmith and Barry concluded that “externally developed, research-based, and standards-aligned examples of instructions would be beneficial…” (p. 176).

**Summary of Literature on Professional Learning Communities**

Throughout the review of research on professional learning communities, the presence of the Hord’s five dimensions were documented as leading to the successful development, implementation, and sustaining of PLCs. The literature provided data to support this framework for PLCs. Professional learning communities were described from those in the early stages of development to those who were fully implementing the concept. Much of the research involved examination or discovery of the presence of shared beliefs, values and vision; shared and supportive leadership; supportive conditions; collective learning and application; and shared personal practice. Although different terminology or lists of key components were found in the literature, there was general consensus about the essential attributes of PLCs and the promise of a positive impact in schools. Research findings were primarily from descriptive or exploratory studies focused on the presence of the PLC attributes, but there was little research on how to begin implementation or develop sustainability. From this review of literature, insight into the attributes that constitute successful PLCs was the primary finding.
The Role of the Principal

As school leaders, principals play a key role in the success or failure of professional learning community development. Leaders “matter in the creation and long-term maintenance of professional learning communities” (Sparks, 2005, p. 157). Hord (1997) stated, “It seems clear that transforming the school into a learning community can be done only with the leaders’ sanction and active nurturing of the entire staff’s development as a community” (p. 6). In contrast, lack of administrative support or direction has been identified as a stumbling block to the successful development and sustaining of learning communities (Wells & Feun, 2007). In order to gain greater understanding of the role of the principals in fostering the development and sustainability of PLCs, it was imperative to be informed by research and literature on the role played by the principal in PLC implementation.

Professional learning communities require a paradigm shift from viewing the principals as the “leaders” of schools and teachers as the “implementers” to a practice of principals serving as “leaders of leaders” (Hipp & Huffman, 2007, p. 22). Top-down management structures have been found in research to impede the development of shared leadership in schools (York-Barr & Duke, 2004). Senge (1990) described the new work of leaders in learning communities as becoming designers, stewards, and teachers. Research (Portin, Schnelder, DeArmond, and Gundlach, 2003) has shown that while principals are responsible for ensuring leadership in critical areas, they do not have to be the sole provider. Leadership teams have been found to be part of a powerful learning environment that provided a means of confronting issues that are critical to the school (Scribner et al., 1999). Researchers at McREL (2003) reported, “Collective decision
making results in increased morale, ownership, understanding about the direction and processes of change, shared responsibility for student learning, and a sense of professionalism, all of which help to sustain improvement efforts” (p. 1). A summary of conditions proposed by York-Barr and Duke (2004) that have been found to support the development of teacher leadership was presented in Table 3.

As found in the literature, shared vision and beliefs are foundational elements of successful professional learning communities. In effective professional learning communities, principals not only participated in the development of shared vision and beliefs, but also shouldered responsibility to promote and protect the shared vision (DuFour & Eaker, 1998; Fleming & Leo, 1999; Hord & Sommers, 2008). In a study of mature and less mature professional learning communities, Huffman (2003) found that “strong leadership by the principal provides faculty members the direction needed to develop the why, what, who, and how related to shared values and vision for their school” (p. 32). The principal plays a role in the development of the culture of the school and building trust that is crucial for successful implementation of the concept (Fleming & Leo; Scribner et al., 1999). Louis, Dretzke, and Wahlstrom (2010) posited, “…school leader preparation and professional development programs should continue to emphasize both the ‘softer’ (emotional) and ‘harder’ (behavioral) aspects of leadership” (p. 332). The researchers further noted that it is extremely difficult to disaggregate the relationships among teachers and the level of trust in the principal. Hord and Sommers maintained that when principals nurtured the human capacity of their staff, they contributed to the development of collegiality necessary to develop a shared vision.
Principals need to be cognizant of the varying levels of buy-in and implementation of PLC practices. Wells and Feun (2007) reported that high school teachers in their study expressed the need for help in dealing with those who were resistant to the collaboration that was needed to develop shared values and visions as well as for collected learning and shared practice. From their research on sustainable leadership, Hargreaves and Fink (2006) found that PLCs “can’t be forced, they can only be facilitated” (p. 129). Administrators have the opportunity to provide this help as they recognize that all of the staff may be in different stages of implementation (Ontario Principal’s Council, 2009).

One role of principals in the PLCs involved acting as an agent for change that shapes the culture of a school that can foster the development of a professional learning community (DuFour & Eaker, 1998; Hord & Sommers, 2008). As a change agent, principals have been found in research on PLCs to demonstrate seven Cs of leadership: communication, collaboration, coaching, change, conflict, creativity, and courage (Hord & Sommers, 2008). McLaughlin and Talbert (2006) asserted, “Because of their positional authority and control over school resources, principals are in a strategic position to promote or inhibit the development of teacher learning community in their school” (p. 56). Principals can impact the practices of PLCs by establishing policies, expectations, and structures that will support the collaborative work. In her study of communities of practice, Printy (2008) posited, “The expectations communicated by school leaders are critical influences on teachers’ participation in communities of practice, motivating them generally and cuing them that learning is required to attain the vision of the instructional programs” (p. 217). The Ontario Principals’ Council
concluded, “Transforming a school into a PLC can only happen when the principal is an advocate for collaborative action and actively supports the faculty’s development as a PLC” (p. 13).

Principals of schools with successful professional learning communities have served as change agents in many ways. Scheduling time for professional learning community development; providing resources and training necessary for the reform of teacher practice; incorporating opportunities for mentoring and coaching are roles that have been identified through research as falling under the principal’s realm of influence (Cawelti, 2003; DuFour & Eaker, 1998; Hord & Sommer, 2008; Payne & Wolfson, 2000; Snyder et al., 2008). Leithwood, Louis, Anderson, and Wahlstrom (2004) found that successful leaders set directions, developed people, and redesigned the organization. As change agents, successful leaders developed people by “offering intellectual stimulation, providing individualized support and providing appropriate models of best practice considered fundamental to the organization” (Leithwood et al., p. 9). Being an agent of change required that principals take action that will foster the development and sustainability of the professional learning community.

Collective learning and application represents another hallmark of schools that are operating as professional learning communities. From his extensive work on the role of the principal, Barth (2005) asserted that the principal must lead the way to bring about a community of lifelong learners. School leaders have the opportunity to provide supportive structures that lead to collective learning and build the capacity of the staff. Louis, Dretzke, and Wahlstrom (2010) concluded, “First, both teachers and those with formal administrative responsibilities need to acknowledge and act on the increased
importance of collective and shared work around instruction” (p. 331). They went on to propose that PLCs must be more than a program initiated by administrators to analyze data for the purposes of increasing test scores. Wahlstrom and York-Barr (2011) surmised, “When leaders attend to the context in which others around them learn, they strive to put in place structures and supports that are likely to be effective” (p. 22).

Just as PLCs are based on the belief that students can learn, principals must believe that teachers can learn as well (Barth). In order to build a community of lifelong learners, Barth posited that principals should model lifelong learning, build a staff of lifelong learners, place lifelong learning in sight, and enlist parental participation. Sparks (2005) concluded, “The quality of teaching, learning, and relationships in professional learning communities depends on the quality of leadership provided by principals and teachers” (p. 156). Findings from Hord’s (1997) research indicated that in order to develop “a culture of high intellectual quality,” school leaders in more successful schools “actively supported a culture of inquiry through constant scanning and bringing in of new ideas and people to help teachers reflect on their teaching practice and to develop increased skills” (p. 37).

From a five year study on leadership, Louis et al (2010) concluded, “School leaders can have a significant influence on teachers’ classroom practices through their efforts to motivate teachers and create workplace settings compatible with instructional practices known to be effective” (p. 103). Wenger et al. (2002) proposed that leaders (coordinators) must also be aware of the “waxing and waning of community energy” and be prepared to provide help to the community as it meets its challenging and often
changing demands. Thus principals are called upon to model, promote and monitor learning in the implementation of PLCs.

DuFour and Eaker (1998) remind principals of the difficulty involved in transforming schools into professional learning communities. While change initiatives bring about discomfort, anxiousness, and even conflict, the task is not impossible (DuFour & Eaker). Research (DuFour & Eaker; Hord & Sommer, 2008; Louis et al., 1996; Wells & Feun, 2007) has shown that political agendas, as well as internal and external forces, that seek to diminish the value of the work of PLCs surfaced and had to be faced by the principal. Moving beyond the traditional practice of teacher isolation posed an internal force that impacted PLC development. Snyder, Acker-Hocevar, and Snyder (2008) indicated that teams needed both knowledge and skills in order to “overcome our traditions and training to work alone, teams need knowledge and skills for working together” (p. 252). Additional barriers to developing PLCs were identified by Sparks (2005) as follows:

- A lack of clarity regarding values, intentions, and beliefs;
- Dependence on those outside the school for solutions to problems; and
- A sense of resignation that robs educators of the energy that is essential to the continuous improvement of teaching, learning, and relationships in schools. (p. 162)

Administrators play a crucial role in focusing the school on issues and problems that can be addressed for school improvement in collaborative working groups (McLaughlin & Talbert, 2006).
Research has also supported principal’s leadership as either facilitating or impeding the development of a professional learning community (Graham, 2007; Huffman & Hipp, 2003; Hord, 1997; Scribner et al., 1999). Roles identified as facilitating the school’s implementation included being a role model in the process, motivating teacher learning, sharing leadership, and providing supportive structural conditions (Fleming & Leo, 1999; Graham; Hord & Sommer, 2008; Ontario Principal’s Council, 2009; Payne & Wolfson, 2000). When principals adopted a hands-off approach to the process or failed to create norms concerning collective and continual learning, the impact on development of professional learning communities was negative (Hord, 1997; Scribner et al.). Hord (1997) emphasized the need for leading from the center rather than from the top as follows:

To summarize, leading from the center requires being at the center—a physical presence with accessibility the key. Second, leading from the center means giving up some of the expected leadership behaviors (such as being authoritative, or always running the meetings) in favor sharing such behaviors with others. And third, individuals who lead at the center take advantage of every opportunity to stimulate conversations about teaching and learning, to bind faculty around issues of students and instruction. (p. 35)

The role of principals in the development and sustaining of professional learning communities is broad. Principals in schools with successful learning communities have provided opportunities for developing a culture within a school that led to the incorporation of the five dimensions of a professional learning community (Hord & Sommer, 2008). Sparks (2005) asserted, “Leaders also matter because they, along with
others, shape a school or school system’s structure and culture in ways that promote learning, collaboration, and environments in which all members of the community feel cared for and respected” (p. 157). Research (Fleming & Leo, 1999; Hord & Sommers; Huffman & Hipp, 2003) has demonstrated that establishing conditions that promoted collegial learning and practice tied to a strong sense of shared vision builds the capacity of schools to foster greater student learning.

The principal can also play a vital role in sustaining professional learning communities. Hargreaves and Fink (2006) found that building sustainable leadership required building depth, breadth and length. Building distributed leadership can foster PLCs to be sustained even after a principal leaves. Hargreaves and Fink state:

Sustainable leadership develops diversity, resilience, and human capacity within an organization. It enables people to adapt to and prosper in their increasingly complex environment. (p. 172)

While the role of the principal appeared critical to the successful development and sustaining of a professional learning community, the principal’s leadership was not enough. When schools depend primarily on the principal to be the visionary, the motivator, and the leader of change, “their efforts to improve will continue to be characterized by stops and starts as leaders come and go” (DuFour, Eaker, & DuFour, 2005, p. 24). Senge, Kleiner, Roberts, Ross, and Smith (1994) posited, “At its heart, this traditional view of leadership is based on assumptions of people’s powerlessness, their lack of personal vision and inability to master the forces of change, deficits which can be remedied only by a few great leaders” (p. 34). One of the basic premises of the PLC concept is the idea of developing shared leadership that moves beyond the need for the
principal to carry leadership on his/her back alone (DuFour et al., 2005; Hord, 1996, 1997, 2008). Shared leadership requires a new way of thinking and a new culture that believes in collective and collaborative processes rather than the traditional view of charismatic hero leaders. McLaughlin and Talbert (2001) found that effective principals “empower and support teacher leadership to improve teaching practice” (p. 118). In successful PLC implementation, “leadership should be widely dispersed throughout a school, and thus developing the leadership potential of all staff members is imperative” (DuFour et al., p. 23).

*Summary of the Principal’s Role*

Throughout the literature reviewed on professional learning communities, the principal was found to be a link to the successful implementation of the concept. The principal served as a leader of leaders to develop a shared vision that leads to collective learning, shared practice, and shared leadership (Hord, 2008). Ensuring that supportive conditions are in place that will foster the development and the sustainability of the professional learning community falls under the principal’s umbrella. When describing strong professional learning communities, Hargreaves and Fink (2006) concluded:

> They do not require heroic principals, but principals who can help create a culture in which leadership is distributed in an emergent and even an assertive way, so that the community engages in evidence-informed and experience-grounded dialogue about the best means to promote the goals of deep and broad students learning for all. (p. 267)

While the principal’s role is portrayed as crucial, little evidence of a focused look at the principal was found in the review of literature. The studies reviewed included the
principal’s impact, but most of the research was designed to identify the attributes of PLCs as a whole.

Theoretical Framework

Professional learning communities have been extolled throughout literature as powerful tools in building the capacity of educators to transform their schools (Andrews & Lewis, 2004, 2007; Cowan, 2003, DuFour, 2003, 2004, 2007; DuFour & Eaker, 1998; DuFour et al., 2008; Eaker et al., 2002; Hargreaves & Fink, 2006; Hipp & Huffman, 2003, 2007; Hord, 1997, 1998, 2008; Hord & Sommers, 2008; Leo & Cowan, 2000; Louis et al., 1996; Newmann, 1991, 1994, 1996; Olivier et al., 2003). With the term so prevalent in educational circles today, many educators have labeled any group, committee, or team in a school as a PLC. Thus, finding a means of examining the components of learning communities was necessary. Before identifying a theoretical framework to guide the research, an understanding of the role of the framework was indispensable.

Anfara and Mertz (2006) defined a theoretical framework as “any empirical or quasi-empirical theory of social and/or psychological processes at a variety of levels (e.g. grand, mid-range, and exploratory) that can be applied to the understanding of the phenomenon” (p. xviii). Theory has been described as telling a story that provides “insights and broadens your understanding of the phenomenon” (Anfara & Mertz, p. xvii). Thus the role of theory is to serve as a lens for researchers as they move through their research (Anfara & Mertz; Henstrand, 2006). Fowler (2006) proposed a sieve as another metaphor for a theoretical framework. The sieve serves to filter data like sand and leave behind the rocks that are relevant to the research.
Bettis and Mills (2006) provided a valuable explanation of the role of the theoretical framework in research:

The purpose of a theoretical framework is to make sense of the data, to provide some coherent explanation for why people are doing or saying what they are doing or saying. It is meant to move the research project beyond the realm of the descriptive into the real or the exploratory. It is not meant, however, to be a straitjacket into which the data is stuffed and bound. (p. 68)

Theoretical frameworks guide a study by influencing the development of research questions, sample selection, and data analysis (Bettis & Mills; Fowler, 2006; Henstrand, 2006; Tashakkori, & Teddlie, 2003). Understanding that a theoretical framework is not a perfect means of viewing and analyzing data is also important for the researcher to remember (Anfara & Mertz, 2006; Fowler). The researcher must be willing to question and even suggest refinement of the framework (Fowler). Determining the framework that will guide a research study proved to be a critical element of the research process.

From the review of literature on professional learning communities and the role of principal leadership, two related theoretical frameworks, both grounded in the conception of learning communities, surfaced. First, looking outside of educational theory, Senge’s (1990) work and research on learning communities offered a lens for the examination of professional learning communities and the role of the principal. A second framework, Hord’s (1997, 1998, 2008) five dimensions of a professional learning community was actually formulated from the work of Senge. Consideration of the two frameworks was merited in order to determine the theoretical framework for this research.
From the work of Senge (1990), a model of learning communities based on five disciplines was developed: (a) Systems Thinking, (b) Personal Mastery, (c) Mental Models, (d) Building Shared Vision, and (e) Team Learning. Senge posited that these five disciplines were present in organizations that are truly operating as learning organizations. Systems thinking necessitates the organizational members to view the larger system as a whole rather than looking at their own small piece of the organization. In developing the discipline of mental models, Senge asserted that reflection and discussion of underlying assumptions can lead to shared understanding or the putting away of assumptions that hinder organizational learning. Shared vision is built through collaboration rather than imposing a mission from the top down. Integration of systems thinking, mental models, and shared vision, team learning and personal mastery are able to be cultivated in the organization (Senge).

Senge’s (1990) five disciplines of a learning organization actually provided the foundation for the development of the five dimensions of a professional learning community developed by Hord (1997, 1998, 2008). The review of literature provided insight into the connections between the concept of learning organizations that arose from the business world and the concept as it has been implemented in a school setting. It was important to analyze Senge’s (1990) conceptual framework in order to have greater understanding of the work on PLCs in the educational setting. Examining PLCs through the sieve of the five disciplines could provide the framework necessary for studying professional learning communities and the role of the principal in their development and sustainability.
Five Dimensions of a Learning Community

After participating in a learning community that incorporated the disciplines promoted by Senge, Hord (1997) explored the concept in the school setting. As a result of her work with the Southwest Educational Development Laboratory (SEDL), Hord (1997, 1998, 2008) identified five dimensions found in effective professional learning communities: (a) shared values and vision; (b) shared and supportive leadership; (c) collective learning and application; (d) shared personal practice; and (e) supportive conditions. Shared vision and values are demonstrated by a focus on student learning that is strengthened by the learning of the PLC (Hord & Sommer, 2008). Shared leadership offers the opportunity for shared decision-making and authority that is enhanced by supportive structural and relational conditions for success (Hord & Sommer). Collective learning and application sets the stage for the professional learning community to be involved in shared practice that supports change and improvement for individuals and the organization (Hord & Sommer). The five dimensions also provided a framework for understanding the characteristics of a professional learning community.

After reviewing the historical development of professional learning communities and bodies of research on PLCs and the role of the principal, Hord’s five dimensions continued to rise to the surface as a lens for this study. Shared values and vision; shared and supportive leadership; collective learning and application; shared personal practice; and supportive conditions served as a filter for sorting and making sense of the wealth of literature reviewed for this study. The framework provided an understanding of professional learning communities that led to asking questions about gaps in the research that should be addressed in this study and in future studies.
As proposed by Tashakkori and Teddlie (2003), sampling and research questions stemmed logically from this theoretical framework. The categorizing and analysis of data was conducted through the sieve of these five dimensions. While the framework presented essential attributes of learning communities, the five dimensions also provided a lens for examining the role of the principal in developing and sustaining PLCs. Examining the principal’s role in developing a shared vision and values, in implementation of shared leadership, in promoting and enabling collective learning and shared practice, and in providing and developing supportive conditions provided insight into ways in which the principal fosters or hinders the development and the sustainability of PLCs. Thus, Hord’s five dimensions of a learning community offered a theoretical framework that moved the research “beyond the realm of the descriptive into the realm of the exploratory” (Bettis & Mills, 2006, p. 68).

Summary of the Chapter

Among the key dimensions of a professional learning community identified by research are: (a) shared beliefs, values and vision; (b) shared and supportive leadership; (c) supportive conditions; (d) collective learning and application; and (e) shared personal practice (Hord, 1997, 1998, 2008; Hord & Sommer, 2008; Huffman & Hipp, 2003; McLaughlin & Talbert, 2006; Pankake & Moller, 2003). The unwavering commitment to a focus on student learning was identified through research as central to the concept of a PLC (DuFour, 2004; Eaker & Keating, 2008; Hord, 1997, 1998, 2008; McLaughlin & Talbert, 2006, 2010; Stoll & Louis, 2007; Vescio et al., 2007). Evidence of the presence of the five dimensions in schools was shown through the literature review.
The review of literature pointed to the principal as one who wears many hats in implementation of the professional learning community concept. While research has shown the importance of the role of the principal in successful implementation of PLCs, a gap in the literature was found. Wells and Keane (2008) concluded, “While the literature exalting the promises and importance of PLCs increases, the road to actual implementation of a PLC is less clear” (p. 25). Part of that lack of clarity is in the specific ways in which the principal can foster or hinder the successful development and sustainability of professional learning communities. Research indicated that the principal could either foster or impede the implementation of PLCs. While principal support and leadership in the process was evident, questions about specific ways in which the principal can foster or hinder the PLC work continued to rise. What role does the principal play in cultivating shared vision and beliefs; shared and supportive leadership; collective learning and application; shared personal practice; and supportive conditions? Suggestions for how the principal could positively impact PLCs were found, but I found little empirical research devoted to specifically examining the role of the principal. Thus, the need to extend previous research by conducting a study focused on examining the role of the principal in developing and sustaining professional learning communities is warranted. A focused look at the ways in which PLCs are fostered or impeded by the roles of a principal could provide insight for future leaders as they seek to successfully implement professional learning communities.

Two conceptual frameworks concerning learning communities, Senge’s Five Disciplines and Hord’s Five Dimensions of Professional Learning Communities were considered to provide a lens for the gathering and analysis of data. Although both
frameworks offered a means of understanding and literature, Hord’s five dimensions provided the best lens for filtering the research on professional learning communities. The utilization of the theoretical framework in developing research questions, determining sampling procedures, and analyzing data will be presented in Chapter 3. Chapter 3 will now provide an overview of the mixed methods research approach designed to address the findings of Chapter 2.
CHAPTER 3

METHODOLOGY

Introduction to the Chapter

The purpose of this study was to examine the role of the principal in developing and sustaining professional learning communities in elementary school settings. The dimensions of PLCs and the supportive role of the principal were outlined in the review of literature. While researchers (DuFour & Eaker, 1998; Fleming & Leo, 199; Hipp & Huffman, 2007; Hord, 1997; Hord & Sommer, 2009; Huffman, 2003; Wells & Feun, 2007; York-Barr & Duke, 2004) have described the principal’s role as important for successful implementation and sustainability of PLCs, focused examinations of the role of the principal are lacking in the literature related to professional learning communities. Thus, this exploratory, sequential, mixed method case study was conducted using Hord’s (1997, 1998, 2008) Five Dimensions of a Professional Learning Community as the theoretical framework to address the gap in the literature.

Considering the purpose of this study was to examine the role of the principal in developing and sustaining professional learning communities in elementary school settings, Chapter 3 describes the methodology that was employed in order to achieve this purpose. Included in this chapter is a presentation of the type of research design as well as the rationale for the design choice. Details about the role of the researcher, the selection of the sample, data collection and analysis strategies, and the instrumentation employed are provided. An explanation of how the quantitative and qualitative approaches worked together to achieve the purpose of the study is discussed. I also describe for the reader of the methods that were utilized to ensure the trustworthiness of
the findings. The chapter concludes with a summary of the methodology utilized for the research.

**Type of Design**

To achieve the purpose of the study, an exploratory, sequential, mixed method, multisite case study approach was employed (Johnson & Onwuegbuzie, 2004, Onwuegbuzie & Collins, 2007; Teddlie & Tashakkori, 2009; Yin, 2009). Because of the need to look for insights into the role of the principal in developing and sustaining professional learning communities, the research was exploratory in nature. Gay, Mills, and Airasian (2009) proposed that mixed methods research allows the “synergy and strength that exists between quantitative and qualitative research methods to understand a phenomenon more fully than is possible using either quantitative or qualitative methods alone” (p. 462). The research method was a quan→QUAL sequential approach, with priority or dominance given to the qualitative phase (Greene, 2008; Johnson & Onwuegbuzie). The mixed methods design achieved the purposes of development and triangulation (Caracelli & Greene, 1993; Greene, Caracelli, & Graham, 1989). A visual representation of the research design is provided in Figure 1.
Rationale for a Mixed Methods Design

Multiple data collection and analysis methods were considered in light of the purpose of the study. The exploratory, sequential, mixed methods case study approach was selected based on the strengths of the design to illuminate the phenomena. The rationale for the methodology decision that follows will examine the choice from several perspectives.

Methodology Follows Inquiry Purposes

The choice of methodology for this study came as a result of considering which research methods would best allow the purpose of the research to be achieved. In addressing the need for the method to serve to achieve the purpose of the inquiry, Greene (2008) concluded, “Consistent with all social science methodologies, there is a wide
agreement in the mixed methods community that methodology follows from inquiry purpose and questions” (p. 13). Johnson and Onwuegbuzie (2004) echoed this belief that “research methods should follow research questions in a way that offers the best chance to obtain useful answers” (pp. 17-18). Yin (2009) stated, “Mixed methods research forces the methods to share the same research question to collect complementary data, and to conduct counterpart analysis…” (p. 63). Therefore, it was important to set forth the research questions that guided the study before considering why a mixed method research method was the best approach to achieve the purpose of the study. The research questions which guided the study were as follows:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in the study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions

2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?

In order to address research question one, it was essential to have some understanding as to the fidelity to which the five dimensions of professional learning
communities were being implemented in the elementary school setting. The Professional Learning Community Assessment – Revised (Olivier & Hipp, 2010a), a quantitative instrument, provided data concerning the extent to which sample schools are implementing the five dimensions of professional learning communities (Olivier et al., 2003; Olivier & Hipp, 2010a). These data were necessary in order to address research question one and to guide the selection of schools for the case study in which the role of the principal in developing and sustaining PLCs was more deeply examined.

While the quantitative instrument provided some insight into perceptions of the principal’s role, qualitative methods were necessary to thoroughly explore research question two. By incorporating interviews and observations, I was able to gain insight into teachers’ and principals’ perceptions of the principal’s roles that contributed to developing and sustaining professional learning communities. Data from the PLCA – R instrument were also utilized to develop the interview protocols and an observation checklist for the qualitative phase. Having multiple data sources (PLCA – R, interviews, observations, and artifacts) and multiple methods (quantitative and qualitative) also provided a means of increasing the trustworthiness of the findings through triangulation (Anfara, Brown, & Mangione, 2002; Firestone, 1993). Thus, in order to address the research questions, the research design needed to provide multiple sources of data in order to select a sample and then to explore the role of the principal in schools implementing the PLC concept. Table 4 provides a summary of how the research questions were addressed by both the quantitative and qualitative data collection tools.
\textit{Table 4}

\textit{Research Question in Relation to Data Collection Sources}

<table>
<thead>
<tr>
<th>Research Question</th>
<th>PLCA Question</th>
<th>Interview Question (T=Teacher; P=Principal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in the study? (Quantitative and Qualitative):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Shared values and vision</td>
<td>Items 1-11</td>
<td>T: 1,6,9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1,6,9</td>
</tr>
<tr>
<td>b. Shared and supportive leadership</td>
<td>Items 12-20</td>
<td>T: 1,5,7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1,5,7</td>
</tr>
<tr>
<td>c. Collective learning and application</td>
<td>Items 21-30</td>
<td>T: 1,2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1,2</td>
</tr>
<tr>
<td>d. Shared personal practice</td>
<td>Items 31-37</td>
<td>T: 1,2,4,5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1,2,4,5</td>
</tr>
<tr>
<td>e. Supportive conditions</td>
<td>Items 38-52</td>
<td>T: 1,2,3,8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1,2,3,8</td>
</tr>
<tr>
<td>2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. What are the teachers’ perceptions?</td>
<td>Items 1-52</td>
<td>T: 1-10</td>
</tr>
<tr>
<td>b. What are the principals’ perceptions?</td>
<td>Items 1-52</td>
<td>P: 1-10</td>
</tr>
<tr>
<td>c. How do the perceptions of teachers and principals compare?</td>
<td>Items 1-52</td>
<td>T: 1-10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: 1-10</td>
</tr>
</tbody>
</table>
Mixing the Best of Both

A mixed methods design is considered the preferred design when the results from either the quantitative or the qualitative design can enhance the other (Creswell & Plano Clark, 2007; Teddlie & Tashakkori, 2009). This design “mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” without replacing either method with the other (Johnson & Onwuegbuzie, 2004, p. 17). Data collected included a quantitative survey instrument as well as qualitative data gathered through semi-structured interviews, observations, and through artifacts. By incorporating a mixed methods design, I was able to capitalize on the strengths of both approaches to minimize their inherent weaknesses (Teddlie & Tashakkori).

Administering the Professional Learning Community Assessment – Revised (PLCA – R) (Olivier & Hipp, 2010a) to eight schools allowed me to gather quantitative data about the five dimensions from teachers and principals as experienced in schools implementing the PLC concept. By utilizing the statistical strengths of quantitative research, I was able to select two schools that demonstrated a high level of fidelity to the five dimensions of PLCs. The results from the administration of the PLCA – R served to inform the sample section for the qualitative phase of the study. The data were also used to develop interview protocols and an observation guide for the qualitative phase and to triangulate data from both phases of the study.

Quantitative research alone was not sufficient to meet the purpose of the study. The quantitative data collection was limited to one instrument, the PLCA – R. While the PLCA – R data gave some insight into the role of the principal, semi-structured
interviews and observations provided a means for ferreting out details and probing deeper into teacher and principal perceptions concerning the principal’s role in developing and sustaining professional learning communities. By using semi-structured interviews with principals and teachers, I was able to gain greater insight into perceptions of the principal’s role. Observations provided a means of overcoming the weakness of self-reported data (PLCA – R and interviews) by seeing the reality of the phenomenon. While interviews, observations, and artifacts offered greater insight into the phenomenon, the data collections represented a subset of the school staff. Triangulation of the qualitative and quantitative data allowed me to overcome this weakness since the PLCA – R was administered to the teachers of each school.

A mixed methods approach produced insights or understanding into the role played by the principal in developing and sustaining professional learning communities that might not have been realized through the use of either quantitative or qualitative methodology alone (Greene, 2008). Through using mixed methods research, this study was able to address “more complicated research question and collect a richer and stronger array of evidence” than employing a single research method (Yin, 2009, p. 63). As Greene posited, “Better understanding of the multifaceted and complex character of social phenomena can be obtained from the use of multiple approaches and ways of knowing” (p. 20). Through utilizing a mixed methods approach, I was able to utilize the best of both quantitative and qualitative methods to achieve the purposes of the study.

Priority and Sequencing

Morgan (1998) described the use of the complementary strengths of quantitative and qualitative methods as a “division of labor” in the mixed methods research approach
In order to integrate the two methodologies, two decisions had to be made: priority and sequence (Morgan). The rationale for deciding on a quan→QUAL design follows.

To achieve the purpose of examining the role of the principal, the priority decision was with the qualitative phase of the study. It was through qualitative methods that I was able to conduct an in-depth probe into the perceptions of principals and teachers concerning the principal’s role in developing and sustaining PLCs. In the quantitative research phase, only a broad view of the role of the principal was gained. The data collected provided guidance for selecting the cases for the qualitative portion of the study, developing interview protocols and an observation checklist, and as a source for data triangulation (Caracelli & Greene, 1993; Greene, 2008; Greene et al., 1989; Morgan, 1998).

A sequential research design was necessary in order to allow the data from the quantitative phase to inform the development of the qualitative data collection (Caracelli & Greene, 1993; Greene, 2008; Greene et al., 1989; Morgan, 1998). The quantitative data provided insight into what should be explored in more depth in the qualitative phase. Data analysis from the PLCA – R was essential for selecting the cases for the qualitative research. In addition, the data analysis served the development of questions for the principal and teacher interviews and also provided guidance for conducting observations.

**Case Study Rationale**

Yin (2009) posited that the “distinctive need for case studies arises out of the desire to understand complex social phenomena” and “allow investigators to retain the holistic and meaningful characteristics of real-life events…” (p. 4). Case study research
allowed me to examine the principal’s role within the “real-life context” of PLCs (Yin, p. 18). Because focused examinations of the principal’s role were lacking in PLC research, utilizing case study research provided data for developing a rich, thick description of the principal’s role. Case study research was the preferred since I was “interested in insight, discovery, and interpretation rather than hypothesis testing” (Merriam, 2009, p. 42).

In order to achieve the purpose of the study, the choice of a multi-site case study provided a way to closely examine the role of the principal in developing and sustaining professional learning communities (Merriam, 2009; Yin, 2009). The choice of two elementary schools that demonstrated high levels of fidelity to the five dimensions of professional learning communities allowed for both cross-case and within-case analysis of data. Incorporating multiple sites that shared the same phenomenon but demonstrate variations in implementation provided a way to strengthen the findings of the study (Merriam; Yin).

Merriam (2009) defined a case study as “an in-depth description and analysis of a bounded system” (p. 40). In this study, the bounded system was elementary schools implementing the professional learning community concept. Using a case study approach allowed exploration of the principal’s role in settings that were actively involved in PLC implementation. Again, the multiple sites provided greater insight into and description of the roles of the principal in PLCs. Another rationale for the selection of case study research came from its heuristic nature which “can bring about the discovery of new meaning, extend the reader’s experience, or confirm what is known” (Merriam, p. 44). Because case studies are particularistic, descriptive, and heuristic, this methodology provided an excellent way to illuminate the phenomenon (Merriam).
Role of the Researcher

Identifying the role played by the investigator in any research is important to aid the reader’s understanding. In quantitative research, there is generally “little direct interaction between researcher and participants” (Gay et al., p. 115). Therefore, my role was not visible to the participants in the quantitative portion of the research due to the administration of the PLCA instrument through an online format. Participants were provided with a link to the online instrument through email correspondence. Since data were coded by school, I was able to ensure anonymity and confidentiality during the quantitative data collection and analysis.

In contrast, the role of the researcher in qualitative research is to act as an instrument of data collection (Gay et al., 2009; Merriam, 2009). I assumed the role of a non-participant observer as qualitative data were collected through observations of professional learning communities at work and through the analysis of artifacts. During interviews with principals and teachers, my role was to interact with the interviewees using an interview protocol in order to gather data on the participants’ perceptions of the role of the principal in developing and sustaining PLCs. Throughout the research process, my role included maintaining the confidentiality of the participants.

Disclosure of my role as a public school educator for over 25 years is also important for the reader. As a classroom teacher, a teacher leader, and a trainer in my school district, I have participated in and also trained colleagues in the practices of professional learning communities. My work as an educator led to my interest in developing and sustaining PLCs. While my personal and professional interest has led me
to pursue this research, it is important that I maintained the role of a researcher in order to ensure ethical procedures are followed.

The qualitative phase of the research required me to develop interview protocols and then identify codes and develop categories and themes from the data collected. As stated by Constas (1992), “…categories are created, and meanings are attributed by the researcher who, wittingly or unwittingly, embrace a particular configuration of analytical preferences” (p. 254). Throughout the data analysis, I recognized that my own biases could impact the process. Therefore, using the theoretical framework, the research questions, and the literature as a guide in this process was critical in avoiding personal bias in data analysis. Using a mixed methods approach also provided a means of overcoming any bias on my part through triangulation of data from multiple data sources.

Site and Sample

The population for the study was elementary school teachers and principals involved in the implementation of the PLC concept. Since implementation of professional learning communities was a criterion for participation, a non-probability sampling procedure was necessary to select participants (Gay et al., 2009; Merriam, 2009). Merriam spoke to the appropriateness of this sampling approach when she stated, “Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (p. 77). The purposive sampling procedures for the quantitative and qualitative phases are outlined below.
Quantitative Sampling Procedures

The initial phase of the study was designed to quantitatively determine the extent of the evidence of the five dimensions of a PLC in elementary schools (research question one). The sample for Phase 1 was a large county school district in a southern U.S. state that was purposefully selected due to a district-wide implementation of the PLC concept. Prior to selecting the district to serve as the sample, I gathered demographic data, achievement data, and explored information concerning the district’s implementation of PLCs. It was important to have an understanding of this context in order to decide on using this district for my study.

The school district began the implementation of PLCs in 2008. The commitment of the current Director of Schools to PLCs is indicated in the following statement from the school district’s vision document:

I will make it a priority to ensure that a viable, intensive, and active Professional Learning Community is developed and sustained at each of our schools. I am convinced that these vibrant PLCs will facilitate significant improvement of instruction, as educators enhance their teaching skills and knowledge together (Source: Executive Summary of the school district’s 2010 vision document: Building on Strength: Excellence for All Children).

Each school in the district is expected to be actively involved in the development and continuation of PLCs as a means of promoting teacher collaboration, adult learning, and ultimately student achievement. In order to gain a broader understanding of the context of the sample for this study, it was important to gather demographic information about the make-up and the achievement of the school district.
This public school district provides services for the third largest county in the state with a population of approximately 430,000 covering a geographic area of 2000 square miles. The student population in this district includes 56,516 students; 26,260 of which are elementary students. A comparison of the demographics of the school district’s student population to the population of the county it serves is presented in Table 5. The U.S. Census Bureau (2011) reported that 14.7% of the county population lives below the poverty level. In the school district, 42.8% of the students are identified as economically disadvantaged (as measured by participation in the free/reduced price meal program). Of the 49 elementary schools, 96% have been accredited by the Southern Association of Colleges and Schools (SACS). The student population has a distribution of 51.6% male and 48.4% female students. Individual school settings include urban, suburban, and rural communities. The demographic data presented here will serve as a means for comparing the two elementary schools selected to serve as cases for Phase 2 of the study to the context of the school district as a whole.
Table 5

Demographic Data of Students in the Participating School District and the County It Serves

<table>
<thead>
<tr>
<th></th>
<th>School District</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>56,516 students</td>
<td>432,226</td>
</tr>
<tr>
<td>African American</td>
<td>15%</td>
<td>8.8%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>NA</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian/Pacific Island</td>
<td>0.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>White</td>
<td>79.2%</td>
<td>83.9%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau (2011) and the website of the participating school district.

One impact of PLCs that has been noted in research is an increased focus on student learning. (DuFour et al., 2004; Hord, 2008; Louis, Marks, & Kruse, 1996; Stoll & Louis, 2007). The vision statement of the school district presents student academic development and achievement as their core mission. The commitment to students is described in the vision document as follows:

The [school district] will be a system where all students achieve at high levels and every school is a school of distinction. Children will begin their education at an early age, and high quality instruction, rigorous curriculum, and high standards will permeate the educational landscape from early education to graduation. Innovation and creativity will be the hallmarks of our school district: in teaching, in management and particularly in student learning. In short, we envision a future
where we will achieve academic excellence for all of our children (Source: the school district’s 2010 vision document: Building on Strength: Excellence for All Children).

Included among the priorities for students are high expectations and academic standards for all students, broad access to rigorous relevant instruction, and multiple options and pathways to graduation. To reach their vision, priorities for educators consist of deliberately developing strong effective principals; establishing a culture of teacher collaboration and leadership; providing quality instruction with a focus on student learning in every classroom every day; and maintaining high student expectations, standards and accountability.

Achievement data provide one means of measuring the success of this focus on student learning. The state in which the study was conducted employs a value-added system for reporting achievement growth as measured by the state achievement tests in the areas of math, reading/language, science, and social studies. At the elementary level, growth data was available for fourth and fifth grade students. As reported on the state website, the district’s fourth and fifth graders met or exceeded the three-year growth standard (growth standard = 0) in all four academic areas. Areas in which the state expectation were not met in the last three years included fifth grade math, reading/language, and science in 2010; fifth grade social studies in 2009; and fourth grade social studies and science in 2011.

Another means of measuring growth in achievement for this district was found in a comparison of the achievement of current eighth graders to their scores in third grade. As found in Table 6, the progress of students from third to eight grade has exceeded the
growth standard in all areas except Science. The growth of the district students was above the state average in all areas. Additionally, an increase in NCE percentiles occurred across the disciplines measured by state achievement testing.

_Table 6_

_Academic Progress Since Third Grade of Current Eighth Graders in Participating School District_

<table>
<thead>
<tr>
<th></th>
<th>Mean NCE Gain Relative to:</th>
<th>Mean Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Growth Standard</td>
<td>State</td>
</tr>
<tr>
<td>Math</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Reading/Language</td>
<td>0.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Science</td>
<td>-0.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1.5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Note. Academic progress presented is based on average scores of students as measured by annual state achievement tests.

After gaining insight into the context of the school district and its implementation of PLCs, the district was selected as for examining the principal’s role in developing and sustaining professional learning communities. In order to conduct research in the schools, permission had to be granted from the district’s research committee. This process involved the submission of a request to conduct research which included the intended purpose, data collection procedures, estimated time requirements, targeted population, value to the district and copies of all instruments, forms, and protocols. In February, 2011, permission was granted for conducting research in the school district. After receiving the district’s approval, an IRB Form A was submitted and approved by
the Institutional Review Board of the university for Phase 1 of the study. The IRB approval process included meeting requirements for insuring the research procedure complied with all regulations concerning research involving human subjects. All of the 49 elementary schools from this district were invited to participate in Phase 1 of the study and the process follows.

Participants in the Quantitative Phase

After obtaining permission from the research committee of the school district, the principals of each of the district’s 49 elementary schools were invited to participate in the study via letter and a follow-up email (See Appendix F). Responses were received from 17 principals (34.7%). Of the 17 responses, eight principals agreed that their schools would participate. Of the nine who elected to not participate, two principals explained that they did not consider the PLCs to be “typical” at their schools when compared to larger schools due to the fact that their faculties consisted of only one teacher per grade. Four other principals indicated they would not be able to participate due to pressing commitments such as piloting a new state teacher evaluation system, district initiatives, or state testing.

Communication with the principals from the eight participating schools was conducted via email for the remainder of Phase 1. I requested that principals forward an email to the teachers in their schools to provide information about the study and also to provide a link to the web-based instrument. When the web-based survey was accessed by participants, an explanation of the study including its inherent risks and benefits was presented prior to participants agreeing or electing not to proceed with the questionnaire.
A reminder email was sent to principals once during the data collection period. In this email, I also informed each principal about the current number of respondents from the school. From March 2011 until June 2,011 data were collected from 107 teachers.

The breakdown of teachers who completed the PLCA—R online is presented by school in Table 7. By finding the number of teachers at each school through resources provided by the school district, I was able to determine the number of participants versus the total number of possible participants (See Table 7). With these data, I was able to calculate the response rate at each of the eight elementary schools. The schools with the highest response rates were School 5 (61.4%), School 7 (45.8%), and School 8 (95%). All of the remaining five schools had response rates of less than 25%. Additional demographic information gathered from the teacher participants will be presented in Chapter 4 as part of the quantitative data analysis.
Table 7

Frequency Counts of Teacher Participants by School: Web-Based PLCA – R Administration

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Teacher Participants</th>
<th>Number of Teachers Possible</th>
<th>Percentage of Teachers Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>57</td>
<td>22.8%</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>39</td>
<td>20.5%</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>46</td>
<td>14.2%</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>53</td>
<td>16.9%</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>43</td>
<td>9.3%</td>
</tr>
<tr>
<td>6</td>
<td>35</td>
<td>57</td>
<td>61.4%</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>24</td>
<td>45.8%</td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>21</td>
<td>95%</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>339</td>
<td>31.6%</td>
</tr>
</tbody>
</table>

The eight participating schools represent student populations that vary in enrollment, socio-economic status, minority enrollment, and community setting (See Table 8). Three of the eight elementary schools (Schools 1, 4, and 6) have an enrollment greater than 1000. The enrollments of Schools 2 and 3 fall in the in the range of 600-700, while schools 5 and 6 have enrollments less than 300. School 4 is an intermediate school for students in grades three through five, while the Schools 1, 2, 3, 5, 6, 7, and 8 are K-5 settings. As found in Table 8, Schools 1, 2, and 4 are suburban schools, while Schools 3, 7, and 8 are urban schools. Two of the eight schools (Schools 5 and 6) serve communities that include a mixture of suburban and urban areas. Although the district
has several magnet programs at the elementary level, all of the eight participating schools are considered neighborhood schools.
### Table 8

**Demographic Data for Schools Participating in Quantitative Phase**

<table>
<thead>
<tr>
<th>School</th>
<th>Demographic</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School 1</strong></td>
<td>Student Population</td>
<td>1105*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>12%</td>
</tr>
<tr>
<td>Setting</td>
<td>Suburban</td>
<td></td>
</tr>
<tr>
<td><strong>School 2</strong></td>
<td>Student Population</td>
<td>664*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>63%</td>
</tr>
<tr>
<td>Setting</td>
<td>Suburban</td>
<td></td>
</tr>
<tr>
<td><strong>School 3</strong></td>
<td>Student Population</td>
<td>680*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>85%</td>
</tr>
<tr>
<td>Setting</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td><strong>School 4</strong></td>
<td>Student Population</td>
<td>1077*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>14%</td>
</tr>
<tr>
<td>Setting</td>
<td>Suburban</td>
<td></td>
</tr>
<tr>
<td><strong>School 5</strong></td>
<td>Student Population</td>
<td>804*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>30%</td>
</tr>
<tr>
<td>Setting</td>
<td>Suburban/Rural</td>
<td></td>
</tr>
<tr>
<td><strong>School 6</strong></td>
<td>Student Population</td>
<td>1033*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>29%</td>
</tr>
<tr>
<td>Setting</td>
<td>Suburban/Rural</td>
<td></td>
</tr>
<tr>
<td><strong>School 7</strong></td>
<td>Student Population</td>
<td>290*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>77%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>100%</td>
</tr>
<tr>
<td>Setting</td>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td><strong>School 8</strong></td>
<td>Student Population</td>
<td>283*</td>
</tr>
<tr>
<td></td>
<td>Minority Students</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td>Economically Disadvantaged Students</td>
<td>80%</td>
</tr>
<tr>
<td>Setting</td>
<td>Urban</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Student population based on Average Daily Membership as reported by the school district (Spring, 2011)
Qualitative Sampling Procedures

The PLCA – R data were analyzed at the school level in order to purposefully select the cases (i.e., two elementary schools) for the qualitative phase of the study. As proposed by Denzin and Lincoln (2000), the cases were selected to represent the population of elementary schools implementing the phenomenon (i.e., professional learning communities) with fidelity. Descriptive statistics of the PLCA – R data provided a means of measuring the strength of PLC practices in the participating schools (Olivier & Hipp, 2010a; Olivier et al., 2003).

The PLCA – R instrument is designed to provide a continuum for measuring implementation of the concept (Olivier et al., 2003). Rather than yielding one score for the entire instrument, means are calculated for each section of the PLCA – R. The mean and standard deviation of each of the six PLCA – R sections (dimensions) for the eight schools were compared in order to select two elementary schools demonstrating high levels of PLC implementation to serve as the cases for Phase 2 (See Table 18 in Chapter 4). Since the PLCA – R does not yield a single score, it was necessary to look for trends in the data in order to isolate two schools that seemed to rise to the top of the group. The process for using the data analysis to inform the selection of the cases for the qualitative research is now presented.

After completing the overall comparison of the data from the eight participating elementary schools, it was helpful to narrow the field and look more closely at the three highest means for each of the PLC dimensions. This provided a way to determine if any of the eight schools stood out from the rest. In this process, I first observed that the means from three schools (Schools 3, 7, and 8) were greater than 3.0 in all six dimensions
measured on the PLCA – R. Since means of greater than 3.0 are indicative of strong agreement in the practices, it seemed apparent that the selection of cases should come from these three schools. However, this observation alone did not suffice for making the decision. I then identified the school with highest, the second highest, and the third highest mean for each of the PLCA – R dimensions. From this analysis, I found that three schools surfaced above the rest: Schools 3, 7, and 8.

Although Schools 3, 7, and 8 stood out as the schools with more of the highest means than the other five schools, I concluded that other available data should be examined prior to making the final decision. Two types of data were utilized in this process. First, I looked at individual PLCA – R descriptors which were specifically indicative of the role of the principal in PLC work. Another area of data that warranted consideration in the decision was the response rate of the participants for each of the three schools. Comparing these data sources for Schools 3, 7, and 8 led to the final selection of the two elementary schools to serve as cases for Phase 2 of the study.

Due to the strength of PLC practices, as evidenced by the PLCA – R and also the response rates for these schools, School 7 and School 8 were selected to meet the objective of identifying schools with high levels of PLC implementation. While analyzing the data from eight elementary schools, it was easier to refer to the schools by number rather than by name. From this point forward, pseudonyms will be utilized for the two schools that will serve as cases for Phase 2 of the study of the two schools in order to provide greater ease for the reader. School 7 has been identified as Bradford Elementary School and School 8 was Campbell Elementary School.
Once the sites for the case studies were selected, it was necessary to solicit participants from within the participating schools. Principals at each site were asked to participate in both interviews and observations during the qualitative phase of the research. The research committee of the school district requires that all participation be voluntary. In order to meet that requirement, the principals at each of the two schools were asked to obtain a list of teachers who were willing to be interviewed. While the purposive sampling for interviews yielded interviewees that were representative of the teaching staffs, the selection process differed at the two elementary school sites.

Information about the 18 interview participants are presented in Table 9 by school. The teachers that were interviewed at Bradford Elementary (School 7) are identified as 1B, 2B, 3B, 4B, and 5B while the teachers from Campbell Elementary (School 8) are identified as 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C, and 9C.
Table 9

Demographic Information for Interview Participants by School Site

<table>
<thead>
<tr>
<th>Participant</th>
<th>Grade Level</th>
<th>Gender</th>
<th>Years of Experience as an Educator</th>
<th>Years of Experience at this School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bradford Elementary School (School 7)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>N/A</td>
<td>Female</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Assistant Principal</td>
<td>N/A</td>
<td>Female</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Teacher 1B</td>
<td>4th Grade</td>
<td>Female</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Teacher 2B</td>
<td>Kindergarten</td>
<td>Female</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Teacher 3B</td>
<td>Art</td>
<td>Female</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Teacher 4B</td>
<td>Third Grade</td>
<td>Female</td>
<td>8.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Teacher 5B</td>
<td>Third</td>
<td>Male</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td><strong>Campbell Elementary School (School 8)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>N/A</td>
<td>Male</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>Literacy Coach</td>
<td>N/A</td>
<td>Female</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Teacher 1C</td>
<td>Kindergarten</td>
<td>Female</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Teacher 2C</td>
<td>5th Grade</td>
<td>Female</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Teacher 3C</td>
<td>1st Grade</td>
<td>Female</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Teacher 4C</td>
<td>3rd Grade</td>
<td>Female</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Teacher 5C</td>
<td>3rd Grade</td>
<td>Male</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Teacher 6C</td>
<td>Kindergarten</td>
<td>Female</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Teacher 7C</td>
<td>5th Grade</td>
<td>Female</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Teacher 8C</td>
<td>4th Grade</td>
<td>Female</td>
<td>33</td>
<td>26</td>
</tr>
<tr>
<td>Teacher 9C</td>
<td>1st Grade</td>
<td>Female</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
At Campbell Elementary (School 8), the principal obtained a list of teacher volunteers from which nine teachers were purposefully selected to represent different grade levels and/or teaching assignment and varying years of experience. As presented in Table 9, those interviewed included the principal, the literacy coach, two kindergarten teachers (Teachers 1C and 6C), two first grade teachers (Teachers 3C and 9C), two third grade teachers (Teachers 4C and 5C), one fourth grade teacher (Teacher 8C), and two fifth grade teachers (Teachers 2C and 7C). The literacy coach was interviewed since she facilitates the formal grade level PLCs at Campbell Elementary. The principal and one of the third grade teachers (Teacher 5C) were males, while the remaining interviewees were females. The experience as educators of the teachers interviewed ranged from 4 to 33 years, while the principal has 24 years of experience.

Only one teacher at Bradford Elementary (School 7) initially turned in her name as a volunteer to be interviewed for the study. As I observed grade level PLCs with the principal, she asked each group if others would volunteer. From this process, four more teachers volunteered to be participants. As found in Table 9, the participants included one kindergarten teacher, two third grade teachers, a fourth grade teacher (who is also a mentor teacher), and the art teacher (who is also a mentor teacher). In addition to the principal and teacher participants at Bradford Elementary, I also interviewed the assistant principal (female) who is first year administrative intern who had experience with PLCs at other schools in the district. The teachers’ years of experience ranged from 8.5 to 15 years. Grade levels that were represented include kindergarten (Teacher 2B), third grade (Teachers 4B and 5B), and fourth grade (Teacher 1B). Teacher 3B is the art teacher. Teachers 1B and 3B are also mentor teachers in the Teacher Advancement Program.
(TAP). All of the teacher participants were female except for Teacher 5B, who was a third grade male teacher.

Data Collection

Quantitative Data Collection

Onwuegbuzie and Johnson (2006) stated, “In basic sequential mixed designs, data collected and analyzed from one phase of the study (i.e., quantitative/qualitative data) are used to inform the other phase of the investigation (i.e., qualitative/quantitative data)” (p. 53). Thus, data collection in the initial phase of the study incorporated quantitative methods through the use of an online questionnaire instrument to inform the selection of the cases for the qualitative phase of the research. In addition to informing the next phase of research, the data collected were used to develop and refine interview protocols and served as a source of data triangulation. The Professional Learning Communities Assessment – Revised (Olivier & Hipp, 2010a) was administered through an online format to 107 teacher participants from eight elementary schools in a southern state in the United States who are implementing the PLC concept. The PLCA – R instrument can be found in Appendix B and permission for its use in Appendix C.

The PLCA – R (Olivier & Hipp, 2010a) is a diagnostic instrument, designed around five dimensions of professional learning communities as proposed by Hord (1997) that provided information about the fidelity of the implementation of the five dimensions and how advanced schools are in their implementation of PLCs. Olivier et al. (2003) described the instrument as follows: “This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the five dimensions of a professional learning community (PLC) and related attributes” (p. 125). The
instrument’s relationship to Hord’s Five Dimensions of Professional Learning

Communities constituted the rationale for using this instrument. This relationship is demonstrated in Table 10.

Table 10

Relationship between the Professional Learning Community Assessment-Revised and the Five Dimensions of a Professional Learning Community

<table>
<thead>
<tr>
<th>Hord’s Dimensions of Professional Learning Communities</th>
<th>PLCA – R Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership</td>
<td>Items 1-11</td>
</tr>
<tr>
<td>Shared Values and Visions</td>
<td>Items 12-20</td>
</tr>
<tr>
<td>Collective Learning and Application</td>
<td>Items 21-30</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>Items 31-37</td>
</tr>
<tr>
<td>Supportive Conditions:</td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>Items 38-42</td>
</tr>
<tr>
<td>Structures</td>
<td>Items 43-52</td>
</tr>
</tbody>
</table>

The PLCA – R instrument is organized into six sections based on Hord’s five dimensions. On the instrument, the supportive conditions dimension is divided into two sections for the two aspects of this dimension: relationships and structures (See Table 10). Figure 2 provides a sample of items from the PLCA – R instrument. Within each section, participants were given 5-11 descriptors and asked to use a four-point Likert-type scale to record their perceptions about practices that occur in their school. Responses range from “strongly disagree” to “strongly agree” for each of the 52 items. Items have been designed to address specific school and classroom practices found to be common aspects of schools implementing the PLC concept with fidelity.
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared and Supportive Leadership</strong></td>
<td></td>
</tr>
<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>4. The principal is proactive and addresses areas where support is needed.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>6. The principal shares responsibility and rewards for innovative actions.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>7. The principal participates democratically with staff sharing power and authority.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>8. Leadership is promoted and nurtured among staff members.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>9. Decision-making takes place through committees and communication across grade and subject areas.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>11. Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>

*Figure 2. Sample Items from PLCA – R Instrument. Used with permission (Olivier & Hipp, 2010a).*
Field testing of the original Professional Learning Community Assessment (Olivier et al., 2003) was conducted with 247 completed and usable instruments. Olivier et al. reported that construct validity was found through factor analysis. The factored subscales of the instrument were computed using Cronbach’s Alpha interval reliability coefficients. With Alpha coefficients ranging from 0.83 on Collective Learning to 0.93 on Shared Values and Vision, the instrument is considered to yield internal reliability for the factored scales (Olivier et al.).

Olivier and Hipp (2010a) reported that “widespread use of the instrument provided an opportunity to review the dimensions for internal consistency” (p. 30). Internal consistency was confirmed using Cronbach’s Alpha reliability coefficients for factored subscales. In analysis of 1209 completed instruments, the coefficients were found to be as follows: 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) (Oliver & Hipp).

From their most recent analysis of the PLCA instrument, Olivier and Hipp (2010a) determined that items relating to the data collection and interpretation were missing from the instrument. By adding seven items to the original 45, the PLCA – R is considered as an “even more powerful formal diagnostic tool for identifying school level practices that support intentional professional learning” (p. 31). As a means of verifying the relevance of the additional items, an Expert Opinion Questionnaire was conducted using a panel of experts. The experts included educators (educational consultants, doctoral students studying PLCs, school administrators, teachers, district personnel,
regional and education supervisors, and university faculty and staff) with knowledge of the measures on the original instrument and of PLC attributes. Participants in the expert panel rated items from High to Low in terms of their relevance, importance, and fit to the PLCA. Olivier and Hipp reported that average ratings “ranged from a high of 2.94 (i.e., \textit{Staff collaboratively analyze evidence of student learning as critical data for improving teaching and learning}) to a low of 2.69 (i.e., \textit{Data are organized in a way to provide easy access to staff})” (p. 31). As a result of the review of the expert panel, all seven of the items were added to the PLCA to create the newly revised PLCA – R (Olivier & Hipp).

In addition to the PLCA – R items, demographic data were collected from the participants in my study. The 107 participants selected their school from a list of schools in the participating school district. Additional demographic information collected included gender and the number of years of teaching experience. The demographic data were utilized to aid the statistical analysis of the data and to develop a description of the participants. Additional demographic data (i.e., student population, SES information, number of teachers in the school) from each school were also obtained from the websites of Department of Education, the school district, and individual schools to gain an overall picture of the participating schools.

\textit{Qualitative Data Collection}

After selecting two elementary schools as sites for the case study research based on the analysis of the PLCA – R data, qualitative data collection began. Prior to contacting principals about participation in Phase 2, an IRB Form B was submitted and approved by the Internal Review Board of the university. Data collection included interviews, observations, and artifacts. Qualitative case studies are designed to gather
data to produce a thick, rich description of the phenomenon (Anfara et al., 2002). Yin (2009) indicated that the case study inquiry “benefits from the prior development of theoretical propositions to guide data collections and analysis” (p. 18). Therefore, the five dimensions of PLCs served as the foundation for the development of the interview and observation protocols and as a guide for selecting appropriate artifacts.

Since “most case studies are about human affairs or behavioral events,” Yin (2009) concluded that interviews provide an “essential source of case study evidence” (p. 108). With case study research, the selection of interview structure falls most appropriately with either semi-structured or unstructured/informal approaches due to the qualitative nature of the study (Fontana & Frey, 2000). As noted by Merriam (2009), a semi-structured interview format includes “a mix of more and less structured interview questions” that were used flexibly and allowed for probing questions to be asked based on participants’ responses” (p. 89). The semi-structured teacher and principal interview protocols presented in Appendices D and E were developed with “open-ended questions that can be followed up with probes and requests for more detail” (Merriam, p. 17).

Interviews served as the primary means of gaining insight into teachers’ and principals’ perceptions of the principal’s roles that contribute to developing and sustaining PLCs. As questions were developed, the theoretical framework, Hord’s (1997) five dimensions of professional learning communities, and the review of literature served as a guide for determining what should be explored. The individual items on the quantitative PLCA – R instrument (Olivier & Hipp, 2010), offered another source for writing interview questions. Data gathered from the administration of the PLCA – R during the quantitative research phase were also utilized to refine the interview protocols.
By analyzing the results by category (the five dimensions of PLCs) and also individually, questions were designed and/or refined to address issues raised by the data analysis.

The semi-structured interviews were conducted with a total of 14 teachers, one literacy coach, an assistant principal, and the two principals from the two elementary schools (See Table 9). Interviews were continued at each site until saturation was achieved (Gay et al., 2009, Merriam, 2009; Yin, 2009). Both the teacher and the principal interview protocols included 10 questions with multiple probes (see Appendices D and E). As shown in Table 4, the interview protocols addressed the two research questions developed for this study. Questions were designed to seek both the extent to which the five dimensions of PLCs were evidenced and the perceptions of teachers and principals concerning the role of the principal in developing and sustaining PLCs. The principal interview protocol mirrored the questions asked of teachers to achieve the purpose of comparison called for in the research questions.

Another means of qualitative data collection involved observations of principals and professional learning communities at work in the school setting. Observations were included in order to “understand the environment as lived by participants, without altering or manipulating it” (Gay et al., 2009, p. 366). Observing principals at work in their schools provided insight into the ways in which they foster or hinder the work of PLCs. Since much of the work of PLCs occurs at the teacher level, it made it difficult to actually observe the principal. At one of the schools, the principal utilizes curriculum coaches as facilitators for grade level PLCs. Although the principal was not present at all of the PLC meetings observed, the data gathered offered insight into how PLCs operate at the school. Observational data was also used in the development of interview questions.
that could probe into the role that is actually played by the principal. Despite the limitation of finding ways to see the principal’s role in action, observations provided a means for verifying the self-reported data collected through interviews and through the PLCA – R.

Observations varied at the two elementary schools according to the nature of PLC work observed. At Bradford Elementary school, observations included four grade level PLCs, one leadership team meeting, and one grade level cluster meeting. The principal, assistant principal, grade level teachers and interns were participants in the grade level PLC meetings. Participants at the grade level cluster meeting observed at Bradford Elementary included a master teacher, two grade level classroom teachers, and one substitute teacher. At this school I was able to spend three school days observing the principal’s daily routines. During this time, I observed the principal as she attended meetings, walked through classrooms and the hallways, worked in her office, and interacted with new students and their families. At Campbell Elementary school, the principal plays more of a supportive role in PLCs and does not normally attend PLC meetings. I observed four grade level PLCs in which the literacy coach, the math coach and grade level classroom teachers were participants. The fifth observation at Campbell Elementary was a leadership team meeting that was facilitated by the principal included teachers and parent participants. Observations of PLC meetings ranged from 35 minutes to two hours in duration.

In addition to interviews, artifacts related the work of the school’s professional learning communities were collected. These data sources of data provided information concerning the development and practice of PLCs and offered additional insight into the
principal’s role in the developing and sustaining of PLCs in the school. While the types of artifacts varied from case to case, examples included agendas from PLC and faculty meetings; the School Improvement Plan, vision and mission statements; teacher and student handbooks; copies of correspondence between the principal and the staff; information found on the school and school district website, and professional development schedules or agendas. Overall, the artifacts provided another source of data related to the role of the principal.

Data Analysis

Quantitative Data Analysis

Quantitative data were collected from the online administration of the PLCA – R instrument using MR Interview © online survey software and then downloaded into SPSS Statistics© software. Measures of central tendency to include the mean and standard deviation were calculated for each of the 52 descriptors and also for the six sections of the PLCA – R using SPSS © software. These measures of central tendency were calculated by school and by total participants. According to Teddlie and Tashakkori (2009), these descriptive statistics offer “procedures for summarizing data, with the intention of discovering trends and patterns, and summarizing results for ease of understanding and communication” (p. 257).

The descriptive statistics were utilized to determine the level of implementation of the practices of PLCs in the total sample as well as at each of the eight participating elementary schools. Since the PLCA – R does not yield a total score; the schools were compared using the means and standard deviations of the six categories in order to determine the extent to which practices associated with PLCs were reported by the
participants. Additionally, a focused examination of the descriptive statistics for items that are directly tied to the actions of principals provided data specifically related to the principal’s role in PLCs. The data analysis provided not only a means for selecting of the two elementary schools for Phase 2 of the study, but also offered data used to refine the interview protocol and a source for the triangulation of the quantitative and qualitative data.

*Qualitative Data Analysis*

Data analysis served the purpose of “bring(ing) meaning, structure, and order to the data” (Anfara et al., 2002, p. 31). The analysis of qualitative data in this study was multi-faceted due to the nature of qualitative research. Merriam (2009) described the complexities as follows:

Data collection and analysis is a simultaneous activity in qualitative research. Analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase of data collection, which in turn leads to the refinement or reformulation of questions, and so on. It is an interactive process throughout that allows the investigator to produce believable and trustworthy findings. (p. 165)

Qualitative analysis is iterative in nature, “involving a back-and-forth process between data collection and data analysis” (Teddlie & Tashakkori, 2009, p. 251). Thus, the data were analyzed as they were collected in order to provide guidance as I moved from data source to data source. This approach was both “recursive and dynamic” in nature in order to examine closely the role of the principal in developing and sustaining professional learning communities (Merriam, 2009, p. 169). While the process of
analyzing the data can change due to the nature of qualitative data, a plan for data analysis was necessary to guide the work. A description of the analysis procedures for interviews, observation, and for artifacts follows.

Since the interviews represented “verbatim records and are the central part of (this) case study,” audio recordings of interviews were essential to the data analysis (Yin, 2009, p. 129). In order to maintain accuracy as I sought to gain insight into the teachers’ and principals’ perceptions of the role of the principal, the audio recordings were transcribed verbatim and entered into QDA Miner, a qualitative data analysis software program. As proposed by Constas (1992), I developed codes, categories, and themes to provide “a manageable way of describing the empirical complexities of many hours of observations or summarizing hundreds of pages of interview transcriptions” (p. 255).

Using the five dimensions of PLCs, the research questions, and the interview protocol as a guide, a priori codes were developed to provide a starting point for the initial coding of the transcripts. The first iteration also provided a long list of codes that required additional analysis of the data in order to be able to arrive at themes. Through multiple iterations, groups of codes or more complex categories were developed (Yin, 2009). The process of the code development through three iterations can be found in Table 11.
Table 11

**Code Mapping: Three Iterations of Qualitative Data Analysis**

### Third Iteration: (Answers to Questions)

**Research Question #2: Role of the Principal?**

<table>
<thead>
<tr>
<th>Relationships Matter</th>
<th>Principal Support is Critical</th>
<th>Structure is Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships Matter</td>
<td>Principal Support is Critical</td>
<td>Structure is Necessary</td>
</tr>
<tr>
<td>Structure is Necessary</td>
<td>Structure is Important</td>
<td></td>
</tr>
<tr>
<td>Walk the Talk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offer Accountability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Second Iteration: (Themes)

**Bradford Elementary**
- Relationships Matter
- Structure is Necessary
- Walk the Talk
- Offer Accountability

**Campbell Elementary**
- Relationships Matter
- Principal Support is Critical
- Structure is Important

**Cross-Case Analysis**
- Relationships Matter
- Principal Support is Critical
- Structure is Necessary

### First Iteration: (Initial Codes)

<table>
<thead>
<tr>
<th>Shared Values</th>
<th>PLC Days</th>
<th>Role Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kids First</td>
<td>Set Expectations</td>
<td>Practice What You Preach</td>
</tr>
<tr>
<td>Whole child</td>
<td>She Just Requires It</td>
<td>Walk the talk</td>
</tr>
<tr>
<td>Whatever It Takes</td>
<td>Accountability</td>
<td>Freedom for teachers</td>
</tr>
<tr>
<td>Value it</td>
<td>Resources</td>
<td>Micromanage</td>
</tr>
<tr>
<td>Believe it</td>
<td>Relationships</td>
<td>Supportive Conditions</td>
</tr>
<tr>
<td>Shared Practice</td>
<td>Family</td>
<td>Structures</td>
</tr>
<tr>
<td>Invitation to Share</td>
<td>Caring for Staff</td>
<td>Time</td>
</tr>
<tr>
<td>Collective Learning</td>
<td>Being Vulnerable/Real</td>
<td>Time is Sacred</td>
</tr>
<tr>
<td>Shared Leadership</td>
<td>K Fosters</td>
<td>Trust in teachers</td>
</tr>
<tr>
<td>Principal Supports it</td>
<td>Hinders</td>
<td>Trust in principal</td>
</tr>
<tr>
<td>Part of the Culture</td>
<td>Knows His People</td>
<td></td>
</tr>
</tbody>
</table>

### Data: PLCA – R, Interviews, Observations, Artifacts

Another means of code development involved utilizing a constant comparative method in which interviews were analyzed and compared throughout the data collection process rather than waiting until all data were collected (Glaser & Strauss, 1967; Merriam, 2009; Teddlie & Tashakkori, 2009). Glaser and Strauss proposed comparing each incident to each category throughout the inductive analysis. Sources of category formations included: etic (the researcher), emic (the participants), and the literature on PLCs and principals (Merriam). As proposed by Constas (1992), a chart outlining the components of categorization and temporal designation was created to reveal the process to the reader (See Table 12).
### Table 12

**Components of Categorization/ Temporal Designation**

<table>
<thead>
<tr>
<th>Component of Categorization</th>
<th>Temporal Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origination</strong></td>
<td></td>
</tr>
<tr>
<td>Where does the authority for the category creation lie?</td>
<td>A priori</td>
</tr>
<tr>
<td>Participants</td>
<td></td>
</tr>
<tr>
<td>Programs</td>
<td></td>
</tr>
<tr>
<td>Investigative</td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td>SV, SC, SL, CL, SP, S</td>
</tr>
<tr>
<td>Interpretative</td>
<td></td>
</tr>
<tr>
<td>Verification</td>
<td></td>
</tr>
<tr>
<td><strong>Verification</strong></td>
<td></td>
</tr>
<tr>
<td>On what grounds can a given category be justified?</td>
<td>Rational</td>
</tr>
<tr>
<td>Rational</td>
<td></td>
</tr>
<tr>
<td>Referential</td>
<td></td>
</tr>
<tr>
<td>External</td>
<td></td>
</tr>
<tr>
<td>Empirical</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td></td>
</tr>
<tr>
<td>Participative</td>
<td></td>
</tr>
<tr>
<td><strong>Nomination</strong></td>
<td></td>
</tr>
<tr>
<td>What is the source of the name of the category?</td>
<td>Participants</td>
</tr>
<tr>
<td>Participants</td>
<td></td>
</tr>
<tr>
<td>Programs</td>
<td></td>
</tr>
<tr>
<td>Investigative</td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td>SV, SC, SL, CL, SP, S</td>
</tr>
<tr>
<td>Interpretative</td>
<td>PS</td>
</tr>
</tbody>
</table>

**Category Label Key:**
- Shared Values/Vision (SV)
- Supportive Conditions (SC)
- Shared Leadership (SL)
- Collective Learning (CL)
- Shared Practice (SP)
- Relationships Matter (RM)
- Principal Support is Critical (PS)
- Structure is Necessary (S)

**Data Source Key:**
- ( ) Interview
- * Observation
- ** Artifact
- ∞ PLCA – R Instrument

The following criteria proposed by Merriam (2009) for constructing categories, themes, and findings that are responsive to research questions served as a guide:

1. Be as **sensitive** to data as possible,
2. Be **exhaustive** (enough categories to encompass all relevant data),
3. Be **mutually exclusive** (a relevant unit of data can be placed in only one category),
4. Be **conceptually congruent** (all categories are at the same conceptual level).

(p. 186)

By coding the interviews as the data were collected, rather than waiting until all data collections were complete, I was able to refine the data collection process. Through the process of analyzing interviews as they were completed, I gained insight that led me to make adjustments in questions by probing deeper or clarifying questions for the interviewee. This constant comparative process contributed to the stronger development of rich thick description of the cases and of the roles of the principal that were discovered in the data analysis.

Frequency counts of codes using QDA Miner software tools also aided in the analysis of the qualitative data as I evaluated the data for themes or meaningful patterns (Yin, 2009). While the software provided a tool for coding data and sorting it by categories, the analysis of the data rested with the researcher. Throughout the data analysis, the theoretical framework continued to provide a lens for filtering the data. As the roles of the principal were gleaned from the words of participants, I also examined the interviews carefully for roles that foster and those that hinder the development and sustainability of professional learning communities.
Another source of data analysis involved the observations of professional learning communities and principals in action at the school sites. Based on the observational data, interview questions were refined to help me look more closely at the role the principal played in developing and sustaining the practices actually observed in PLCs. The data collected from the observations also provided a way to compare the reality of the PLC work at each school with the self-reported data from the PLCA – R and from interviews.

The examination of artifacts that are related to PLCs in the school provided another source of data for the study. Artifacts such as agendas from PLCs, faculty meetings, and professional development opportunities provided a means of checking the perceptions of teachers and principals against reality of what actually occurred within the school related to PLCs. This analysis involved looking for ways in which the principal has either fostered or hindered the work of PLCs as evidenced in the various artifacts. School improvement plans, teacher handbooks, and vision/mission statements were a source of documentation of the common practices of PLCs. As with the interviews and observations, the five dimensions of professional learning communities served as a theoretical framework for analyzing artifacts. Artifacts served as another way to strengthen the development of categories and themes as well as a means of triangulating data sources.

*Within-Case and Cross-Case Analysis*

As a multi-site case study, this study involved data collection at two elementary schools currently involved in the implementation of the PLC concept. Therefore, both within-case and cross-case analysis of data contributed to achieving the purpose of the study. Within-case analysis of the quantitative data guided the selection of the two
participating schools for Phase 2. Common data collection methods at each school allowed for the data to be analyzed separately and across the cases throughout the study. This was achieved by utilizing a semi-structured interview protocol and an observation protocol at both sites as well as administering the PLCA – R instrument to participants from each case. The rationale for within-case analysis was due to the nature of PLCs, which can vary in format and practice from school to school. The within-case analysis provided a way to account for differences.

First, each case was “treated as a comprehensive case in and of itself” (Merriam, 2009, p. 205). After analyzing each case separately, the purpose of a cross-case analysis was to “seek to build abstractions across cases” (Merriam, p. 205). With the selection of two cases, the possibility of direct replication existed. Yin addressed this as he concluded, “Analytic conclusions independently arising from two cases, as with two experiments, will be more powerful than those coming from a single case (or single experiment) alone” (p. 61). Data from the two cases were compared and contrasted in light of the purpose of the study in examining the role of the principal in developing and sustaining professional learning communities. As a researcher, it was important to “consciously seek to permit cross-site comparison without necessarily sacrificing within-site understanding” (Herriott & Firestone, 1983, p. 14).

Method of Verification

Achieving Trustworthiness and Transferability

Merriam (2009) stated, “All research is concerned with producing valid and reliable knowledge in an ethical manner” (p. 209). Validity and reliability have been addressed in the quantitative phase by the selection of a valid and reliable instrument
(i.e., the PLCA – R). For the qualitative research, it was imperative to establish the trustworthiness of the data. Key to assuring that qualitative results are trustworthy and transferable is the commitment on the part of the researcher to “analytic openness” in disclosing all aspects of the research process to the reader (Anfara et al., 2002, p. 28). In order to achieve this openness, Table 13 presents verification procedures posited by Anfara, Brown, and Mangione (2002) for improving the rigor and quality of research. By incorporating prolonged engagement in the field, triangulation, thick description, purposive sampling, an audit trail, code-recode strategy, triangulation, and reflexivity, I was able to demonstrate the rigor and quality of this study.
Table 13

Quantitative and Qualitative Criteria for Assessing Research Quality and Rigor

<table>
<thead>
<tr>
<th>Quantitative term</th>
<th>Qualitative term</th>
<th>Strategy employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal validity</td>
<td>Credibility</td>
<td>• Prolonged engagement in field</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use of peer debriefing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Triangulation</td>
</tr>
<tr>
<td>External validity</td>
<td>Transferability</td>
<td>• Provided thick description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Purposeful sampling</td>
</tr>
<tr>
<td>Reliability</td>
<td>Dependability</td>
<td>• Created an audit trail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Code-recode strategy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Triangulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Peer examination</td>
</tr>
<tr>
<td>Objectivity</td>
<td>Confirmability</td>
<td>• Practiced reflexivity</td>
</tr>
</tbody>
</table>


Multiple Sites

Multi-site case studies have been viewed as a way to “strengthen its ability to generalize while preserving in-depth description” (Herriott & Firestone, 1983, p. 14). Yin (2009) concluded that multiple sites can lead to more robust findings than can be found in a single case. The inclusion of multiple sites in this study provided a means of replicating cases (Firestone, 1992; Yin, 2009). While the mixed methods approach included integration of both quantitative and qualitative data, the selection of two schools afforded the opportunity for cross-case analysis (Herriott & Firestone).

Rich, Thick Description

As proposed by Firestone (1993), providing the reader with rich, thick description can “contribute to cases-to-case reasoning” (p. 22). Detailed description of the cases, including the demographics of the school, implementation of the PLC concept, and the
work of the principal in regards to PLC work, offered the reader insight in to the perceptions and reality of the phenomenon. The case study research provided details about the principal’s role that cannot be determined by the quantitative questionnaire alone. The thick descriptions in this study contributed to making certain that the qualitative data realistically and effectively portray the role of the principal in developing and sustaining professional learning communities.

**Triangulation of Data**

Data analysis, especially qualitative data analysis, is a complicated process of seeking to make sense of the data in light of the research questions and the purpose of the study. Merriam (2009) described this complexity as “moving back and forth between the concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation” (p. 176). Triangulation of data provided a means of achieving trustworthiness in mixed methods approaches to research. Firestone (1993) stated, “Similar results under different conditions illustrate the robustness of the finding” (p. 17). While the quantitative phase of the research served to guide the selection of the sites for the case studies, the data collected through the PLCA – R instrument also served as a source of data triangulation. Triangulation in this study included both multiple methods of data collection and multiple sources of data (Merriam).

The PLCA – R instrument yielded self-reported quantitative data concerning perceptions about professional learning communities (Olivier et al., 2003; Olivia & Hipp, 2010a). While interviews allowed a more targeted examination of the role of the principal, the data were also self-reported. Observations provided a source of data that was not self-reported and thus presented a way to overcome the weakness of self-reported
data from the other collection methods. Denzin and Lincoln (2000) posited, “Triangulation has been generally considered a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or an interpretation” (p. 241).

Within the qualitative phase, another source of triangulation was found in the multiple sources of data: principal interviews, teacher interviews, observations, and artifacts. Being able to cross-check what was reported in interviews against observations and artifacts resulted in a means of comparing the data (Merriam, 2009). By interviewing both principals and teachers, the different perceptions of the role of the principal in developing and sustaining professional learning communities were able to be compared and contrasted.

Potential Ethical Issues

To maintain ethical research practices, certain precautions were necessary. Prior to conducting research, The University of Tennessee requires that researchers complete training in protecting human research subjects and gain approval from the Institutional Review Board (IRB) for conducting research. In order to meet the first requirement, I completed the web-based training course, “Protecting Human Research Participants,” offered by the National Institutes of Health (NIH) on May 12, 2010 (Certification Number 446574). The IRB approval process included meeting requirements of compliance with all regulations concerning research with human subjects. Included in these requirements are informed consent of participants, identifying potential risks and benefits to participants, procedures for recruitment, means of maintaining confidentiality of participants, and details about methodology that will be incorporated in the study. The
IRB approval process ensured that the research process was both ethical and safe for participants.

Conclusion

To achieve the purpose of examining the role of the principal in developing and sustaining professional learning communities, a mixed methods approach to research was determined to be the best means of exploring the phenomenon. The research process began with gathering data utilizing a quantitative instrument (i.e., the PLCA – R). The quantitative data analysis served to inform the selection of the two cases for the qualitative research that was designed to examine the principal’s role in-depth. By incorporating multiple cases, the findings of the study are more robust than from one case. Thus, after consideration of the best methodology for addressing the research questions and achieving the purpose of the study, Chapter 3 described the exploratory, sequential, mixed method multisite case study approach that resulted (Johnson & Onwuegbuzie, 2004, Onwuegbuzie & Collins, 2007; Teddlie & Tashakkori, 2009; Yin, 2009).

Since a mixed methods approach was utilized in this study, the data analysis and findings will be presented in multiple chapters. In Chapter 4, the analysis of the data from the initial quantitative phase of the study will be detailed for the reader through the use of tables and written description. Analysis of the qualitative data, including a rich, thick description of the cases, will then be presented by case (i.e., elementary school) in Chapters 5 and 6 to provide insight into the within-case analysis findings from the two elementary schools. In Chapter 7, a cross-case analysis of the qualitative data will then
be discussed. Triangulation of the data sources will also be set forth as a means of reporting the rigor and quality of the findings.
CHAPTER 4
ANALYSIS OF THE QUANTITATIVE DATA

Introduction to the Chapter

To achieve the purpose of examining the role of the principal in developing and sustaining professional learning communities, a sequential, mixed method, multi-site case study was employed. Quantitative data were collected in Phase 1 of this quan→QUAL study using a web-based administration of The Professional Learning Community Assessment – Revised (Olivier & Hipp, 2010a) to 107 teachers from eight elementary schools located in one school district in a southern U.S. state. The quantitative data were analyzed in order to address the first research question:

To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):

a. Shared values and vision
b. Shared and supportive leadership
c. Collective learning and application
d. Shared personal practice
e. Supportive conditions

As noted by Onwuegbuzie and Johnson (2006), “In basic sequential mixed designs, data collected and analyzed from one phase of the study (i.e., quantitative/qualitative data) are used to inform the other phase of the investigation (i.e., qualitative/quantitative data)” (p. 53). While the primary purpose for the data collection in the initial phase was to inform the selection of the cases (i.e., the two elementary schools) for the qualitative phase of the
research, the quantitative data were also utilized in the development of the interview protocols and for triangulation purposes. The method for the selection of the cases was detailed in Chapter 3.

In Chapter 4, the quantitative data analysis and findings from the web-based administration of the PLCA – R instrument and demographic questions will be presented. The quantitative data analysis involved the use of descriptive statistics which included means and standard deviations. This procedure follows the directions of the creators of the instrument. From the presentation of the quantitative data, insight will be gained as to the extent to which practices associated with PLCs were reported by respondents from eight elementary schools. A more focused examination of the data collected from the two elementary schools that served as cases for the qualitative phase will be included as well.

Analysis of the Quantitative Data

As outlined in Chapter 3, the analysis of the quantitative data included the demographic data and responses to PLCA – R. The web-based data collection was completed using MR Interview © online survey software and then data were exported to SPSS Statistics© software. Descriptive statistics were calculated by school and by total participants using SPSS Statistics© software. A presentation of the data analysis follows.

Demographic Data of the Participants

Demographic data collected from the teacher participants included school, gender, and the number of years of experience as an educator. The eight participating schools were represented by 107 teacher respondents. The data will first be presented for the 107 participants as a group. Of the 107 respondents, 93.5% were female and 6.5% were male.
While the disparity between the number of female and male teachers surveyed is large, it is not unusual for elementary teachers to be primarily female. Frequency counts for years of experience for the group of 107 teachers indicated that teachers from all of the five categories of experience presented in Table 14 were participants. Only 17.8% of the respondents were in the category of 0-5 years of teaching experience. The vast majority of the respondents (73.8%) have 6-29 years of teaching experience. A small group of nine teachers (8.4%) of the 107 fell into the category of 30 or 30+ years of experience.

Table 14

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
<th>Number of Respondents (N=107)</th>
<th>Percentage of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>19</td>
<td>17.8</td>
</tr>
<tr>
<td>6-10 years</td>
<td>24</td>
<td>22.4</td>
</tr>
<tr>
<td>11-19 years</td>
<td>29</td>
<td>27.1</td>
</tr>
<tr>
<td>20-29 years</td>
<td>26</td>
<td>24.3</td>
</tr>
<tr>
<td>30 or 30+ years</td>
<td>9</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Demographic data were also disaggregated by school. In Chapter 3, Table 7 presented a breakdown of participants by school. As found in Table 7, the percentage of teachers at each school who responded when compared to the number of teachers on staff at each school ranged from 9.3% at School 4 to 95% at School 8. The response rate for
each school was a factor considered in the selection of the two elementary schools for the qualitative phase.

The frequency counts for gender and the years of teaching experience varied from school to school and are found in Table 15. Respondents from Schools 1, 2, and 4 were all females, while Schools 3, 5, 7, and 8 had only one or two male participants. The distribution of teachers by years of experience varied from school to school. Four of the schools (Schools 3, 4, 7, and 8) did not have any respondents from the 30 to 30+ years category. The percentage of teachers that have five or fewer years of experience varied from 9.1% at School 7 to 50% at School 5 (It is important to note that there were only 4 respondents from School 5). There were no significant patterns found in the distribution of teachers when compared school to school.
Table 15

Frequency Counts of Demographic Data by Participating Schools

<table>
<thead>
<tr>
<th>Gender</th>
<th>Years of Experience as an Educator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-5 years</td>
</tr>
<tr>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>School 1</td>
<td>13</td>
</tr>
<tr>
<td>(n=13)</td>
<td>(100%)</td>
</tr>
<tr>
<td>School 2</td>
<td>8</td>
</tr>
<tr>
<td>(n=8)</td>
<td>(100%)</td>
</tr>
<tr>
<td>School 3</td>
<td>6</td>
</tr>
<tr>
<td>(n=7)</td>
<td>(85.7%)</td>
</tr>
<tr>
<td>School 4</td>
<td>9</td>
</tr>
<tr>
<td>(n=9)</td>
<td>(100%)</td>
</tr>
<tr>
<td>School 5</td>
<td>3</td>
</tr>
<tr>
<td>(n=4)</td>
<td>(75%)</td>
</tr>
<tr>
<td>School 6</td>
<td>33</td>
</tr>
<tr>
<td>(n=35)</td>
<td>(94.3%)</td>
</tr>
<tr>
<td>School 7</td>
<td>9</td>
</tr>
<tr>
<td>(n=11)</td>
<td>(81.8%)</td>
</tr>
<tr>
<td>School 8</td>
<td>19</td>
</tr>
<tr>
<td>(n=20)</td>
<td>(95%)</td>
</tr>
</tbody>
</table>
Demographic data collected with the online administration of the PLCA – R offered insight into the make-up of the respondents both at the school level and for the total sample. Since participants identified their schools, data could be analyzed at the school level which led to the selection of the cases (i.e., the two elementary schools) for the qualitative phase of the study. Response rates at each school were calculated by using these frequency counts and data collected from the school district about the number of teachers at each of the eight participating schools. As presented in Chapter 3 and later in Chapter 4, the response rates actually played a role in the final selection of the two elementary schools that participated in Phase 2. The demographic data also provided another source of comparison for the case study schools.

Analysis of the PLCA – R Data by Dimension for the Total Sample

To address the first research question established for this study, analysis of the PLCA – R data provided a means of determining the extent to which the dimensions of PLCs are evidenced in elementary schools. The PLCA – R instrument offered insight into the level of implementation of PLCs by “determining the practices in [schools] within each dimension.” (Olivier & Hipp, 2010, p. 30). Olivier and Hipp also noted, “When analyzing PLCA – R results, descriptive statistics are beneficial in determining the strength of the dimensions, as well as reviewing teacher responses for each individual item” (p. 35). The PLCA – R instrument is not designed to yield a total score. Therefore, descriptive statistics including means and standard deviations were calculated for each of the 52 descriptors individually and also by the six PLC dimensions. The data were analyzed for the participants as a total group and also by elementary school. Data analysis and findings for the group will be presented first.
The PLCA – R was designed as a diagnostic instrument to assess the level of implementation of practices associated with PLCs. To understand the significance of the means for each dimension, I contacted the researcher who developed the PLCA – R. Olivier (personal communication, July 28, 2011) noted that means of three or above indicate “overall agreement of strength of that practice.” When the means are below three, more individuals are responding with disagreement to the presence of the practice (Olivier, personal communication, July 28, 2011).

As found in Table 16, the means for the six PLCA – R factors for the 107 teacher respondents ranged from 3.00 (SD = .481) for supportive structures to 3.30 (SD = .444) for collective learning. The mean for supportive relationships (M = 3.28, SD = .532) was very close to that of collective learning. With means for five of the six dimensions greater than 3.0, there is evidence of an overall agreement of the strength of the PLC practices in the sample schools. It is important to note that the standard deviations of each of the six dimensions ranged from .444 for collective learning to .536 for Shared Leadership. A complete table of the means and standard deviations by individual descriptor and by PLC dimension for the 107 participants can be found in Appendix G.
Table 16

Mean and Standard Deviation Scores for PLCA-R Dimensions for Total Sample

<table>
<thead>
<tr>
<th>PLC Dimension</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Leadership</td>
<td>107</td>
<td>1.64</td>
<td>4.00</td>
<td>3.09</td>
<td>.536</td>
</tr>
<tr>
<td>Shared Values</td>
<td>107</td>
<td>1.56</td>
<td>4.00</td>
<td>3.14</td>
<td>.504</td>
</tr>
<tr>
<td>Collective Learning</td>
<td>107</td>
<td>2.20</td>
<td>4.00</td>
<td>3.30</td>
<td>.444</td>
</tr>
<tr>
<td>Shared Practice</td>
<td>107</td>
<td>1.86</td>
<td>4.00</td>
<td>3.03</td>
<td>.472</td>
</tr>
<tr>
<td>Supportive Relationships</td>
<td>107</td>
<td>2.20</td>
<td>4.00</td>
<td>3.28</td>
<td>.532</td>
</tr>
<tr>
<td>Supportive Structures</td>
<td>107</td>
<td>1.70</td>
<td>4.00</td>
<td>3.00</td>
<td>.481</td>
</tr>
</tbody>
</table>

Analysis of PLCA – R Means for Items Directly Related to the Principal

When the individual PLCA – R items are considered, many of the 52 descriptors included practices that have been impacted, either directly or indirectly, by the principal. Four specific items directly involve actions of the principal (See Table 17). These items include actions such as incorporating staff advice in decision making, being proactive in providing needed support, sharing responsibility and rewards for innovation, and sharing power and authority with staff members. As presented in Table 17, the means of these four items, ranging from 3.05 to 3.15 (SDs from .724 - .790), indicated that the group on average perceived these as strong practices in their respective schools. For the PLCA – R items that may be indirectly tied to the role of the principal, qualitative data collection was utilized to determine perceptions of teachers and principals as to how the principal impacts the PLC practices.
Table 17

PLCA – R Items Directly Linked to Principals: Means and Standard Deviation

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>107</td>
<td>3.05</td>
<td>.732</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>107</td>
<td>3.13</td>
<td>.790</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>107</td>
<td>3.15</td>
<td>.724</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>107</td>
<td>3.02</td>
<td>.765</td>
</tr>
</tbody>
</table>

From the analysis of the data for all of the 107 participants in Phase 1, I concluded that the sample as a whole reported high levels of PLC practices are in place at their respective schools. For this study, it was important to find schools that are implementing the practices of PLCs in order to achieve the purpose of examining the role of the principal in developing and sustaining professional learning communities. While these conclusions offered valuable insight into the practices across the schools, it was necessary to analyze the data by school in order to select two schools that would serve as cases for Phase 2 of the study.
Analysis of the PLCA – R Data by Dimension and by School

After determining the strength of the practices for the sample as a total group, the data were then disaggregated by school. As outlined in Chapter 3, the mean and standard deviation of each of the six PLCA – R sections for the eight schools were compared in order to select two elementary schools demonstrating high levels of PLC implementation to serve as the cases for Phase 2. The data analysis by school also provided a source of data for developing and refining the interview protocols and for triangulation of the quantitative and qualitative data. The means and standard deviations for each of the eight schools are presented in Table 18. The data analysis and quantitative findings will now be presented by school.
Comparison of the Means and Standard Deviations of the PLCA – R Data by School and by PLC Dimension

<table>
<thead>
<tr>
<th>School</th>
<th>n</th>
<th>Shared Leadership (Mean/SD)</th>
<th>Shared Values &amp; Vision (Mean/SD)</th>
<th>Collective Learning (Mean/SD)</th>
<th>Shared Practice (Mean/SD)</th>
<th>Supportive Conditions: Relationships (Mean/SD)</th>
<th>Supportive Conditions: Structures (Mean/SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>3.09***/.510</td>
<td>3.00/.719</td>
<td>3.23/.581</td>
<td>3.03/.516</td>
<td>3.32/.500</td>
<td>2.92/.458</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>3.64*/.375</td>
<td>3.54***/.478</td>
<td>3.50***/.509</td>
<td>3.30*/.562</td>
<td>3.49***/.460</td>
<td>3.57*/.415</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>2.59/.311</td>
<td>2.94/.192</td>
<td>3.38***/.457</td>
<td>2.57/.583</td>
<td>3.30/.622</td>
<td>2.38/.479</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3.06/.343</td>
<td>3.31***/.409</td>
<td>3.38***/.351</td>
<td>3.12***/.284</td>
<td>3.58***/.451</td>
<td>3.00***/.316</td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>3.62***/.334</td>
<td>3.58*/.367</td>
<td>3.57*/.412</td>
<td>3.20***/.448</td>
<td>3.73*/.385</td>
<td>3.37***/.425</td>
</tr>
</tbody>
</table>

Note. *=highest mean for the dimension. ** = second highest mean for dimension. *** = third highest mean for dimension.
School 1. Of the eight participating elementary schools, School 1 has the largest student population with 1105 students in grades K-5. The community is suburban with 15% of the student population being considered minority students and 12% considered economically disadvantaged (See Table 8 in Chapter 3). Only 13 of the 57 teachers at School 1 responded to the web-based instrument for a response rate of 22.8% as presented in Table 7 in Chapter 3. Female teachers made up 100% of the respondents at School 1 (See Table 15). Additional demographic data for the respondents can be found in Table 15.

The analysis of PLCA – R data for School 1 revealed that the means for the six dimensions ranged from 2.92 ($SD = .458$) for Supportive Conditions: Structures to 3.23 ($SD = .500$) for Supportive Conditions: Relationships (See Table 18). When compared to the eight participating elementary schools, School 1 had the third highest mean ($M = 3.09, SD = .510$) in the area of Shared Leadership. When looking at the means of each dimension in comparison to the other eight schools, I found that School 1 did not have the highest or the lowest for any of the six dimensions.

School 2. As a suburban school, School 2 serves 664 students in grades K-5 in the school district. The student population includes 11% minority students as well as 63% economically disadvantaged students (See Table 8 in Chapter 3). As presented in Table 7 in Chapter 3, the eight respondents from School 2 represented 20.5% of the teaching staff. All of the respondents from this school were female. See Table 15 for additional demographic data for the participants.

An analysis of the PLCA – R data from School 2 revealed that the means for three of the factors were the lowest among all eight participating schools: Shared Leadership
(M = 2.47, SD = .584), Shared Values and Vision (M = 2.83, SD = .178), and Supportive Conditions: Structures (M = 2.55, SD = .293). As shown in Table 18, School 2 shared the bottom with School 4 for Collective Learning with a mean of 3.13 (SD = .271). Collective Learning was actually the PLCA –R dimension with the highest mean (and the only mean above 3.0) for School 2. From this analysis, I concluded that the respondents’ agreement on the PLC practices was the weakest at School 2 of all of the eight participating schools.

School 3. The K-5 student enrollment at School 3 is 680 students. Serving an urban neighborhood, the school is made up of 37% minority students and 85% economically disadvantaged students (See Table 8 in Chapter 3. Only seven of the 46 (6 female and 1 male) teachers at School 1 responded to the survey instrument for a response rate of 14.2%. With a low percentage of the staff participating, the data may not portray the total picture of the staff’s perception of PLC practices at the school.

The data collected and analyzed from the seven teacher respondents revealed that the means for of the dimensions fell among the three highest means for the eight participating schools (See Table 18). Shared Leadership (M = 3.63, SD = .375), Shared Practice (M = 3.30, SD = .562) and Supportive Conditions: Structures (M = 3.57, SD = .415) had the highest means for these dimensions of all of the eight participating schools. School 3 also had the second highest means for the following PLC – R dimensions: Shared Values and Vision (M = 3.54, SD = .478) and Collective Learning (M = 3.50, SD = .509). With a mean of 3.49 (SD = .460), Supportive Conditions: Relationships was the third highest of the eight schools. For the seven respondents at School 1, I found strong agreement for the PLC practices at the school.
School 4. As a suburban school of 1077 K-5 students, School 4 had the second highest student population of the eight participating elementary schools. School 4 differs from the other elementary schools in that it only serves students in third through fifth grades. As presented in Table 8 in Chapter 3, this school serves a student population that includes 15% minorities and 14% economically disadvantaged students. The nine female teacher respondents represented only 16.9% of the teaching staff at School 4.

As found in Table 8, only one of the six dimensions of the PLCA – R had a mean above 3.0: Collective Learning ($M = 3.13$, $SD = .464$). As presented previously, this mean was tied for the bottom with School 2. Supportive Conditions: Relationships ($M = 2.96$, $SD = .677$) was the dimension with the highest mean for School 4. The lowest mean was for Supportive Conditions: Structures ($M = 2.89$, $SD = .366$). From this analysis, I found that the nine teachers did not portray strong agreement of PLC practices in five of the six PLC – R dimensions.

School 5. As a school that serves both suburban and urban areas, School 5 has a student population of 804. The student population is made up of 5% minority students and 30% economically disadvantaged students (See Table 8 in Chapter 3). Of the eight participating schools, School 5 had the lowest response rate (9.3%). Only four (3 females and 1 male) of the 43 teachers at this school responded to the web-based instrument.

From the four respondents, only two of the dimensions received means above 3.0: Collective Learning and Application ($M = 3.38$, $SD = .351$) and Supportive Conditions: Relationships ($M = 3.30$, $SD = .622$). The remaining four means ranged from 2.38 ($SD = .479$) for Supportive Conditions: Structures to 2.94 ($SD = .394$) for Shared Values and
Vision. With only 9.3% of the teachers responding, the results do not provide much insight into PLC practices at School 5.

School 6. With a student population of 1033, School 6 serves a community that includes both suburban and rural areas. Due to transfers allowed within the NCLB guidelines, urban students do attend School 6. As shown in Table 8, the population includes 13% minority students and 29% economically disadvantaged students. With 35 of the 57 teachers responding to the PLCA – R, the response rate of 61.4% was the second highest for eight participating schools. The respondents included 33 females (94.3%) and two males (5.7%).

As presented in Table 18, the dimension with the highest mean for School 6 was Collective Learning (\( M = 3.20, SD = .394 \)). The only other mean that was above 3.0 was for Supportive Conditions: Relationships (\( M = 3.02, SD = .394 \)). The remaining dimensions had means that ranged from 2.99 (\( SD = .422 \)) for Shared Practice to 2.91 (\( SD = .406 \)). While School 6 had a stronger response rate than most of the participating schools, none of the means fell within the top three means for the six dimensions when compared to all eight schools.

School 7. When compared to the eight schools that participated in Phase 1 of the study, School 7 is one of two smaller elementary schools. With a student population of 290 students, 77% are minorities and 100% are considered economically disadvantaged. The community setting is considered urban. Of the 24 teachers at the school, 11 participated in the quantitative phase of the study leading to a 45.8% response rate. The respondent group included nine (81.8%) females and two (18.2%) males.
The analysis of School 7’s data revealed that the means for all six PLCA – R dimensions were at or above 3.00; thus, indicative of strong agreement of the perceived levels of PLC practices. The highest mean ($M = 3.58, SD = .451$) was found for Supportive Conditions: Relationships. This mean (Supportive Conditions: Relationships) was also the second highest mean when compared to the eight participating schools. Three of the means were the third highest of the total group: Shared Values and Vision ($M = 3.31, SD = .409$), Collective Learning ($M = 3.38, SD = .351$), and Shared Practice ($M = 3.12, SD = .284$).

School 8. When compared to the eight participating elementary schools, School 8 has the smallest student population with 283. Serving an urban community, the student population includes 22% minority students and 80% economically disadvantaged students. School 8 had the highest response rate (95%) of the eight schools with 20 out of 21 of the teachers responding to the web-based instrument. The group of respondents was 95% female.

With all of the means for the six dimensions at 3.20 or above, there was strong agreement that the practices associated with PLCs are in place at School 8. Three of the means represented the highest mean for that dimension among the eight participating schools. These included Shared Values and Vision ($M = 3.58, SD = .367$), Collective Learning ($M = 3.57, SD = .412$), and Supportive Conditions: Relationships ($M = 3.73, SD = .385$). The mean for Supportive Conditions: Relationships was the highest mean for all dimensions for all schools. The remaining three dimensions ranked second among the eight schools: Shared Leadership ($M = 3.62, SD = .334$), Shared Practice ($M = 3.20 SD = .448$), and Supportive Conditions: Structures ($M = 3.37, SD = .425$).
Comparison of the Data for the Eight Participating Schools

After analyzing the data for the eight participating elementary schools individually, the selection of two schools to serve as cases for Phase 2 necessitated comparing the PLCA –R data across the eight schools. While Table 18 provided the overall comparison of the means for the eight schools, it was helpful to narrow the field and look more closely at the three highest means for each dimension (See Table 19). This analysis provided a way to determine if any of the elementary schools stood out from the rest of the group. In this process, I first observed that the means of three schools (Schools 3, 7, and 8) were greater than or equal to 3.00 in all six dimensions measured on instrument. Since means of 3.0 or greater are indicative of strong agreement in the PLC practices, it seemed apparent that the selection of the cases should come from these three schools.
**Table 19**

*Presentation of Top Three Highest Means and Standard Deviations for Each PLCA – R Dimensions*

<table>
<thead>
<tr>
<th>PLCA – R Dimension</th>
<th>School (Mean/Standard Deviation)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highest</td>
<td>Second Highest Mean</td>
<td>Third Highest Mean</td>
<td></td>
</tr>
<tr>
<td>Shared and Supportive Leadership</td>
<td>School 3 (3.64/.375)</td>
<td>School 8 (3.62/.334)</td>
<td>School 1 (3.09/.510)</td>
<td></td>
</tr>
<tr>
<td>Shared Values and Vision</td>
<td>School 8 (3.58/.367)</td>
<td>School 3 (3.54/.478)</td>
<td>School 7 (3.31/.409)</td>
<td></td>
</tr>
<tr>
<td>Collective Learning and Application</td>
<td>School 8 (3.57/.412)</td>
<td>School 3 (3.50/.509)</td>
<td>School 7 (3.38/.351)</td>
<td>School 5 (3.38/.457)</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>School 3 (3.30/.562)</td>
<td>School 8 (3.20/.448)</td>
<td>School 7 (3.12/.284)</td>
<td></td>
</tr>
<tr>
<td>Supportive Conditions: Relationships</td>
<td>School 8 (3.73/.385)</td>
<td>School 7 (3.58/.451)</td>
<td>School 3 (3.49/.460)</td>
<td></td>
</tr>
<tr>
<td>Supportive Conditions: Structures</td>
<td>School 3 (3.57/.415)</td>
<td>School 8 (3.37/.385)</td>
<td>School 7 (3.00/.316)</td>
<td></td>
</tr>
</tbody>
</table>
By using Table 19, the schools with the highest means for each of the six sections of the PLCA – R are more easily identified. Both School 3 and School 8 had the top mean for three of the six dimensions. The three areas in which School 3 held the highest means are: Shared Leadership ($M = 3.64$, $SD = .374$); Shared Practice ($M = 3.30$, $SD = .562$); and Supportive Conditions—Structures ($M = 3.57$, $SD = .415$). School 8’s means were the highest for the following dimensions: Shared Values and Vision ($M = 3.58$, $SD = .367$); collective learning and application ($M = 3.57$, $SD = .412$); and Supportive Conditions—Relationships ($M = 3.73$, $SD = .385$). When looking at the second highest means, School 3 was listed for Shared Values and Vision ($M = 3.54$, $SD = .478$) and Collective Learning and Application ($M = 3.50$, $SD = .509$). For three of the six factors, School 8 had the second highest means: Shared Leadership ($M = 3.62$, $SD = .334$); Shared Practice ($M = 3.20$, $SD = .448$); and Supportive Conditions—Structures ($M = 3.37$, $SD = .425$).

As shown in Table 19, School 7 was found in the list of the top three means for five out of the six PLCA – R dimensions. School 7 had the second highest mean for Supportive Conditions—Relationships ($M = 3.58$, $SD = .284$). In the areas of Shared Values and Vision, Collective Learning, Shared Practice, and Supportive Conditions—Structures, School 7 had the third highest mean out of the eight participating elementary schools. With all of the means greater than 3.0, the strength of PLC practices would be also be considered high at this school.

Although Schools 3 and 8 stood out as the two schools with more of the highest means than the other six schools, I concluded that other available data should be examined prior to making the selection of two schools to serve as cases for Phase 2.
Since School 7 also appeared often in the top three means, I look more closely at available data for three schools (Schools 3, 7, and 8). Two types of data were utilized in this process. First, I looked at individual PLCA – R descriptors which were specifically indicative of the role of the principal in PLC work. Another area of data that warranted consideration in the decision was the response rate of the participants for each of the three schools.

An analysis of the individual PLCA – R descriptors directly tied to actions of the principal provided another way to look at the schools that seemed to rise to the top of the group. Four items from the PLCA – R asked participants to respond to practices that directly involve the principal. Table 20 presents a comparison of the means for the three elementary schools for four individual items. The means and standard deviations for these items were compared for the three schools (Schools 3, 7, and 8) that had warranted further exploration. Once again, with all of the means at 3.0 or higher, the evidence indicated strong agreement that these practices were perceived as strong by the teacher respondents from the three schools. For each of the four items, School 3 had the highest mean, School 8 had the second highest mean and School 7 had the third highest mean. Isolating the four items directly related to the role played by the principal in PLCs provided another picture of the data from the three elementary schools.
Table 20

Comparison of the PLCA – R Items Directly Linked to Principals for School 3, School 7, and School 8

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>School 3 (n=7)</th>
<th>School 7 (n=11)</th>
<th>School 8 (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>3.71/.488</td>
<td>3.09/.539</td>
<td>3.55/.605</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>4.00/.000</td>
<td>3.00/.632</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>3.57/.535</td>
<td>3.00/.632</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>3.71/.488</td>
<td>3.18/.603</td>
<td>3.60/.503</td>
</tr>
</tbody>
</table>

After looking at the means for PLCA – R items directly related to the principal, I considered other available data analyzed for Schools 3, 7, and 8. Reviewing the analysis of the demographic data provided another manner of comparison. The response rates for the three schools are presented in Table 7 in Chapter 3. School 3’s response rate of 14.2% was considerably lower than those from School 7 (45.8%) and School 8 (95%).
Selection of the Two Cases for Phase 2

The primary purpose of the quantitative data analysis was to utilize the data to select two elementary schools from the eight participating schools to serve as cases for the qualitative phase of the study. The data analysis provided the means for answering the first research question:

To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):

a. Shared values and vision
b. Shared and supportive leadership
c. Collective learning and application
d. Shared personal practice
e. Supportive conditions

By examining the PLCA – R data by school and across the group of schools, three schools were found to have the highest perceived strength of PLC practices: Schools 3, 7, and 8. After also looking at the means practices directly related to the principal for these schools, the evidence for strength of practice was also high for the three schools. The final consideration of response rate led to the conclusion that Schools 7 and 8 would serve as cases for Phase 2. A more focused comparison of the data analysis and findings for these two elementary schools will follow.

With eight participating schools, it was more efficient to label the schools by number (i.e., School 1, School 2, School 3, School 4, School 5, School 6, School 7, and School 8). From this point forward, the two schools will be referred to as Bradford
Elementary (School 7) and Campbell Elementary School (School 8). The names of the schools are pseudonyms.

**Comparison of the PLCA – R Means for Bradford and Campbell Elementary Schools**

Since Bradford Elementary (School 7) and Campbell Elementary School (School 8) were selected to serve as cases for the qualitative phase of the study, a focused analysis of the data from these schools is warranted. In Table 21, the means and standard deviations for each of the six factors assessed in the PLCA – R are presented for the two elementary schools. With all of the means are greater than 3.0, the data reveal that teachers are in overall agreement in the strength of PLC practices at both schools. Comparing the means from the two schools led to the discovery that Supportive Conditions: Relationships was the dimension with the highest mean for both Bradford Elementary ($M = 3.58, SD = .451$) and Campbell ($M = 3.73, SD = .386$). The lowest mean for Bradford ($M = 3.00, SD = .316$) was found to be Supportive Conditions: Structures, while the lowest mean for Campbell ($M = 3.20, SD = .448$) was Shared Practices.
Table 21

Summary of the PLCA – R Data for Bradford Elementary and Campbell Elementary

<table>
<thead>
<tr>
<th>PLC Dimension</th>
<th>Bradford School 7 (n=11)</th>
<th>Campbell Elementary School 8 (n=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean/ Std. Deviation</td>
<td>Mean/ Std. Deviation</td>
</tr>
<tr>
<td>Shared Leadership</td>
<td>3.06/.343</td>
<td>3.62/.335</td>
</tr>
<tr>
<td>Shared Values</td>
<td>3.31/.409</td>
<td>3.58/.367</td>
</tr>
<tr>
<td>Collective Learning</td>
<td>3.38/.352</td>
<td>3.57/.412</td>
</tr>
<tr>
<td>Shared Practice</td>
<td>3.12/.284</td>
<td>3.20/.448</td>
</tr>
<tr>
<td>Supportive Relationships</td>
<td>3.58/.451</td>
<td>3.73/.386</td>
</tr>
<tr>
<td>Supportive Structures</td>
<td>3.00/.316</td>
<td>3.37/.425</td>
</tr>
</tbody>
</table>

In Figure 3, a graph is presented to provide a visual comparison of the means for the six factors of the PLCA – R for the two elementary schools. By looking at the graph, it is obvious that for each of the six dimensions, the means for Campbell Elementary School are higher than those for Bradford Elementary School. The qualitative phase of the study provided a way to explore the differences that were seen across and also within the two schools. I referred to the quantitative findings throughout Phase 2 as a means of triangulating the data sources. Consideration of how these differences are seen in practice was valuable in the qualitative data collection and analysis.
An important purpose of the quantitative phase of this study was to utilize the data to develop and refine the interview protocols that will be used as these two elementary schools are explored qualitatively. By comparing the two cases (i.e., the two elementary schools), I found the means of each of the six PLCA – R factors were higher for Campbell Elementary than for Bradford Elementary. This finding provided data that could be explored qualitatively. To explore the perceived differences in the practices at the two schools, I developed probes that asked participants to provide examples of
practices that contributed to the strength of the PLCs and how the principal fostered or hindered the practices.

An example of how this was accomplished lies in the area of shared practice. Recognizing that the quantitative findings indicated that this was the lowest mean for Bradford Elementary School, I saw the need to delve into the ways in which teachers share practice (or not) in the two schools. I wanted to find examples of shared practice as well as the role of the principal in developing and sustaining these practices. Thus, I developed the following probes to follow up on a question asking if opportunities exist for teachers to share their practice with other teachers:

1. Can you give me an example of ways that teachers share practice at your school?
2. In an ideal school, how could a principal encourage and enable teachers to share their practices?
3. Can you think of ways that principals hinder teachers from working collaboratively?

Another noteworthy finding that was explored in greater depth in the qualitative phase was that Supportive Conditions—Relationships was the highest mean for the two elementary schools. In the qualitative phase, inquiry into ways in which principals contribute to relationships as a supporting condition was needed to gain insight into ways in which principals foster or hinder the work of PLCs. Thus, I developed a question that asked teachers to describe relationships that exist among the staff. The probes that were developed included asking about how principals could play a role in developing relationships in a school, how principals could hinder the development of caring and
trusting relationships, and an example of a time that the principal contributed to building positive relationships that encourage PLCs at the school. Throughout the qualitative phase of the study, I referred to the quantitative findings to influence both the interview and observation processes.

Summary of the Quantitative Findings

The quantitative phase of the sequential, mixed-methods case study was designed to address the first research question. This question called for determining to what extent are Hord’s (1997, 2008) five dimensions of professional learning communities evidenced in the elementary schools in this study. Olivier and Hipp (2010a) noted that the PLCA – R instrument can assist “educators and researchers in determining the strength of practices” in school implementing PLCs (p. 30). With means for five of the six dimensions greater than 3.0 out of 4, the data supported an overall agreement of the strength of the PLC practices in the sample schools. I was able to achieve the selection of two elementary schools exhibiting high levels of implementation of the PLC concept as a result of this data analysis. Additionally the data from two elementary schools, Bradford Elementary and Campbell Elementary, provided evidence of teachers’ perceptions of strong PLC practices at each school.

While the quantitative data analysis allowed me to address the first research question, it also contributed to the analysis of qualitative data as a source of triangulation. Throughout Phase 2, the findings from Phase 1 were utilized as I compared qualitative findings to those that were found through the PLCA – R data. The triangulation of the data will be included in the presentation of the qualitative findings as a way to strengthen the findings.
Summary of the Chapter

In Chapter 4, the quantitative data collection and analysis from Phase 1 of the quan→QUAL study was presented. The quantitative phase served to inform the selection of cases for the qualitative phase and to address the first research question in this study. Data were collected from the online administration of The Professional Learning Community Assessment-Revised to teachers from eight elementary schools from one school district in a southern U.S. state. Demographic data from the 107 teacher participants was discussed. The analysis of descriptive statistics for the respondents as a whole group indicated strong agreement in the PLC practices associated with (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.

After examining the data from the total group, an analysis of data by school was presented. Looking at the data at the school level provided understanding of how the perceived strength of PLC practices varied from school to school. By comparing the means of each of the six PLCA –R dimensions, three schools were found to have stronger overall agreement across the board. An examination of the specific descriptors that include practices directly related to the principal was presented for the top schools. By using the findings from the PLCA –R data and the demographic data, the selection of two cases was accomplished.

The deeper analysis of the data from the two schools—Bradford and Campbell Elementary Schools— that served as the cases for the qualitative research phase was set forth. The quantitative findings indicated that the two elementary schools have both
demonstrated high levels of implementation of PLC practices as evidenced by the PLCA – R, but also revealed differences between the schools. The use of the quantitative data to develop interview protocols for Phase 2 was discussed.

The analysis of the qualitative research phase will now be presented in Chapters 5-7. The within-case data analysis will be presented by elementary school in Chapters 5 and 6 and followed by a cross-case analysis in Chapter 7. A rich, thick description of Bradford and Campbell Elementary Schools are included to provide insight into the data collected and analyzed qualitatively. Teacher and principal perceptions of the role of the principal in developing and sustaining professional learning communities are explored qualitatively. The analysis of teacher and principal interviews, observations, and artifacts are included. Triangulation of data sources and methods has been set forth as a means of reporting the rigor and quality of the findings.
CHAPTER 5

ANALYSIS OF THE QUALITATIVE DATA FOR A SINGLE SITE: BRADFORD
ELEMENTARY SCHOOL

Introduction to the Chapter

As presented in Chapter 3, the analysis of the PLCA – R data from the quantitative phase of this study was utilized to select two elementary schools to serve as cases for the qualitative phase. This multi-site case study provided the primary means of exploring the role of the principal in developing and sustaining professional learning communities within the setting of two elementary schools. The qualitative research was designed to address the following research questions:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions

2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?
The first research question was explored both quantitatively and qualitatively, while the second research question was addressed through the case studies. Data sources for Phase 2 included teacher and principal interviews, observations, and artifacts. Consistent data collection and analysis procedures were utilized at the two elementary schools that served as cases for Phase 2 of the study.

The two elementary schools that served as cases were Bradford Elementary School and Campbell Elementary School. Both of these public K-5 schools are part of the same school district in a southern U.S. States. Details about the demographics of the school district were presented in Chapter 3. Student enrollment at both elementary schools is close to 300 students. Although PLCA – R data from the two schools indicated high levels of practices that are associated with professional learning communities, PLC structures in the schools were found to be quite different.

A rich thick description of the two elementary school sites provides a contextual reference for the reader. In multi-site case studies, Merriam (2009) noted, “…each case is treated first as a comprehensive case in and of itself” and then the researcher “seeks to build abstractions across cases” (p. 204). Thus, the themes developed from the qualitative data collection will be presented initially by school and then across the two cases. Data analysis and themes from Bradford Elementary are introduced in Chapter 5 and data from Campbell Elementary follows in Chapter 6. After detailing the findings from the two schools, a cross-case analysis is included in Chapter 7. Triangulation of data sources brought trustworthiness to the findings and is included in the presentation of the qualitative findings.
Bradford Elementary School

In order to enter Bradford Elementary School at any time other than at arrival and dismissal times, you must ring a buzzer that alerts the office of your approach before gaining entrance into the locked school building. Despite locked doors, once you enter the school you find a welcoming atmosphere. While the main office is immediately to the right of the school entrance, visitors first encounter a welcome desk in the entry foyer staffed on a part-time basis by a Spanish interpreter. With Hispanic students representing over 40% of the students at this school, the interpreter is a welcome sight for many parents whose primary (or only) language is Spanish. For those who by-pass the welcome desk, the office staff provides assistance upon entering Bradford Elementary.

A belief in students and the potential they hold is evident throughout the school. The school mission statement is posted in every classroom and is also displayed prominently around the building. While observing the principal, we walked into one classroom in which the principal requested that the students share the mission statement with her visitor. The class joined the principal as they loudly and proudly proclaimed:

[Bradford] is a safe place where we are all unique. We are life-long learners. We are responsible, respectful citizens and community leaders. We are a Project GRAD school of EXCELLENCE!

As they concluded, the students enthusiastically added the school’s year-long theme:

“Celebrate [Bradford]!” Bradford Elementary School is a welcoming place that is full of energy as administrators, teachers, and students work diligently to meet the needs of students each day.
School History

The original Bradford Elementary School was, according to the best information available, constructed as a one-room frame structure in either 1897 or 1898. Under the control of the county, this first school building housed approximately 200 students in first through tenth grades. The Bradford area grew so rapidly that by 1907, it was granted a charter as an incorporated city. While under the control of the Bradford School Board, additions to the building were constructed in 1910-1911, bringing the total number of rooms to 15. Included in the additions were an auditorium, five classrooms, a reading room, a music room, a gymnasium, and one teacher’s restroom. The school remained under the governance of the Bradford School Board until 1917 when the small city was annexed into the larger surrounding municipality.

In 1956, more construction was completed adding a new cafeteria, a new principal’s office, a clinic, two toilets, two teachers’ rest rooms, and thirteen new classrooms. Although periodic modifications have occurred over the last fifty-plus years, the infrastructure of this building remains in use today. Currently two portable classrooms are found on the campus to provide additional classroom space.

The school building is separated from the road by only a small area of grass and a sidewalk. There is no school drive or parking lot on the front of the building. For students who are transported by cars, drivers stop directly on the street for their passengers. Visitors are able to parallel park on the road directly in front of the school. An extremely small parking area for staff members sits behind and to the side of the building. Since the entire student population lives within a one mile radius of the school,
bus service is not provided for students who attend Bradford Elementary. Many students walk to and from school, often accompanied by family members for safety.

_A Project GRAD and a TAP School_

Two distinguishing characteristics of Bradford Elementary School include designation as a Project GRAD School of Excellence and as a TAP™ school. Project GRAD (Graduation Really Achieves Dreams) is a comprehensive national reform initiative that takes a “feeder schools’ approach” to prepare students for college and/or postsecondary vocations (School district website, 2011). The TAP program is also a “comprehensive school reform that restructures and revitalizes the teaching profession by providing teachers with powerful opportunities for career advancement, ongoing professional development, a fair evaluation system and performance-based compensation” (NIET, 2011). Both the Project GRAD and TAP programs play vital roles in the success of this high needs school.

Bradford is one of 10 elementary schools, two middle schools, and two high schools within the school district that participate in Project GRAD. According to the website for the city’s affiliate of Project GRAD, the mission of the program is “to help ensure a quality public school education for Heart of [the city] students that equips and encourages youth to graduate from high school and to succeed in college or post-secondary vocational education.” As a Project GRAD school, teachers and administrators receive materials, professional development, coaching support, assistance with implementation, and recognition (See Figure 4). All of the students in a Project GRAD school are considered to be GRAD scholars. In addition to local support staff and
resources, the school has access to National Project GRAD resources including a support team, trainers, and a network for sharing practices (School district website, 2011).
Figure 4. Components of the Project GRAD Program

Note. Source: School district website, 2011.
As an elementary feeder school, Bradford has benefited by the support services provided by Project GRAD for students and families (See Figure 4). A campus manager is involved in projects promoting family engagement, student welfare, and the building of academic and interpersonal skills (Assistant Principal, personal communication, October 26, 2011). The after-school homework help program and after-school parent nights are coordinated through this campus manager. Other resources provided by the campus manager include working with small group of students on issues, working one-on-one with students, and providing clothing and food as needed. Due to lack of space at Bradford Elementary, the campus manager has a table in one of the hallways that is filled with resources such as clothing and school supplies that are either used with students or to be given to students (Field notes, October 3, 2011). According to the assistant principal (personal communication, October 26, 2011):

Parents are able to (and do!) receive help with clothing, food, transportation, scheduling doctor's appointments, and many more household needs. They generally go to visit [the campus manager] about these issues, and she does many things that even we aren't aware of to help meet the needs of our families.

As a school serving students from poverty, this aspect of being a Project GRAD school meets many needs that cannot be filled by the administrators and classroom teachers alone.

As shown in Figure 4, Project GRAD elementary schools also benefit from resources provided for teachers. Teachers at Bradford received extensive training and support in the areas of reading, mathematics, and even classroom management. A math coach makes weekly visits to the school to work with teachers on lesson planning or to
co-teach math lessons. A school climate consultant (monthly) also provides services to the staff at Bradford Elementary School.

In the 2006-2007 school year, Bradford was one of the four schools (two middle schools and two elementary schools) in the school district to become TAP schools. After finding significant academic improvements (as measured by AYP growth) of students at these four schools, the district expanded the TAP program to include 13 high needs schools in 2011. In partnership with the National Institute for Excellence in Teaching (NIET), the school district is utilizing a $26.5 million federal grant to fund the TAP program (School district website, 2011). NIET (2011) sets forth four foundational elements of success in the TAP model which are outlined in Figure 5. Outstanding leadership from both teachers and administrators is a key to successful implementation of the TAP model. According to NIET (2011) website, TAP “restructures and revitalizes the teaching profession by providing teachers with powerful opportunities for career advancement, ongoing professional development, a fair evaluation system, and performance-compensation.”
Figure 5. Components of TAP™

Following the TAP model of leadership, Bradford Elementary incorporates a leadership team comprised of the principal, the assistant principal, one master teacher, and three mentor teachers. The TAP leadership team meets weekly after school to plan and refine their work. The leadership team’s areas of work include cluster meetings, teacher evaluations using the TAP rubric, and mentoring teachers. Through the grade level cluster meetings, the master teacher leads the teachers through what is known as “cluster cycles.” According to the principal of Bradford Elementary, all cluster meetings are centered on the following framework: (a) identify a need; (b) obtain new learning; (c) development; and (d) apply and re-access (Field notes, October 4, 2011). The TAP program provides a very systematic way to address the instructional practices of teachers as it utilizes teacher leadership to provide the resources necessary to increase teacher and ultimately student success.

One of the cluster cycles is a review of the evaluation rubric designed to address areas of the rubric where teachers feel less confident or lack understanding. In a TAP school, the educators are evaluated annually using a rubric which measures instructional practices. Areas requiring reinforcement and refinement are identified by the leadership team as they observe teachers in action. At the beginning of the current school year, the TAP leadership team led the teachers through an exercise designed to identify areas of challenge for teachers based on the evaluation rubric. In response to these identified needs, a recent cluster focused on levels of questioning used in instructional practices (Field notes, October 6, 2011). The master teacher presented research on levels of questions, provided an activity in which teachers identified the various levels of pre-written questions, and then guided the teachers to find applications within their own
curriculum. Through discussion, the teachers identified areas in which they would apply
and assess the use of questioning over the next week to bring back for discussion at the
next cluster meeting.

Another aspect of the TAP program involves mentor teachers who are assigned to
work with a group of teachers on a weekly basis. Although they do not lead clusters, the
mentors provide follow-up with the teachers on their caseload. Mentors may observe a
teacher in order to be able to provide feedback on an area that has been identified for
reinforcement or refinement. Depending upon the needs of the teacher, the mentor might
script the lesson, record types of questions infused into the lesson, or chart teacher
interactions with students. Modeling instructional practices for their mentees is another
role played by mentors.

Project GRAD and TAP have provided valuable resources for students and
teachers at Bradford Elementary. From rewards for students to resources and families to
professional development for teachers, these programs appear to be ingrained into the
fabric of the school. According to the principal, Project GRAD and TAP have become
part of the culture at this elementary school (Field notes, September 25, 2011).

School Demographics

Bradford Elementary School is a neighborhood school that is categorized as a
high-needs school by the school district. The enrollment at Bradford Elementary in the
fall of 2011 was 370, as compared to 290 reported on the daily average membership for
2010-2011. Minority enrollment has increased from 77% to 82.8% from the previous
school year. The diverse student population is broken down by ethnicity as follows:
17.1% Caucasian, 42.7% Hispanic, 36.9% African American, and less than 1% Pacific
The Hispanic student population has risen from 35.4% as reported in the school improvement plan (2010-2011). During one week in October, 2011, more than 10 Hispanic students enrolled at Bradford Elementary. These students all transferred from a neighboring state whose immigrant policies were changing. Among the students identified as African American, there is a group of Burundian refugees. It is also important to note that the student population is quiet transient with a 32% mobility rate.

While there are three classes for most of the grade levels, the growing student population led to the opening of a fourth kindergarten class in the fall of 2011. Another increase has been in the area of students enrolled in English as a Second Language (ESL). In the fall of 2011, 25% of the student population receives ESL services. As reported by the assistant principal, “many more students come from non-English homes than the 25% reflects, as student often test out of the program as they move up through the grades.” In addition to a large number of Hispanic students, African dialects are also spoken by a small number of the students.

From the 2010-2011 school improvement plan, I learned that Bradford Elementary had a 100% promotion rate. The attendance rate for students was reported to be 95%. Fifty-two (21% of students), were referred to the office for disciplinary reasons over the course of the school year. All of the 370 students qualify for participation in the free/reduced price breakfast and lunch programs.

With 100% of the students at Bradford Elementary School qualifying for free/reduced price meals, it is easy to come to the realization that the school serves children of poverty. While the educational level of parents and guardians of the students varies, the majority have not graduated from high school (School Improvement Plan,
During the 2007-2008 school year, a GED program was implemented on the school campus. According to the SIP, “The majority of parents of [Bradford] students receive some form of public assistance and under federal assessment guidelines are required to enroll in educational programs or seek employment.” As the Hispanic population has increased, the school has addressed the issue of parents not speaking English through a part-time Spanish interpreter and by providing English classes for adults after school hours.

The staff at Bradford Elementary School includes the principal, an assistant principal (an administrative intern), one TAP master teacher, 18 grade level teachers (K-5), an art teacher, a librarian, a special education teacher, a P. E. teacher, and two English Language Learners (ELL) teachers. Three of the classroom teachers also serve as TAP mentors. Part-time positions include a guidance counselor, a music teacher, and a school psychologist. Instructional coaches serve the school in the areas of literacy, mathematics, and gifted and talented. All of the certified teaching staff meets the school district requirement of attainment of the minimum of a Bachelor’s degree. The educational preparation of the staff includes 13 Bachelor’s degrees, 18 Master’s degrees, and 5 Educational Specialist’s degrees. The range of experience of the educators includes both novice teachers and those with more than 20 years of experience. A breakdown of the staff demographics by years of experience is found in Table 22. Staff membership includes 29 females (85.3%) and 5 males (14.7%). The breakdown of ethnicity of the staff is 79.4% Caucasian, 17.6% African American, and .03% Native American.
Table 22

Experience of Bradford Elementary Staff

<table>
<thead>
<tr>
<th>Years of Experience in Education</th>
<th>Number of Staff Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 Years</td>
<td>8</td>
</tr>
<tr>
<td>6-10 years</td>
<td>10</td>
</tr>
<tr>
<td>11-15 years</td>
<td>5</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>10</td>
</tr>
</tbody>
</table>

*Average Number of Years of Experience in Education = 13.02 years

Note. Adapted from 2010-2011 School Improvement Plan.

The Beliefs and Values that Guide Bradford Elementary School

The vision statement of Bradford Elementary School reflects a belief in the value of education for students as it declares, “Our vision is to become a full-service school, working with parents and our community to produce self-disciplined students that become adults who are responsible for breaking the cycle of poverty through academic excellence and community involvement” (School Improvement Plan, 2010-2011). As presented earlier, the mission statement of the school is proclaimed in writing and in voice throughout the school:

[Bradford] is a safe place where we are all unique. We are life-long learners. We are responsible, respectful citizens and community leaders. We are a Project GRAD school of excellence.

The mission of the school is supported by student-centered beliefs that are focused on meeting the needs of Bradford students. These beliefs, as stated in the SIP, are as follows:
• The best is expected of our students, the community, and ourselves.

• All students will learn and achieve.

• A quality education requires a results-oriented, data driven focus on curriculum, which is based on continuous growth.

• A team effort with shared commitment and accountability among students, teachers, parents, administration, and stakeholders is necessary for a successful school.

• A physically and emotionally safe environment where students’ and staff’s needs are met is essential to student achievement.

• Consistent, fair discipline is necessary for an optimum learning environment.

• Our school produces quality citizens, life-long learners, and community leaders.

The student-focused beliefs and mission were reflected in the statements of teacher and administrator interview participants. When asked to describe the beliefs and values that guide the work of the educators at this school, one of the teachers (Teacher 3B) replied:

This is going to sound trite and like a Hallmark card, but this school is all about the children. It really is. No matter what it takes. We do it for the children. We don’t just educate them. We love them; we nurture them. They are such a real part of our lives.

Another teacher (Teacher 2B) noted, “We just want the kids to be able to succeed.”

Observations of five grade level collaborative work groups also evidenced the fleshing out of the school mission, values and beliefs. In these meetings, teachers and administrators analyzed assessment data as a means to determine how best to meet the
needs of the students. A focus on and belief in students is practiced at Bradford Elementary.

Community Partnerships

Community partnerships play a valuable role in meeting the needs of the students at Bradford Elementary School. Sixty-eight adult volunteers spend one hour with the same student each week during the school day. Eleven of the twenty-five partnerships listed in the SIP document are either churches or faith-based organizations. Also included in the community organizations working with the school are corporations, fraternities, the Big Brother/Big Sister organization, a local hospital, a community center, and a recreational center. From these organizations, volunteers spend countless hours tutoring, teaching English to parents, meeting physical plant needs, and providing after school opportunities for students. Financial and material resources from these community partners have afforded such needs as playground equipment and supplies for students.

Organizational Features

Several organizational features of the school are worth noting in an attempt to provide contextual understanding to the reader. Since 100% of the students are eligible for free/reduced price meals, the school does not have the capacity to serve breakfast in the cafeteria. Therefore, breakfast is served in the classrooms each morning starting at 7:25. Soon after 7:45, students carrying thermal containers and crates, bring the remains of breakfast service back to the cafeteria.

The master schedule includes a common planning period for grade level teachers five days per week. While students participate in encore classes such as physical
education, art, and music, teachers have the expectation to work in collaboration with other teachers on four out of five of those days. Also found in the daily schedule is a time devoted to academic intervention or enrichment that is designed to meet the needs of students.

**Academic Progress at Bradford Elementary School**

Meeting the needs of all students was identified as a priority in each of the six interviews conducted at Bradford Elementary. The principal spoke of her staff working diligently “to make sure kids get the knowledge they need because we do believe that education is the only way to break the cycle of poverty.” Observations of six grade level PLCs revealed the principal, the assistant principal, and the teachers working collaboratively to utilize student performance data to make instructional decisions that will address areas of strength and challenge for their students.

As required by NCLB, adequate yearly progress of students is reported from the yearly state assessment tests. Table 23 summarizes academic gains achieved by fourth and fifth grades in reading and mathematics for 2011 as well as a three-year average to give a picture of growth over time. Since state testing requirements commence with third grade, growth data is only available for fourth and fifth grades. The administration and teachers utilize state testing reports by grade level, by teacher level, and by student level in order to identify strengths and weaknesses and to make instructional decisions. As a result of concerns raised from the reading data analysis, the administration and teachers have sought professional development and have also utilized PLCs as a means of addressing areas of challenge. One impact of this process included targeting small group reading practices as an instructional area to strengthen.
Table 23

Value-Added Test Data for Bradford Elementary School

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Fourth Grade</th>
<th>Fifth Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>3 yr. avg.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Reading/Language</td>
<td>2.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Science</td>
<td>-4.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Social Studies</td>
<td>-2.7</td>
<td>0.9</td>
</tr>
</tbody>
</table>

As shown in Table 23, fourth and fifth students at Bradford Elementary fell below the expected growth in science in 2011, but maintained adequate progress when the three-year average is considered. In fourth grade, average scores for social studies in 2011 indicated failure to meet the state growth standard, but again reached that standard when looking at the three-year average for fourth graders. Fifth grade students made adequate yearly progress in social studies in 2011 and the three-year average.

In addition to yearly state testing, benchmark assessments in reading and mathematics are administered three times per year for grades one to five. The administration and the teachers also utilize the test data from these sources to address areas of need for students. While regular education students that fall below the tenth percentile in reading and mathematics participate in the Response to Intervention (RTI) program, the school is in the development stage of implementing a research-based program to provide intervention for students who fall between the tenth and the twenty-fifth percentiles.
**PLCs at Bradford Elementary School**

Although the teachers who completed the PLCA – R instrument in Phase 1 of the study indicated that practices associated with professional learning communities are strong, the term PLC is not part of the day-to-day vocabulary at Bradford Elementary. When asked to participate in Phase 2 of this study, the principal explained that they do not use the term PLC to describe the collaborative work groups in the school. When the school district began to implement PLCs, the principal found that many of the practices being promoted in training were already in place at Bradford Elementary. Therefore, she did not feel it was necessary to use the terminology as long as the school’s practices were in line with the expectations of the school district. As I explained the purpose of my study in each of the teacher interviews, I simply noted that a PLC would include any collaborative work group of teachers and/or administrators. When I explained this to one of the teachers interviewed, she commented, “I have heard it [PLC], but honestly, I don’t even know what it means.” The principal explained:

I kind of like that we don’t use the term because it has become a buzzword. I think it is any time we sit down together and learn from one another and that we have a plan. It is more than planning. We have a plan about what learning will occur and how it will benefit student learning.

Despite the fact that the term is not used, the fundamental practices of PLCs were found to be implemented at this elementary school.

The principal described three types of more formal collaborative work groups that exist at Bradford: grade level planning meetings, TAP cluster meetings, and grade level meetings that include the administrator and other support personnel. The expectation for
teachers is that four of the five common planning each week periods be utilized for collaborative work. TAP grade level cluster meetings facilitated by the master teacher are scheduled on either Thursdays or Fridays each week. In addition to their own grade level collaboration, the third type of PLC occurs as the principal and assistant principal meet with each grade level team either for data-driven collaboration and decision making or for a book study.

The Principal: Ms. Beshears

In order to fulfill the purpose of examining the role of the principal in developing and sustaining professional learning communities, a description of the principal at each of the two elementary schools in Phase 2 is included to provide contextual understanding for the reader. Linda Beshears (a pseudonym) has been the principal of Bradford Elementary School for 10 years. Her 27 year tenure in education has included seven years as a special education teacher and 10 years as a special education consultant for the school district. During her time as principal, Bradford has become both a Project GRAD school and a TAP school as a means of addressing the many needs of the students.

Ms. Beshears is highly visible throughout the school. Her relational style is evident as she greets students and parents as they arrive each morning and as she encounters staff and students throughout the day. She makes a point to greet new students and new parents as they register their students. Her personal commitment is to visit each classroom each day. As a result, students and teachers are very accustomed to her presence in their classrooms, in the hallways, or wherever students and teachers may be. Teacher 1B described Ms. Beshears’s presence as follows:
She has set up the type of relationships where you just expect her to be in there and if not, you wonder where she is. So, she has to let us know when she is not going to be here because we are going to be looking for her...Like, why didn’t you come into my room today? I was doing some amazing teaching and you weren’t here!

Her knowledge of the students is apparent as she interacts with them around the school and asks them specific questions about their school work or about their personal lives. She compliments them for positive actions, but also corrects behavior that does not meet the school’s high expectations.

The principal plays a very active role in the collaborative work groups (PLCs) within the school. She participates weekly in grade level PLCs that may center on a book study related to professional development needs, a discussion of student data, or examining instructional highlights and concerns. Ms. Beshears indicated that she meets with teachers to know what is going on and how students are progressing. She has the expectation that teachers are involved in collaboration with their grade level teams four out of five days each week during their planning time. As a member of the TAP leadership team, the principal works with the master and mentor teachers as they guide the work of the TAP program. All of the five teacher interview participants described an “open-door policy” for their principal. Overall, Ms. Beshears could be described as a very hands-on principal that is committed to her staff and to the students.

Qualitative Findings: Bradford Elementary School

To address the research questions of this study, the qualitative data collection at Bradford Elementary School included interviews, observations, and artifacts. The data
sources provided teacher and principal perceptions as well as evidence from observations and artifacts. The quantitative data from the PLCA—R was also considered as a means of triangulating the findings. In order to find either confirmation of or disagreement with the qualitative data, I often examined specific items from the 52-item instrument. The theoretical framework, Hord’s five dimensions of professional learning communities, served as a sieve for analyzing the wealth of qualitative data. As detailed in Chapter 3, the data analysis included using QDA Miner software to assist the coding of the interview data. The data were analyzed using the constant comparative method (Glaser & Strauss, 1967).

In order to gain the perspectives of teachers and administrators, semi-structured interviews were conducted with the principal, the assistant principal (an administrative intern), and five teachers (i.e., Teachers 1B, 2B, 3B, 4B, 5B). In Chapter 3, demographic information about the interview participants was presented in Table 12. The teacher participants included a kindergarten teacher, a fourth grade teacher, two third grade teachers, and the art teacher. The semi-structured interview protocols are found in Appendices D and E.

Observations at Bradford Elementary included grade level PLC meetings for kindergarten, second, third, fourth and fifth grades; a second grade TAP cluster meeting; a faculty meeting/celebration; and a TAP leadership team meeting. The principal was a participant in each of the grade level PLC meetings. The TAP cluster meeting was facilitated by the master teacher for grade level teachers. Since the TAP program is so ingrained into the collaborative process at Bradford Elementary, it was important to have an understanding of how the TAP cluster meetings are structured and how they contribute
to the work of PLCs at this school. I also spent three days with the principal observing her daily routines that included PLC meetings, classroom visits, walking through the school, meeting new students and their families, and working in her office. Artifacts that contributed to the data analysis included the 2010-2011 School Improvement Plan, email correspondence, the school website, the school district website, the Project GRAD website, the NIET website, documents about school programs, and various documents concerning student achievement.

*The Extent of PLC Practices*

The first research question called for determining the extent to which Hord’s five dimensions of professional learning communities were evidenced in the elementary schools in this study. This question was addressed both quantitatively and qualitatively in this study. The quantitative findings were presented in Chapter 4. The qualitative findings will be discussed by considering the five PLC dimensions: (a) shared values and vision, (b) shared and supportive leadership, (c) collective learning, (d) shared personal practice, and (e) supportive conditions. By utilizing the interview data, observational data, and artifacts, insight was gained into the extent to which PLC practices are present at Bradford Elementary School.

*Shared values and vision.* Shared values and vision implies more the presence of written mission and belief statements. As noted earlier, the student-focused mission statement of Bradford Elementary School is prominent throughout the building. Developing a vision that is “characterized by an undeviating focus on student learning” has been identified as a “hallmark of a true professional learning community” (Pankake & Moller, p. 8). It was important to determine if this statement was found to be evident
in practice. During the interview process, teacher after teacher reiterated a belief that students are at the heart of their actions. In fact, four out the five teachers, the principal, and the assistant principal directly referred to students as they focus as they described the beliefs and values that guide the work at Bradford Elementary School. In addition to the qualitative data sources, shared values and vision was also found to be strong in the PLCA—R data ($M = 3.31$, $SD = .409$). Evidence to support the strength of this PLC dimension will now be presented.

The principal, Ms. Beshears, spoke of the staff’s conviction that education is the key to breaking the cycle of poverty for their students. When asked to describe the beliefs and values that guide the work of the educators at this school, responses from participants included the following:

**Teacher 1B:** No matter what we are doing, it is about the students. Every decision we make at this school is about students first…And if you don’t have kids buying into having an education, then we are not doing our job effectively.

**Teacher 2B:** We just want the kids to be able to succeed. I mean that’s the whole thing. And we all know the kinds of influences and things that affect children in poverty.

**Teacher 3B:** This is going to sound trite and like a Hallmark card, but his school is all about the children. It really is. No matter what it takes. We do it for children. We don’t just educate them. We love them. We nurture them. They are such a real part of our lives. It almost scares me sometimes how tied-in I am.

**Principal (Ms. Beshears):** Whatever it takes. I think that is one thing that we always try to put students first and we talk about it. We try to live that. By that I
mean their learning comes first and the nurturing part. It all points back to the students.

Teachers who responded to the PLCA—R indicated strong agreement ($M = 3.36$, $SD = .505$) with the following item: “Shared values support norms of behavior that guide decisions about teaching and learning.” A commitment to meeting the needs of the students was woven throughout the seven interviews that were conducted.

Another belief that surfaced through multiple interviews is summarized in the following quote by the assistant principal:

They are all our kids. You don’t see that everywhere…that they are all our kids. Part of it is the population, but even the special education and the ELL kids are still my kids as a teacher instead of “I don’t need to worry about them.” And, unfortunately, in other places I have seen that. I love that everybody is working together with the same goals.

Seeing students as “all our kids” was brought up in the three of the five teacher interviews as well as in the interviews with the two administrators. Observational data also upheld this belief. In the third, fourth and fifth grade PLC meetings, I found that the teachers and administrators spoke about ways in which the entire faculty could meet the needs of students rather than just focusing on that particular grade level. This belief was corroborated with strong agreement on the following PLCA—R item: “A collaborative process exists for developing a shared sense of values among staff” ($M = 3.27$, $SD = .467$). An example of this included discussions about collaboration between grade levels for addressing areas of academic weaknesses.
Observational evidence also pointed to practices that demonstrated shared beliefs, values, and mission in action. Grade level PLC meetings in grades two, three, four and five were focused on analyzing student benchmark assessment data in an effort to make instructional decisions. The fourth grade PLC discussed the impact of attendance on the progress of a few students, how to address the needs of students with limited English proficiency, and specific strategies such as a word wall. The PLCA—R data also indicated that teachers offered a sense of agreement ($M = 3.00, SD = .894$) with the statement: “School goals focus on student learning beyond test scores and grades.” Noticeably absent was conversation among the teachers about how that addressing student concerns would impact the teachers. The third grade teachers and administrators pondered how to provide additional academic intervention for the greatest number of students. The kindergarten PLC that I observed was involved in a book study that had been selected to address the primary grade’s target on improving small group reading practices for their students. Observational data supported an undeviating focus on student achievement.

Other evidences of shared values and vision were observed reflecting a solid commitment to doing whatever it takes to meet the needs of students. With a growing Hispanic population, the presence of a part-time Spanish interpreter is indicative of the school’s commitment to meeting the needs of the students. Sixty-eight volunteers work individually with students on a weekly basis in an effort to reach the whole child. As I spent five days at Bradford Elementary, volunteers were often seen checking in or out in the office or in the hallways working one-on-one with students. Through community partnerships and participation as a Project GRAD school, additional resources are
available to address academic, social/emotional, and physical needs of the students. The quantitative data also supported this finding with strong agreement that “policies and programs are aligned to the school’s vision” \((M = 3.27, SD = .467)\). The programs mentioned are aligned with the school’s vision of meeting the needs of students.

The presence of shared values and vision was evident at Bradford Elementary. The work of the staff in PLCs was built upon a student-centered focus. Programs and policies were found to be aligned with the school’s mission statement.

*Shared and supportive leadership.* Shared and supportive leadership is another practice found in schools practicing PLCs with fidelity. According to research (Huffman & Hipp, 2003, 2010; Hord, 1997; Richardson, 2003), administrators in schools with strong PLC practices have been found to participate in nurturing relationships within the school that allowed for shared leadership, shared power, shared authority, and shared responsibility. The principal, Ms. Beshears, was described by each of the five teachers interviewed as one who shares leadership and has an “open door policy.” Teacher 3B remarked, “[Ms. Beshears] likes to delegate for the purpose of letting teachers build their capacity.” When asked about opportunities for teacher leadership at Bradford Elementary, all of the seven interview respondents (teachers and administrators) listed formal leadership roles that included being a TAP mentor or master teacher, a member of the Title I leadership team, participation on the SACs accreditation or SIP committee, or membership on other school committees. Two of the teacher participants indicated that although each grade level does not have a designated team leader, they believe that the collaboration within each team and the small size of the teams made it unnecessary to
designate a team leader at Bradford Elementary. The quantitative data supported the practice of shared and supportive leadership ($M = 3.06, SD = .343$).

The TAP program utilizes both teacher and principal leadership to impact the instructional practices and professional development of the staff. The master teacher plans and facilitates the grade level cluster meetings, while the three mentor teachers provide instructional support to a caseload of teachers. Four of the five teachers noted that all of the teachers with appropriate years of experience have the opportunity to apply to become master or mentor teachers. While the interview participants did not express negative comments about the leadership structure at Bradford Elementary, the following statement is the only comment posted by the 12 PLCA – R respondents:

I feel that it is important for those who have expressed desires to lead in some capacity to be given consideration for positions and tasks. There should be an expressed use for the elected Leadership Team beyond the S.I.P.

Other evidences of shared and supportive leadership were identified through the interview process as participants described ways in which teachers are involved in discussing and making decisions. Teacher 4B described the principal’s style as “very much involving people in the decision-making process.” This comment was echoed in the other four teacher interviews as well. The teachers’ responses included the following:

**Teacher 1B:** She is very big on asking people with their input.

**Teacher 2B:** We’re involved in a whole lot of stuff I feel like….We may brainstorm a list of things impeding us from getting [to a goal]. And then we will meet in committees and come back with something to go forward toward those
goals and share that. And usually pull those into plans. We do have a lot of input; everybody does.

**Teacher 3B:** [Ms. Beshears] is good at being democratic. She very rarely exercises her authority and says, ‘I am making this decision, whether you like it or not.’ I don’t think that I have ever seen that.

In the principal interview, Ms. Beshears indicated that she “likes to give the grade level teams a lot of autonomy,’ but also noted, “Some decisions are just made because of time, unfortunately, and some are directives. On the PLCA—R, the respondents indicated agreement ($M = 3.09, SD = .539$) with this practice: “The principal incorporates advice from staff members to make decisions.”

Observational data also supported the presence of practices that demonstrated shared and supportive leadership. In four of the five grade level PLCs that I observed, the teachers and the administrators were discussing remediation for students based on benchmark testing in reading. In the second, third, and fourth grade level meetings, teachers took the lead in making decisions about students to be included in a new district level remedial program. Ms. Beshears participated in the discussion, but did not dictate the outcomes. At the fifth grade level, participation in the new remedial program, according to the principal, was not mandatory. Prior to the meeting, Ms. Beshears explained that she had given the teachers the opportunity to either participate in the district program or to present an evidenced-based plan to meet the needs of their students in another way. At the meeting, the grade level teachers demonstrated shared leadership as they presented options that would address the academic needs of students and provided evidence to support their ideas. The options presented were accepted by the
administration. While I observed solid evidence of teachers being involved in decisions and initiating change, the data from the PLCA—R was not as strong. When asked to respond to the following item, the mean was 2.91 with a standard deviation of .539: “Opportunities are provided for staff members to initiate change.”

Artifacts examined also provided evidence for shared leadership practices at Bradford Elementary School. In an email sent to her staff, Ms. Beshears shared her thoughts about using data to drive decisions. In this email she noted ways in which teachers, specialists, and administrators would share the lead in meeting the needs of students based on data. As an example, the email described how the administrators and specialists would provide data and data worksheets to grade level teams and then teams would take the lead in determining the course of action necessary. Rather than simply distributing mandates to teachers on what actions were expected, handouts and agendas for cluster meetings demonstrated the shared leadership practiced at this school. This finding was also supported with observational data from a TAP cluster meeting. While the TAP mentor teacher provided research and examples about higher order questions, the teachers also shared leadership as they developed specific ways in which they could take on responsibility for developing and implementing the ideas.

The evidence presented supported the PLC practice of shared and supportive leadership at Bradford Elementary. Both formal and informal opportunities for the staff to provide leadership were found. While the principal is very involved in many of the PLC meetings, she utilized teacher leadership to make decisions about instructional practices.
Collective learning. Collective learning at Bradford Elementary School was most evident in the TAP cluster meetings. In one second grade cluster meeting, the master teacher led the grade level teachers through an activity designed to increase their understanding and application of levels of questioning. The group practiced collective learning as they collaboratively devised higher order questions to be utilized in an upcoming lesson. The teachers were given the expectation to bring back examples of their practice to the following cluster meeting for sharing and reflection. One of the teachers referred to these application expectations as “our homework.”

Another example of collective learning observed at this school involved the kindergarten grade level PLC with the administrators. Part of the grade level PLC meetings this fall have centered on a book, *The Daily Five*, which was selected as part of their efforts to improve small group reading. While the meeting began with the principal asking for “aha” moments from the current chapter, the discussion quickly became a time of learning from one of the teachers who is currently piloting the strategies found in the book. As this teacher shared what was happening in her classroom, the teachers and administrators asked questions to discover more logistical information. The group discussed how and when to incorporate the ideas in other classrooms. Thus, the group’s learning resulted from both the shared reading and the ensuing discussion about implementation. The PLCA—R data supported practices that offer opportunities for collective learning by indicating agreement ($M = 3.09, SD = .302$) with the following statement: “A variety of opportunities and structures exist for collective learning through open dialogue.”
Interview data also pointed to the presence of the collective learning of the staff. The principal described a learning activity involving the TAP evaluation rubric in which teachers scored a video lesson using the evaluation rubric. The scoring results were utilized as “a pretest to see where we [the TAP leadership team] felt like there were parts of the rubric they were less confident about or didn’t understand exactly.” From this determination, a cluster cycle was developed to address areas in which learning was needed. Another description of the learning that comes through the TAP program was given by Teacher 3B:

I have learned more from TAP than I learned from my master’s program…. TAP is very systemic. It’s very constant. They feed you information; you use it. They watch you; they give you more feedback. They feed you more. It has totally changed the way I do my job. We do the cluster meetings more to develop our skills as teachers.

The PLCA—R data also indicated that teachers agreed with the following practice associated with collective learning: “Staff members work together to seek knowledge skills and strategies and apply this new learning to their work” ($M = 3.27, SD = .467$).

Collective learning appeared to be most evident through the work of the TAP program at Bradford Elementary, but was also found as teachers utilized a book study discussion to learn from one another. From both the qualitative and quantitative data sources, I concluded that this PLC dimension is clearly being practiced.

**Shared personal practice.** In order to incorporate shared personal practice, teachers and administrators must address the traditional practice of teacher isolation. One of the ways in which Ms. Beshears has overcome this barrier to sharing personal practice
has been through building the expectation of grade level teachers working together during their common planning time. Ms. Beshears described how the school began with sharing practice 10 years ago and how it has now become the culture of the school:

We started out creating the climate and norms….We started very simply with a graphic organizer that said: ‘What did I do this week that worked? What did I do that didn’t work?’ They did it as a team. So it was focused…just trying to get them into the practice of reflecting….I just had to make sure they were talking and communicating. That’s long gone now. It is the culture.”

On the PLCA—R, a mean of 3.12 ($SD = .284$) was also indicative of the extent of shared practice that is in place at this elementary school. Observations of the PLCs provided evidence of teachers working collaboratively to share their practice and make shared decisions based on analyzing data collectively. Teachers shared data from students and asked for input for strategies from their colleagues.

Opportunities for teachers to work collaboratively are built into the schedule with grade level teachers having common planning time. One day per week the grade level teaching team participates in a TAP cluster meeting with the master teacher in which teachers share practice as they work through the focused topic of the day. Ms. Beshears noted that her goal is participate in a grade level PLC one of the other days each week to “keep our hands on the pulse of things.” Another time when teachers share practice is through the mentor/mentee relationships. Teachers described the times set aside for sharing practice as follows:

**Teacher 1B:** We are now teaching one subject and one of the things that was a concern for the county was that we are making those connections in reading and
math and language arts. So, we plan very closely together so that we know we can make the connections and we know where we can each fill in any gaps.

Teacher 2B: Mostly, we just share with our grade level teams. But when we have staff meetings, we work in our committees and share across the board.

Teacher 3B: We have cluster meeting once a week with teachers who are like us. So, second grade teachers meet with second grade teachers. Not only do they sometimes go over day, they also learn teaching strategies, student strategies, and teacher-based strategies. We sometimes study the rubric.

Teacher 4B: I know I have gone just personally to some of the fifth grade teachers, one in particular that has lots of experience in math. That is her strength. So, I feel comfortable going to her and saying, ‘Here I am having trouble on this. What can I do to improve?’ So, I think everybody is really into helping one another around this school.

Teacher 5B: You are not resistant to going to someone and asking how they (students) are doing….People are open to it. I guess the size helps.

On the PLCA—R respondents expressed strong agreement ($M = 3.36$, $SD = .505$) that “opportunities exist for coaching and mentoring.”

Another example of shared practice was found in the TAP leadership team -- a group which collaborates on planning the cluster cycles and refining their skills as teacher evaluators and mentors. While observing the TAP leadership team meeting, I found that the group shared examples of teacher practices that they had observed. The discussion that followed included bouncing around ideas for addressing needs that were noted from teacher observations. The two new mentor teachers asked for and received
input from the other team members on ways to implement their responsibilities to their mentees.

The PLC dimension of shared practice was found to be evident in the practices at Bradford Elementary School. The TAP program provides many opportunities for teachers to engage in sharing practice with peers as well as with mentors and coaches. The strength of this dimension was supported by both qualitative and quantitative data sources.

Supportive conditions. From their research, Huffman and Hipp (2003) concluded that supportive conditions are the “glue that is critical to hold the other dimensions together” (p. 146). Supportive conditions encompass both structural conditions and relational conditions within a school. The most evident structural condition impacting the work of PLCs at Bradford Elementary School is the daily common planning time that is scheduled for teachers in the same grade level. This structure allows time within the school day for PLCs to work together. Interview data provided insight into the use of this time:

Principal (Ms. Beshears): Everybody has a common planning time and there is an expectation that they are together daily. We are trying to release them of one day so that they can do some things in their classrooms.

Teacher 1B: We are required to meet every day with our team to make sure that we are planning. Even if we are not planning, especially with our group, we might be grading papers and discussing different students…. Also during that time, once a week or every other week, the administrators meet with us. They come in and we talk about different grouping we have and how we are deciding
groups...what we are doing in the classroom and what we are seeing that is effective.

**Teacher 3B:** We have cluster meeting once a week with teachers who are like us. So, second grade teachers meet with second grade teachers.

**Teacher 4B:** For reading, the intentions were to meet with us once a week. And then we have TAP. Then I think once or twice a month we have the math coach come in so that would take up another planning time.

PLCA—R respondents also expressed agreement ($M = 3.00, SD = .447$) that “time is provided to facilitate collaborative work.” Observational data supported the use of the common plan as a structure that supports the work of PLCs. In one conversation that took place while I was observing, a teacher asked the master teacher if he could work with his mentor teacher during a time set aside for the TAP cluster meeting. The master teacher reminded the teacher about the sacredness of the time set aside for these collaborative work groups. She did not back down from the commitment to their meeting structure and supported it by talking about the value placed on the TAP clusters at Bradford Elementary.

Because the assistant principal has been a curriculum coach at other schools in the district, she offered a unique view to PLC work that offered comparison to other schools. She shared this perspective on the use of the structured planning period for PLC work:

If it is a PLC day or a cluster day, she (the principal) doesn’t let other things be scheduled during that time. So making the time scared...she does a great job of that.
She went on to describe how that when the time was not guarded in other schools, it became hard to carry on the PLC work with missing teachers or cancelled meetings.

The expectation to meet appears to be part of the culture of the school. The teachers spoke about the requirements meeting during the planning in a matter of fact manner: it is just a normal part of their job. Teachers were on time to the PLC meetings and were focused on the task at hand. There were no incidents where teachers were grading papers or doing other things. All of the grade level teams actively participated in the meetings. Two of the teachers made the following comments about these expectations:

**Teacher 2B:** Well, she just kind of requires it. Sometimes you don’t have a lot of choice, but she will give you something to work on so that everybody has to come together and share from what they are doing. Everybody has to contribute, either with student work or how you are using the curriculum to achieve something…

**Teacher 4B:** They are tightly structured and that’s why it gives very little freedom just to sit and grade papers. Really what happens is you are taking it home. You are taking outside time to do a lot of things that you would really like to do here. Just preparing. You spend a lot of extra hours outside of work because you have...you are so involved in a lot of meetings. It’s a positive and negative. I see both. It’s both beneficiary, but at the same time it kind of hurts teachers. Sometime I think, maybe, the morale can go down.
While mixed feelings may exist about the requirements, both observational and interview data provided evidence that the common plan structure provide support that makes PLCs meeting a priority at this school.

The other aspect of supportive conditions is relationships. Relationships surfaced often in interviews as being very important to the teachers and administrators at Bradford Elementary. Four out of the five teachers interviewed and the principal used the word family to describe the relationships that exist among the staff at this school. The principal’s words provided insight into this sense of family:

Indescribable. I would say family, family, family. That includes all the good, the bad, and ugly. That means we may bite each other’s head off occasionally, but we always come back and reflect. We support each other. Honestly, people come in this building and say, ‘I have never been in a place like this.’ I think it is fostered out of…certainly, I think… everyone here has a servant heart. I believe that we need each other and we recognize that. So, I would say I have never worked in a place where they take care of each other like this. It’s not cliquish. I think you have to work hard not to make it cliquish…It’s pretty phenomenal. That’s what defines us.

Teacher 2B spoke of how she feels that the sense of family becomes ingrained in those who become part of the school staff:

We’re family. I know it is because we are small…I mean even new people…it doesn’t matter if you are here and not here (points), we will know right away if you are going to stay. But if you are here, you can’t let go. I mean it’s just you
get so involved with the community and the kids and helping each other. It’s like you can’t leave if you wanted to.

The art teacher, Teacher 3B, commented, “We rarely have any kind of fighting—arguing—like I have see at other schools where it is constant.” On the PLCA—R, the supportive conditions-relationships was the PLC dimension with the highest mean ($M = 3.58, SD = .451$). The importance of positive relationships was evidenced throughout the qualitative and quantitative data.

During the five days that I spent at Bradford, a sense of team work was observed in multiple settings. The first was in the grade level PLC meetings in which the principal worked collaboratively with the teachers to analyze student test data and identify needs for academic intervention. During a three day period in which 12 new Hispanic students were enrolled at the school, I observed positive working relationships among the multiple people involved in registering, doing placement tests, and placing the children in classes. I observed a TAP leadership team that lasted for about two hours. The trusting, supportive relationships were evident as the team evaluated the TAP work in progress and made plans for the future. The group shared from their personal life as well as their professional roles. With the added responsibilities that come with being part of this leadership team, the principal shared plans for how a substitute was going to be used to offer time within the school hours to carry out their work. This was presented in the context of caring for the team members as they mentor the staff.

Each month the staff has a celebration meeting designed to celebrate birthdays and the positive things happening in the school. In the celebration that I observed, teachers shared success stories of students and teaching highlights. The friendly, family-
type atmosphere was visible as the staff shared cake and stories. Teachers shared stories about individual student’s successes. The teachers and administrators celebrated the victories of the teachers and also the students. In each observation, I noted that laughter came easily to the staff members as they comfortably interacted with each other.

Trust is another aspect of relational conditions that was described by the participants. The assistant principal described the trusting relationships among the staff in this way:

One of the things the grade levels have to me…they do have shared trust. That I don’t have to worry if my teammates are going to look down on me because I have that shared trust.

Teacher 2B spoke of her comfort with her colleagues as she commented:

Well, I think first of all if you have an atmosphere where you know you are safe to share. We have that. I could go to anyone in this building and ask them for advice and I feel like—I hope—that that I am welcome, that they could come to me.

A sense of trust was observed with the ease in which teachers welcomed the principal into their classrooms. One of the teachers (1B)voiced that trust as she remarked:

The thing is, she is not in our classrooms because of a lack of trust, and she is in our classrooms because she cares. She wants to know the kids. She wants to see what they are doing. So there’s a big difference and you feel that from her. I have had administrators before that are in there because they don’t trust you…. [Ms. Beshears] gives you that freedom to teach the way you know your kids. I think not giving that trust to your teachers also hinders the process.

190
Another facet of trusting relationships that was described by the teacher participants was the value of Ms. Beshears trusting her staff as well. These insights about working relationships were supported by strong agreement ($M = 3.73; SD = .467$) with the following PLCA—R item: “Caring relationships exist among staff and students that are built on trust and respect.”

Supportive conditions are a vital part of the success of PLCs. At Bradford Elementary school, supportive structures provide time for teachers to work collaboratively in professional learning communities. Positive relationships built on trust, support, and caring set the tone for being able to work together.

*Summary of the extent of PLC practices.* In response to the first research question, the data presented supports the conclusion that the five dimensions of professional learning communities are strongly evidenced in the collaborative work of the staff at Bradford Elementary. After determining the extent of PLC practices at Bradford Elementary School, themes concerning the role of the principal in developing and sustaining PLCs were developed to address the second research question. Findings related to the ways in which principals foster and/or hinder the work of PLCs will now be presented.

*The Role of the Principal*

In order to achieve the purpose of examining the role of the principal in developing and sustaining professional learning communities, teachers and principal perceptions were examined. The analysis of the qualitative data sought to answer the question: What are the roles of the principal that foster or hinder the successful implementation of PLCs? After consideration of teacher and principal perceptions and
how the two compared, the following four themes were developed: relationships matter; structure is necessary; walk the talk; and offer accountability. In each of these areas, fostering and hindering aspects of the principal are presented. As will be shown, the majority of the interview data pointed to the ways in which the principal impacts PLC work in a positive way. It is worth noting that throughout the interview process, participants primarily referred to situations other than at Bradford Elementary when they spoke of ways that principals hinder PLC work. Triangulation of the data sources will be offered as a means of adding strength to the findings.

**Relationships matter.** In the literature, supportive conditions found in schools implementing a professional learning community included both supportive relational conditions and supportive structural conditions (Hord, 1997, 2008; Hord & Sommers, 2008; Huffman & Hipp, 2003; Leo & Cowan, 2000). The strength of the relationships among the staff at Bradford Elementary was found to be ingrained within the culture. As presented previously, four out of five teachers and the principal each used the word family as they described relationships among the staff. As has been presented, supportive conditions - relationships was the strongest of the PLC dimensions addressed on the PLCA—R instrument. Throughout the interviews and observations, evidence pointed to the positive contribution made by the principal in the area of supportive relationships. Teacher 3B described the role of the principal as she noted the tone of the relationships in a school “trickle from the top.”

York-Barr and Duke (2004) identified trust and positive working relationships among teachers as peers and with administrators as one aspect of fostering teacher leadership. Interview and observational data from Bradford Elementary pointed to the
ways in which the principal can positively impact PLC work at a school by developing trust and collaborative working relationships. As principal, Ms. Beshears demonstrates that she values relationships—with teachers, with students, with parents, and with the community. As noted by all of the five teacher interview participants, one of the ways in which Ms. Beshears contributes to positive working relationships is through having an “open-door policy.” While observing at Bradford Elementary School, I saw this open-door policy in action as teacher after teacher dropped by Ms. Beshears’s office to discuss concerns about students, placement of new students, after-school programs, and other needs. Each person was at ease as they spoke with the principal. Over the course of three days, I observed the principal start the process of building trust with students and parents as she greeted 12 new students and their families. On the PLCA—R, the data indicated strong agreement (M = 3.73, SD = .467) that “a culture of trust and respect exist for taking risks.”

The teachers spoke of the elements of trust and the role played by their principal in different ways. Five out of seven of the interview participants spoke of the positive impact of relationships at this school including both professional and personal aspects. Teacher 1B described the principal as one who “gives us a lot of trust” and noted that “having trust in your teachers is a big thing.” Teacher 2B spoke of how the principal contributed to developing trusting relationships by being vulnerable herself:

Well, she is just raw and emotional and lets us all go there. If we’ve got something to talk about, we are just right there all of the time.

This teacher went on to talk about how the principal had led the staff through activities that helped them share with each other. This teacher described herself as one who liked
to keep to herself and do her job, but had been impacted by the principal in the area of relationships. She commented, “She almost wants you to have that point where you can just break out of professionalism and break out and get on that level with everybody.” Building a sense of trust—trust in the principal and principal trust in teachers—was found to be an important aspect of how the role of the principal impacts relationships within a school.

Building trusting relationships with the staff has an impact on the way the administrators and teachers carry out their jobs. Because the principal has positional power that includes hiring and assigning teachers, evaluation of teachers, and setting policy, the tone of the working relationships reflects the leadership style of principal. Teacher 1B described the type of working relationships that this principal has built as follows:

Because we are at the point where if she doesn’t come into the classrooms, I will go down and ask, “Where were you today?” It’s not like at some other schools where when the principal walks into your room you go, “Oh my gosh! What have I done?” That’s because of the kind of relationship they set up with you. She has set up the type of relationships where you just expect her to be in there and if not, you wonder where she is. So, she has to let us know when she is not going to be here because we are going to be looking for her…Like, why didn’t you come into my room today? I was doing some amazing teaching and you weren’t here!

As I observed grade level PLC meetings, the TAP leadership team meeting, and other day-to-day activities involving the principal, I found positive working conditions that appeared to be built on a trusting foundation. Teachers appeared very much at ease when
the principal walked into their classrooms or in meetings. The PLCA—R data showed strong agreement ($M = 3.55$, $SD = .522$) with the statement: “Relationships among the staff members support honest and respectful examination of data to enhance teaching and learning.” Although the principal was part of the grade level PLC meetings, there was not a sense of the principal dictating the course of action to follow. The discussions among the teachers and the principal included times in which teachers offered opinions that were in opposition to the ideas of the principal. The observations of these meetings revealed a sense of collaboration among the teachers and administrators.

When asked how the principal contributes to developing and sustaining trusting and caring relationships among the staff, the participants spoke of the importance of the principal leading the way by knowing the school and encouraging others to do the same. Comments included:

**Assistant Principal:** You’ve got to get out there. You can’t be in your office the whole time. You’ve got to get out there and be in the classroom. You’ve got to be where they are eating lunch…where they are hanging out in the afternoon. Just be available for teachers to come and talk to you and listen and be hearing what is going on. Just kind of have your finger on the pulse of what is going on.

**Teacher 4B:** She knows everybody. She is involved with all of the behavior…with the mission statement…and I do believe that we follow that well here.

**Teacher 5B:** We are so blessed because of our size. We all know students because it is such a small staff, so the comfort is there with most of us that we can
just go for help or to talk with each other. It’s almost like a family atmosphere…You are not resistant to going to someone and asking…

Six of the seven interview respondents also spoke of the importance of keeping your “hand on the pulse” of the staff, both professionally and personally.

Additional comments about the role of the principal in developing relationships included:

**Teacher 1B:** …developing those relationships at the beginning so that when you have to be the administrator with feedback and tough love, teachers take it just as well as they do the positive because they know it is coming from a good place.

**Teacher 2B:** I like that everything is just so open here that we all feel comfortable….I tend to be really confident and just want people to leave me alone and let me do my thing. At the same time I know I can’t do that. I am not free to go into my room and do my thing because more is expected of me that that. We have to be open.

**Teacher 4B:** I think it is important to look at the strengths of each staff member and being able to organize their strengths and weaknesses to balance different groups…So, a lot of it is just know your staff personally. Knowing their strengths and weaknesses and kind of building from that base.

**Teacher 5B:** Well, with her [the principal] too…her biggest thing and she says it every year—you know, the gossiping—we are not going to treat each other with any kind of disrespect. We are going to work together as a team. We all have to make it work.
While the responses of the interview participants were overwhelmingly positive about the ways in which the principal fosters relationships, it is important to also discuss findings concerning ways that principals can hinder the development of trusting and caring relationships. The principal felt that “having a very small core group” and “going to the same person all of the time for leadership” can be detrimental to developing positive relationships among the staff. She described the state of the faculty when she came to Bradford Elementary as one in which “certain people were privy to the principal and others who were not.” When teachers are not treated equally, resentment can develop. The principal noted that when inequality is even perceived, it can be problematic. This hindering stance of a principal was supported by other participants as well:

Teacher 3B: [The principal] can favor a select group and picked them for every job that had any kind of power or any kind or reward. I had one principal who, instead of allowing the staff to pick the teacher of the year, she picked it on her own. That kind of thing gives more power to a few and is not democratic. I think that is one way you can hinder relationships.

Teacher 4B: You may feel alienated. You feel resentment builds up. With shared leadership as a key component to successful PLCs, it is realistic to view favoritism as something that keeps power only among a few.

Another hindrance to building positive working relationships occurs when principals do not deal with issues that arise as the staff works together. Teachers 4B and 5B spoke of resentment that can build among teachers when concerns or problems are not confronted. It is not enough for principals to simply expect teachers to avoid negativity
and to work collaboratively. In contrast, modeling positive interactions with the staff contributes to building positive relationships. Teacher 2B spoke of how teachers can get mad at each other, but still come back the next day and work well together. When the principal ignores what is working against positive working conditions, his/her actions can hinder the work of PLCs.

As the interview participants noted multiple ways in which the principal can play a part in fostering positive relationships, they often cited the opposite actions as hindrances. Included among these were staying in their office, not hearing the concerns of the staff, and not appearing to care about the staff both professionally and personally. Three of the seven participants noted that when principals make negative comments about the staff to others it hinders relationships. The assistant principal noted that this concern about negative comments included not only the principal making them, but also ignoring the negative comments that are present among the staff. The following statements provide insight into specific hindrances from the teachers’ perspectives:

**Teacher 2B:** Well, if you are set up in a competitive environment where you want to outdo each other all of the time or if [principals] are punitive or not at least positive.

**Teacher 3B:** I had a principal recently who continued to call special area faculty support staff. That was our only purpose. That hindered us from sharing anything. She never included us in anything the classroom teachers were doing.

**Teacher 4B:** If things are not addressed openly and upfront….Just avoidance. Because what happens…you start avoiding people. If there is something that needs addressed, you might not go and try to deal with it because you are
afraid…not afraid, but maybe just apprehensive of the reaction you have gotten before.

It is important to note that as the teachers shared ways principals can get in the way of building caring and trusting relationships, they shared examples that were from other situations or were simply the opposite of the ways they describe the principal at Bradford Elementary fostering relationships.

Relationships matter when it comes to developing and sustaining professional learning communities. As found through interviews and observations at Bradford Elementary, the principal can foster PLCs by fostering the development of trusting and caring relationships. This theme was also supported by the quantitative data. Developing a sense of family has contributed to the positive way in which the staff at this school works collaboratively to impact student learning and development. When the importance of relationships is downplayed by the actions of the principal, his/her role can become a hindrance to the work of PLCs.

**Structure is necessary.** Supportive conditions are one of the five dimensions of PLCs set forth by Hord (1997, 1998, 2008). This aspect of PLCs includes both structural and relational conditions. Just as relationships were shown to be deeply embedded in the collaborative work at Bradford Elementary, structures that support the work of PLCs were found to be integral to the strength of the practices at this school. The data analysis supported the conclusion of the Ontario Principal’s Council (2009): “Time for collaboration and teamwork is essential to establishing a school culture that supports a professional learning community” (p. 46). As presented earlier, the most evident
structural condition impacting the work of PLCs at Bradford Elementary School is the daily common planning time that is scheduled for teachers in the same grade level.

As principal, Ms. Beshears has impacted the PLC work by establishing the expectation that the grade level teams are working collaboratively four out of the five days each week. One of the planning times is set aside for a grade level TAP cluster meeting that is facilitated by the TAP master teacher. Another PLC time involves the grade level team in collaboration with the principal and assistant principal on student data and progress, a book study, or discussing instructional practices. Teams are expected to work together on two other days as well. Interviews, observations, and artifacts supported this structural condition as critical to the success of PLCs at this school. The following descriptions speak to the importance of this structure:

**Assistant Principal:** She [principal] does a good job in making sure other things are not scheduled during that time. If it is a PLC day or a cluster day, she doesn’t let other things be scheduled during that time. So, making the time sacred…she does a great job of that.

**Principal (Ms. Beshears):** Everybody has a common planning time and there is an expectation that they are together daily. We are trying to release them of one day so that they can do some things in their classrooms.

**Teacher 1B:** We are required to meet every day with our team to make sure that we are planning. Even if we are not planning, especially with our group, we might be grading papers and discussing different students…. Also during that time, once a week or every other week, the administrators meet with us. They come in and we talk about different grouping we have and how we are deciding
groups…what we are doing in the classroom and what we are seeing that is effective.

**Teacher 3B:** We have cluster meeting once a week with teachers who are like us.

So, second grade teachers meet with second grade teachers.

These statements were typical of those given by all seven interview participants. The PLCA—R data also offered teacher agreement ($M = 3.18, SD = .603$) with this related statement: “The school schedule promotes collective learning and shared practice.”

During the week of October 3-7, 2011, I also observed this structure (common planning time) in action. During that week the scheduled PLC meetings I observed included second and fourth grade PLCs on Monday; kindergarten, third, and fifth grade on Tuesday, a faculty meeting and a TAP leadership meeting on Wednesday, and a second grade TAP cluster meeting on Thursday. As presented earlier, I observed a teacher asking the master teacher if he could work with his mentor teacher during the time set aside for the TAP cluster meeting. The master teacher reminded the teacher about the sacredness of the time set aside for these collaborative work groups and did not back down from the commitment to honor the meeting structure.

The structured times for PLC meetings appeared to be “set in stone.” The following comment seemed to sum up the role of the principal when it comes to the structure:

**Teacher 2B:** Well, she just kind of requires it. Sometimes you don’t have a lot of choice, but she will give you something to work on so that everybody has to come together and share from what they are doing. Everybody has to contribute,
either with student work or how you are using the curriculum to achieve something…

While the interview participants spoke of the expectations for the PLC as an embedded aspect of their work, only one teacher spoke of the downside of this structure:

**Teacher 4B:** They are tightly structured and that’s why it gives very little freedom just to sit and grade papers. Really what happens is you are taking it home. You are taking outside time to do a lot of things that you would really like to do here. Just preparing. You spend a lot of extra hours outside of work because you have...you are so involved in a lot of meetings. It’s a positive and negative. I see both. It’s both beneficiary, but at the same time it kind of hurts teachers. Sometime I think, maybe, the morale can go down.

While mixed feelings may exist about the requirements, both observational and interview data provided evidence that the common plan structure was an essential part of the success of PLC practices at Bradford Elementary.

One of the ways in which principals can hinder the development of PLCs is to not see structure as important to collaborative work. The assistant principal, who has facilitated PLCs in other schools as a literacy coach, noted that when principals do not keep the structured times set aside for PLCs as sacred, the collaborative work suffers. She described schools in which other things are scheduled during the planned PLC time or individuals are pulled out or allowed to do something else to the detriment of the group.

Although structure is important to developing and sustaining PLCs, a time structure alone is not enough. Principals can hinder strong collaborative work by not
providing other necessary aspects of structure. Throughout the interview process, teachers spoke of what happens in their PLC meetings. All of the seven participants described working collaboratively on things such as analyzing data, addressing ways to meet the needs of students, developing instructional strategies, sharing ideas, sharing struggles, and refining their teaching practices. Observational data supported PLC structured times being focused on meeting the needs of students. Noticeably absent were teachers grading papers, conversations about field trips and school events, and teacher gripe sessions. The process appeared ingrained into the culture of the school. The principal spoke about how this evolved:

We started out creating the climate and norms and there was a time they turned things into me. We started very simply with a graphic organizer that said, “What did I do this week that worked? What did I do that didn’t work?” They did it as a team. So it was focused…just trying to get them into the practice of reflecting and probably before all of the books came out…just to kind of make sure they were talking and communicating. That’s long gone now. It is the culture.

While the teachers did not express verbally that the lack of these structures for communicating and reflection could be a hindrance, I wondered if the collaborative work would have been as strong without the process of learning how to collaborate.

When principals do not have a “finger on the pulse of the school” (Assistant Principal Interview), the PLC structure may not meet the needs of teachers or students. Speaking to this problem, the assistant principal stated:
It can also be saying our goal is increasing reading when teachers are saying, ‘I need this for reading” and then saying, “We can’t do that.” That would be a hindrance.

The art teacher (Teacher 3B) spoke about a lack of structure for specialists like herself to work collaboratively. The PLC structure at Bradford Elementary is set up primarily around grade level teams. In the principal interview, Ms. Beshears noted that while the common planning time works well for horizontal collaboration within a grade level, it does not provide time for vertical planning across grade levels. Thus, having a structure that focuses on grade level collaboration without also developing structures that could enable vertical or interdisciplinary collaboration and collaboration among area specialists (i.e., art, physical education, music, and special education) can hinder PLC work from meeting its full impact in a school.

Recognizing the critical role played by building structures that support collaborative work is an important way that principals can foster PLC practices. The principal has the positional authority to impact the development of supportive structures. Failure to construct support structures can impede the success of PLCs.

*Walk the talk.* As I analyzed the qualitative data gathered at Bradford Elementary, it became apparent that requiring teachers to participate in collaborative work groups is not sufficient for successful PLCs. Over and over again, I heard and also observed the need for the principal to “walk the talk.” It was during the principal interview that I first heard this idea put into words:

If you don’t value it, they won’t value it. I think the most important is walking the talk and being a learner beside them. I think that is huge.
Interview participants used similar phrases such as “being a model,” “starts at the top,” “trickles from the top,” “models it,” “role model,” and “practice what you preach.” The principal elaborated this idea as she stated, “You have to lay the expectations out there and then you have to live it with them.”

As noted previously, the principal sets the tone for relationships and working conditions within the school. The following statements provide a few of the interview participants’ beliefs about how the principal can foster PLC practices as a role model:

**Assistant Principal:** Being a model of it first. Practice what you preach. Don’t just say we are teaching the whole child, but really being out there to see the needs of the child in the classroom…Really modeling it and giving [teachers] support.

**Teacher 1B:** [Ms. Beshears] is a huge advocate of student growth. And she is a very big believer that students come first. No matter what we are doing, it is about the students. Every decision we make at this school is about students first.

**Teacher 3B:** It trickles from the top. The principal is so important in schools. I’ve had great principals like [Ms. Beshears]. I have had principal that should have never walked into a school building. So, I have seen both sides of it and it trickles from the top. They set the tone. They set the practices in place. They either value or de-value people in the building.

One of the teachers (Teacher 1B) noted that when she gets the opportunity to be an administrator, she desires to “model a lot of the same things [Ms. Beshears] does.”

Another way in which the principal was described as having a positive impact on PLC practices was by being real with the staff, showing vulnerability, and including the
staff in what is going on at the school. When asked to describe how the principal has contributed to the collaborative work at Bradford Elementary, responses included the following:

Teacher 2B: She lets us know everything that is going on in her head. If not immediately, eventually we will meet about it and she will say, “This has been going on and I am really stressed.” She is just really good about letting everybody in on everything.

Teacher 3B: She is also fairly transparent about things. You don’t get surprised by things that are changes in the way we operate. She is really good about telling us what’s going to happen.

Teacher 4B: If [Ms. Beshears] sees something is not working, she is not afraid to come back and say, “Well, let’s just forget that and try something else. Scratch…let’s just scratch it and do something else.”

The impact of being real and at times vulnerable with the staff appeared to be an atmosphere that was built on trust and valued teachers as part of the decision making process.

Being real also means that words are backed up with actions. As has been noted, the principal and teachers described an open-door policy with the principal at Bradford Elementary. During the interview process, I found that four out of five teachers described the principal as one who really listens to their questions, ideas, concerns, and feelings. The following perception offered by Teacher 4B was typical of those offered by the other four teacher interview participants:
We always feel like we are heard. We are able to collaborate together in staff in-service days. A lot of times that is shown through activities where everybody is able to give out their ideas and then we talk about it as a group. If there are things we won’t to change, the will are all able to put forth—to freely communicate—our opinions.

From the PLCA—R data, I found that teachers strongly agreed ($M = 3.64, SD = .505$) that “decisions are made in alignment with the school’s values and vision.”

An example of how the principal’s words are put into action can be found in the area of shared leadership. The principal spoke of the importance of shared decision making, but the five teachers actually supported her statements as actually being practiced at their school. Teacher 3B noted, “[Linda] very rarely exercises her authority and says [that she is] making this decision, whether you like it or not.” Two teachers described her as being ‘democratic.” The principals’ claims were also supported through artifacts and observational data. One of the artifacts shared with me by the principal was an email that she sent to her staff concerning decisions about a new intervention program in the school district. The correspondence provided data to support the need for the intervention and also the principal’s perspective on decisions related to this program. This email was sent in advance of PLC meetings that were to be devoted to this new program. Observations of the grade level PLC meetings supported the principal’s perspective she involves teachers in decision making. Teachers were actively involved in deciding how they would implement the new intervention program rather than the principal simply outlining the plan for the grade level. One way in which the PLCA—R data supported these practices was through agreement ($M = 3.18, SD = .603$) with this
item: “Staff members collaboratively review student work to share and improve instructional practices.” Teacher 2B described how the principal puts the idea of shared decision making into place this way:

[Ms. Beshears] is not pushy, but she will let you know when this is non-negotiable. This is something we are going to do…figure out how you are going to do it. But, most of the time she will, unless it is a really, really big deal, she won’t give you a guideline that is this, this, and this. She will let you work it through for what works with your grade level team and gives you enough leeway that makes it comfortable for your team.

Listening to teachers and involving them in decisions are two ways in which the principal was found putting their words into practice.

It is difficult to truly measure the impact of a principal who walks the talk. The following responses provide a few additional insights presented from the teachers’ perspectives:

Teacher 1B: …if you need to improve something, you are willing to do it and you don’t take offense to it because you know it comes from a good place.

Teacher 2B: Well, I think first of all if you have an atmosphere where you know you are safe to share. We have that…You know you hear from other schools that they are competitive and they don’t want to share. I think the principal fosters that from the top down.

Teacher 3B: I think with the growing Hispanic population, she has been proactive in making sure we have in place what we need—pulling in volunteer translators from the community...She sees that there are needs on our part. She is
even talking now about Spanish classes for staff—just basic things—that will bridge these first few weeks with kids.

Overall, the consistency of the message and the action of the principal were found to have a positive impact on PLCs in a school.

Just as principals can foster the development of PLC practices by “walking the talk,” failing to put words into action can be a hindrance to collaborative work. When asked how the principal might hinder the work of PLCs, all of the interview participants described either hypothetical situations or situations in other schools. The interview data included examples of ways in which the principal promotes PLCs, but yet acts in a way that is seen in contrast to valuing the collaborative work. Typical responses of the interviewees included:

**Principal:** “Number 1: If [principals] are not a big collaborator themselves. If [principals] don’t see the value in it, then that is going to hurt. If [teachers] see it as a directive, as opposed to a practice that is going to make a difference.

**Assistant Principal:** Definitely scheduling all sorts of other stuff during the PLC time.

**Teacher 1B:** Not feeling like we could go to her and talk to her.

**Teacher 3B:** I had a principal recently who continued to call special area faculty support staff. That was our only purpose. That hindered us from sharing anything. She never included us in anything the classroom teachers were doing.

When principals “walk the talk,” the teachers may be more likely to follow their lead. By being real, the principal at this elementary school has earned the trust of her staff. The role of the principal may be a hindrance to building and sustaining
collaborative work when they dictate the need for PLCs, but yet do not “practice what they preach.”

*Offer accountability.* Another theme that was developed through the analysis of the qualitative data was the importance of offering accountability. From the interviews, observations and even the artifacts collected, I found that the principal at Bradford Elementary went beyond simply setting up the structure for PLCs. The principal noted that PLC meetings at Bradford Elementary include “a plan about what learning will occur and how it will benefit student learning.” When asked how principals can hinder the work of PLCs, Teacher 1B’s response included her rationale for the importance of accountability:

I think not holding teachers accountable. It goes back to the classroom, too. Holding kids accountable makes kids want to do it. If you are holding teachers accountable, then they want to do it. I think a big part of that is accountability.

As presented earlier, the structures for PLCs at Bradford Elementary include common planning time, TAP cluster meetings, TAP leadership team meetings, and grade level teaching teams. The elements of accountability centered on how the structured time was spent; the expectation of actions to be done prior to, during, and following PLC meetings; and the teacher evaluation system.

Teachers spoke of accountability as “a matter of fact” at Bradford Elementary. From all of the qualitative data sources, I found that it appeared to be another aspect of PLCs that was ingrained in the culture. When asked about the principal’s role in the collaborative work found in PLCs, elements of accountability surfaced. Interview responses included the following:
**Teacher 1B:** She (principal) plays a big role in the collaborative process here. I have had some schools where the principal would require you to plan together, but never held you accountable for it. [Ms. Beshears] holds you accountable for it. She’s constantly saying, “What are you guys doing?” She is constantly holding us accountable for that.

**Teacher 2B:** Well, she (principal) just kind of requires it. Sometimes you don’t have a choice, but she will give you something to work on so that everybody has to come together and share from what they are doing. Everybody has to contribute, either with student work or how you are using the curriculum to achieve something, or you’ll have to meet and set goals.

**Teacher 4B:** Like I said before, it is so important for that person to say, here’s my expectations…here’s where we need to go… here’s where the school is struggling, so here is where our focus needs to be. Just setting those boundaries and guidelines benefits the staff as a whole.

Teacher 4B also described how the principal expects teachers to be accountable for student progress. When the available data indicates that an approach is not working, she leads teachers through PLC structures to develop a plan, works with them to implement the plan, and then follows up with the impact of actions. From the PLCA—R data, I found that teachers expressed strong agreement ($M = 3.64, SD = .505$) with this item: “Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.’ Teacher 2B shared that as a result of their work through TAP clusters, the teachers are very accustomed to setting specific goals tied to data and continuing to evaluate the progress toward meeting the goals in their PLCs.
Three teachers described how their grade level groups hold each other accountable by asking each other about instructional practices, student progress, and staying on track with presenting the grade level curriculum. The PLCA—R data also indicated that teachers agreed ($M = 3.27$, $SD = .467$) with the statement: “Staff members informally share ideas and suggestions for improving student learning.”

Observational data and artifacts supported the importance of accountability to the PLC practices at Bradford Elementary School. As has been previously noted, four of the five grade level PLCs observed were centered on utilizing available test data to make decisions concerning the implementation of a new district-wide integration program. In each of these meetings, it was obvious that teachers are responsible for student progress. The administrators shared in that responsibility by providing input on decisions, offering support to facilitate the team’s implementation of the program, and by adhering to the mandates of the school district. In an email sent to the teachers prior to the PLC meetings, the principal provided an overview of student achievement as had been measured through both the 2011 state testing and benchmark testing conducted at the school level. Within the email, the principal put forth the areas in greatest need of improvement as she challenged the staff to consider how they would address the needs. She also gave them assignments to complete prior to the PLC meetings. Teachers brought the required work (sorting students according to test data) to the meetings. During the meetings, they formulated a plan and discussed how they would measure progress toward reaching their goals. Accountability will include sharing progress in PLCs and analyzing the next available benchmark tests.
Another way in which the principal offered accountability to the staff was observed in the kindergarten PLC. This group has been engaged in a book study. The expectation that the study should lead to change in practices was obvious as the meeting progressed. The meeting was far more than a discussion of the required reading. As has been previously presented, the teachers and administrators utilized the time to learn from one kindergarten teacher who is piloting the practices being studied. Accountability was established as the group devised a plan for implementation the strategies. The expectation was that they would continue to read the book and to share how they are progressing toward implementation.

Accountability is built into the TAP program through the cluster meetings and teacher evaluations. Teacher 3B described the TAP program as follows:

TAP is very systemic. They feed you information. You use it. They watch you. They give you more feedback. They feed you more. It has totally changed the way I look at my job. I was a pretty good teacher before and I look at what I did then and I was just adequate. I was barely adequate and now I am doing so much more that helps the children think and learn.

During my observation of a TAP cluster meeting, teachers were expected to participate actively in the learning and discussion of higher order thinking. The master teacher provided time for the group to work on developing questions to use during the next week. The expectation was that teachers would bring feedback to the next cluster meeting. Four of the five teachers talked about how the master and mentor teachers incorporate accountability by observing teachers’ practices as well as discussing progress toward meeting the expectations. Accountability is also embedded in the TAP program by
presenting learning opportunities designed to improve teacher practices that directly tied to the rubric utilized in the teacher evaluation model.

Providing structures has been set forth as a way that principals can foster the development and sustainability of PLCs. The principal can foster the development of PLCs by building accountability within the PLC structures. Ms. Beshears shared how that accountability also helps the administration to “keep our hands on the pulse of things.” She stated:

I want to meet with them once a week because it helps me understand and that is either the book study or looking at data. Basically, it is where we are. It may be weekly data if we don’t have big data like you saw today (benchmark and achievement test data). We meet and see what did you teach last week? How did your kids do on it? It just increases accountability and it also helps me like I said know what’s going on and be able to support them on what they need. I just want to support them.

Part of the accountability at this school includes having a plan for what will happen at meetings centered on how it will impact student learning. With the principal or master teacher participating and/or facilitating some of the PLCs at Bradford Elementary School, there is a sense of built-in accountability. The assistant principal noted that the principal’s presence can be either fostering or hindering to the collaborative work depending upon the situation. She described a school in which the principal was actively engaged like Ms. Beshears and it worked well. In another school, the principal participated in PLCs only when he/she perceived that the teachers needed the added
accountability to stay focused. None of the five teachers at Bradford Elementary described the principal’s presence as a hindrance to the collaborative work of PLCs.

Just as offering accountability for PLCs can be a way to foster the collaborative practices, the absence of accountability was noted by Teacher 1B and the assistant principal as a way to hinder PLCs. The assistant principal added that not holding PLCs accountable to “PLC appropriate topics” is another way that principals can hinder the work. When accountability is absent, Teacher 4B concluded:

If a principal doesn’t set some sort of expectation and objective for the staff, then it’s going to be really hard for them to know where we want them to go. It makes collaboration more difficult without some kind of guideline. So, that would hurt a staff if a principal doesn’t put that as a high priority.

Despite the need for setting expectations, Teacher 4B also noted that the expectation for grade levels to be involved in collaborative work four days per week left teachers to have to do a lot after school. While this teacher pointed out that the expectations were both positive and negative, this could be seen as a possible hindrance.

Without accountability, there is no guarantee that collaborative work will result. Setting expectations and measuring progress toward meeting them was perceived to be important to the success of PLCs by both teachers and administrators at Bradford Elementary. As elementary principals consider how to foster the strong PLCs that can be sustained over time, developing systems of accountability should be part of the plan.

Summary of the findings related to the role of the principal. Utilizing interviews, observations, and artifacts collected at Bradford Elementary School, teacher and principal perceptions of the principal’s role in foster and hindering the development of PLCs were
examined. By triangulating the qualitative data with the quantitative data collected in Phase 1, I was able to add strength and trustworthiness to the findings. In response to the second research question, four themes were developed: relationships matter; structure is necessary; walk the talk; and offer accountability. I found common perceptions were shared by teachers and principals alike. Using the theoretical framework of Hord’s five dimensions of PLCs as a filter, these themes are in congruence with the findings presented in PLC research in the literature.

Summary of the Chapter

After providing a rich, thick description of Bradford Elementary, the qualitative findings were then presented. In response to research question one, the extent of PLC practices at this elementary school were examined by using Hord’s five dimensions of PLCs: (a) shared values and vision; (b) shared and supportive leadership; (c) collective learning and application; (d) shared personal practice; and (e) supportive conditions. Through the analysis of interviews, observations, and artifacts, I found strong evidence of strong PLC practices despite the fact that the term PLC is not used by this staff. The values and vision of the staff at Bradford Elementary indicate an undeviating focus on students both in word and in actions. Shared and supportive leadership was evident as a way to build the capacity of teachers. Teacher leadership was found formally through the TAP program and informally in grade level PLCs. The most evident example of collective learning was demonstrated through the cluster meetings associated with the TAP program. With the expectation of teachers working collaboratively during their common planning time, shared practice was found to be part of the culture. The most obvious structural condition that impacted the work of PLCs at this school was common
planning time and the expectation that it is used for collaborative work. Of all of the PLC practices, the relational conditions are one of the most essential to the success of PLCs at this school. Four out of five teachers and the principal used the word family to describe the strength of the collegial relationships. From both the interview and observational data, I found that the principal has model a caring and trusting environment that fosters the development of excellent working relationships. The qualitative findings about the extent of PLC practices at Bradford Elementary were found to triangulate with the quantitative findings from the PLCA—R data.

After determining the extent of PLC practices at Bradford Elementary, research question two was addressed: What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? From the analysis of the qualitative data, four themes were developed in response to this question: relationships matter; structure is necessary; walk the talk; and offer accountability. Relationships matter in building strong PLC practices. The principal can foster the growth of PLCs by modeling trusting and caring relationships, but can also be a hindrance when the importance of relationships is ignored. Setting in place structures such as common planning time and expectations for collaboration are structures that are necessary for developing PLCs as part of the culture. With positional authority, the principal can foster PLCs by recognizing the necessity of building supportive structures. On the contrary, lack of these structures can impede the collaborative process. The qualitative data pointed to the critical role the principal plays by modeling collaborative practices rather than merely dictating them. Over and again, I found that principals need to” practice what you preach” in order to foster the development of PLCs. Simply setting
up the structures and fostering positive working relationships was not enough to ensure that PLCs will work. At Bradford Elementary, the administrators and the teachers realized the importance of offering accountability within the practices. One of the hindrances noted was not offering accountability. Throughout this chapter, the quantitative findings have been a valuable source for triangulation.

The four themes presented for Bradford Elementary School fall within the PLC dimensions of supportive conditions and shared values and vision. While all of the five dimensions of PLCs were found to be strong, the data pointed to the importance of the principal’s role in developing structures and relationships as a way to put the shared values and vision into action. By carefully attending to these critical areas, principals can foster the development of successful PLCs. Overlooking the importance of structures, relationships, walking the talk, and building accountability can impede the collaborative practices of PLCs.

In Chapter 6, the qualitative analysis and findings for Campbell Elementary will be presented. Chapter 6 will provide a rich, thick description of the context of this single case study. Using Hord’s (1997, 1998, 2008) five dimensions of professional learning communities as a sieve, the extent of PLC practices at this site were examined. Themes are presented concerning role played by the principal in developing and sustaining PLCs. Following this presentation, a cross-case analysis of the qualitative data will be set forth in Chapter 7.
CHAPTER 6

ANALYSIS OF THE QUALITATIVE DATA FOR A SINGLE SITE: CAMPBELL ELEMENTARY SCHOOL

Introduction to the Chapter

As presented in Chapter 5, the qualitative phase of this study involved two elementary schools serving as cases. The research questions that were addressed qualitatively in each case individually and collectively are as follows:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions

2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?

In Chapter 5, the data analysis for Bradford Elementary was outlined. The presentation of the qualitative data collection and analysis for Campbell Elementary will begin with a rich description of the school and will be followed by the findings in relation to the
research questions. The triangulation of the data sources and collection methods will be presented to add to the trustworthiness of the findings. The cross-case analysis will then be set forth in Chapter 7.

Campbell Elementary School

Upon entering Campbell Elementary School, one quickly finds an atmosphere that is focused on students. Murals of school scenes painted in pastel colors line the hallways and include the school motto: “Every child a reader, every child an achiever.” Even the cafeteria walls are covered with murals that portray scenes that are very kid-friendly. In contrast to the bold primary colors traditionally associated with elementary schools, the soft colors are warm and welcoming. As an arts integrated school, student art work, writing, and arts related performances are highlighted throughout the building in murals, displays, and bulletin boards. The school is designed around the following vision:

[Campbell Elementary] stakeholders will work together to foster productive, lifelong learners. Through a variety of research based teaching strategies, all students are to be effective information gatherers, as well as effective oral and written communicators so they can be competent in all curriculum areas. And finally, the students are to be respectful of others, responsible, cooperative, dependable, and positive; which will enable them to make appropriate life choices and lead them into adulthood as caring and contributing citizens. (School Improvement Plan, 2010-2011)

The descriptions that follow are presented to shed light upon how this vision is played out at Campbell Elementary School.
School History

Campbell Elementary School opened in 1904 bearing the name of a prominent local businessman who donated the land for the school site. The original small wooden structure housed students in grades 1-8 in just two classrooms. The school has remained a “cornerstone of the community” over its rich 100 year history in spite of many changes in its structure, the demographics of the community, the curriculum, and in its size (School Improvement Plan, 2010-2011). In 1931, the school building was torn down and rebuilt as a two-story brick structure. Well maintained, but obviously aged, hardwood floors are found throughout the first floor of the building, providing evidence of the building’s long history. Additions and improvements to the campus have included the 1948 addition of a cafeteria, the 1956 addition of a gymnasium and additional classrooms, and the 1995 completion of a drive and parking improvements. One portable classroom can be found on the campus. The fenced playground includes a small track and elementary age-appropriate playground equipment. With a local park adjoining the property, Campbell Elementary can extend its useable land to accommodate walking field trips and special events.

Currently, 18 self-contained classrooms for pre-kindergarten through fifth grade are found throughout the school with primary grades housed on the first floor and intermediate grades on the second (main) floor. Additional spaces are found for the special education, speech, talented and gifted (TAG), art, music, and physical education programs. Several of the academic coaches and specialists that work with small groups of students share a space on the bottom floor. The school also houses a library, a cafeteria, a television studio, a staff mail and workroom, and a stage in the gymnasium.
The administrative area includes an office for the secretary and an adjoining principal's office. The one portable classroom on the school grounds appears to be more permanent than portable with a sidewalk lined with landscaping leading to its door.

While the front entrance to the school is visible from the road, no parking is available on this side of the building. The school building sits very close to the road with a single one-way drive circling to the back of the building and back to the road. Upon arrival at the school for the first time, deciding which door to enter the building was a challenge. To avoid walking all the way around the building to the front doors, it appears that most visitors enter through the cafeteria. One drawback to the building—due primarily to the multiple additions on a limited site—the main entry ways are not visible to school personnel in the main office.

An Arts Integrated School

One of the defining characteristics of Campbell Elementary School is its status as a Value Plus school. In 2006, the school was selected by the Arts Council of the state as one of three schools in the state to participate in a “five-year whole school reform model emphasizing learning through the arts by integrating performing, visual, literary, and traditional art forms into non-arts subjects such as math, science, and language arts” (Campbell School website, 2011). The Value Plus program was the recipient of an Arts Educational Model Development and Dissemination Grant from the U.S. Department of Education in 2006. State funding sources for the program have also included the state legislature and the state Arts Council. Being part of the Value Plus program, teachers and administrators are afforded the opportunity to participate in specialized professional development in arts integration throughout the year that includes on-site mentoring,
learning core workshops, and a leadership academy. As a result of the tremendous success experienced at Campbell Elementary, the school has now become part of a mentoring program to four other schools in the district that are now arts integrated schools. The arts specialist serves as the coordinator for the *Value Plus* program at the school and also serves to coordinate the work in the four newly selected school sites in the school district.

As a *Value Plus* school, teachers and the arts specialist collaborate to integrate art into the core academic curriculum and to integrate the core academic curriculum into the arts curriculum. Teacher 4C described this collaboration as follows:

We usually have a monthly meeting with one or both of the arts specialist and our technology teacher and we discuss the SPIs (State Performance Indicators) we will be covering for the next month… We brainstorm ideas on how to integrate the arts into certain SPIs of our curriculum and maybe brainstorm some collaborative lesson plans we do with the arts specialists or some projects the arts specialist may do in our classroom and how she is going to integrate that and vice versa.

One of the many examples of arts integration noted by teachers was an author study of Eric Carle in the regular classroom being coordinated with a study of collage in art classes. Being an arts-integrated *Value Plus* school is an integral part of Campbell Elementary School.

*School Demographics*

Of the 259 students at Campbell Elementary School, 79% are Caucasian, 16% are Africans American, 5% are Hispanic, and less than 1% are Asian. With nearly 80%
of students qualifying for free or reduced lunches, the school is considered an inner city school. Forty percent of the students ride a bus to and from school each day while 60% either walk or are transported by another means of transportation. The students reside in single family homes that are rented or owned, apartments, and/or a low-income government assisted housing project. The attendance rate was 93.7% for the 2009-2010 school year. Student suspension rates are low with 12 suspensions reported in 2009-2010. A breakdown of students receiving special services is included in Table 24.

*Table 24*

*Campbell Elementary Students Receiving Special Services*

<table>
<thead>
<tr>
<th>Educational Service Provided</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Math</td>
<td>14</td>
</tr>
<tr>
<td>CDC</td>
<td>13</td>
</tr>
<tr>
<td>ESL</td>
<td>25</td>
</tr>
<tr>
<td>OT/PT</td>
<td>3</td>
</tr>
<tr>
<td>Resource</td>
<td>12</td>
</tr>
<tr>
<td>Speech and Language Services</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note.* Based on data included in the 2010-2011 School Improvement Plan document for Campbell Elementary.

All of the members of the teaching staff, both certified and non-certified, at Campbell Elementary have reached highly qualified status as prescribed by the state department of education. As shown in Table 25, the teaching staff represents a wide range of teaching experience and level of educational attainment. The staff, including
support staff, is made up of 39 females and 2 males. A breakdown of the staff’s ethnicity reveals 40 Caucasian members and 1 African American.

Table 25

Teaching and Educational Attainment of Campbell Elementary Professional Staff

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Bachelor’s Degree</th>
<th>Master’s Degree</th>
<th>Educational Specialist’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>11-15 years</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>16-20 years</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>20 + years</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Adapted from the 2010-2011 School Improvement Plan document for Campbell Elementary School.

The principal is the sole administrator at Campbell Elementary School. In addition to the 18 grade level classroom teachers, teaching specialists provide services to students. Instructional coaches, some full-time and some shared with other schools, are a vital part of the staff. The literacy coach, a full-time member of the staff, facilitates grade level PLC meetings and works in collaboration with the teachers to plan and also provide instruction and assessment that is designed to meet the academic needs of the students. A math coach is at Campbell Elementary School two days per week to provide support for teachers in analyzing assessment data, planning for instruction, and monitoring the progress of students. As already mentioned, the full-time arts specialist coordinates the arts integration that is a hallmark of the school. This arts specialist also coordinates the
mentoring of four other arts integrated schools. A gifted and talented coach provides services to students on a part-time basis. The guidance counselor works at Campbell Elementary 2 days per week. The teaching staff also includes an art teacher, a physical education teacher, and a librarian.

*The Beliefs and Values Guiding Campbell Elementary School*

“Every child a reader, every child an achiever.” As you enter Campbell Elementary School, this school motto is proclaimed in the murals that adorn the entry hallway. As presented in the 2010-2011 School Improvement Plan, the school community operates with the following beliefs serving as a guide for the education of elementary students:

- With positive experiences in a safe environment, students gain confidence to become lifelong learners.
- To achieve their greatest potential, students should set challenging, but attainable goals for themselves.
- By recognizing and modeling good character traits, students become productive citizens in their community.

The common mission set forth for Campbell Elementary is to “create a safe learning environment where all children can become confident life-long learners who achieve their greatest potential through traditional disciplines as well as the arts in order to become productive citizens” (Campbell Elementary School SIP, 2010-2011).

The teachers, the literacy, and the principal who participated in interviews for this study spoke of the focus on meeting the needs of the whole child. This commitment to enabling children to reach their greatest potential was evidenced as teachers analyzed
student assessment data in an effort to plan appropriate instruction to enable each child to achieve. Throughout the interview process, the participants spoke of not only meeting the academic needs of students, but also loving the kids and caring for their physical and emotional needs.

Community Partnerships

The school benefits from a number of business, church, and university partners that have provided support in numerous ways. The contributions vary from monetary gifts from a local church that fund the school reading program to academic tutoring and internships from a nearby private university. The Wal-Mart located in the area has provided prizes for students, gift cards for teachers, clothing, and left over items from holidays. The principal has formed relationships with the staffs at the Boys and Girls Club, the Baptist Center that works with the government housing project where some students reside, and the staff from the government housing project in order to partner together in a way that positively impacts students. Teacher 3C described the partnerships formed by the principal as follows:

Volunteers come to our school to read to children all of the time. We have donations of food, clothing, all sorts of random things that we don’t pay anything for because he is an advocate for us in the community.

The school participates in a program with Second Harvest Food bank to deliver bags of food for 95 students each week to provide nutrition to the children over the weekends. Community support contributes to the goal of enabling students to maximize their potential.
Organizational Features of Campbell Elementary

While all of the students from one grade level participate in music, art, physical education, and library programs at one time, the teachers are afforded a common planning time. One of the expectations of teachers during this time is participation in a PLC that is facilitated by the literacy coach on Thursdays. Other days provide time for grade level teams to work collaboratively, parent conferences, and meetings with special education staff.

With close to 80% of the students at Campbell Elementary participating in the free/reduced price meals program, providing healthy meals for students is a priority. The principal noted that breakfast is served every day that the school is open in order to make sure all of the students have the opportunity to eat. Many schools do not serve breakfast on half-days for students, but the principal has set this expectation for his cafeteria manager. He commented, “She doesn’t even ask anymore.”

Academic Progress at Campbell Elementary

The formal PLCs at Campbell Elementary School focus on utilizing data to drive the instructional practices. These PLCs are facilitated by the literacy coach who stated, “The whole purpose of PLCs here is how to improve student achievement.” Through observations, I found that the teachers know the academic achievement levels of their students and are committed to addressing both the strengths and challenges of their students. They utilize data from state achievement tests as well as benchmark tests administered for reading and mathematics.

One measure of the academic achievement at Campbell Elementary School is annual state achievement tests administered each spring in grades three through five.
Adequate yearly progress for students in the areas of mathematics and reading/language arts is required by NCLB. Value-added reports generated at the state level provide a means of measuring academic growth of students. Table 26 presents the value-added achievement test data for grades four and five at Campbell Elementary School. The average student gains/losses are reported for 2011 and also for a three year average. Due to state testing commencing in third grade, growth data is only available for grades four and five.

Table 26

Value-Added Test Data for Campbell Elementary School

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Fourth Grade</th>
<th>3 yr. avg.</th>
<th>Fifth Grade</th>
<th>3 yr. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>5.2</td>
<td>3.6</td>
<td>3.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Reading/Language</td>
<td>2.2</td>
<td>5.2</td>
<td>5.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Science</td>
<td>-4.3</td>
<td>0.2</td>
<td>-4.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>-2.7</td>
<td>0.9</td>
<td>1.5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Fourth and fifth grade average gains in mathematics and reading/language exceed the state growth standard of zero for 2011 and also for the three-year period. While the three-year average for science and social studies met the growth standard in both grade levels, the 2011 averages were not as promising. Fourth grade averages indicated negative gains in both science and social studies, while fifth graders did achieve the expected growth in social studies.
**PLCs at Campbell Elementary**

When asked to describe PLCs at Campbell Elementary School, the majority of the staff members immediately described formal grade level PLCs that meet on Thursdays. Part of the purpose of providing common planning time for grade levels is to facilitate these collaborative groups. These meetings are facilitated by the school’s literacy coach who offered the following description:

> We meet on a pretty regular basis and they’re all very much data-driven. We just meet either looking at data either based on a school-wide assessment or a grade level assessment. It can be something as specific as Discovery [Education Assessment] data or something like a math topic test or a reading test they have given just to look at how we can improve student achievement. That is the whole purpose of PLCs here is how to improve student achievement.

The math instructional coach also participates in these formal PLCs.

The more formal PLC meetings are structured around an agenda that has been planned by the literacy coach, in conjunction with the principal. One recent PLC meeting involved teachers analyzing data from a benchmark test in reading and math to identify areas of strength and challenge for the students in the grade level. Utilizing focus questions provided by the literacy and math coaches, the teachers highlighted students who were on the “bubble” between the proficiency categories and discussed how to ensure progress for these students. The coaches and teachers collaborated on identifying needs and workable strategies for addressing the needs.

Teachers also reported that their grade level teams join forces regularly to share ideas, discuss needs, and help one another outside of the time set aside for PLCs.
Another example of PLCs at Campbell Elementary is found in the collaboration that occurs between the arts specialists and the classroom teachers as part of the *Value Plus* program. The two groups work together both formally and informally to plan for ways they can collectively address student achievement through integration.

At Campbell Elementary, the principal does not actively participate in the actual PLC meetings on a regular basis. Although he is not physically present, the value he places in this collaborative process was noted by all of the interview participants. In addition to working in collaboration with literacy coach and the arts integration coach, his role in PLCs includes providing structures that include common planning time, availability of instructional coaches, and data resources.

*The Principal: Dr. Mizell*

The principal of Campbell Elementary School, Dr. Tom Mizell (a pseudonym), is a white male who recently completed his doctorate degree. With 27 years of experience in education, Dr. Mizell has been principal at Campbell Elementary for eight years. During his tenure as principal, the school successfully piloted the *Value Plus* arts integration program. Dr. Mizell leads his faculty in utilizing data to drive decisions.

One of the teachers at Campbell Elementary describes Dr. Mizell by saying, “He just leads by example…” A common thread found among descriptions of the principal was his focus on the whole child. His commitment to meeting the needs of students goes beyond academics to include forming community and parent partnerships that ensure that the children will have coats, food, and safe after-school options. Dr. Mizell is extremely relational and was described by his teachers as having an open door policy.
As a leader, Dr. Mizell was portrayed by teacher participants as one who often involves teachers in decision making. In each of the ten interviews conducted with the staff at Campbell Elementary, the participants laughed as they referenced the number of committees in their school that provide opportunities for teachers to be involved in decision making. Teacher 1C stated, “We were joking the other day… there’s an app for that… there’s a committee for that.” Dr. Mizell categorizes himself as a transformational leader who believes that “the best of these teachers comes out through collaborating and working together.” The purpose for the committees and even PLCs is to empower teachers to be involved. Therefore, he concluded, “I pretty much set up a lot of things around here and then I get out of the way.”

Qualitative Data Analysis: Campbell Elementary

To achieve the purpose of this study, the qualitative data collection at Campbell Elementary School included interviews, observations, and artifacts. As was described in Chapter 5, these data sources provided a means of examining the extent to which Hord’s five dimensions of PLCs are practiced as well as gaining insight into teacher and principal perceptions of the role played by the principal in developing and sustaining PLCs. The data were analyzed using the constant comparative method (Glaser & Strauss, 1967).

In an effort to gain the teacher and principal perspectives, semi-structured interviews were conducted with the principal, the literacy coach, and nine teachers (i.e., Teacher 1C, 2C, 3C, 4C, 5C, 6C, 7C, 8C, 9C). Demographic information that included the gender, position, and years of experience as an educator were presented in Table 9 in Chapter 3. The nine participating teachers (8 female, 1 male) included two kindergarten...
teachers, two first grade teachers, two third grade teachers, one fourth grade teacher, and two fifth grade teachers. The protocols utilized for the interview process are found in Appendices D and F.

Observations at Campbell Elementary School included four grade level PLC meetings, a school leadership team meeting, and a faculty meeting. I observed PLC meetings for the kindergarten, third grade, fourth grade, and fifth grade teams. These forty-five minute meetings were held during the common planning time for teachers. The participants involved in the PLCS were grade level teachers, student teachers, the math coach, and the literacy coach. The school leadership team included a teacher from each grade level, teachers representing special curriculum areas, the arts specialist, the principal, and parents from most grade levels. The meeting lasted approximately 1.5 hours. The faculty meeting observed occurred on an in-service day. The school leadership team and the faculty meeting observations provided opportunities to observe the principal, but I would not label these meetings as PLCs. While collaboration and learning may occur, these meetings were more typical of reporting information, discussing ideas, and some decision making. They were not described by any of the interview participants as examples of PLCs. Therefore, I have not included these in the discussion of the extent of PLC practices at Campbell Elementary.

Additional data were collected through artifacts. Included among the artifacts were the 2010 School Improvement Plan document, agendas and handouts for the PLC meetings, academic data, documents that provided information about the organization of the school, email correspondence, and information about the Value Plus program. The websites for the school and the school district served as a data sources as well.
The Extent of PLC Practices

To address the first research question, I analyzed the qualitative data in order to gain insight into the extent to which the five dimensions of PLCs were evidenced at Campbell Elementary School. I utilized interview data, observational data, and artifacts to determine the extent of the practices associated with PLCs were present at this school. The qualitative findings for this school will now be discussed by PLC dimensions: (a) shared values and vision, (b) shared and supportive leadership, (c) collective learning, (d) shared personal practice, and (e) supportive conditions.

Shared values and vision. Shared values and vision provide a foundation for the work of PLCs. Eaker and Keating (2008) concluded, “When schools passionately and sincerely adopt the mission of ensuring high levels of learning for all students, they are driven to pursue fundamentally different questions and work in significantly different ways” (p. 15). The student-focused mission statement at Campbell Elementary School calls for a commitment to provide experiences that will allow students to become lifelong learners, achieve their greatest potential, and become productive citizens in the community. The focus on student learning is even embedded within the murals lining the hallways of the school with the slogan: Every child a reader, every child an achiever. When asked to share the values and beliefs that guide the work of educators at Campbell Elementary Schools, all of the 11 interview participants talked about a commitment to the education of the “kids.” Typical responses from the teachers included:

**Teacher 1C:** Kids…the kids.

**Teacher 2C:** I mean, everybody has the same mindset. How can we do what’s best for kids?
**Teacher 4C:** Well, we always want to focus on the learning of the students.

**Teacher 7C:** That it’s about the kids… I mean we are committed because we want to make a difference in the lives of these kids. And education is a way to open up doors for them…But, I feel like everyone knows we want to better children and given them education and opportunities.

**Literacy coach:** We say this over and over again: It’s all about the kids. It’s not about us. It’s about the kids at our school getting the best education possible…We value kids. We value their education. We believe that they deserve to learn everything…. I have never seen a school so student focused.

I found it interesting that when asked this same question, the principal first began to talk about valuing leadership, However, the interview as a whole pointed to a strong focus on students as what is valued most by the principal and the staff as a whole. As presented in Chapter 4, the perceptions of shared values and vision as indicated on the PLCA—R were also strong ($M = 3.58, SD = .367$).

While observing the teachers at work in PLCs, I found that the stated values and beliefs were put into action through data-driven decision making. Each of the PLC meetings observed involved teachers, the literacy coach, and the mathematics coach working collaboratively to analyze student data and make decisions on how to best enable students to progress. I will share two of the multiple examples that occurred at the PLC meetings. In the kindergarten PLC, the group was considering literacy scores of students. As facilitator, the literacy coach guided the teachers through a discussion by asking for their reflections on the scores and inquiring about the teachers’ identification of stronger readers. The result was the development of groups (to be led by the literacy
coach) designed to allow the stronger readers to move forward while the teachers worked with the beginning and non-readers. A second example came from the fifth grade PLC where the group identified “bubble” kids who were close to proficient on testing. Throughout the discussion, the teachers and the literacy coach addressed students’ needs, both individually and collectively. Included in the discussion were personal issues that were impacting students in the classroom and how they could be addressed. The observations of PLC meetings strongly supported shared vision and values that are student focused rather than teacher focused.

From both interview and observational data, I found a vision that focused on meeting the needs of students. The focus on students was also supported by the PLCA—R data. Teachers expressed strong agreement ($M = 3.70$, $SD = .470$) with the following item: “Staff members share visions for school improvement that have an undeviating focus on student learning.” The teachers and the principal were “on the same page” when it came to students. Teacher 3C spoke of the shared mindset of the staff in this way:

So, our values, I think, are just so encouraging here because we feel we are all on the same page. We all do what is best for the kids even if that means doing extra work ourselves. We work so hard here. We’re here early; we stay late because we are all of the same mindset. [The principal] tells us all of the time, “If you’re not with us, then you can leave.” We’ve had our opportunities every year to leave, but we always stay. So, it is because we love the kids and the population that we serve.
Four of the teachers spoke of spending long hours and weekends in order to put these beliefs into action. There was no evidence of disagreement on the values and vision at Campbell Elementary.

Although student academic achievement was an obvious value shared by the staff, I also found a strong belief in meeting the needs of the whole child. I first heard of this commitment as I met with the principal. He stated, “The nurturing and caring of these kids is very important.” One example of the way in which this belief is carried out at Campbell Elementary involves ensuring that every child has the opportunity to eat at school. Dr. Mizell described his strong conviction as follows:

Every kid here, at my discretion, eats. The cafeteria manager knows that. If we have a half day, we have breakfast. She doesn’t like it. Isn’t it wonderful to know they ate something today? Now, after eight years, she just does it. The first day of school is a half day. We eat breakfast. She doesn’t even ask anymore. We should if we care about kids. Then we know they eat at least once that day. Then we send home food from Second Harvest on Friday and feed 95 of our kids over the weekend. I know that one-third of our kids will have food if their parents don’t come through this weekend. That’s who we are.

On the PLCA—R, teachers also reported strong agreement ($M = 3.80$, $SD = .410$) when asked to respond to this item: “School goals focus on student learning beyond test scores and grades.” The belief in the reaching the whole child was also echoed by in the teacher interviews. A few of the responses included:

**Teacher 2C:** It’s all about loving the kids and teaching the kids always comes second. If they just need sleep because they weren’t able to sleep because
something was happening at home, then that needs to happen over them staying in math class… Or if they are hungry, we find ways to feed them.

**Teacher 5C:** You have a common objective with the rest of the staff to ensure that children are taught, are looked over, are cared for, are take care of—mentally, physically, whatever.

**Teacher 6C:** I would say a heart for kids, first of all. I think that from our leadership down that is just very clear. There are things we do just because they are for our kids. They may not be listed in your standards, but you do that first.

**Literacy Coach:** We take care of our kids. We know that they have needs that need to be met that aren’t being met at home…It’s not just achievement. We care about students’ mental health. I mean we care about kids here.

With over 80 percent of the student population coming from poverty, this staff recognized the significance of meeting physical needs of students in order to enable them to reach their potential as students.

Hord and Sommers (2008) noted, “Values and beliefs guide the behavior of individuals no matter where they work or in what endeavor” (p. 8). Having a shared sense of purpose has been found in schools with strong PLCs (Hord, 1997, 1998). Both qualitative and quantitative data supported the strength of this PLC dimension at this elementary school. For this critical dimension of PLCs, the staff at Campbell Elementary was found to be unified in their commitment to meeting the needs of students.

*Shared and supportive leadership.* In schools that are successfully immersed in the implementation of PLCs, principals have been found to share leadership, power, authority, responsibility and decision making (Cowan, 2003; Hord, 1997, 1998, 2009;
Huffman & Hipp, 2003, O’Malley, 2010). This dimension of PLCs was found to be strong at Campbell Elementary School. All of the nine teachers and the literacy coach indicated that the principal, Dr. Mizell, practices shared leadership. The principal described how knowing the qualities of your faculty and your own leadership style impacts the development of PLCs as he stated:

There is no cookie cutter model for PLC. There can’t be. There’s too many independent variables being put into the process and that’s leadership and the style of leadership and the teachers and the style of teachers. There are many ways to be effective….I think you have to recognize the leadership that is in the school and the faculty that is in the school and you have to build your PLC based on that.

As I observed PLCs and interviewed staff members at Campbell Elementary, I found evidence of how the principal has provided supportive leadership and has also developed shared leadership. The PLCA—R data also indicated strong agreement ($M = 3.70, SD = .470$) that “leadership is promoted and nurtured among staff members.”

The strongest examples of shared and supportive leadership were found in the working relationships that existed between the principal and the literacy coach and the principal and the arts specialist. Both the literacy coach and the arts specialist facilitated opportunities for collaboration with the grade level teams. When asked to describe PLCs at this school, each of the 11 interview participants referred to the formal PLCs that are facilitated by the literacy coach. When probed about other opportunities for collaborative work, integration with the arts specialist also came up in eight out of the 11 interviews. While the staff did not label the Value Plus arts integration as a PLC, the practices
associated with this program include PLC practices. In both of these examples of PLC work, the principal does not directly take responsibility for the meetings. The literacy coach and the arts specialists exemplified shared leadership as they carry the responsibility for collaboration with the teachers and the principal.

The literacy coach demonstrated shared leadership as she facilitated the formal PLC meetings at Campbell Elementary School. The principal described the importance of the literacy coach’s leadership role in facilitating PLCs as follows:

I think [literacy coach] is paramount to this transition—this paradigm shift, for lack of a better term—that took place from the grade level and faculty meetings to the PLC concept. And it started working. She caught it at the beginning…Now it is almost like an invitation to collaborate.

While the principal collaborated with the literacy coach to review data and what will be part of the PLC agenda, he does not normally attend the meetings. The literacy coach stated:

[The principal] and I very much communicate about what’s going to be discussed. Before [the PLCs] meet, he gets an agenda. I tell him, “Here’s what I am thinking.” He tells me if there is anything he wants to put in or change. And then after every PLC meeting, I always have a discussion with him.

When I asked teachers about the principal not being actively part of the PLC meetings, eight out of nine indicated that they would not change this plan. Teacher 8C indicated that she would like for him to participate occasionally because he is a “data guru” and brings great ideas. Teacher 1C recognized that sharing the responsibilities and leadership with the literacy coach and with the teachers revealed that he “trusts us to do our jobs.”  

240
In observing five PLC meetings, I found that the literacy coach offered leadership that enabled the teachers to be actively involved in making decisions about instructional practices that could address the areas discussed at the meetings. She facilitated the meetings using an agenda that called for teachers to share practice and participate in collective learning.

While I did not observe the collaboration that occurs between grade level teachers and the arts specialists, the interview data pointed to this being highly representative of shared and supportive leadership. As presented in the description of the Value Plus, teachers and the arts specialist collaborate to integrate art into the core academic curriculum and to integrate the core academic curriculum into the arts curriculum. Eight of the teachers referred to the leadership provided by the arts specialist as very beneficial to the implementation of this program. From a document shared by the principal, I learned that teachers are also given the opportunity to take on leadership as mentors to new teachers and by allowing other teachers to observe arts integrated lessons in their classroom. The principal described the collaborative work as “grade levels [teachers] sitting down with [the arts specialist] and looking for the best practices—what’s best for kids.” The sense of shared leadership and also shared responsibility for planning is demonstrated through these comments that were typical during interviews:

**Teacher 1C:** We talk about our year plan and the concepts we are going to cover in the next two months. The arts specialist [and other related arts teachers] can talk about how they can integrate that into what they are doing and then share the concepts they are covering so that when we do an arts integrated lesson, we are on the same page.
Teacher 4C: We usually have a monthly meeting with the arts specialist and we discuss the SPIs we will be covering… We brainstorm some collaborative lesson plans.

Teacher 6C: We are going to be studying collage with Eric Carle and an author study. The art teacher says she will do collage during that time. We will talk about common language.

The Value Plus program is an integral part of the collaborative work and also provides ways for shared leadership to be put into action.

When the interview participants were asked to describe teacher leadership at Campbell Elementary School, the overwhelming response from the teachers and the principal centered on opportunities to lead through the work of 24 committees. Typical responses included:

Teacher 2C: We have a lot of committees. There are great things in that. You hear a lot of voices….There is one point person, but they are not having to carry the weight all by themselves.

Teacher 4C: The thousand committees…that’s one! One of them is a mentoring committee. I kind of see that as a leadership role.

Teacher 5C: There are lots of opportunities: heads of committees, taking part in in-service hours, being part of the committees, giving feedback to the principal. This school allows for many leadership opportunities inside and outside of school.

Teacher 7C: I feel like a lot of it is committees. A lot of people take ownership in parts of the school that they are kind of in charge of and decision making about…and committees allow you to do that.
Reviewing the list of committees and the members of each provided insight into the magnitude of this opportunity for teachers to utilize leadership and carry responsibility. As I met with the principal, he shared an example of the committee notebook that is kept by each chair to demonstrate the work of the committees. Another committee document shared with me stated, “The chair schedules meetings, takes attendance, and sees that notes are taken….The committees will meet when necessary to take on their responsibilities.” In additions to committees, the teachers also shared other opportunities for leadership as the leadership team, the Arts Integrated program, and after-school clubs and activities as ways in which teachers have the opportunity to utilize leadership.

All of the nine teachers and the literacy coach indicated that the principal is one who shares leadership and involves the staff in decision making. Teachers completing the PLCA—R instrument also expressed strong agreement ($M = 3.70$, $SD = .470$) that “staff members are consistently involved in discussing and making decisions about most school issues.” When asked if leadership is either promoted or discouraged, Teacher 3C shared that teacher leadership is promoted by the principal “letting us decide for ourselves how to do things” rather than telling us to “do it this way.” Other evidences of the teachers’ perceptions of shared and supportive leadership included:

**Teacher 3C:** Well, I think it is really whatever you want to do as a leader, you can do….You express interest… then it will be done. You will be given leadership.

**Teacher 7C:** I think also giving us more responsibilities. He gives us lots of trust. It’s not like we have to turn in a lot of lesson plans. He trusts that we are doing that.
**Teacher 8C:** Any time there are decisions to be made, [Dr. Mizell] does a great job of allowing us to discuss, negotiate, and arm wrestle if we need to! But we get decisions made!

**Teacher 9C:** We have task teams. We have committees. We are empowered here.

All of the interview participants offered examples of how teachers are involved in decision making. Examples centered on committee decisions and decisions about classroom instruction. The principal and three other teachers shared an example of how teachers were involved in determining how to spend additional Title I funding in ways that would best impact students. Another example given was teachers taking the lead to make decisions about developing a recycling program. One of the interview participants stated that at times she feels that the principal may already have a decision in mind, but yet she feels that the voice of the teachers is invited and heard.

The evidence for shared and supportive leadership at Campbell Elementary was strong. Teachers are given opportunities to lead and feel empowered to do so. The principal noted that “leadership is important here” as he talked about the ways in which the more official leaders (e.g. literacy coach) as well as those without official roles provide direction for the staff. The strength of shared and supportive leadership was found through both the qualitative and the quantitative data analysis.

**Collective learning.** Levine (2011) stated, “In addition to using data for continuous improvement, PLCs intentionally position teachers in configurations and activities that allow them to lean and to enact change” (p. 33). Two primary areas of collective learning surfaced during the qualitative data analysis: the formal grade level
PLCs and the Value Plus program. In addition to these more formal opportunities for teacher learning, the informal PLCs that existed among the grade level teachers also were indicative of collective learning.

The formal PLCs that are facilitated by the literacy coach are designed to be a time of collective learning. Learning about student progress by analyzing data was demonstrated in the five grade level PLCs that I observed. The literacy coach and the math coach led the teachers in learning how to take the data and use it to make decisions about how to address areas that need improvement. In three of the PLC meetings, the literacy coach shared a skill mastery sheet that was being used by a fifth grade teacher to identify needs of her students. The literacy coach led the groups through understanding of how to use the tool with their own students. Another example was found in the fourth grade PLC when the literacy coach taught a strategy for writing instruction. Further support for this finding came from PLCA—R data as it revealed strong agreement ($M = 3.55, SD = .510$) with the following statement: “Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.”

Interview data also supported the collective learning that occurs among the staff. All of the 11 interviews included a description of how the PLCs were utilized for learning that is data-driven. The perceptions voiced in the interviews include the following:

**Teacher 4C:** We also use [PLC meeting] for test data…how to identify strengths and areas to strengthen and how to identify students who may need assistance in some skills.
**Teacher 7C:** That is essential to our school. At first, it [PLC] was a more forced thing and no one really knew. But now it’s like I get it. Our survival at school. Just learning from each other.

**Literacy Coach:** On Thursdays, specifically, we come together with the coaches and talk about specific data or specific topics that need to be discussed related to student achievement.

From the 11 interviews and the five observations, I found the formal PLCs to be focused on collective learning about data and ways to address student academic needs. It is important to note that the meetings were constrained to the time available during the grade level’s common planning period. In four of the meetings, the group talked about different ways to extend this learning beyond the meeting. Two fifth grade teachers shared how they had taken what was learned on the previous day and planned time to work collaboratively to incorporate what was learned into their instruction. An example of this was the literacy coach offering to model a strategy for the teachers in their classroom. Teacher 9C voiced her desire for additional time to be set aside for reflection of what is learned in PLCs.

Since I was unable to observe the collaborative work that happens in the *Value Plus* program, I depended upon the perceptions of the interview participants and the data mined from artifacts as sources of evidence. Artifacts were gathered from the school and district website as well as from documents shared by the principal. As part of this program, teachers and administrators are afforded the opportunity to participate in specialized professional development in arts integration throughout the year that includes on-site mentoring, learning core workshops, and a leadership academy. PLCA—R data
indicated that the teachers strongly agree ($M = 3.45, SD = .510$) that “professional development focuses on teaching and learning.” The staff has participated in summer workshops over the last five years in which they have learned together about how to integrate the arts into the curriculum and how to integrate academic curriculum into the arts. In the teacher interviews, collective learning was described as teachers working collaboratively to find ways to implement the arts integration and through observing arts integrated lessons. Observing arts integrated model lessons was another way in which teachers learn. The collaborative learning happens formally through the trainings, through meetings with the arts specialist or with grade level teams, and also informally as teachers “find each other in the hallway or the workroom” (Teacher 2C).

In addition to these two examples of ways in which collective learning is evidenced at Campbell Elementary, I also found that collective learning takes place informally among the teachers both within grade levels (more common) and across grade levels (to a lesser degree). The principal and all of the nine teachers referenced this type of shared learning. Typical responses included:

**Teacher 2C:** Since we met yesterday [PLC meeting], we’ve [two fifth grade teachers] already talked and set a time today to go back and really look through the test and the SPIs and really find the gaps—the holes—that as we plan for the next few weeks, we can integrate those and reach teach those.

**Teacher 6C:** We [kindergarten team] do almost every single day. We meet; we talk at some point every day whether we meet or it’s in the hallway, waiting on the kids or during lunch. We are constantly sharing ideas.
**Teacher 8C:** Well, first and foremost, [grade level team member] and I are bonded as peer fourth grade teachers. So, she and I collaborate often. Lots of times we have a PLC just with a huddle of gals there in the hallway. I come to the school every Sunday and open it up. So, we have an informal PLC right there because it just lends itself while we are preparing for the next week…Sometimes across grade levels and sometimes within your grade level.

One example that was shared by the principal, the literacy coach, and four teachers (Teachers 2A, 3A, 7A, and 9A) involved learning about writing instruction across the grade levels. This collective learning has led to the formation of a team that led a concentrated effort to develop a plan for improving writing and developing consistency across the grade levels. Four teachers spoke about being comfortable to ask teachers in other grade levels about something that they want to learn from that person. Three of the teachers noted that this informal sharing was probably easier because they consider their school to be small.

In successful PLCs, collective learning is part of the culture of the school. From observations, perceptions shared by the interview participants, and through examination of related quantitative findings, this dimension of PLCs was found to be practiced. During the PLCs that I observed, the learning appeared to be a normal part of the way in which the staff at Campbell Elementary works together as professional learning communities.

**Shared personal practice.** Shared personal practice is closely related to the collective learning found in effective PLCs. The need for a deprivatization of personal practice that leads to teachers opening their practices to others has been found to be a
significant aspect of the work of professional learning communities (DuFour, 2003, 2004; Kanold et al., 2008; Kruse et al., 1994; McREL, 2003; Wahlstrom & Louis, 2008). At Campbell Elementary, I found ample evidence to support that teachers are willingly share ideas, learning strategies, and lesson plans. In the literature on PLCs, shared practice goes beyond simply offering ideas and materials to the practice of teachers opening teachers as a way to share their own practices and to allowing others to provide input on what has been observed. Although shared practice was perceived as strong by PLCA—R respondents, this dimension had the lowest mean \( (M = 3.20, SD = .448) \) of the PLC practices. The extent to which shared practice was found at this school follows.

In each of the five PLCs that I observed, teachers discussed areas in which they struggled to meet student academic needs as well as ideas for how to address specific areas of the curriculum (e.g., writing, reading). The agendas for each of these meetings also provided time for collaboration on ways to share practice with the grade level group and also with other grade level teachers. The literacy and math coaches offered specific examples of materials or strategies that could be used to address areas of need that resulted from analyzing student academic data. Both of the coaches also model practices indicated they were willing to model strategies in classrooms if desired. The observational data was in line with the PLCA—R data in which teachers agreed \( (M = 3.25, SD = .716) \) that “staff members collaboratively review student work to share and improve instructional practices.”

Another example of opportunities for shared practice was found in the implementation of a new teacher evaluation model. As a preparation for first round of classroom observations, the principal and literacy coach offered teachers the opportunity
to participate in “scrimmages.” By voluntarily sharing their practices with the evaluator, teachers were afforded valuable feedback. In each PLC meeting that I observed, the literacy coach offered multiple areas that could be targeted in the scrimmages. She offered to script lessons for teachers to be able to compare their practices with those included on the evaluation rubric. Another example offered was scripting only the questions asked during the lesson to provide feedback on types of questions used by the teacher. Opening your teaching in this setting was designed to be a means of improving instruction and learning through shared practice.

Interview data provided perceptions of how the teachers share practice with their colleagues outside of the formal PLC meetings. Typical responses included:

**Principal:** It is just amazing to see what they do own their own....These grade level teachers will sit down and build a unit based on the art standards and the non-art standards and then come together [with the arts specialist]…The next thing you know you have related and non-art related standards being taught across the school.

**Teacher 3C:** It is so beneficial when you try to meet and help each other out…share materials and vent and share classroom management strategies.

**Teacher 4C:** We usually do that informally. It’s more at our grade level than across, but we are in constant communication with one another.

**Teacher 5C:** I think during the PLCs we have a lot of opportunities to share our practices with each other. So, that’s one of the good things about a PLC—you can listen and learn from the good practices that are taking place, especially at your grade level.
Teacher 6C: We do that almost every single day. We meet. We talk at some point every day whether we meet or it’s in the hallway waiting on the kids. We are constantly sharing back and forth. This is what I am doing for this...This is a good lesson for this…

Teacher 7C: [A fifth grade teacher] and I plan every Wednesday together…. We talk about pacing—about where we are—and what we are going to be hitting even though we are not planning the exact same lesson.

Teacher 8C: We are very good about sharing ideas. Generally, we try to do the same thing with our own spin on it.

As can be surmised from the responses of the participants, shared practice was primarily associated with sharing lesson plans and teaching strategies or participating in collaborative planning. On the PLCA—R, respondents also indicated that “staff members informally share ideas and suggestions for improving student learning” (M = 3.60, SD = .503).

As a Value Plus school, opportunities for observing art integrated lessons are provided at Campbell Elementary School. Five of the interview participants included these observations as a way in which teachers share their practices. As described by these teachers and documented with the written documents about this program, these observations involve teachers at Campbell Elementary or outside arts specialists presenting lessons. The stated purpose of the model lessons was to provide examples of how to integrate the arts into the academic classroom. By seeing “how this drama person teaches the lesson,” Teacher 2C noted that the teachers benefit from outside specialists
sharing their practices. Teacher 3C shared that she teaches demonstration lessons for teachers from the schools that are being mentored by Campbell Elementary.

While teachers easily shared examples of sharing with their grade level team, I did not find evidence of opening up their classroom practices to observation by other teachers outside of the Value Plus program. This finding was supported by the PLCA—R data. The descriptor with the lowest overall reported mean ($M = 2.75, SD = .639$) was as follows: “Opportunities exist for staff members to observe peers and offer encouragement.” The following comments were typical of the teachers when probed about observing other teachers’ practices:

**Teacher 2C:** I’ve never…beyond when an arts specialist comes in…But, I have never just taken or had the time to go see a third grade to see what they are doing. Also I do not feel there is a lot of communication between grade levels. So this is something we could improve. It’s like we pass in the hallways.

**Teacher 6C:** Mostly it’s when someone comes in to teach an arts integrated lesson.

Teacher 4C commented that she believed observing other teachers or having them observe you was available “upon request.” While the sharing of arts integrated practices is very important at Campbell Elementary, extending this practice could also be beneficial to the teachers.

**Supportive conditions.** The dimension of supportive conditions includes both structural and relational conditions that foster the collaborative work of PLCs (Hord, 1997; Hord & Sommers, 2008). At Campbell Elementary School, the supportive conditions identified appeared to be the “glue that is critical to hold the other dimensions
together “(Huffman & Hipp, 2003, p. 146). The presentation of the findings on this critical dimension of PLCs will first center around logistical structures and then move on to the strong relational conditions found among the staff.

The daily common planning time afforded grade level teachers has been a valuable asset for the implementation of PLCs. The principal stated, “The encore schedule allows for a 45 minute block for every grade level throughout the day to have a common planning time.” At Campbell Elementary, Thursdays have been set aside as the day for scheduling formal PLCs that are facilitated by the literacy coach. The Thursday time structure was acknowledged by the 11 interview participants and also found in documents shared by the principal. As reported by the principal, the literacy coach, and two of the teachers, the decision for selecting Thursday was based on the fact that the math coach was in the building on Thursdays; it was not a day for other scheduled meetings; and it avoided meeting on Fridays when teachers were planning for the upcoming week. In order to maximize the time allotted for meetings, the PLC meetings are normally held in the same place (the literacy coach’s room). The frequency of the structured PLC meetings was found to vary from every week to once monthly. Teacher comments (by grade level) included:

**Teacher 2C (grade five):** We have official PLCs once a week, but within…even within that…I mean, as a grade level, we meet multiple times a week.

**Teacher 4C (grade three):** We meet grade level PLCs with our [literacy coach] and the math coach. We usually met once a week.

**Teacher 6C (kindergarten):** We have PLCs about every other Thursday for Kindergarten.
**Teacher 8C (grade four)**: Now we have required PLCs like the one you [the researcher] visited with us on Thursday.

**Teacher 9C (grade one)**: We hold, or are supposed to hold one, every Thursday or it is a time designated for our group to get together if there is not an official [PLC].

Despite reporting different frequencies of meetings, the Thursday PLC structure was cited by the 11 interview participants when asked to share about the PLCs you are a part of at this school.

In addition to the time structure, another aspect of the PLC structure at Campbell Elementary that was reported and observed was the focus on data-driven decision making. The principal described the formal PLC meetings as “all based on data.” He went on to describe how the most recent meetings focused on analyzing current benchmark data available from testing in reading and math. The agendas for the meetings that I observed were focused on looking at the data collaboratively and making instructional decisions based on the data. On the PLCA—R, teacher respondents also agreed that “data are organized and made available to provide easy access to staff members” ($M = 3.45$, $SD = .605$). The following statements, which are typical of the interview responses, provide support for the PLC structure’s focus on data:

**Teacher 5C**: We take, for instance, [benchmark testing] and we will come up with approaches to improve different areas that need improving. We will look at certain students to see if we can either help them or challenge them to do better.
**Teacher 7C:** Most of the time it’s about looking at data, past [state achievement data], or [benchmark] testing…identifying strengths and weaknesses and how are we going to attack those issues and make them better.

**Literacy Coach:** On Thursdays, specifically, we come together with the coaches and talk about specific data or specific topics that need to be discussed.

Four of the teachers indicated that as a grade level, they follow-up the PLC with either a meeting or at least an informal discussion of what has been covered in the PLC meeting.

It is important to note that while the structures of time and format can be seen as supportive structures, several teachers indicated some level of discontent with the structure as it is. Teacher 8C shared the following:

After those meetings. If there were an opportunity to reflect. Sometimes it’s not just me and my grade level partners that need the reflection. We need to reflect with the prior grade level, perhaps. Or in preparation of the next grade level.

Because there is responsibility and a connectedness that needs to be addressed.

That is my opinion.

Another teacher (Teacher 3C) described her grade level informal PLCs as beneficial, but had this to add about the structured PLCs:

Planned ones…like the ones they make us go to…are hit and miss. Sometimes it is beneficial and sometimes it could have been said in an email.

Two of the teachers indicated that would like to be able to offer input about developing the agenda for the meetings to be able to address some of their perceived needs or ideas.

In my observations, I found that the literacy coach did ask the teachers to share areas where they needed additional support. Teacher 2C shared that she would like to be able
to “see some other PLCs…to get ideas from other schools or even other grade levels.” From these and other similar comments, I found a need to involve the teachers in evaluating the current structures with the goal of making the time even more beneficial.

When considering the extent to which structural conditions that support the work of PLCs are in place at this elementary school, it is also important to discuss policies and practices that impact PLCs. Byrd (as cited in Hord & Sommers, 2008) included resource availability and “policies that provide greater autonomy, foster collaboration, provide effective communication, and provide for staff development” (Hord & Sommers, 2008, p. 14). Providing resources needed by teachers was found to be strength of the principal at Campbell Elementary. Teacher 8C reflected the perceptions of the other interviewees as she stated, “Well, he certainly does everything he can to provide us with a wealth of materials.” Examples of ways in which the principal allocated funding and obtained community resources were found throughout the interviews. A discussion of some of the policies that demonstrate the extent to which supportive structures are in place at this school follows.

As noted previously, the literacy coach and the arts specialist facilitate the collaborative work that occurs through the formal PLCs and the arts integration. The principal normally does not participate, but plays a supporting role. The principal believes that “you have to be aware of your own abilities and the abilities of your staff to create an effective PLC model.” None of the interview participants viewed his policy of handing over leadership of PLCs as detrimental to the collaborative work at Campbell Elementary. Typical comments included:
**Teacher 1C:** I like that he does not come to the meetings—not that I am afraid of him or anything. But he trusts us to do our jobs unless we give him reason not to. I think part of that is helpful because if you feel you have a principal who is looking over your shoulder waiting for you to make a mistake, and then you will be less likely to share things you don’t feel you’re good at or things you need help with.

**Teacher 4C:** I don’t think it hinders.

**Teacher 5C:** My last three years was spent at another school and the principal was part of the PLCs….I feel as though not having the principal in there physically, in my opinion, seems to make it more relaxed.

**Teacher 9C:** Sometimes I think it even helps if the principal is not there because you are afraid to say, “I am not doing this math, can you tell me how to do it?” That way we have a more open arena to speak.

The overall feeling expressed by the teachers was that the principal’s presence is not necessary for the collaborative work of PLCs to be effective. Thus his policy of enabling the literacy coach and the arts specialist to facilitate PLCs is viewed as effective by the interview participants.

Decision-making policies at Campbell Elementary include the work conducted by the school leadership team and the 24 active committees. As has been presented in the evidence for shared leadership, the teachers indicated that they feel empowered to participate and to utilize leadership and decision making. The quantitative data also offered agreement that “decision making takes place through committees and communication across grade and subject levels” ($M = 3.80$, $SD = .410$).
The relationships that exist among the staff members also contribute to supportive conditions of PLCs. Looking at the PLCA—R data, relationships \((M = 3.73, SD = .385)\) had the highest mean of the six factors of the instrument. In five of the 11 interviews, the word family was used to describe the relationships at Campbell Elementary School. Teacher 6C described the sense of family as follows:

We are pretty much like a family. We are a smaller school. We have only one workroom, so everyone pretty much knows each other. We take care of each other. If something happens, we are there for each other. We collaborate, even between grade levels.

A common thread among the interview participants was a reference to relationships being more than just collegial or professional, but personal as well. The principal and three of the teachers shared how many of the faculty members go out to dinner together on the Friday closest to payday as an example of how relationships extend beyond the walls of the school. Even the newest of the faculty members interviewed described the staff as a “very professional, very understanding, very caring, very nice staff.” Two (Teachers 2A and 9A) described how the principal and their fellow teachers supported them when they went through a time of personal difficulty.

As indicated by the interview data, the strong relationships contributed to the collaborative practices of the staff. The interview participants described sharing strategies and lesson plans and also planning collaboratively. The following comments provide an overview of how they described their working relationships:

**Teacher 1C:** I think there are some teachers who have demonstrated that they are just really good at their job and they’re open to people talking to them. They are
open to giving suggestions. They are non-judgmental. People are comfortable with them.

**Teacher 2C:** [The arts specialist] is a great, wise mentor. [Dr. Mizell] has a “my door is always open” [policy].

**Teacher 4C:** This has always seemed like a very open place to work. I have not worked anywhere else, but you hear stories of vindictiveness and hoarding. Most teachers here are willing to share ideas and strategies and lesson plans.

Everybody seems helpful towards one another.

Notably absent was discussion of favoritism or cliques among the staff. The participants spoke of positive relationships that made Campbell Elementary School a “great place to work.”

As I observed PLCs, a faculty meeting, and the school leadership team meeting, I found that teachers did seem to like one another. While waiting for meetings to start, conversations were often reflective of friends inquiring into the lives of friends. The working relationships observed demonstrated practices of mutual respect and trust among the participants. An indication of the sense of trust was found in teachers voluntarily sharing areas in which they were struggling to meet students’ needs or asking questions when they didn’t “get it.” Teachers listened to their colleagues and responded to their requests for ideas or clarification. I also found the principal and the literacy coach modeled respect, caring, and trust as they facilitated meetings. There was no evidence of the leaders speaking down to the teachers. The observational data provided a comparison of the actual practices and the perceptions reported both through interviews and on the PLCA—R.
The quantitative data provided additional support for the qualitative findings concerning relationships. This evidence included strong agreement with the following statements by the 20 PLCA—R respondents from Campbell Elementary:

- Caring relationships exist among staff and students that are built on trust and respect ($M = 3.80$, $SD = .410$).
- A culture of trust and respect exists for taking risks ($M = 3.80$, $SD = .410$).
- Relationships among staff members support honest and respectful examination of data to enhance teaching and learning ($M = 3.70$, $SD = .470$).

Supportive structures and relationships were found to be a strong part of the collaborative working culture at this elementary school. The schedule offers a structure for the formal PLCs to be active. The strength of the relationships provides a trusting and caring work environment that operates out of a sense of mutual respect.

Summary of the extent of PLC practices. In response to the first research question, the data presented provides evidence concerning the extent to which PLC practices are found at Campbell Elementary School. The sense of shared values and a vision focused on students was obvious in all areas of the data collection. Shared and supportive leadership was demonstrated through the leadership of the literacy coach and the arts specialist, through teacher leadership on the 24 school committees, and through the principal support of PLCs. Shared practice and collective learning was most evident in the arts integration program and through the data-driven PLC Thursdays. Common planning time and focused agendas are examples of supportive structures that positively impact the collaborative work. The strongest area of PLC practices was found to be in
the area of supportive relationships. Both qualitative and quantitative data revealed the five dimensions of PLCs were practiced to a great extent at Campbell Elementary School.

The Role of the Principal

After determining the extent to which the five dimensions of PLCs were found at Campbell Elementary School, I then addressed the second research question: What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? Consideration of the perceptions of teachers and of the principal and how these perceptions compared led to the development of three themes: relationships matter; principal support is critical; and structure is important. It is important to note that the vast majority of the perceptions presented in the 11 interviews offered ways in which the principal at Campbell Elementary School fosters the work of PLCs. Most of the hindrances presented were drawn from personal experiences in other schools, the experience of family or friends at other schools, or were simply stated as the converse of ways in which the principal fosters PLC work.

Relationships matter. Relationships are considered to be a significant element of the supportive conditions that contribute to the collaborative work found in successful PLCs (Hord, 1997, 2008; Hord & Sommers, 2008; Huffman & Hipp, 2003; Leo & Cowan, 2000). From the PLCA—R data for Campbell Elementary School, relationships were the strongest of the PLC dimensions examined. Five of the eleven interview participants described the relationships at this school using the term “family.” From both teacher and principal perceptions, I found that the relationships among the staff include many personal friendships that move beyond just collegial job-centered
interactions. Relationships were found to be central to the PLC work at this elementary school.

As indicated by the interview data, strong relationships contribute to the collaborative practices of the staff. The interview participants, including one teacher who is new to this school, described sharing strategies and lesson plans, helping one another in numerous ways, and planning collaboratively as part of their normal way of doing things. The quantitative data from the PLCA—R supported this qualitative finding as revealed by strong agreement ($M = 3.70, SD = .470$) with the following item: “Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.” Both qualitative and quantitative findings indicated that relationships are an essential part of successful collaborative work among the teachers and also with the administrator. This leads to a discussion of how the principal plays a role in either fostering or hindering the development of the types of caring, trusting, and respectful relationships found at Campbell Elementary.

All of the interview participants were asked, “In your opinion, how can a principal play a role in developing caring and trusting relationships among a school staff.” Teacher 1C noted the positive impact of principals “not being so focused on what the test scores are that you forget all else, understanding that we are people, too, that have lives, and have things that we like and don’t like.” Typical responses about how the principal can contribute to positive relationships that foster PLC practices included:

**Principal:** I get out of the way. That is the big thing. I think some leaders micromanage due to their own inefficiencies. I don’t care one bit to tell them I am as scared as they are. I think we are personable…They know I am real. When
my dog died, I was about to die and they knew it! They know my door is always open.

Teacher 1C: He values it. He understands it. He points it out when someone is having a hard time.

Teacher 3C: I think that [Dr. Mizell] promotes a very warm environment.

Teacher 4C: Well, by modeling, of course. It was already in place when he got here, so he just fell into that role and things just rolled on as they always have. I’ve never seen any negativety. You know, everyone is helpful to one another. We have a unique environment.

Teacher 5C: I think that principals play a role by becoming part of the staff, by participating in caring, in trying to help all. Not only from a professional standpoint, but from a personal standpoint. When a principal tells you that family is the most important part of your lives, that tells me that person is caring enough to help out when there are problems outside of your professional career and I think that is important.

Teacher 6C: I think just by being positive…by having positive relationships with the staff. Just giving different times for the staff to get together like breakfast this morning.

Literacy Coach: The culture is caring and trusting and collaborative and that he has set. It is the expectation he has set for us…He practices what he says.

From the perceptions of the interview participants, I concluded that the principal can foster positive relationships by modeling caring, trusting, personable relationships.
One of the ways in which the principal modeled caring and trusting relationships was by practicing what he and five of the teachers described as an “open-door policy.” As I met with the principal on four occasions, I found that his door is literally open. Teachers and students demonstrated a sense of comfort in coming in to ask questions, share information with him, or to seek encouragement. Multiple teachers indicated in their interviews they felt cared for by the principal and felt they could come to him with concerns. Two of the teachers spoke of how the principal modeled caring and support to them when they faced difficult personal issues. While only two of the teachers used the phrase, “practice what you preach,” the importance of being an example of the type of relationships that cultivate collaboration was found to be a contributing role of the principal through both interview and observational data.

From the teacher interviews, I also surmised this faculty strongly believes that the principal’s encouragement of personal relationships among the staff and also the staff sharing concerns with one another plays a role in developing positive working relationships. As presented earlier, the principal and three of the teachers shared the importance of their “payday Friday” practice of many faculty members going to dinner together. Having a faculty breakfast on in-service days was another example offered by two teachers of how the principal encourages socialization among the staff. Teacher 9C shared this observation:

You know we do this Value Plus thing, so we spend a week together every summer. We come and fellowship for another two hours after the meetings—just playing games and talking and stuff. I don’t see other schools doing this…It
seems like you can see teachers want to spend time outside the classroom with each other. You can see how good the relationships are.

Others offered similar examples of how relationships extend beyond the walls of the school. Avoiding the emergence of a competitive environment was also mentioned by three of the teachers as a key to the strong relationships that have developed at Campbell Elementary. The sense of collaboration (in contrast to competitiveness) was evident in my observations of the PLCs, the staff meeting, and the school leadership team meeting. There was a sense of being “in this together.”

The principal also fostered the development of positive, collaborative relationships by recognizing and celebrating the contributions of the staff. The principal addressed this as he shared:

I just sent out an email to your four [academic] coaches not too long ago praising them…as they make the faculty feel comfortable in sharing their areas to strengthen and some of their weaknesses (for lack of a better term) and understanding the instructional pieces that are necessary for children’s success and in accepting and adopting those best practices from other teachers. I commend those coaches.

Statements from teachers supporting this conclusion included:

Teacher 2C: If you come up with something you believe needs to be done and you express that to [Dr Mizell], then he’s very much an encourager of that. And when you’ve proven yourself…that you can lead…whether it’s a committee or you lead students well…once he sees that you can do that well and you can be organized with it and execute it well…it’s like it continually flows.

265
**Teacher 3C:** When you really think about it, it’s flattering that [the principal is not] just going to go in there and make the decision by himself. He wants to hear our input. It’s just a respect thing and I appreciate that.

**Teacher 8C:** [Dr. Mizell] does give us credit for doing the work. Teachers who responded to the PLCA—R instrument indicated strong agreement (M = 3.80, SD = .410) with this statement about relationships: “Outstanding achievement is recognized and celebrated regularly in our school.” From the observations at this elementary school, I also found that contributions of the staff were celebrated and shared with others. Teachers were recognized for developing ideas that could be implemented by others. At the school leadership team meeting, the principal did not take sole credit for the successful aspects of the school, but instead honored the accomplishments of the staff. The principal also shared in the interview that he believes it is his job to recognize excellent teaching and then actually tell teachers they are doing a good job. Supporting and celebrating the contributions of the staff plays a role in developing positive working relationships.

Another way in which the principal at Campbell Elementary School builds relationships that fosters PLC work lies in the fact that “he knows his people” (Teacher 8C). Throughout the time spent collecting data, I found that Dr. Mizell’s knowledge of his staff, the students, the parents, and the community represented key ingredients to the collaborative work at this elementary school. Two of the teachers voiced this idea as follows:

**Teacher 9C:** I think that [Dr. Miiszell] is a very good judge of character and work ethic. It seems like the people he hires all have the same mindset.
Teacher 8C: He (the principal) knows his people. He knows what our strengths are. If there is a situation that requires consensus, he will pull people together that can come up with the best answer and be most productive.

The overall sentiment expressed in teacher interviews was that the principal knows their strengths, their weaknesses, their professional lives, and also their families. His knowledge of them as people and as teachers served as a model for how they should develop relationships with their colleagues. As I interviewed the principal, I found numerous examples of how “he knows his people.” In the community, he has built working relationships with agencies, churches, ministries, business leaders, and low-income housing personnel that interface with the students or parents of students from Campbell Elementary. These relationships have allowed collaborative efforts to occur between these community partners and the school staff. Three of the teachers expressed that the principal is, as one teacher put it, “our arms and legs in the community.” By “knowing his people,” the principal can contribute to building relationships that foster collaborative work.

How then can the principal hinder the development of strong relationships? With strong evidence to support the significant impact of relationships in developing successful PLCs, the primary way in which a principal could hold back the progress is failure to recognize that relationships are important. The teachers shared the following actions as hindrances to building caring and trusting relationships among a school staff: micromanaging; encouraging competitiveness among the staff; creating an atmosphere of distrust; not valuing relationships; and not communicating wisely and diplomatically. Micromanaging was actually voiced by the principal and by four of the teachers as a
primary way principals can impede the development of PLC practices. Three of the
teachers noted that not practicing confidentiality could also undermine the trust needed
for collaborative work. Additional teacher perceptions about the ways in which the
principal can be a hindrance to PLCs included:

**Teacher 1C:** Ruling with an iron fist would be one. Not understanding that
we’re not just a teacher who has to get a certain test score, but we are a human
being that has a family and other things going on in our lives at the same time.

**Teacher 5C:** I believe principals hinder growth when they become
micromangers.

**Teacher 6C:** If it seems very obvious that [principals] are playing favorites, that
can divide a staff—if it doesn’t think the principal is fair across the board.

**Teacher 7C:** If [the principal] is not modeling and practicing [caring
relationships] himself, then that is hard for other people to catch on.

**Teacher 8C:** If people were called in and fussed at behind closed doors or if I
were called in and share secrets that would perhaps be used in a hurtful manner
rather than a supportive manner. If I were put in a position to cross the line. I
think that would be the biggest.

Thus, principals can hinder the work of PLCs by failing to see the importance of
developing collaborative relationships or by not practicing positive trusting relationships
with the staff.

As has been shown at Campbell Elementary, relationships matter greatly when it
comes to developing and sustaining the work of PLCs. Developing and practicing
trusting, caring, and respectful relationships is one way for principals to foster practices
found in successful PLCs. In contrast, a principal can hinder the success of PLC by either failing to recognize the contribution of positive relationships or by acting in ways that undermine a trusting and caring environment. At Campbell Elementary, the perceptions of the principals and the teachers were aligned in the belief that relationships really do matter.

Principal support is critical. Hord (1997) stated, “It seems clear that transforming the school into a learning community can be done only with the leaders’ sanction and active nurturing of the entire staff’s development as a community” (p. 6). Evidence was found at Campbell Elementary School to support the idea that leaders “matter in the creation and long-term maintenance of professional learning communities” (Sparks, 2005, p. 157). Just as principal support can foster the process of developing and sustaining PLCs, a lack of support can be detrimental. Principal support can be demonstrated through both actions and beliefs.

At Campbell Elementary, it has been established previously that the principal does not play an active role in PLC meetings. However, his supportive role was found to be critical to PLC success. The first way in which Dr. Mizell has contributed to the PLC work lies in his beliefs concerning PLCs. When the school district set PLCs as a priority for implementation, he first thought, “This is a faculty meeting or a grade level meeting with somewhat of an acronym.” After attending training on PLCs, his view changed as he realized “it was more of a data-driven initiative and best practices.” As the implementation evolved, he found collaboration among the teachers was more open. Instructional decisions became far more data-driven as they “started looking at data...tracing and tracking our kids from year to year to see if the gains were there.”
Thus, his view of PLCs shifted from seeing it as another initiative to experiencing the positive impact of PLC practices at his school. From the principal interview, I concluded that he was a “believer” in the PLC process.

The principal’s beliefs about PLCs were also found to have an impact upon the beliefs of the staff in regards to PLCs. The principal shared the following:

When we talk about PLCs, I think they have to know the leaders believe in the process…that the leadership—the administration—believes it works. And we have to constantly continue to define what PLC is. If we don’t, we lose sight of it and we go back to that grade level meeting talking about field trips.

From the teachers’ and literacy coach’s interviews, I found teachers’ beliefs about PLCs were influenced by the principals’ supportive beliefs. PLCs were described in the nine teachers interviews as times when the grade level teams work collaboratively to look at data and to make instructional decisions based on the data. Viewing PLCs as a time set aside for data-driven decision making echoes the beliefs of Dr. Mizell. Teacher 7C stated, “I think [principals] have to give us that vision.” Another teacher, Teacher 8C, described the principal as “steering the boat” because he sees the bigger picture of what is happening with initiatives such as PLCs or the Value Plus program. Observational data supported this belief as one that is practiced at this school. In each of the five PLCs observed, teachers worked with the literacy and math coaches to examine student academic data and to then make plans based on the findings. Written agendas also indicated that the primary purpose of the meeting was tied to data. While the all of the teachers shared the belief that PLCs were for data, it was interesting that two of the teachers commented that they believe the agenda for PLCs comes from district level
directive. Four teachers described collaboration between the literacy coach and the principal as the source of the agenda. The principal’s beliefs about PLC practices impacts the nature of the work accomplished.

Principal support must move beyond beliefs into actions that provide support for the implementation of PLC practices. Developing schedules that allow time for teacher collaboration is one way in which the principal can hold up the importance of PLCs. At Campbell Elementary School, the schedule includes a common planning time for grade level teachers as the students participate in encore classes. Thursdays have been set apart as “PLC days” at this school. As presented earlier, the principal worked with the literacy coach to determine the week day that would allow PLCs to include not only the teachers, but other academic coaches as well. One of the PLCA—R items also indicated strong agreement that “the school schedule promotes collective learning and shared practice.” When asked to describe PLCs that you are a part of at this school, every teacher referred to the structured PLC meetings facilitated by the literacy coach and held on Thursdays. While the frequency of the meetings was found to vary from grade level to grade level, the principal has set aside the time for the formal meetings to provide logistical support for PLCs.

In addition to providing time for PLC meetings, the principal can contribute to successful collaboration by having a voice in the agenda for PLC meetings. The agendas for the PLC meetings were devoted to using the data to help teachers meet the needs of students. Dr. Mizell supports the PLC process by guarding this time for the work of PLCs. Faculty meetings are used to distribute information and more “housekeeping”
items. The literacy coach spoke about the principal’s value of the time set aside for PLCs as she stated:

How he has helped… having a common planning time…not having his own agenda. I mean he recognizes that these are for grade levels and data. He has staff meetings where he can [share] housekeeping things. He respects what goes on in her. He respects us looking at data. He respects us trying to move kids and what they need. That time…he respects it. If he has something else, he has staff meetings to do that.

The principal indicated that in the beginning stages of PLC implementation, he used a type of checklist to make sure that the group was doing what was supposed to occur in PLC meetings. While the meetings do include a written agenda to guide the time, Dr. Mizell believes the checklists are no longer necessary as PLC practices have become more ingrained into the culture. Teacher 4C noted that “having guidelines, but not necessarily making the guidelines so rigid that there’s no flex room” is an important way to foster PLC work. Two of the teachers noted that the structure of an agenda kept the group focused on the task at hand.

While the principal does not take part in the PLC meetings at Campbell Elementary, he often provides support by addressing areas of need that arise from the collaborative work. Multiple teachers spoke of ways in which Dr. Mizell has worked diligently to provide resources and materials that allow them to put their plans into action. Teacher 8C stated, “Well, he certainly does everything he can to provide us with a wealth of materials. I do not believe he has ever told us he has no money to get anything we have needed.” Teachers shared examples of ways in which the principal has
been proactive in addressing an area where support was needed. A few of these instances are described below:

**Writing instruction:** Three of the teachers described how analyzing the data from fifth grade writing assessments, Dr. Mizell formed a committee of teachers, the literacy coach, and the arts specialist to examine the writing program across the grade levels. A plan for writing instruction has been developed as a result of providing supportive conditions for teachers to collaborate. The plan was scheduled to be shared with the faculty in the fall of 2011.

**Meeting the needs of students:** Three teachers shared how Dr. Mizell worked diligently to address needs identified for a group of students who were Burundian refugees. The students had never experienced school before and were also in a foreign place. Collaboration among the teachers was not sufficient to address the needs of the students. Dr. Mizell worked with the district level ESL program to provide an ESL instructor to work with the students in a self-contained setting in order to assimilate them to the idea of school and to America.

**Classroom assignments:** Another teacher shared how after losing a few teaching positions due to a smaller enrollment, the principal formed a committee to evaluate the classroom locations in order to “determine what were the best decisions for the kids and for the grade level teachers.” The thought behind this was to better enable collaboration among grade level teachers.

Providing supportive structures to address needs that arise as teachers share their ideas and discuss problems faced with meeting students’ needs is an important role for principals.
Just as principal support is critical to successful PLC work, the lack of support can hinder the collaborative process. Other than two teachers expressing they feel a bit overloaded with paperwork and meetings at times, the teachers’ perceptions of hindrances came from other situations or hypothetical situations. The principal noted that when PLCs are not a priority to the principal, they are setting the tone for school. Teachers 2A, 4A, and 5A felt micromanaging the work of PLCs impedes the work due to lack of trust in the teachers to carry out the work. Other teachers also spoke of ways in which the principal can fail to be supportive as follows:

**Teacher 1C:** I know of principals at other schools that do watch over their teachers’ shoulder to where the teachers feel they are in trouble or in danger of being in trouble all of the time. So, they are not sharing anything they feel is a weakness because the principal is right there.

**Teacher 2C:** I have heard of some instances where there are too many meetings in a week.

**Teacher 4C:** Micromanaging. I don’t think we would respond too well to making sure [PLCs] have to meet every week, whether there is something to address or not. And then having a form that has to be filled out every time and has to be filled out properly… I think we would be resentful if this and this had to be done and you had to meet two out of every five planning periods in formal PLCs.

**Teacher 5C:** I think back to my experience of the last three years where a principal was present and the principal created an atmosphere of distrust.
**Teacher 9C:** I think forcing too much hinders because people get a sour taste of it. And then maybe overloading teachers.

As principals realize the impact of providing support for PLC work, it is also important that they become aware of the ways in which their lack of support can be a hindrance.

The interview participants (the principal, nine teachers, and the literacy coach) at Campbell Elementary School did not view the principal not actively meeting with the PLCs as a hindrance to the collaborative work. In fact, none of the participants indicated that they felt it was necessary in order for PLCs to be effective. As a result, the supportive role of the principal was deemed to be a critical element of PLC implementation. Valuing and believing in the PLC process, setting aside time for the formal PLC meetings, maintaining a focus on data-driven decision making, and providing additional support as needs arise were found to be significant ways in which the principal can foster PLCs. Hindrances perceived by the teachers and the principal included failure to value PLC work, micromanaging the collaborative efforts, and overloading the teachers with work and meetings.

*Structure is important.* Structural factors have been identified as one facet of the supportive conditions found in school successfully implementing PLCs (Hord & Sommers, 2008). While supportive structures have been presented as part of the critical role of principal support for PLCs, the part played by supportive structures is a significant theme within itself. In order to develop and sustain professional learning communities, principals must understand this valuable piece of the puzzle. Rather than restating the findings related to principal support for logistical structures necessary for PLCs, I will highlight the findings related to the structures themselves.
Setting aside a time for PLC meetings provides a predictable structure that is not left to chance occurrences. The logistics of a common planning time for grade level teachers was found to be the most important structure for the development of the PLCs at Campbell Elementary School. At this school, the term PLCs was associated with the formal meeting that is held on “PLC Thursdays” by the 11 interview participants. Therefore, actually setting a time, a day, and a place provided the structures needed for establishing PLCs as an expectation. Quantitative data also supported the value of providing time structures. The teacher respondents indicated “time is provided to facilitate collaborative work” \((M = 3.15, SD = .671)\) and “the school schedule promotes collective learning and shared practice” \((M = 3.20, SD = .616)\). Another way in which the principal sought to maximize the time was to schedule PLCs on a week day that allowed the academic coaches to participate. Scheduling time for PLCs is one example of a supportive structure that falls under the positional authority of the principal. As presented earlier, principals also play a role in developing supportive structures by providing and allocating resources and through decision making policies.

In addition to creating a schedule that allows teachers the opportunity to work collaboratively, principals can also play a role in the developing expectations for how PLCs are structured. As previously discussed, the principal at Campbell Elementary School set the standard for PLCs to be utilized for data-driven decision making. The principal employed personnel structures (using the literacy coach as facilitator) and agendas as a way to guide the PLC work. Teacher 6C was one of the teachers who indicated that having an agenda and a facilitator was helpful. If these were not in place, she described what she felt would happen:
Having [the literacy coach or the arts specialist] to lead the meetings helps a lot because, just for my team, we are so close we would talk all of the time away. If we have to sit down on a Thursday and we have to have this meeting, then it’s just going to look as unstructured as the rest of the time.

In the initial implementation of PLCs, the principal noted that he developed a check-list to be used as a way to both guide the group and to keep track of the progress being made. As PLC meetings became part of the culture of the school, the principal discontinued the use of the checklist. Principals can play a role in developing PLCs by providing necessary structures that maximize the time for the teachers.

In this school district, PLC training led to the creation of opportunities for teachers to work collaboratively in a setting that was focused on using student data. While this structured PLC design was identified by the 11 interview participants when asked about PLCs, it is important to note that other times of collaborative work are in place at this school. The *Value Plus* program exemplifies a structure in which the five dimensions of PLCs are practiced regularly and to a great extent. In fact, the strongest examples of shared practice and collective learning described during the interview process involved this arts integration program. Teacher collaboration also happens on a daily basis among teachers in each grade level through either informal times or planned grade level meetings. The *Value Plus* program and informal grade level PLCs were only described when I probed with a question similar to this:

I know that you have a time set aside on Thursday for meetings, but are there other times within the structure of the school that allow you to meet in these kind of learning groups with your colleagues?
As a principal, recognizing structures and even programs that inherently lead to the practices associated with PLCs could impact the understanding of the power of PLCs by the staff. Dr. Mizell stated:

I think any initiative, be it PLC or RTI or IDEA or whatever acronym you are looking at, I think it starts at the top. The building level administrator sets the tempo and the culture and the climate of the building.

After analyzing the qualitative data, I concluded that this school has far more PLC practices in place than are realized by the staff due to seeing PLC Thursdays as how they do PLCs. Because the principal sets the tone, expanding the understanding of how PLCs can be ingrained into the culture of the school is an important role that can be played by the principal.

Principals can also hinder the work of PLCs by not recognizing the importance of structural conditions to building strong PLC practices. As detailed previously, the interview data pointed to principals impeding the collaborative work by imposing too many meetings. From both the principal and teachers’ perspectives, the principal can also be a hindrance by “watching over the teachers’ shoulders” or by micromanaging the PLC work. Principals can thwart the work by not recognizing the structures that will best facilitate PLC work at their own school. The principal at Campbell Elementary spoke about this as he said:

PLCs work differently in different schools. There is not a cookie cutter model for PLC. There can’t be. There’s too many independent variables being put into the process and that’s leadership and the style of leadership and the teachers and the style of the teachers.
Thus, developing too many logistical structures, micromanaging the work, and imposing structures that are not fitting for a staff can be detrimental to providing the supportive conditions needed to foster PLCs.

Hipp and Huffman (2010) spoke of the importance of structures as they stated: “These structural conditions are clearly important so staff and administration have available resources to conduct their work without major logistical barriers” (p. 20). Structures such as time, policies, material and human resources, and agendas fall within the realm of the principal’s authority. Recognizing the significant function of supportive structures and then selecting the structures that will empower teachers to collaborate are important roles that can be carried out by the principal of a school that is involved in PLC implementation. Without structures in place to undergird shared practice and collective learning, PLC success can be hampered.

Summary of the findings related to the role of the principal. Utilizing interviews, observations, and artifacts collected at Campbell Elementary School, teacher and principal perceptions of the principal’s role in foster and hindering the development of PLCs were examined. In response to the second research question, four themes were developed: relationships matter; principal support is critical; and structure is important. The principal can impact the work of PLCs by recognizing both significant role played by relationships and also the power of modeling caring and trusting relationships. In order for PLCs to be effective, the support of the principal through beliefs and actions can positively affect the collaboration that occurs. With a deep understanding of how supportive structures provide an arena for PLC practices to develop, principals can utilize their positional authority to put them in place. Just as the principal can foster PLCs, their
lack of careful attention to developing relationships, building supportive structures, and modeling support in both word and deed can derail the effort to build effective PLCs. Using the theoretical framework of Hord’s five dimensions of PLCs as a filter, these themes fall within the findings of research currently available on PLCs.

Summary of the Chapter

After providing a rich, thick description of Campbell Elementary, the qualitative findings for this case were then presented. In response to research question one, the extent of PLC practices at this elementary school were examined by using Hord’s five dimensions of PLCs: (a) shared values and vision; (b) shared and supportive leadership; (c) collective learning and application; (d) shared personal practice; and (e) supportive conditions. Evidence from interviews, observations and artifacts was detailed to show the strength of PLC practices. Throughout the interview process, participants referred to the PLC Thursdays when asked about PLCs. Through probing questions, other significant examples of collaborative work were described, adding to the strength of the practices at this elementary school.

From the data, I found that the beliefs of the staff are focused on “kids first.” A strong commitment to meeting the needs of the whole child was demonstrated. The teachers described the principal as one who shared leadership and empowers them to develop their own capacity to lead. Leadership opportunities were found through committee work and the Value Plus arts integration program. Collective learning and shared practice were evident in the formal PLC meetings and through the Value Plus program. The literacy coach plays an important role in teacher learning and sharing practices as she facilitates the formal PLC meetings that are focused on using student data.
to make decisions. Opportunities afforded through *Value Plus* program were found to be significant times for learning and sharing practice. Common planning time and the designated “PLC Thursdays” are the two most obvious structures that provide supportive PLC conditions. The most significant supportive condition found at Campbell Elementary School was the strength of both professional and personal relationships among the staff. The principal serves as a model for developing caring and trusting relationships that foster collaboration. The extent to which PLC practices are in place was found to be strong. The triangulation of data sources—both qualitative and quantitative—added strength to the findings for research question one.

After determining the extent of PLC practices at Campbell Elementary, research question two was addressed: What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? From the analysis of the qualitative data, four themes were developed in response to this question: relationships matter; principal support is critical; and structure is important.

By modeling and building caring and trusting relationships, the principal can foster the work of PLCs. In contrast, a principal can hinder the success of PLC by either failing to recognize the contribution of positive relationships or by acting in ways that undermine a trusting and caring environment. From the qualitative data analysis, I found that principal support is critical to the development of thriving PLCs. Principal support includes both beliefs and actions that provide support for the implementation of PLC practices. Hindrances perceived by the teachers and the principal included failure to value PLC work, micromanaging the collaborative efforts, and overloading the teachers with work and meetings. Determining the structures that will promote collaborative work
falls within the positional role of the principal. To be effective, PLCs need structures that include time and expectations for what will occur during meetings. When the importance of the structures is ignored or downplayed, principals can impede the work of PLCs.

The three themes presented for Campbell Elementary School fit primarily within the PLC dimensions of supportive conditions and shared values and vision. Although evidence supported strong PLC practice in all of the five PLC dimensions, I found that the role played by the principal was most obvious in developing supportive conditions – structural and relational—and in developing and modeling a sense of shared vision and values. By developing caring and trusting relationships, recognizing the critical role played by PLC structures, and by supporting the collaborative work, principals can foster the development of successful PLCs. In contrast, failure to attend to these vital aspects of PLCs can undermine attempts to successfully develop these collaborative work groups.

In Chapter 7, a cross-case analysis will be presented. Using Hord’s (1997, 1998, 2008) five dimensions of professional learning communities as a sieve, the extent of PLC practices will be examined. From the combined data from the two cases, themes are set forth concerning role played by the principal in developing and sustaining PLCs. Attention to the triangulation of data sources and methods will be included. Following the cross-case analysis of the data, conclusions and implications will be presented in Chapter 8.
CHAPTER 7
CROSS-CASE ANALYSIS OF THE CASE STUDY DATA

Introduction to the Chapter

The qualitative analyses of the two cases, Bradford and Campbell Elementary Schools, were presented in Chapters 5 and 6, respectively. Rich, thick descriptions were provided for each of the elementary schools to provide contextual understanding for the reader. Qualitative themes were developed and discussed, along with triangulation of the data sources and methods. In Chapter 7, the discussion will shift to a cross-case analysis of the data in order to address the two research questions established for this study:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions

2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?
The purpose of this chapter will be to provide a comparison of PLC practices and the qualitative themes presented by case in Chapters 5 and 5 in order to provide a global understanding of findings across the two cases. Included in the analysis will be a picture of the collective quantitative data for the two elementary schools. I will first address the findings related to the extent of the five dimensions of PLCS (research question one), to be followed by themes developed concerning the role played by the principal in developing and sustaining professional learning communities (research question two).

Before presenting the findings, it is important to review the designations assigned to interview participants at the two elementary schools. Table 27 presents the labels used for the teachers at Bradford Elementary (1B, 2B, 3B, 4B, 5B) and Campbell Elementary (1C, 2C, 3C, 4C, 5C, 6C, 8C, 9C). The name of the school will be included when the two principals, the assistant principal, and the literacy coach from the two sites are referenced.
Research Question One: The Extent of PLC Practices

As presented in Chapters 4, 5, and 6, both qualitative and quantitative data evidenced the extent to which the five dimensions of PLCs were practiced at both Bradford and Campbell Elementary Schools. Before discussing the findings related to research question one, it is important to delineate the ways in which PLCs are practiced at each school. The practices demonstrated variety on several levels. First, use of the term PLC was found to be quite different. Although PLC practices were evident at Bradford Elementary School, the term PLC was not used by the staff. Teachers and administrators participate in collaborative work groups that exemplify PLCs through grade level meetings, TAP cluster meetings, and TAP leadership meetings. At Campbell Elementary
School, the participants considered PLCs to be the formal PLC meetings which are held on Thursdays. Other strong PLC practices found outside this formal structure included the arts integration program and informal grade level collaboration. Another noteworthy variant was the participation of the principals at the two elementary schools. At Bradford Elementary School, the principal actively takes part in many of the PLC meetings. In contrast, the principal at Campbell Elementary school plays a supportive role utilizing the leadership of the literacy coach and the arts specialist to facilitate collaboration. With this understanding of PLC structures, the findings for research question one will be presented through the construct of Hord’s (1997, 1998, 2008) five PLC dimensions: (a) shared values and vision, (b) shared and supportive leadership, (c) collective learning, (d) shared personal practice, and (e) supportive conditions.

**Shared Values and Vision**

The sense of shared values and vision was notable at both Bradford and Campbell Elementary Schools. The overwhelming focus was described as putting kids first. Both schools serve children of poverty with 100% at Bradford Elementary and nearly 80% at Campbell Elementary being identified as economically disadvantaged. Thus, the participants from the two elementary schools viewed education as an opportunity for their students to move beyond a life of poverty. From the collective interviews, the following quotes were typical of the beliefs expressed:

**Teacher 1B:** No matter what we are doing, it is about the students. Every decision we make at this school is about students first…and if you don’t have kids buying into having an education, then we are not doing our job effectively.
**Teacher 7C:** That it’s about the kids… I mean we are committed because we want to make a difference in the lives of these kids and education is a way to open up doors for them. But, I feel like everyone knows we want to better children and given them education and opportunities.

**Literacy coach (Campbell Elementary):** We say this over and over again: It’s all about the kids. It’s not about us. It’s about the kids at our school getting the best education possible…We value kids. We value their education. We believe that they deserve to learn everything…. I have never seen a school so student focused.

**Principal (Bradford Elementary):** [We] work ourselves to death to make sure kids get the knowledge they need because we do believe that education is the only hope to break the cycle of poverty.

The focus on students on students was also evident in the stated beliefs of both elementary schools (See Table 28). Common threads in the belief statements included high expectations for students, a safe environment, and the desire to develop lifelong learners who are productive citizens. Another aspect of shared values and vision found across the interview and observational data was a sense of viewing students as “all our kids.” In the interviews, references to this belief were found in 9 of the 18 interviews.

At both sites, I observed PLC meetings in which the participants were focused on how the staff could meet the needs of all of the students as they moved from grade to grade within the school. Examples included looking at the progression of writing instruction across the grades, following student progress throughout elementary school, and looking at the global picture of meeting the needs of all students.
Table 28

Comparison of the Belief Statements of Bradford and Campbell Elementary Schools

<table>
<thead>
<tr>
<th>Bradford Elementary School Belief Statements</th>
<th>Campbell Elementary School Belief Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The best is expected of our students, the community, and ourselves.</td>
<td>• With positive experiences in a safe environment, students gain confidence to become lifelong learners.</td>
</tr>
<tr>
<td>• All students will learn and achieve.</td>
<td>• To achieve their greatest potential, students should set challenging, but attainable goals for themselves.</td>
</tr>
<tr>
<td>• A quality education requires a results-oriented, data driven focus on curriculum, which is based on continuous growth.</td>
<td>• By recognizing and modeling good character traits, students become productive citizens in their community.</td>
</tr>
<tr>
<td>• A team effort with shared commitment and accountability among students, teachers, parents, administration, and stakeholders is necessary for a successful school.</td>
<td></td>
</tr>
<tr>
<td>• A physically and emotionally safe environment where students’ and staff’s needs are met is essential to student achievement.</td>
<td></td>
</tr>
<tr>
<td>• Consistent, fair discipline is necessary for an optimum learning environment.</td>
<td></td>
</tr>
<tr>
<td>• Our school produces quality citizens, life-long learners, and community leaders.</td>
<td></td>
</tr>
</tbody>
</table>

The overall strength of the dimension of shared values and vision was also evidenced in the PLCA—R data for both Bradford Elementary ($M = 3.31$, $SD = .409$) and Campbell Elementary ($M = 3.58$, $SD = .367$). Table 29 provides a summary of the overall means and standard deviations for the dimension as well as the nine individual items related to shared values and vision. The means for each of these items ranged from 3.00 to 3.80 for the PLC practices identified on this instrument. From this analysis, I found teachers responding to the PLCA—R instrument from both elementary schools indicated
strong agreement that “staff members share visions for school improvement that have an undeviating focus on student learning” (See Table 29). It was also important to note that the data supported the practice of decisions and policies being made in line with the schools’ values and vision (See Table 29). As will be presented within the following discussion, the PLCA—R data was found to triangulate with the qualitative data for this valuable PLC dimension.

Table 29

PLCA—R Data for Shared Values and Vision by School

<table>
<thead>
<tr>
<th>PLCA – R Items</th>
<th>Bradford Elementary N= 11</th>
<th>Campbell Elementary N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Values and Vision (Overall Dimension)</td>
<td><strong>3.31/.409</strong></td>
<td><strong>3.58/.367</strong></td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared sense of values among staff.</td>
<td>3.27/.467</td>
<td>3.45/.686</td>
</tr>
<tr>
<td>Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>3.36/.505</td>
<td>3.45/.605</td>
</tr>
<tr>
<td>Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
<td>3.36/.505</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>Decisions are made in alignment with the school’s values and vision.</td>
<td>3.64/.505</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared vision among staff.</td>
<td>3.18/.405</td>
<td>3.45/.510</td>
</tr>
<tr>
<td>School goals focus on student learning beyond test scores and grades.</td>
<td>3.00/.894</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>Policies and programs are aligned to the school’s vision.</td>
<td>3.27/.467</td>
<td>3.65/.489</td>
</tr>
<tr>
<td>Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>3.09/.701</td>
<td>3.20/.616</td>
</tr>
<tr>
<td>Data are used to prioritize actions to reach a shared vision.</td>
<td>3.64/.505</td>
<td>3.80/.410</td>
</tr>
</tbody>
</table>
Meeting the needs of the whole child was another attribute of the shared values and vision for both Bradford and Campbell Elementary Schools. With both schools serving children of poverty, one of the ways in which this belief was put into action was in addressing not only the students’ academic needs, but physical and emotional needs as well. The following statements were typical of those expressed in interviews:

**Principal (Bradford):** Whatever it takes. I think that is one thing that we always try to put students first and we talk about it. We try to live that. By that I mean their learning comes first and the nurturing part. It always points back to the students.

**Teacher 2B:** We just want students to be able to succeed. I mean that is the whole thing. And we all know the kinds of influences and things that affect children in poverty.

**Teacher 3B:** This is going to sound like a Hallmark card, but this school is all about the children. It really is. No matter what it takes. We do it for children. We don’t just educate them. We love them. We nurture them.

**Teacher 2C:** It’s all about loving the kids and teaching the kids always comes second.

**Teacher 3C:** We all do what is best for the kids even if it means doing extra work ourselves. We work so hard here. We’re here early; we stay late because we are all of the same mindset.

At both schools, the breakfast program was notably designed to make sure every student has the opportunity to eat; with all students eating in classrooms at Bradford Elementary and breakfast being served every day at Campbell Elementary. At Campbell Elementary,
references were made to partnerships with Second Harvest Food Bank as another means of assuring students had ample food over the weekend. Supplying needs for clothing and school supplies was evident at Bradford Elementary. Partnerships with community agencies, religious organizations, and businesses were found to be another way these elementary schools are seeking to meet the needs of the whole child. The PLCA—R data also supported these practices with strong agreement with this item: “School goals focus on student learning beyond test scores and grades” (See Table 29).

Data-driven decision making was another way in which the focus on meeting the needs of students was practiced. At both of the elementary schools, I observed PLC meetings centered on analyzing student academic data (e.g., benchmark test data in mathematics and reading, literacy data, state achievement test data) in order to make decisions about instructional practices and programs designed to meet the needs of struggling students. Also included among the discussions were personal student issues impacting academic performance. The participants know their communities and their clients well as demonstrated in the focus on making decisions that are student-focused.

The presence of shared values and vision was evident at the two elementary schools through each method of data collection: interviews, observations, artifacts, and the quantitative instrument. A student-centered focus guides the work of the educators at these urban schools. Pankake and Moller (2003) noted that a “hallmark of a true professional learning community” is a vision “characterized by an undeviating focus on student learning” (p. 8). The ultimate sense of purpose found in both cases was obviously related to meeting the needs of the students.
Shared and Supportive Leadership

Shared and supportive leadership is critical for the emergence of thriving professional learning communities. Hipp and Huffman (2007) concluded:

Schools involved in sincere efforts to broaden the base of leadership to include teachers and administrators, to define shared vision based on student learning, and to provide a culture of continual support, are much more likely to make great strides in becoming learning organizations and addressing critical student needs.

(p. 130)

The principals at Bradford and Campbell Elementary schools practiced elements of shared and supportive leadership as they guided their respective staffs toward collaborative practices. When asked if they would describe leadership at their schools as shared leadership, all of the 14 teachers respond affirmatively. While there was evidence this dimension of PLCs was strong, it is important to recognize both common and divergent practices were found at the two elementary schools.

The quantitative data collected through the PLCA—R instrument provided support for the practice of shared and supportive leadership at both Bradford Elementary School (\( M = 3.06, SD = .343 \)) and Campbell Elementary School (\( M = 3.62, SD = .338 \)) (See Table 30). Additionally, the 11 individual PLC practices associated with shared and supportive leadership included on the quantitative instrument provided evidence related to this dimension (See Table 30). From the individual items, I found that teacher respondents expressed strong agreement that “staff members are consistently involved in discussing and making decisions about most school issues” and “the principal
incorporates advice from staff members to make decisions.” The PLCA—R data support the qualitative findings related to shared and supportive leadership.
### Table 30

**PLCA—R Data Analysis for Shared and Supportive Leadership by School**

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>Bradford Elementary N=11</th>
<th>Campbell Elementary N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared and Supportive Leadership (Overall Dimension)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Overall Dimension)</td>
<td>3.06/.343</td>
<td>3.62/.338</td>
</tr>
<tr>
<td>Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>3.00/.447</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>3.09/.539</td>
<td>3.55/.605</td>
</tr>
<tr>
<td>Staff members have accessibility to key information.</td>
<td>2.91/.302</td>
<td>3.60/.503</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>3.00/.632</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>Opportunities are provided for staff members to initiate change.</td>
<td>2.91/.539</td>
<td>3.50/.513</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>3.00/.632</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>3.18/.603</td>
<td>3.60/.503</td>
</tr>
<tr>
<td>Leadership is promoted and nurtured among staff members.</td>
<td>3.00/.632</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>Decision-making takes place through committees and communication across grade and subject areas.</td>
<td>2.82/.405</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>3.18/.751</td>
<td>3.20/.410</td>
</tr>
<tr>
<td>Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>3.55/.522</td>
<td>3.75/.444</td>
</tr>
</tbody>
</table>
While interview participants at both elementary schools offered examples of teacher leadership opportunities, variation existed in the way this PLC dimension is practiced. When asked about opportunities for teacher leadership, all of the seven interview participants from Bradford Elementary School listed formal leadership roles including being a TAP mentor or master teacher, a member of the Title I leadership team, a participant in SACs accreditation or SIP committee, or membership on other school committees. Although grade level team leaders are not found at Bradford Elementary School, two of the teachers at Bradford indicated the small size of their grade level teams and the level of collaboration among the teachers makes this role unnecessary. On the other hand, grade level team leaders are in place at Campbell Elementary School and serve as members of the school leadership team. All of 11 participants interviewed at Campbell Elementary immediately referenced the 24 active committees as providing opportunities for teachers to be involved in shared leadership. Although the ways in which leadership is practiced differed at the two schools, the participants indicated that shared leadership is in place.

As found in Table 30, the PLCA—R respondents expressed agreement that “leadership is promoted and nurtured among staff members.” Yet, it is important to note differences in practices as well as differences in the PLCA—R data between the two schools. One example was found in the area of committees. With a strong emphasis on the committee structure at Campbell Elementary School, the leadership practice with the strongest agreement ($M = 3.80$, $SD = .470$) on the PLCA—R stated: “Decision-making takes place through committees and communication across grade and subject areas” (See Table 30). In contrast, this statement received the lowest level of agreement ($M = 2.82$, $SD = .570$).
\( SD = .405 \) for Bradford Elementary teachers. At Bradford Elementary, committees were simply mentioned as a way to get involved.

As described in the thick, rich descriptions of the two elementary schools in Chapters 5 and 6, both schools are implementing wide-sweeping programs that impact leadership opportunities for teachers. At Bradford Elementary School, teachers have can apply for either master or mentor teacher roles as part of the TAP program. The Value Plus art integration program at Campbell Elementary is coordinated by the arts specialist, but also offers teachers the chance to mentor or conduct model teaching for colleagues within and outside of their school. In both cases, the principals practiced shared and supportive leadership as they worked collaboratively with those who have taken on the leadership roles. There was a strong sense of shared leadership through the TAP and the Value Plus programs.

Another aspect of shared and supportive leadership was found in shared decision making. On the PLCA—R, teachers at both school indicated overall agreement with the statement: “The principal participates democratically with staff sharing power and authority” (See Table 30). The observational data also supported the practice of involving teachers in making decisions. With the two schools being from the same school district, I had the unique opportunity to observe PLCs working on decision making regarding a new academic intervention program at both elementary schools. The PLCs were involved in analyzing student data to determine who would participate in the new program. In both cases, teachers were actively involved in selecting students for groups and in determining how the intervention strategies would be employed. From the interview data, I gained insight into perceptions concerning this element of shared
leadership. Across the 18 interviews, eight teachers and the two principals pointed out that there are times when administrators need to make the “final decision.” From the interviews at Bradford Elementary, three of the five teachers felt that their principal rarely exerts the authority to make decisions without involving others. At Campbell Elementary, four of the nine teachers noted that while teachers are afforded the opportunity to offer input, they believe the principal has the final word in many decisions, especially when money is involved. The following comments provided insight into the perceptions of the interview participants:

Teacher 1B: [The principal] is very big on asking people their input.

Teacher 3B: [The principal] is good at being democratic.

Teacher 8C: Any time there are decisions to be made, [the principal] does a great job of allowing us to discuss, negotiate, and arm wrestle if we need to! But we get decisions made.

Examples of shared decision making were presented at each school and included spending Title I money, developing a recycling program, deciding about student promotion/retention, and addressing areas of academic challenge.

Hipp and Huffman (2010) posited, “Shared leadership fosters a multitude of interactions that build capacity for change particularly because these changes promote increased student learning” (p. 15). By distributing leadership, the principals in this study fostered the work of PLCs. Although the practices differed at Bradford and Campbell Elementary Schools, shared and supportive leadership was found to be part of the collaborative work.
Collective Learning

Learning is central to the practices of PLCs. Hord and Sommers (2008) noted, “The PLC is not just about collaboration; it is collaborating to learn together” (p. 12). Evidence for application of this PLC dimension was also found at the two elementary schools. As has been noted previously, the differing PLC formats at each school led to varying forms of this practice. As shown Table 31, the PLCA—R data also supported the strength of collective learning and application practices for Bradford Elementary ($M = 3.38, SD = .352$) and Campbell Elementary School ($M = 3.58, SD = .412$). The findings related to this PLC dimension will now be discussed.
Table 31

PLCA—R Data Analysis for Collective Learning and Application by School

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>Bradford Elementary N= 11 Mean/SD</th>
<th>Campbell Elementary N=20 Mean/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collective Learning and Application (Overall Dimension)</strong></td>
<td>3.38/.352</td>
<td>3.58/.412</td>
</tr>
<tr>
<td>Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>3.27/.467</td>
<td>3.55/.510</td>
</tr>
<tr>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>3.55/.522</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>3.45/.522</td>
<td>3.70/.470</td>
</tr>
<tr>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>3.09/.302</td>
<td>3.45/.605</td>
</tr>
<tr>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>3.36/.505</td>
<td>3.50/.607</td>
</tr>
<tr>
<td>Professional development focuses on teaching and learning.</td>
<td>3.36/.674</td>
<td>3.45.510</td>
</tr>
<tr>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>3.18/.603</td>
<td>3.45/.605</td>
</tr>
<tr>
<td>School staff members are committed to programs that enhance learning.</td>
<td>3.36/.505</td>
<td>3.60/.598</td>
</tr>
<tr>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>3.64/.505</td>
<td>3.65/.489</td>
</tr>
<tr>
<td>Staff members collaboratively analyze student work to improve teaching and learning.</td>
<td>3.55/.522</td>
<td>3.50/.607</td>
</tr>
</tbody>
</table>
Both of the elementary schools serving as cases for this study had numerous opportunities for collective learning and application. As has been noted with other PLC dimensions, it is most apparent in the TAP program at Bradford Elementary and the Value Plus program at Campbell Elementary. Multiple ways for teachers to learn collectively are embedded within each of these unique programs. In the TAP cluster meetings, the master teacher facilitates grade level teachers’ learning centered on instructional practices that can impact student learning. Teacher 3B described the learning as “systemic” and “constant.” The TAP design provides more than just information by also offering application and feedback for teachers. Collective learning as experience through the TAP program was described as follows:

Teacher 1B: There are always areas where I can grow and things I am personally working on as a teacher. Watching these teachers has helped me grow as an educator. That’s one of the things I love about mentoring… because you get to see a lot of different teaching styles, a lot of different management styles.

Teacher 3B: Not only do they sometimes go over data; they also learn teaching strategies, student strategies, and teacher-based strategies. We sometimes study the [teacher evaluation] rubric.

Principal (Bradford Elementary School): We have cluster cycles. All of those meetings are centered around a certain framework and it is: identify a need; obtain new learning: development, apply & re-access. Ideally, you do that in every meeting.

In the same vein, the Value Plus program involves collaborative opportunities for teachers to learn from specialists, from model teaching, and through mentoring. In the
teacher interviews, collective learning was described as teachers working collaboratively
to find ways to implement the arts integration and through observing arts integrated
lessons. The PLCA—R data supported the following practice at both schools: “School
staff members are committed to programs that enhance learning” (See Table 31).

Further evidence for collective learning was found in grade level PLC meetings
that were observed at both elementary schools. As teachers worked with data-driven
decision making at both schools, I observed discussion about patterns in the data, areas of
strength, and areas of challenge. At times the teachers looked to one another as a source
of learning, while at other times they looked to either the principal (at Bradford
Elementary) or the literacy coach (at Campbell Elementary) for guidance. Another
aspect of the learning was seen through the PLCs identifying areas in which they needed
to look outside the group for expertise or resources. On the PLCA—R, respondents from
both schools indicated strong agreement with the following related statement: “Staff
members collaboratively analyze multiple sources of data to assess the effectiveness of
instructional practices” (See Table 31).

Collective learning also takes place informally, both among grade level teachers
and across grade levels. At Bradford Elementary School, grade level teachers are
expected to work collaboratively during their common planning time four out of the five
school days. Thus, on days when formal PLC meetings are not scheduled, the teachers
have opportunities to learn from one another. From the interview data from Campbell
Elementary School, I learned that meetings held outside the formal PLC meeting vary
from grade level to grade level. All of the teachers at Campbell Elementary indicated
extending the learning from formal PLCs happens informally at the grade level and often
centers on putting the learning into action. Three of the nine teachers (at Campbell) spoke of meeting in a more formal way with their grade level team to build upon the learning from PLC meetings. Four of the teachers from Campbell described learning collectively about the writing process across grade levels. From the perspective of the teachers, collective learning and application does occur outside the formal PLCs at both schools.

Collective learning is an important aspect of professional learning communities. From the analysis of the qualitative and quantitative data sources, I found evidence to support this PLC dimension as being practiced at both Campbell and Bradford Elementary Schools. A cycle of learning and application was found to be embedded within the TAP and Value Plus structures and provided strong examples of this PLC dimension in action at the two elementary schools.

*Shared Personal Practice*

Collective learning and shared practice have been found to “help sustain improvement by strengthening connections among teachers, stimulating discussion about personal practice, and helping teachers to build on one another’s expertise” (McREL, 2003, p. 2). Calling for teachers to move away from the traditional stance of isolation in one’s classroom, shared practice requires a sense of trust and mutual respect among colleagues. At both case study sites, the data pointed to structures and relationships that supported this important PLC dimension. As presented in Table 32, the PLCA—R data revealed strong agreement that shared practice was found at Bradford Elementary School ($M = 3.12, SD = .284$) and Campbell Elementary School ($M = 3.20, SD = .448$). Through
the data analysis, I found both evidence of shared practice and also the need for expanding this practice to strengthen the work of PLCs.

*Table 32*

**PLCA—R Data Analysis for Shared Personal Practice by School**

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>Bradford Elementary N= 11 Mean/SD</th>
<th>Campbell Elementary N=20 Mean/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Personal Practice (Overall Dimension)</strong></td>
<td>3.12/.284</td>
<td>3.20/.448</td>
</tr>
<tr>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>2.82/.603</td>
<td>2.75/.639</td>
</tr>
<tr>
<td>Staff members provide feedback to peers related to instructional practices.</td>
<td>2.73/.467</td>
<td>3.05/.510</td>
</tr>
<tr>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
<td>3.27/.467</td>
<td>3.60/.503</td>
</tr>
<tr>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>3.18/.603</td>
<td>3.25/.716</td>
</tr>
<tr>
<td>Opportunities exist for coaching and mentoring.</td>
<td>3.36/.505</td>
<td>3.35/.587</td>
</tr>
<tr>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>3.18/.405</td>
<td>3.35/.587</td>
</tr>
<tr>
<td>Staff members regularly share student work to guide overall school improvement.</td>
<td>3.27/.467</td>
<td>3.05/.759</td>
</tr>
</tbody>
</table>

At both case study sites, the principals described a paradigm shift that occurred over time as PLCs were initiated and developed at the two elementary schools. A form was initially used for the purpose of guiding and recording the meetings at each of the elementary schools. At Bradford Elementary, the principal noted the importance of first “creating the climate and the norms” that would sustain collaborative work groups. The early work at Bradford Elementary School was focused on “just trying to get them into the practice of reflecting.” At Campbell Elementary, the principal also described the
transition from a grade level meeting focused on events to the idea of a PLC. While the PLC forms served to provide parameters for PLC meetings, the two principals discontinued the use of PLC forms as the PLC practices became part of the culture. The principal at Campbell Elementary described the shift in thinking about PLCs as follows: “Now it is almost like an invitation, an invitation to share, an invitation to collaborate.”

The most obvious examples of shared practice were found in the grade level PLC meetings focused on student data at both elementary schools. This conclusion was grounded in observational and interview data. As the PLCs collectively analyzed student data, I found the discussions among the teachers included multiple ways of sharing practice. It is important to note that in each of the 10 PLC observations, teachers openly discussed their own areas of strength and challenge in light of the data under review. Teachers offered and asked for help in instructional areas in which needs were identified. Sharing practice at PLC meetings included offering insight into understanding the implications of student data, sharing teacher developed tools for monitoring student progress, sharing strategies to address specific skills, and discussing grouping options for students. Across the two cases, the strength of this practice was supported by strong agreement with the following PLCA—R item: “Staff members collaboratively review student work to share and improve instructional practice” (See Table 32).

From the interview data, I found that teachers offered ways in which they share practice, especially with their grade level colleagues. The following comments were typical responses when asked about opportunities that exist for teachers to share practice:

Teacher 2B: Mostly, we just share with our grade level teams.
**Teacher 4B:** I know I have gone just personally to some of the fifth grade teachers, one in particular that has lots of experience with math. That is her strength. So, I feel comfortable going to her and saying, “Here, I am having trouble on this. What can I improve?”

**Teacher 4C:** We usually do that informally. It is more at our grade level than across...

**Teacher 5C:** I think during the PLCs we have lots of opportunities to share our practices with each other. So, that is one of the good things about a PLC—you can listen and learn from the good practices that are taking place, especially at your grade level.

When asked about sharing practices, most of the teachers referred to sharing ideas or materials, sharing lessons plans, or working collaboratively to plan for instruction.

Coaching and mentoring relationships provided a platform for shared practice to develop. It was within the TAP and *Value Plus* programs that I discovered strong examples to support this aspect of shared practice. In the TAP program (at Bradford Elementary School), teachers are assigned mentors. From interviews and my observation of the TAP leadership team, I learned how the mentoring program is another facet of the program designed to improve student outcomes by addressing instructional practices. At Campbell Elementary School, the mentoring role was found to be less formal than the mentor teacher role in a TAP school. In the *Value Plus* program, teachers at Campbell Elementary can serve as mentors for arts integration or can conduct model teaching of arts integrated lessons as ways to open the practices of teachers to their peers. Academic instructional coaches are also part of the staff (at least on a part-time basis) at both case
study sites as well. The roles of the literacy and math coaches were found to be strongly tied to shared practice at Campbell Elementary, while these positions were only mentioned at Bradford Elementary. As presented in Table 32, the PLCA—R respondents from both Bradford Elementary and Campbell Elementary schools indicated strong agreement that “opportunities exist for coaching and mentoring.”

When describing the PLC dimension of shared practice, Hord and Sommers (2008) stated, “The review of a teacher’s practice and instructional behaviors by colleagues should be the norm” (p. 15). Putting this practice into action involves peers observing peers (not for the purpose of evaluation) and then offering feedback from what was observed. From the data collected at the two elementary schools, I found varying forms and degrees of peer observations. At Bradford Elementary School, the five teachers spoke of observations that were part of the TAP program when asked about opportunities for teachers to observe the practice of other teachers. By probing for more details, I found the observations described were primarily conducted by mentor teachers in the classrooms of their mentees. This is not to underplay the importance of mentoring and coaching, but recognizing the value of teachers observing peers could be valuable as well. While one teacher at Campbell Elementary stated that the opportunity to observe was “available upon request,” I did not find evidence to support this practice outside of either the TAP or Value Plus programs at these elementary schools. Notably, the PLCA—R data also supported this area of need. Means that were less than 3.0 were found at both schools for the following statement: “Opportunities exist for staff members to observe peers and offer encouragement” (See Table 32).
Opening one’s practice to the observation and even discussion among peers is an important element of successful PLCs. In this study, the quantitative and qualitative evidence supported the practice being part of PLC work at Bradford and Campbell Elementary Schools. While the strong practices were found, greater opportunity exists for expanding the ways in which teachers share practice.

Supportive Conditions

In schools implementing PLCs with fidelity, supportive conditions provide a foundation for building the collaborative work. Supportive conditions encompass two areas: relationships and structures. Consideration of the physical and structural factors and the relationship factors and human capacity provided insight into the strength of PLC practices at each of the case sites as well as across the cases.

Supportive structures. Supportive structures were found to be highly important to the work of PLCs at the two elementary schools in this study. Both schedules and organizational structures contributed to the collaborative work. As presented in Chapters 5 and 6, interviews, observations, and artifacts provided support for the strength of supportive structures across the two elementary schools. The strength of this dimension was also evidenced through the PLCA—R data from Bradford Elementary ($M = 3.00, SD = .316$) as well as from Campbell Elementary ($M = 3.75, SD = .425$) (See Table 33).
Table 33

PLCA—R Data Analysis for Supportive Conditions: Structures by School

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>Bradford Elementary</th>
<th>Campbell Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N= 11</td>
<td>N=20</td>
</tr>
<tr>
<td></td>
<td>Mean/SD</td>
<td>Mean/SD</td>
</tr>
<tr>
<td><strong>Supportive Conditions: Structures (Overall Dimension)</strong></td>
<td>3.00/.316</td>
<td>3.37/.425</td>
</tr>
<tr>
<td>Time is provided to facilitate collaborative work.</td>
<td>3.00/.447</td>
<td>3.15/.615</td>
</tr>
<tr>
<td>The school schedule promotes collective learning and shared practice.</td>
<td>3.18/.603</td>
<td>3.20/.616</td>
</tr>
<tr>
<td>Fiscal resources are available for professional development.</td>
<td>2.18/.693</td>
<td>3.15/.587</td>
</tr>
<tr>
<td>Appropriate technology and instructional materials are available to staff.</td>
<td>2.45/2.45</td>
<td>3.55/5.10</td>
</tr>
<tr>
<td>Resource people provide expertise and support for continuous learning.</td>
<td>3.45/.522</td>
<td>3.50/.607</td>
</tr>
<tr>
<td>The school facility is clean, attractive and inviting.</td>
<td>2.91/.701</td>
<td>3.30/.571</td>
</tr>
<tr>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>3.18/.405</td>
<td>3.55/.510</td>
</tr>
<tr>
<td>Communication systems promote a flow of information among staff members.</td>
<td>3.18/.405</td>
<td>3.45/.605</td>
</tr>
<tr>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>2.91/.539</td>
<td>3.35/.587</td>
</tr>
<tr>
<td>Data are organized and made available to provide easy access to staff members.</td>
<td>3.55/.522</td>
<td>3.45/.605</td>
</tr>
</tbody>
</table>

The most evident structure found at Bradford and Campbell Elementary Schools was common planning time for grade level teachers. In both schools, this time frame is central to the PLC structure. While an expectation exists at both schools for participating in PLCs during this time, the ways in which the structure is used for PLCs varied at the two schools. At Bradford Elementary, teachers are expected to work collaboratively with their grade level colleagues four out of five days each week. Included among these PLC
opportunities are TAP clusters, formal PLC meetings that include teachers and administrators, and informal grade level PLC meetings. In contrast, formal PLC meetings are scheduled on Thursdays at Campbell Elementary, with the frequency of meetings varying from grade level to grade level. In addition to the formal PLCs, grade level teachers meet informally during this common plan time, after school hours, or during lunch and recess times. The collaboration that occurs among the arts specialist, the encore teachers, and the grade level teachers at Campbell Elementary normally occurs outside the common planning time due to these encore classes being held during this time. Time is set aside about every two months for collaboration, but informal collaboration occurs on an as-needed basis. PLCA—R data revealed strong agreement among respondents from both schools for the following items: “Time is provided to facilitate collaborative work” and “The school schedule promotes collective learning and shared practice” (See Table 33). Scheduling time for PLCs was beneficial at both schools.

Another structure that contributed to supportive conditions was the presence of expectations for how the time is spent. In both elementary schools, I found the expectation for a focus on data-driven decision making in grade level PLCs. I observed this in practice in different formats. In 8 of the 10 grade level PLCs observed, I found teachers utilizing student data to make decisions about instructional practices and strategies as well as for preparing for the implementation of a new district-level intervention program. In two observations, teachers were considering research or materials related to teaching and learning as a source for making decisions. PLC work at both schools was expected to be more than grade level meetings in which teachers
discussed field trips or other upcoming events. The following quotes provided insight into how the interview participants spoke of the expectations:

**Teacher 3B:** We have cluster meeting once a week with teachers who are like us. So, second grade teachers meet with second grade teachers….Not only do we go over data. We also learn teaching strategies, student strategies, teacher-based strategies.

**Teacher 5C:** We take, for instance, [benchmark testing] and we come up with approaches to improve different areas that need improving.

**Teacher 7C:** Most of the time it is about data, past [state achievement data] or [benchmark] testing…identifying strengths and weaknesses and how we are going to attack those issues and make them better.

The focus on data-driven decision making was found to be a strong expectation at both schools.

The organizational structure of the schools also afforded support for PLC work. At Bradford Elementary School, master and mentor teachers are utilized as facilitators, mentors, and coaches for PLCs. The literacy coach and arts specialist at Campbell Elementary served as facilitators for the collaborative work of the staff. Another means of support that offered opportunities for collaboration was found in the multitude of committees found at Campbell Elementary School. On the PLCA—R, I found overall agreement that “Resource people provide expertise and support for continuous learning” (See Table 33).

One of the major differences in supportive structures found at the two elementary schools was the role of the principal in PLCs. As presented earlier, the principal of
Bradford Elementary School is heavily involved in grade level PLCs. In contrast, the principal of Campbell Elementary School plays a supportive role, but instead utilizes the literacy coach and arts specialist as facilitators of PLCs. In both cases, the role played by the principal was found to work for the individual school. At Bradford Elementary, teachers shared openly about areas of strength and challenge with the principal participating in the discussions and deliberations. Participation in PLCs was viewed by the five teachers at Bradford Elementary School as a way in which the principal puts beliefs about PLCs into action. On the other hand, the teachers at Campbell Elementary felt that playing a supporting role was the best option for them. In fact, the overall feeling expressed by the teachers at Campbell Elementary School was that principals can actually hinder the work of PLCs by micromanaging. The principal at Campbell Elementary concluded, “You have to be aware of your own abilities and the abilities of your staff to create an effective PLC model.” From the two cases in this study, I found that principal involvement can be practiced in different ways and yet be supportive of PLCs.

Providing both expectations for time and how that time will be utilized are valuable ways structures provided conditions that support the work of PLCs. Additionally, the organizational structures of the school set the stage for successful collaboration. While the practices related to these structures may vary, they are an essential element for implementing PLCs.

Supportive relationships. Relational conditions found to nurture the development of PLCs include trust, respect, caring relationships, recognition, celebration, risk-taking, and reflective dialogue (DuFour & Eaker, 1998; Hord, 1997; Hord & Sommers; Huffman
& Hipp; Louis et al., 1996). The importance of relationships surfaced from the interview data as being a critical part of the success of collaborative work at both elementary schools. When asked to describe the relationships that exist among the staff at your school, 10 out of the 18 interview participants used “family” in their responses. Typical comments across the two cases included:

**Principal (Bradford):** Indescribable. I would say family, family, family. That includes all the good, the bad, the ugly. That means we may bite each other’s head off occasionally, but we always come back and reflect. We support each other.

**Teacher 2B:** We’re family. I know it’s because we are small.

**Teacher 4C:** It’s a small school. A family atmosphere—a family-oriented atmosphere.

**Teacher 7A:** We have a very close-knit staff. It helps that we are a very small school. But with the collaboration that has happened with our *[Value Plus]* and also with our PLCs, everyone just looks at our staff as a family. We just take care of each other professionally and personally as well.

Supportive relationships received the highest mean of the PLC dimensions on the PLCA—R instrument for both Bradford Elementary ($M = 3.58, SD = 0.451$) and Campbell Elementary ($M = 3.73, SD = 0.385$) (See Table 34). From spending time at both schools, I also found trusting and caring relationships demonstrated throughout the schools. The interactions among the staff included honest examination of data, comfortable sharing of challenges as well as strengths, and asking probing questions. Relationships were key to successful collaborative work.
Table 34

PLCA—R Data Analysis for Supportive Conditions: Relationships by School

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>Bradford Elementary N= 11</th>
<th>Campbell Elementary N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean/SD</strong></td>
<td><strong>Mean/SD</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Supportive Conditions: Relationships (Overall Dimension)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>3.73/.467</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>A culture of trust and respect exists for taking risks.</td>
<td>3.73/.467</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>3.45/.688</td>
<td>3.80/.410</td>
</tr>
<tr>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>3.45/.522</td>
<td>3.55/.605</td>
</tr>
<tr>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>3.55/.522</td>
<td>3.70/.470</td>
</tr>
</tbody>
</table>

In interviews from Bradford and Campbell Elementary Schools, I found that relationships were described as being more than just professional in nature. In all but 2 of the 18 interviews, the participants referenced caring for the needs of their colleagues who faced difficult health issues personally or in their families. At Bradford Elementary School, 4 out of the 11 interview participants also described colleagues enjoying one another in social settings such as dinner or during summer training times. While there was a sense of caring for one another at Bradford Elementary, only one of the teacher interview participants spoke of social relationships among teachers. I observed teachers at each of the schools demonstrating a sense of caring for their colleagues. At Bradford Elementary, I observed two grade level PLCs in which teachers put concern into action as they determined how to make sure a sick colleague would be “in the loop” concerning the
data analysis and decisions made during the PLCs. Teachers took on extra work in an effort to care for the missing teachers. In the same way, I observed a grade level PLC at Campbell Elementary make similar decisions for a missing colleague.

Building human capacity in PLCs involves developing a caring and trusting environment based on mutual respect (Hord & Sommers, 2008). As I observed PLC meetings, leadership team meetings, faculty meetings, faculty gatherings, and other daily interactions at the two elementary schools, I found interactions that were based on respect and care for others among the staff. The ideas of individuals were discussed professionally with a sense of respect for divergent thoughts and solutions. PLCA—R data supported the impact of relationships on PLCs with strong agreement from the respondents to the following PLCA—R item: “Relationships among staff members support honest and respectful examination of data to enhance teaching and learning” (See Table 34). From the interview data, I found that seven teachers also expressed the importance of the principal placing trust in the teachers. As found in Table 34, respondents to the PLCA—R from both Bradford and Campbell Elementary Schools indicated strong agreement that “a culture of trust and respect exists for taking risks.”

From the two case sites, I found the strength of relationships contributed to the collaborative practices that were observed and described in interviews. Sharing practice was enhanced by an atmosphere of trust and respect. Typical interview statements about working relationships included the following:

**Assistant Principal (Bradford):** One of the things the grade levels have, to me….they do have shared trust. That I don’t worry if my teammates are going to look down on me because I have that shared trust.
**Teacher 2B:** I think, first of all, if you have an atmosphere where you know you are safe to share. We have that. I could go to anyone in the building and ask for advice.

**Teacher 4C:** This has always seemed like a very open place to work. I have not worked anywhere else, but you hear stories of vindictiveness and hoarding. Most teachers here are willing to share ideas and strategies and lesson plans. Everybody seems helpful toward one another.

As I observed PLC work at the two sites, I did not find evidence of cliques or groups that received preferential treatment by the principal.

Supportive conditions that foster PLC practices include both structures and relationships. This PLC dimension was found to be central to the success of PLCs at Bradford and Campbell Elementary Schools. With structures in place to guide the work of PLCs and relationships that foster collaboration, the practices of PLCs at these two elementary schools are strong.

*Summary of the Extent of PLC Practices*

In response to the first research question, the five dimensions of PLCs (Hord 1997, 1998) were found to be practiced to a great extent at Bradford and Campbell Elementary. Through the examination of the qualitative data sources (interviews, observations, and artifacts) and the quantitative data source (PLCA—R) across the cases, I established triangulation of the findings. All of the data sources pointed to a strong sense of shared values and vision focused on putting students first. Both principals were described as sharing leadership. Evidence of shared and supportive leadership were strong in the TAP program at Bradford Elementary and the *Value Plus* program at
Campbell Elementary. Collective learning and shared practice were demonstrated in the data-driven decision making that occurred in grade level PLC meetings. While shared practice was described and observed, it is one area that could be developed more at each school. The presence of caring and trusting relationships built upon trust was found to be one of the greatest strengths at both of these elementary schools. In each school, structures such as common planning time and expectations for practice were in place to support the collaborative work of PLCs. Overall, the strength of the PLC practices found at Bradford and Campbell Elementary were indicative of practices associated with successful professional learning communities.

Research Question Two: The Role of the Principal

After determining the extent to which the five dimensions of PLCs were practiced across the two cases for this study, I then addressed the second research question: What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? The question calls for examining the perceptions of teachers and of the principals concerning the role of the principal as well as how these perceptions compare. Throughout the interview process, I discovered perceptions offered about hindrances to PLC development centered on personal situations in other schools, the situations of families or friend from other schools, or were simply stated as the converse of ways that principals can foster PLC work. From the cross-case analysis of the data from Bradford Elementary School and Campbell Elementary School, three themes related to the role of the principal in developing and sustaining professional learning communities were developed: relationships matter; principal support is critical; and structure is necessary. As the findings related to the role of the principal are
presented, triangulation of data sources and methods will be set forth as a means of adding trustworthiness.

Relationships Matter

Throughout the literature on PLCs, relationships have identified as key elements of successful professional learning communities (Hipp & Huffman, 2010; Hord, 1997, 1998; Hord & Sommers, 2008; Huffman & Hipp, 2003; Leo & Cowan, 2000). Both the qualitative and quantitative data sources in this study pointed to relationships having a significant impact on PLC practices at Bradford and Campbell Elementary Schools. From the cross-case analysis of interview and observational data, I found the strength of relationships to be ingrained into the cultures of the two schools. Supportive relationships surfaced in the PLCA—R data as the strongest of the PLC dimensions at both elementary schools (See Table 34). As I examined the evidence surrounding relationships as a supportive condition for PLCs, I found that the principal plays a role in this vital area.

As presented in response to the first research question, trusting and caring relationships contributed to the collaborative practices found at the two elementary schools in this study. When asked how the principal contributes to building the relationships among the staff, the overwhelming response was by being a role model. The following teacher perceptions provided support for this finding:

**Teacher 1B:** Modeling it…Knowing what’s going.

**Teacher 3B:** It trickles from the top. The principal is so important in schools. I’ve had great principals like [Ms. Beshears]. I have had principals that should have never walked into a school building. So, I have seen both sides of it and it
trickles from the top. They set the tone. They set practices in place. They either value or de-value people in the building.

**Teacher 1C:** [The principal] values it. He understands it. He points it out when someone is having a hard time.

**Teacher 4C:** By modeling it, of course. It was already in place when [the principal] got here, so he just fell into that role and things just rolled on as they always have. I’ve never seen any negativity. You know, everyone is helpful to one another.

The principal from Bradford Elementary indicated principals can cultivate relationships by leading from “a servant’s heart” that recognizes and models the attitude of “we need each other and we recognize that.” Thus, principals can foster positive relationships by serving as a model for the staff.

With 10 out of 18 interview participants using “family” to describe the relationships among staff, the importance of relationships that move beyond simply professional relationships was surmised. Teachers at both schools described ways in which the principal modeled caring relationships. The following quote from Teacher 5C provided a summation of what multiple teachers described:

I think that principals play a role by becoming part of the staff, by participating in caring, in trying to help all…not only from a professional standpoint, but from a personal standpoint. When a principal tells you that family is the most important part of your lives that tells me that person is caring enough to help out when there are problems outside of your professional career and I think that is important.
Two teachers from Bradford Elementary and four teachers from Campbell Elementary shared examples of how the principal cared for them during a difficult time in their own lives. In the TAP leadership team meeting at Bradford Elementary School, I observed ways in which the principal offered caring support to the team by listening to their concerns (both personally and professionally). During this meeting, I also observed how the principal addressed a need for additional support (due to the demands of the TAP program on the TAP leaders) by providing some release time from their classrooms. By modeling caring for the staff, the principal promotes caring as valuable.

The principals of Bradford and Campbell Elementary schools also contributed to the development of strong staff relationships by providing opportunities for the staff to gather without having to deal with business. The description of a “servant’s heart” could be used to describe the approach of the two principals in this study. They seemed to understand the significance of establishing a warm environment in which relationships can develop. In both schools, I observed faculty gatherings that were designed to celebrate successes and enjoy the company of one another. It was an intentional part of the meeting. Each month, the staff from Bradford Elementary School meets to celebrate birthdays for the month and the positive things that are happening at the school. At Campbell Elementary, I observed as teachers enjoyed breakfast together at the beginning of a professional development day. The staff also shared reasons for celebrating success during this breakfast. As presented in Table 34, teachers from the two elementary schools expressed strong agreement with the following related PLCA—R item: “Outstanding achievement is recognized and celebrated regularly in our school.” The principal at Campbell described his practice of incorporating adequate time for lunch on
professional development days in order to allow time for enjoying relationships. In both schools, these gatherings were focused on developing a sense of community among the staff. From these observations, I concluded that the principal can play an important role in developing relationships by incorporating social times for teachers to spend with their colleagues.

Developing trust is another critical role for a principal who desires to foster PLC practices. Hord and Sommers (2008) concluded, “Trust provides the basis for giving and accepting feedback in order to work toward improvement” (p 14). Interview participants considered trust to entail both teachers’ trust of the principal and principal’s trust of teachers. Six of the 14 teachers referred to the need for developing trust at some point during the interview. The following statements provided insight into teachers’ perceptions of trust:

**Teacher 1B:** [The principal] gives us freedom as teachers. She gives us a lot of trust and I think having trust in your teachers is a big thing. The thing is, she is not in our classrooms because of a lack of trust, and she is in our classrooms because she cares. She wants to know the kids; she wants to see what they are doing. So there's a big difference and you feel that from her. I have had administrators before that are in there because they don't trust you.

**Teacher 2C:** I think it helps tremendously. I know I work best when you trust me to do something when I say I am going to do it. I follow through.

**Teacher 7C:** [The principal] trusts that we are doing it [working collaboratively].

**Teacher 8C:** We have trust that the decisions will be just as positive and beneficial for everyone as possible.
The principal of Campbell Elementary noted that his teachers “trust me in decisions I make,” but also indicated that he trusts that “teachers have the best knowledge” when it comes to operating the school. The importance of trust in the building relationships was also supported by strong agreement on the PLCA—R data that “caring relationships exist among staff and students that are built on trust and respect” (See Table 34). The principal has the opportunity to lay the foundation for collaboration by developing trusting relationships among the staff and the administration.

Another way in which principals can cultivate the development of supportive relationships is by establishing practices that foster communication and collaboration. The two principals in this study were described by 10 out of 14 teachers as having an “open-door policy.” I observed as the principals welcomed people to enter the office to discuss problems, ask questions, share needs, and celebrate successes. The two principals in this study shared how the staff initially utilized PLC forms to guide the group as they learned to share and reflect together. The principal and two of the teachers from Bradford Elementary noted the importance of the principal leading the staff through activities that were specifically designed to enhance communication and collaboration among the staff. Once again, the importance of principals modeling communication and collaborative practices that are needed in strong PLCs was found to be an important way in which the principal can contribute to the development of PLCs.

Principals can foster the development of supportive relationships by making sure they “know [their] people.” Throughout the time spent collecting data at both Bradford and Campbell Elementary Schools, I found that the principals had a deep knowledge of their staff (both personally and professionally), the students, the parents, and the
community. As I walked with the principals through the hallways or classrooms, they exhibited knowledge of students and teachers that went beyond the classroom. They know the data—academic and personal. Both principals shared their knowledge of students, teachers, and parents as we met on multiple occasions. A deep knowledge of the community was found through partnerships developed with community leaders, organizations, agencies, and businesses. The overall sentiment expressed in teacher interviews was that the principal fosters the development of supportive relationships by knowing their strengths, their weaknesses, their professional lives, and their families. Perceptions of the importance of knowing your people can be found in these comments that were typical of those shared:

**Teacher 8C:** [The principal] knows his people. He knows what our strengths are.

**Teacher 9C:** I think that [the principal] is a very good judge of character and work ethic. It seems like the people he hires all have the same mindset.

**Assistant Principal (Bradford):** [The principal has] to get out there. You can’t be in your office the whole time. You’ve got to get out there and be in the classrooms. You’ve got to be where [the teachers] are eating lunch…where they are hanging out. Just be available for teachers to come and talk to you and listen and be hearing what is going on…just kind of have your finger on the pulse.

When principals get to “know [their] people’ and have a “finger on the pulse,” they are more likely be able to foster the relationships necessary for strong PLC practices to develop.
Developing positive work relationships has been identified as one way in which principals can foster teacher leadership (York-Barr & Duke, 2004). Just as principals can encourage the development of strong working relationships, they can be hindrances as well. With strong evidence supporting the importance of developing supportive relationships, a primary way in which a principal can impede PLC work would be a failure to recognize the significant role of relationships in successful PLCs. Six teachers indicated principals can hinder PLC work by showing favoritism or treating teachers unequally. Specific actions perceived as impeding supportive relationships included: staying in the office, failure to hear the concerns of the staff, failure to demonstrate care for the staff (both professionally and personally), failure to develop trust, and developing a competitive environment. Four teachers spoke about that a lack of confidentiality would hamper the collaborative work. The following statements provided other hindrances as stated by teachers:

**Teacher 2B:** If [principals] are punitive or not at least positive…

**Teacher 4B:** If things are not addressed openly and upfront… Just avoidance.

**Teacher 1C:** Ruling with an iron fist would be one. Not understanding that we’re not just a teacher who has to get a certain test score, but we are a human being that has a family and other things going on in our lives at the same time.

**Teacher 7C:** If [the principal] is not modeling and practicing [caring relationships] himself, then that is hard for other people to catch on.

**Teacher 8C:** If people were called in and fussed at behind closed doors or if I were called in and share secrets that would perhaps be use in a hurtful manner rather than a supportive manner.
Thus, principals can hinder PLCs when they fail to recognize the importance of developing relationships or when they do not practice positive, trusting relationships with the staff.

Relationships matter when it comes to developing and sustaining professional learning communities. Principals and teachers in this study offered a united front as they shared the importance of relationships in the collaborative work at their own schools. By being proactively engaged in building and modeling caring and trusting relationships, principals can foster a supportive environment for collaborative work. In contrast, the principal can hinder the successful development of strong PLC practices by failing to attend to the importance of relationships in PLCs.

*Principal Support is Critical*

School leaders matter when it comes to developing and sustaining professional learning (Sparks, 2005). Hord (1997) concluded that the successful implementation of PLC practices could only be accomplished with “the leader’s sanction and active nurturing of the entire staff’s development as a community” (p. 6). In this study, the evidence led to understanding ways in which principal support is a critical component. While the principal has the opportunity to foster PLCs, a lack of principal support can deter the collaborative work of the staff. From the analysis of the qualitative and quantitative data, I found principal support to include both actions and beliefs.

One of the primary ways that principals support the work of PLCs was identified as “walking the talk.” Simply setting up PLC structures and requiring teacher participation is not adequate for developing successful professional learning communities. The principal from Bradford Elementary concluded:
If you don’t value it; they won’t value it. I think the most important is walking the talk and being a learner beside them. I think that is huge.

Throughout the interview data, I found the importance of principals’ beliefs expressed in multiple ways such as “be a role model,” “it starts at the top,” “trickles from the top,” “practice what you preach,” and “believe in the process.” The principal from Campbell Elementary stated, “When we talk about PLCs, I think they have to know the leaders believe in the process…that the leadership—the administration—believes it works.” The teachers’ beliefs about PLCs were found to be influenced by the beliefs of the principals. One of the teachers (Teacher 8C) described the principal as “steering the boat” with a bigger picture of what is happening at the school. The perceptions of the interview participants across the cases included statements similar to the following:

**Teacher 1B:** [The principal] is a huge advocate of student growth. And she is a big believer that students come first. No matter what we are doing, it is about the students. Every decision we make at this school is about students first.

**Teacher 3B:** It trickles from the top. The principal is so important in schools….They set the practices in place.

**Teacher 7C:** I think [principals] give us vision.

On the PLCA—R, respondents from both schools expressed strong agreement with the following item: “Shared values support norms of behavior that guide decisions about teaching and learning.” The principal’s influence on developing this sense of shared values was found throughout the interview and observational data. The belief in PLCs being a way to live out a vision focused on students did appear to “trickle from the top” as principals have the opportunity to “set the tone.”

325
Principal beliefs about PLCs must also be translated into actions that support the development of collaborative communities of practice. From the PLCA—R data, I learned that teachers across the cases expressed agreement with “the school schedule promotes collective learning and shared practice” (See Table 33). In both of the case sites, structures were in place to support PLCs. The most obvious of those structures was the common planning time set aside daily for grade level teachers. As presented earlier, PLCs at both elementary schools meet during this time. While the expectations for how often meetings are held differ at each school, the principal has set aside time and also guarded the time by making it a “scared part” of the schedule. In all of the 18 interviews, participants acknowledged the use of common planning time for PLC meetings. The following statements are typical of those that evidenced the principal’s role in setting PLC structures in place:

**Assistant Principal (Bradford):** [The principal] does a good job in making sure other things are not scheduled during that time. So, time. If it is a PLC day or a cluster day, she doesn’t let other things be schedule during that time.

**Teacher 2B:** Well, she just kind of requires it [PLCs].

**Teacher 3B:** We meet once a week. It is very regular, very steady. It’s a 50 minute meeting.

**Literacy Coach (Campbell):** How [the principal] has helped…having a common planning time…not having his own agenda….The time—he respects it. If he has something else, he has staff meeting to do that.

Creating logistical structures such as time is a role that principals can play in fostering PLC work.
Principals at the two elementary schools in this study also supported the development of PLCs by contributing to what happens in PLC meetings. As presented earlier, data-driven decision making is an expected practice of PLCs at Bradford and Campbell Elementary Schools. The two principals were actively involved in analyzing student data. At Bradford Elementary School, the principal worked with the PLCs as they focused on utilizing the data as they make instructional decisions. In contrast, the principal at Campbell Elementary was called a “data guru,” but did not actively participate in the PLC meetings. His role was viewed as a supportive one. By developing agendas and by working with other facilitators, the principals contributed to the type of collaboration that occurs in PLCs.

The principal can support the work of PLCs by setting accountability for the staff. Setting apart time and contributing to the agenda are ways in which principals contribute to the logistical structures of PLCs. By building accountability into the work of PLCs, the principal moves beyond simply requiring PLC meetings to developing expectations for PLC work. The principal at Bradford Elementary School emphasized the practice of creating “a plan about what learning will occur and how it will benefit student learning.” At Campbell Elementary, the principal’s expectations for formal PLC meetings revolved around data-driven decision making. Across the cases I found expectations for how the structured PLC time was spent and expectations for the actions that were needed prior to, during, and following the meetings. Another aspect of accountability that surfaced was the expectation that teachers are responsible for student progress. Evidence from the PLCA—R data supporting the practices that require accountability included teacher agreement with the following statement: “Stakeholders assume shared responsibility and
accountability for student learning without evidence of imposed power and authority” (See Table 30). At Campbell Elementary, elements of accountability were found within the participants’ descriptions of PLC practices. Teachers from Bradford Elementary spoke of accountability in a more matter of fact way—it appeared to be ingrained into the culture. The following quotes from Bradford Elementary teachers provided evidence for the importance of accountability in the PLC process:

**Teacher 1B:** She (principal) plays a big role in the collaborative process here. I have had some schools where the principal would require you to plan together, but never held you accountable for it. [Ms. Beshears] holds you accountable for it. She’s constantly saying, “What are you guys doing?” She is constantly holding us accountable for that.

**Teacher 2B:** Well, she (principal) just kind of requires it….Everybody has to contribute, either with student work or how you are suing the curriculum to achieve something, or you’ll have to meet and set goals.

**Teacher 4B:** Like I said before, it is so important for that person to say, here’s my expectations…here’s where we need to go… here’s where the school is struggling, so here is where our focus needs to be. Just setting those boundaries and guidelines benefits the staff as a whole.

Thus, accountability surfaced as an important way that principals can foster the collaborative work of PLCs.

Another way in which principal support is critical to PLC success lies in taking action to address needs that surface from PLCs. When PLCs identify areas of need, the positional authority of principals is often needed to take action. On the PLCA—R, the
respondents from the two elementary schools expressed agreement that “the principal is proactive and addresses areas where support is needed” (See Table 30). Multiple teachers from both schools described ways in which the principal has responded to provide resources and materials necessary for addressing areas of need. Examples shared by teachers included bringing in resource people to provide professional development, identifying or raising funds needed, and forming a small group to work on a plan to address an area of need. From the data, I concluded that the principal does not have to tackle the problems alone, but utilizes resources within and outside of the school to work toward a solution.

Just as principal support can foster the work of PLCs, a lack of support can be a hindrance to collaborative work. Three teachers and the assistant principal at Bradford Elementary School described a lack of accountability as a way that principals can impede the work of PLCs. Teacher 4B provided this insight the problem with a lack of accountability as she said:

If a principal doesn’t set some sort of expectation and objective for the staff, then it’s going to be really hard for them to know where we want them to go. It makes collaboration more difficult without some kind of guideline. So, that would hurt a staff if a principal doesn’t put that as a high priority.

Four of the teachers indicated that when principals micromanage the work of PLCs, they can hinder the collaboration that occurs. Other ways in which principals can hold back the development of strong PLCs included having too many meetings, watching over teachers’ shoulders, creating an atmosphere of distrust, and overloading teachers with work.
In order to develop and sustain strong PLCs, principal support is extremely important. Failure to recognize its impact on the health of PLCs is one way principals can hinder collaborative work. Developing supportive logistical structures, building accountability, and addressing needs that arise from PLC work are examples of ways in which principals can offer support for PLCs. By putting their beliefs into actions that foster PLCs, principals can influence the practices of the staff.

*Structure is Necessary*

Supportive structures provide a foundation for the development of professional learning communities. While a discussion of supportive structures was included in the theme related to principal support, I found the important role played by structures was significant enough to be considered as a theme itself. The analysis of the data across the two cases revealed both common and divergent findings related to supportive structures. For this reason, I will address the findings specifically related to structures at this time, followed by a discussion of how the findings relate to the role of the principal.

Bradford and Campbell Elementary Schools utilize common planning time for teachers as the time specifically set aside for PLC meetings. As has been presented, setting aside time and guarding that time as “sacred” are vital ways in which the principals at the two elementary schools have contributed to PLC development. What is important to consider is the differences found among the two schools in relation to this time structure. At Bradford Elementary, it has been established that grade level teachers are expected to meet for collaborative work four out of the five school days. TAP cluster meetings represent one of the PLC opportunities that occur on a weekly basis. Another day either each week or every other week is devoted to PLC meetings in which the
principal is a participant. On the remaining days, the grade level teachers are expected to meet as a group for collaboration. The PLC structure at Campbell Elementary School involves grade level PLCs meeting with the literacy coach on Thursdays. While there is an understanding that grade level teachers collaborate throughout the week, there is not a requirement like the one found at Bradford Elementary School. As presented in Chapter 6, the frequency of the Thursday PLC meetings was found to vary from grade level to grade level. Additional PLC meetings include collaboration between the arts specialist and the grade level teams. These collaborative work groups do not meet on PLC Thursdays, but are scheduled formally about every two months and informally on an as need basis. Although different expectations are in place for the frequency of meetings, the logistics of a common grade level planning time provided a set time for PLCs to meet at the two elementary schools.

Another important finding related to supportive structures involved the expectations for what occurs in PLC meetings. With a district initiative to utilize PLCs as the avenue for data-driven decision making, the two schools do have meetings that are centered on data. Observations at the two elementary schools revealed examples of meeting this expectation in both similar and diverse ways. In eight of the ten grade level PLCs observed, I found teachers utilizing student data to make decisions about instructional practices and strategies as well as for preparing for the implementation of a new district-level intervention program. In these eight PLC meetings, I found the format of the meetings to be quite similar. In the other two observations, teachers were considering research or materials related to teaching and learning as a source for making decisions. One of these meetings was a TAP cluster meeting focused on levels of
questioning and the other PLC involved using research on instructional practices through the format of a book study. While I did not observe the informal grade level PLCs, teachers at both schools indicated that the discussion centered on extending the learning from the formal PLCs, student learning, and instructional strategies. While both principals indicated they initially utilized a PLC form for recording meetings, the formal instrument is no longer utilized. Agendas were used in all of the PLCs at Campbell Elementary, and in only one at Bradford Elementary.

As has been presented earlier, the PLC structure at the two schools also differs in role played by the principal. At Bradford Elementary School, the principal is an active participant in grade level PLCs, but the TAP clusters are facilitated by the TAP master teacher. In contrast, the principal at Campbell Elementary School does not actively participate in the formal PLCs. Instead, the literacy coach facilitates the formal Thursday PLCs. Although the principal at Campbell Elementary is not present at PLC meetings, he collaborates with the literacy coach to plan and reflect on meetings. At Bradford Elementary, the five teachers expressed satisfaction with the principal as a PLC participant. On the other hand, eight of the nine teachers did not see the absence of the principal as a hindrance to PLCs.

Each of the schools is involved in implementing a program that represents a significant structure at the school. For Bradford Elementary School, it is the TAP program (See Chapter 5). The TAP program utilizes master teachers and three mentor teachers to serve as facilitators of the program. Campbell Elementary School is immersed in an arts integration program called Value Plus (See Chapter 6) which is led by an arts specialist.
How does the importance of structure relate to the role of the principal in developing and sustaining professional learning communities? The following quote from the principal of Campbell Elementary School offered insight into the answer:

PLCs work differently in different schools. There is not a cookie cutter model for PLCs. There can’t be. There are too many independent variables being put into the process and that’s leadership and the style of leadership and the teachers and the style of the teachers.

At Bradford Elementary, the seven interview participants viewed the active participation of the principal in PLCs as a way that PLCs were fostered. It is intriguing to note that eight of the nine teachers at Campbell Elementary felt the principal’s presence could be a hindrance to PLCs. Several perceived this as a form of micromanaging teachers and felt that more open dialogue was possible without the principal. Only one of the five teachers at Bradford expressed a concern that the expectation of four days of PLCs as overwhelming at times, while three teachers at Campbell Elementary felt a principal could hinder PLC work by having too many meetings. As I considered the disconnect that exists in the perceptions at the two elementary schools, I concluded that the best PLC structure is dependent upon many school-based factors. Thus, one of the roles of a principal in developing supportive structures that will foster PLCs is to determine how PLCs can work successfully at the particular school.

The principal at Bradford Elementary believes that “walking the talk and being a learner beside them” is huge. Her staff appeared to agree. After assessing his style of leadership and the people on his staff, the principal at Bradford Elementary School has determined that sharing leadership with the literacy coach and the arts specialist is the
right structure for his school. Thus, the structural components differed at the two elementary schools. As found in this study, the principal should utilize knowledge of school, understanding of leadership styles, and the make-up of the faculty as critical factors when making decisions about PLC structures.

Summary of the Role of the Principal

The principal plays a role in developing and sustaining professional learning communities. In this cross case-analysis, three themes were developed related to the role of the principal: relationships matter; principal support is critical; and structure is necessary. Understanding the impact of relationships was found to be a significant way in which principals can impact the work of PLCs. Across the two cases in this study, the practice of trusting and caring relationships that were built on mutual respect enhanced the collaboration that occurred in PLCs. The principal can hinder the development of PLCs by not modeling positive relationships and by not recognizing the importance of being proactive in building strong relationships with and among the faculty. Without principal support in beliefs and in actions, the collaborative practices associated with PLCs can be thwarted. As the leader with positional authority in the school, the principal also impacts the work of PLCs through the development of supportive structures.

The three themes presented in Chapter 7 fall under the PLC dimensions of supportive conditions, but have an impact on the other four dimensions. Without developing relationships that foster collaboration, a sense of shared values and vision may not be accomplished. Practicing shared and supportive leadership was a significant way in which the principal impacted the success of PLCs. Structures that support the work of PLCs must be in place in order for the staff to practice collective learning and
shared practice. As found throughout the discussion of the findings in this chapter, the principal can also hinder the work of PLCs by failing to address the importance of the three themes presented here. Developing supportive conditions that set a platform for collaboration in PLCs was found to be a vital role of the principal in an elementary school that is implementing PLCs.

Summary of the Chapter

In Chapter 7, a cross-case analysis of the data was presented to address the two research questions for this study. In response to research question one, the extent of PLC practices across the two elementary schools were examined by using Hord’s five dimensions of PLCs: (a) shared values and vision; (b) shared and supportive leadership; (c) collective learning and application; (d) shared personal practice; and (e) supportive conditions. From the analysis of interviews, observations, and artifacts, I presented evidence of strong PLC practices that were also supported by quantitative data from the PLCA—R instrument. While the structures of PLCs differed at Bradford and Campbell Elementary Schools, the strength of PLC practices was similar. An undeviating focus on meeting the needs of the whole child was at the center of the shared values and visions of these elementary schools. Shared and supportive leadership was evident as a way to build the capacity of teachers. Collective learning and shared practice were demonstrated in grade level PLCs and also through the TAP program at Bradford Elementary and the Value Plus program at Campbell Elementary. The most obvious structural condition that impacted the work of PLCs at both schools was common planning time and the expectation that it is used for collaborative work. Of all of the PLC practices, supportive
relationships were found to be the strongest and one of the most essential to the success of PLCs.

After determining the extent of PLC practices, research question two was addressed: What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? From the analysis of the qualitative data, three themes were developed in response to this question: relationships matter; principal support is critical; and structure is necessary. Relationships matter in building strong PLC practices. By modeling trusting and caring relationships, the principal can foster the growth of PLCs. Principals can also be a hindrance when the importance of relationships is ignored. Principal support was found to be a critical attribute of successful PLC implementation. When principals believe in the power of PLCs and put that belief into actions, the practices of PLCs can be strengthened. On the other hand, not “practicing what you preach” and failing to set expectations for strong PLC practices can hinder the development of PLCs. As the leader with positional authority, the principal can foster the work of PLCs by understanding the importance of supportive structures and making decisions about the structures necessary for PLCs at the individual school. When supportive structures are lacking, PLC work can be impeded. For principals who desire to develop or sustain PLCs, the cross-case findings can provide valuable insight into the role of the principal.

In Chapter 8, conclusions and implications for this study will be presented. The discussion will bring together the findings of this study in light of the theoretical framework and related research. Implications for practice and implications for research will be discussed.
CHAPTER 8

CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to examine the role of the principal in developing and sustaining professional learning communities in elementary school settings. This was accomplished through an exploratory, sequential, mixed method case study designed to address the questions established for this study:

1. To what extent are the following dimensions of a professional learning community evidenced in the elementary schools in this study? (Quantitative and Qualitative):
   a. Shared values and vision
   b. Shared and supportive leadership
   c. Collective learning and application
   d. Shared personal practice
   e. Supportive conditions

2. What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? (Qualitative)
   a. What are the teachers’ perceptions?
   b. What are the principals’ perceptions?
   c. How do the perceptions of teachers and principals compare?

In this Quan→QUAL study, the quantitative phase involved 107 teachers from eight elementary schools from the same school district in a southeastern U.S. state responding to the PLCA—R instrument (Olivier & Hipp, 2010a). The quantitative data analysis form Phase 1 of the study was utilized to select two elementary schools (Bradford
Elementary School and Campbell Elementary School) to serve as cases for the qualitative research phase that followed. The quantitative data also served as a source for developing interview protocols and as a means of triangulation. While the PLCA—R data offered insight into teacher perceptions of the role of the principal in developing and sustaining PLCs, the qualitative methods were necessary to thoroughly explore the second research question. Through interviews, observations, and artifacts, I was able to examine the ways in which the principal fosters or hinders the work of PLCs in elementary schools. The qualitative data analysis for Phase 2 of the study included within-case and cross-case analyses to address variations in the PLC practices of the two elementary schools and to strengthen the findings of the study.

The study was conducted using Hord’s (1997, 1998, 2008) Five Dimensions of a Professional Learning Community as the theoretical framework. Shared values and vision; shared and supportive leadership; collective learning and application; shared personal practice; and supportive conditions served as a filter for sorting and making sense of the wealth of data collected in Phase 1 and Phase 2. The framework provided an understanding of practices that are often found in schools implementing professional learning communities with fidelity. In addressing the first research question, the extent of practices found at the participating elementary schools was compared to what is known about these five dimensions from research on PLCs. As I addressed the second research question, the five PLC dimensions served acted as a filter for making sense of the qualitative data.
Conclusions

The quantitative phase of the sequential, mixed-methods case study was designed to address the first research question. This question called for determining to what extent are Hord’s (1997, 2008) five dimensions of professional learning communities evidenced in the elementary schools in this study. The data collected through the administration of the PLCA—R instrument was used to determine the strength of PLC practices in the eight participating elementary schools and to achieve the selection of two elementary schools to serve as cases for the qualitative phase of the study.

The PLCA—R data collected in Phase 1 was first analyzed for the total sample (N = 107). I found the means for the six PLCA—R factors ranged from 3.00 (SD = .481) for supportive structures to 3.30 for (SD = .481) for collective learning. With means for five of the six dimensions greater than 3.0 out of 4, the data supported an overall agreement of the strength of the PLC practices in the eight sample schools.

After determining the strength of PLCs for the sample, the data were then disaggregated by school in order to achieve the selection of two elementary schools exhibiting high levels of implementation of the PLC concept to serve as cases for Phase 2 of the study. The data from the two case sites were also utilized as a way to triangulate the quantitative and qualitative findings. The analysis of the PLC—R and demographic data was used to compare the extent of PLC practices at the eight participating schools. From the comparison of the data by PLC dimension, three schools were found that exhibited the highest perceived strength of PLC practices. After considering the PLCA—R data and also the response rates for the three schools, I concluded that Bradford Elementary School and Campbell Elementary School would serve as cases for the
qualitative phase of the study. Both of these elementary schools are small, urban, community schools.

When compared to the eight schools that participated in Phase 1 of the study, Bradford Elementary was one of two smaller elementary schools. The student population includes 77% minority students and 100% economically disadvantaged students. Of the 24 teachers at the school, 11 participated in the quantitative phase of the study leading to a 45.8% response rate. The analysis of the quantitative data revealed that the means for all six PLCA – R dimensions were at or above 3.00; thus, indicative of strong agreement of the perceived levels of PLC practices. The highest mean ($M = 3.58$, $SD = .451$) was found for Supportive Conditions: Relationships. This mean (Supportive Conditions: Relationships) was also the second highest mean when compared to the eight participating schools. Three of the means were the third highest of the total group: Shared Values and Vision ($M = 3.31$, $SD = .409$), Collective Learning ($M = 3.38$, $SD = .351$), and Shared Practice ($M = 3.12$, $SD = .284$).

Campbell Elementary School was the smallest of the eight schools that participated in Phase 1 of this study, but represented the highest response rate (95%). The student population includes 22% minority students and 77% economically disadvantaged students. The means for three of the six PLCA—R factors represented the highest means for the sample schools: Shared Values and Vision ($M = 3.58$, $SD = .367$), Collective Learning ($M = 3.57$, $SD = .412$), and Supportive Conditions: Relationships ($M = 3.73$, $SD = .385$). Notably, the mean for Supportive Conditions: Relationships was the highest mean for all dimensions for all schools. The remaining three dimensions ranked second among the eight schools: Shared Leadership ($M = 3.62$, $SD = .334$), Shared
Practice ($M = 3.20 \, SD = .448$), and Supportive Conditions: Structures ($M = 3.37, \, SD = .425$).

In Phase 2 of the study, I addressed both research questions through a within-case analysis of each elementary school and through a cross-case analysis. While the PLC practices at Bradford and Campbell Elementary Schools were strong, variation in the actual practices were found. The use of the term PLC was one difference. At Bradford Elementary School, the term PLC was not used to describe the collaborative work groups found at the school. The term PLC is used primarily to describe formal grade level PLCs at Campbell Elementary despite the fact that other collaborative work groups exemplify PLC practices. Another noteworthy variant in PLC practices was the participation of the principal at the two elementary schools. The Bradford Elementary principal was actively involved in PLCs; while the principal at Campbell Elementary played a supporting role in PLCs as he utilized shared leadership with the literacy coach and the arts specialist to facilitate PLC work. At each of the schools, PLC practices were also found in implementation of a program. At Bradford Elementary, the staff is involved in coaching and mentoring through the TAP program. Collaboration between classroom teachers and the art specialist were embedded in the Value Plus program at Campbell Elementary School. Despite differences in the way PLCs operate, the qualitative findings were similar at the two elementary schools.

In response to the first research question, practices associated with the five dimensions of PLCs were evident at Bradford and Campbell Elementary School through the qualitative data sources: observations, interviews, and artifacts. A strong sense of shared values and vision was found with an undeviating focus on students. The
participants at both elementary schools viewed education as a means of enabling students to break the cycle of poverty that is predominant in the school community. The PLCA—R respondents from both elementary schools also expressed strong agreement with the following items: “Shared values support norms of behavior that guide decisions about teaching and learning” and “Decisions are made in alignment with the school’s values and vision” (See Table 29). With a focus on the whole child, the educators were committed to meeting the physical, emotional, social, and academic needs of students.

Building trusting and caring relationships surfaced in both quantitative and qualitative data as a critical element of the success of PLC work at both schools. In these small elementary schools, the term family was used by multiple participants to describe the relationships that exist among the staff. The importance of the principal serving as a role model of positive relationships was found across the schools. Participants in this study indicated that relationships went beyond professional working relationships to include personal care and support for one another. One of the teachers from Bradford Elementary (Teacher 8C) summarized the importance of relationships to PLCs as she noted that the most effective PLCs are those in which the members have developed trusting relationships. The relationship dimension on the PLCA-R instrument received the highest means for Bradford Elementary ($M = 3.58, SD = .451$) and Campbell Elementary ($M = 3.73, SD = .385$) (See Table 34). By developing strong relationships, the work of PLCs was fostered.

Teachers at both schools indicated shared and supportive leadership was strong at their schools. Both principals depended upon shared leadership to implement PLC practices. Opportunities for formal teacher leadership included mentoring roles in the
TAP and *Value Plus* programs. The literacy coach and arts specialist at Campbell Elementary School and the master and mentor teachers at Bradford Elementary provided strong leadership in PLCs. At Campbell Elementary School, teachers employed leadership through 24 active committees as well. In the PLC meetings I observed, I found teachers demonstrating leadership as they worked with their colleagues. Additionally the following practices associated with shared and supportive leadership had strong agreement from respondents to the PLCA—R instrument; “Staff members are consistently involved in discussing and making decisions about most school issues” and “The principal participates democratically with the staff sharing power and authority” (See Table 30).

Collective learning and shared practice were also evidenced as strong PLC practices at Bradford and Campbell Elementary Schools. Strong agreement was found from both schools on the following PLCA—R item: “The school schedule promotes collective learning and shared practice” (See Table 33). At both schools, I observed PLC meetings in which participants worked collaboratively to learn from student data. The meetings were focused on using the student data to make instructional decisions. Evidence of sharing practices was found as well. The strongest examples of collective learning and shared practice was found in the TAP program at Bradford Elementary and the *Value Plus* program at Campbell Elementary. One area in which more development of shared practice is needed was teachers observing one another. At Bradford Elementary School, observations associated with the TAP program primarily involved mentoring teachers observing mentees and teachers observing model teaching by the master teacher. While a few teachers indicated that they could observe colleagues upon
request, I found that observing model arts integrated lessons or lessons taught by the academic coaches were the primary way this is practiced at Campbell Elementary School.

Structures were found across the case sites that allowed collaborative practices to develop. In both elementary schools, common planning time for grade level teachers was utilized as at time frame set aside for PLC meetings. A commitment to guarding the time for PLCs was evident across the sites. PLCA—R data also revealed strong agreement among respondents from both schools for the following item: “Time is provided to facilitate collaborative work” (See Table 33). Developing structures within the master schedule that offer time dedicated to PLCs was one of the ways in which supportive structures were evidenced in this study.

While both schools schedule PLCs during common planning times, the expectations for using this structure varied. At Bradford Elementary, teachers are expected to work collaboratively with their grade level colleagues four out of five days each week. Included among these PLC opportunities are TAP clusters, formal PLC meetings that include teachers and administrators, and informal grade level PLC meetings. In contrast, formal PLC meetings are scheduled on Thursdays at Campbell Elementary, with the frequency of meetings varying from grade level to grade level. In addition to the formal PLCs at Campbell Elementary, grade level teachers meet informally during this common plan time, after school hours, or during lunch and recess times. The collaboration that occurs among the arts specialist, the encore teachers, and the grade level teachers at Campbell Elementary normally occurs outside the common planning time due to these encore classes being held during this time.
Another important aspect of the supportive structures dimension involved expectations for how the time was spent. A common thread between the two elementary schools in this study was the expectation that PLC meetings focused on topics appropriate for PLCs. The teachers and principals noted that the time was not for planning field trips or scheduling issues. At both schools, I observed meetings structured around analyzing student data in order to make instructional decisions. I found that PLC appropriate topics at Bradford Elementary included book study chosen to address an area of need, mentoring colleagues, or collaborating to develop instructional practices that are research based. From the interview and artifacts collected at Campbell Elementary, the importance of a structure that allows collaboration between classroom teachers and specialists for the purpose of arts integration was evidenced.

The organizational structure of the school also played a role in developing conditions that support strong PLC practices. At Bradford Elementary School, the TAP master and mentor teachers were utilized as leaders in PLC work. The literacy coach and arts specialist at Bradford Elementary served as PLC facilitators and mentors. The committee structure at Campbell Elementary also surfaced as a platform for collaborative work. The PLCA—R data for both schools supported the use of the organizational structure with strong agreement to the following item: “Resource people provide expertise and support for continuous learning” (See Table 33). By using the organizational structure of the school to develop collaboration, the principals provided support for PLC practices.

After determining that strong PLC practices were in place at the two elementary schools, the qualitative data analysis shifted to address the second research question:
What are the roles of the principal that foster or hinder the successful implementation of professional learning communities? I explored the perceptions of teachers and principals and how the two compared. In this study, I found that principal and teacher perceptions were overwhelming similar. The interview participants easily identified ways in which the principal fosters PLCs, but spoke of other schools or hypothetical situations when addressing hindrances.

In response to the second research questions, four themes were developed for at Bradford Elementary School (relationships matter; structure is necessary; walk the talk; and offer accountability) and three themes were established for Campbell Elementary School (relationships matter; principal support is critical; and structure is important). Two of the themes were common to both schools. The remaining themes of walk the talk and accountability matter at Bradford Elementary were closely related to the Campbell Elementary theme of principal support is critical. As the data were analyzed across the two cases, the following three themes concerning the principal’s role in developing and sustaining PLCs were developed: relationships matter; principal support is critical; and structure is necessary. All of these themes fall within the PLC dimension of supportive conditions. The conclusions for this study are laid out using these three themes.

**Relationships Matter**

Both the quantitative and qualitative data pointed to relationships as having a significant impact on PLCs at Bradford and Campbell Elementary Schools. Caring and trusting relationships were found to be ingrained into the cultures of the two elementary schools. With 10 out of 18 interview participants using “family” to described relationships among the staff, it was clear that relationships extended beyond professional...
working relationships. The principals at each of the case sites demonstrated the value of relationships as they incorporated opportunities for social interaction among staff and time for celebration. The overwhelming response of the 18 teachers interviewed in this study was that the principal fosters positive relationships by modeling trusting and caring relationships built on mutual respect. Teacher 3B provided this summary of what was found throughout the interviews and observations:

It trickles from the top. The principal is so important in schools….They set the tone. They set practices in place. They either value or de-value people in the building.

Teachers at both schools reported examples of the principal demonstrating care for them as they went through difficult personal situations. The PLCA—R data supported the importance of relationships with the highest overall mean for both schools being supportive conditions: relationships (See Table 21) and by strong agreement with the following item: “Caring relationships exist among staff and students that are built on trust and respect” (See Table 34).

The principal can foster the development of positive relationships by establishing practices that foster communication and collaboration. Both of the principals in this study were described as having an “open-door policy.” The policy went beyond just allowing the staff to enter as needed, but included the principal listening to and hearing the issues, concerns, and celebrations brought by the staff. Teachers also spoke of confidentiality being important for fostering communication between the principal and teachers that is open and honest. The teachers expressed trust that the principal heard their concerns and ideas. On the PLCA—R, respondents expressed strong agreement that
“the principal incorporates advice from staff to make decisions” and “the principal is proactive and addresses areas where support is needed” (See Table 30). Thus, the principals at Bradford and Campbell Elementary fostered relationships by providing avenues for positive teacher and principal communication.

The principal can also play a role in fostering positive relationships by developing trust. From this study, I found that trust comprises both the principal trusting teachers and the teachers trusting the principal. It is important for teachers to trust the decisions and actions of the principal. In the same light, teachers from both schools spoke of the importance of feeling trusted by the principal to carry out their own jobs well. When trust is present, the participants felt it is easier to accept feedback and to work toward improvements needed. As the positional leader of the school, principals can build a foundation for PLCs by developing trusting relationships among the staff and administration.

Principals can also further the work of PLCs by making sure they “know [their] people.” Through interviews, observations, and artifacts collected at the two sites, I found the principals at Bradford and Campbell Elementary had a deep knowledge of their staffs (both professionally and personally), the students, the parents, and the community. The principals used this knowledge to capitalize on strengths as a way to address areas of challenge. The two principals in this study had a firm understanding of student and teacher data and were able to develop PLC structures and practices to address strengths and weaknesses. Knowing the community allowed these principals to utilize community resources and support to achieve the mission of the schools. By knowing the strengths and challenges that exist, the principals developed practices that fostered PLCs.
It was also important to determine ways in which the principal can hinder the development of PLCs. With strong evidence for the impact of building strong relationships, a principal can impede the work of PLCs by failing to recognize the significant role played by relationships in collaboration. Other ways that principals can stand in the way of PLCs included showing favoritism, not modeling relationships built on trust and respect, staying in the office too much, failing to hear the concerns of the staff, failure to develop trust, developing a competitive environment, and failing to care for the staff both professionally and personally.

Relationships have been found to matter in the successful development of professional learning communities. The significance of developing caring and trusting relationships was found through principal and teacher perceptions at Bradford and Campbell Elementary Schools. A principal can foster the work of PLCs by proactively developing caring and trusting relationships built on mutual respect. In the same light, a principal can hinder PLC development by either downplaying the importance of relationships or by not modeling positive relationships.

**Principal Support is Critical**

From the analysis of the qualitative and quantitative data in this study, I found principal support to include both beliefs and actions that promote PLC development. The principals of Bradford and Campbell Elementary Schools fostered collaborative practices by “walking the talk.” The principal from Campbell Elementary School stated, “When we talk about PLCs, I think [teachers] have to know the leaders believe in the process…that the leadership…the administration…believes it works.” It is not sufficient to schedule PLCs or to say they are important. The beliefs of the principal concerning
PLCs must be put into practice in order to successfully develop and sustain PLCs. Without supportive beliefs and actions on the part of the principal, the work of developing and sustaining PLCs can be hindered. The data from this study pointed to teachers’ beliefs being influenced by the beliefs of the principal. As one teacher stated, “It trickles from the top.” One of the ways in which this was evident was found in the shared beliefs of the staff. The teacher respondents offered strong agreement to the following related PLCA—R item: “Shared values support norms of behavior that guide decisions about teaching and learning” (See Table 29).

Principal’s beliefs about PLCs must also be translated into actions that foster the development of PLCs. One of the ways that beliefs were put into action was scheduling time for PLCs that would allow grade level groups to meet during the school day. By protecting the time frame as set aside for PLCs, the principals at the two elementary schools in this study demonstrated their value of PLCs. While the expectations for the frequency of PLC meetings varied across the cases, establishing the logistical structures for PLCs was a solid example of principal support for the collaborative work groups.

In addition to setting time for PLC meetings, the principals at Bradford and Campbell Elementary Schools also set expectations for what takes place in PLCs. The principal of Bradford Elementary School spoke of the importance of building accountability by creating “a plan about what learning will occur and how it will benefit student learning.” Both of the principals established PLC meetings that were designed for data-driven decision making. At other times collaborative work groups were focused on developing instructional practices, planning integration of the arts, discussing research about teaching and learning, and sharing ideas for meeting student needs. As found in this study, principal support of PLCs included developing expectations for the collaborative work.

350
Another way in which principal support played a critical role in developing successful PLCs was by taking action to address needs that surface as teachers work collaboratively. Since members of PLCs may not have the authority to make decisions concerning resources, schedules, or programs, principal support is needed. Teachers from both elementary schools described ways in which the principal supported the work of PLCs by making decisions, providing ways to get materials, establishing small groups to work on a plan, or by bringing in resource people in an effort to address identified needs. The PLCA—R data also indicated agreement that “the principal is proactive and addresses areas where support is needed (See Table 30).

While principals can cultivate collaboration by providing support to PLCs, the lack of support can obstruct the work of PLCs. From the interview data, five participants felt principals impede PLCs when they fail to establish accountability measures. Other interview participants indicated that micromanaging PLCs was also a hindrance. Additional ways in which principals can undermine the positive outcomes of PLCs included creating an atmosphere of distrust, creating heavy loads of work for teachers, and scheduling too many meetings.

Principal support was found to be a vital part of developing and sustaining the collaborative work of PLCs. When principals fail to recognize the significant impact of supportive beliefs and actions, they may hamper PLC development. When principals value the impact of PLCs and put their beliefs into actions, they can positively influence PLCs.

Structure is Necessary

Building structures that support the development of PLCs was found to be an important way the principals at Bradford and Campbell Elementary Schools impacted PLCs. While the principal’s role in developing structures was included in the discussion of principal support, the importance of structures warranted further consideration for principals. In the previous discussion, the significant role played by the principal in
establishing a time frame for PLC meetings, developing expectations for what occurs in PLCs, and in determining the actual role played by the principal in PLC meetings was presented. Rather than reiterate the findings already discussed, I will now present the rationale for developing this finding as a separate theme.

As I examined the differences in structures at the two elementary schools, the following statement made by the principal from Campbell Elementary School spoke loudly:

PLCs work differently in different schools. There is not a cookie cutter model for PLCs. There can’t be. There are too many independent variables being put into the process and that’s leadership and the style of leadership and the teachers and the style of the teachers.

Although the PLC structures at Bradford and Campbell Elementary differed in numerous ways, the structures found at each of the elementary schools were perceived as working. Teachers at Campbell Elementary School identified scheduling too many meetings and principal participation in PLCs as ways in which the principal can hinder the work of PLCs. On the other hand, the Bradford Elementary School participants saw multiple PLC meetings and principal participation as part of the success of their collaborative work. Thus, what worked in one school setting was viewed as detrimental in another. This dichotomy led to the conclusion that the principally plays a valuable role in developing and sustaining PLCs by using school-based factors to determine the structures necessary for success. As found in this study, principals can foster PLCs by utilizing knowledge of the school culture, understanding of leadership styles, and the make-up of the faculty as critical decisions are made about PLC structures.
As evidenced in this study, the principal plays a vital role in developing and sustaining professional learning communities. Three important themes were set forth to in response to the second research question: relationships matter; principal support is critical; and structure is necessary. Elementary school principals can foster PLC work as they recognize and act upon the importance of building trusting and caring relationships in collaborative work. When principals undervalue the significant impact of principal support on PLC development, PLC practices can be impeded. As the leader with positional authority in a school, the principal can impact the collaborative work by developing structures necessary to support PLC practices.

Implications for Practice

Developing and sustaining professional learning communities requires leadership and direction. Louis, Dretzke, and Wahlstrom (2010) concluded, “Not only do teachers need to work together around instruction and student learning, but administrators need to be part of that process” (p. 332). As the positional leaders in elementary schools, principals have the opportunity to play a vital role in developing the collaborative practices often associated with schools implementing PLCs with fidelity. One of the ways in which the findings from this study contribute to the research on PLCs is through the following implications for practice.

The Role of the Principal

The first implication for practice lies in area of relationships. This study pointed to the importance of relationships in developing successful PLC practices. The significance of relationships was found to encompass both professional working relationships and personal relationships among the staff. In order to develop caring and
trusting relationships among the educators in a school, teachers expressed the belief that principals must serve as a model. Principals can benefit from understanding they set the tone for the professional and personal interactions that occur within their schools. Price (2012) asserted, “Principals’ relationships with their teachers affect principals’ and teachers’ satisfaction, cohesion, and commitment levels” (p. 40). With 10 out of 18 interview participants using the word family to describe staff relationships, principals should examine the extent to which personal relationships are encouraged among colleagues. In this study, the principals fostered trusting and caring relationships by providing and supporting opportunities for the staff to socialize and celebrate. The findings pointed to principals cultivating relationships and even collaboration by having a deep knowledge of the staff (both personally and professionally), the students, the parents, and the community. As principals reflect on how to set the tone, it is also important to consider the negative impact of favoritism, principal isolation, and a competitive environment.

Traditional training and traditional roles for principals have leaned toward the managerial side of the position. With evidence to support the impact of developing trusting and caring relationships, the implication arises for principal preparation and training programs to address the softer side of the principal’s role. Providing training related to developing the culture and climate of the schools should be a consideration. When principal preparation fails to acknowledge the need to develop supportive relationships, principals lack a valuable tool for fostering collaborative work.

The next implication for practice arises from the critical role played by principal support in developing and sustaining PLCs. As Hord (1997) concluded, PLCs can only
be implemented successfully with “the leader’s sanction and active nurturing of the entire staff’s development as a community” (p. 6). While principal support can cultivate PLC practices, lack of support can be detrimental to the collaborative work. In this study, I found principal support to consist of beliefs and actions. In school districts (such as the one in this study) that require the implementation of PLCs, it is critical for principals to have an understanding of how their own beliefs and actions influence those of their staff. Simply providing logistical structures for PLC meetings will not suffice to develop strong PLC practices. As stated by the principal of Bradford Elementary School, “If you don’t value it; they won’t value it.” As was true with relationships, it starts at the top.

The data in this study indicated a need for principals to serve as a role model when it comes to developing and sustaining PLCs. Not only is it essential for principals to believe in PLCs, but the beliefs must be translated into actions that support the development of shared values and vision; shared and supportive leadership; shared practice; collective learning and application; and supportive condition (Hord, 1997, 1998, 2008). Principals can contribute support by establishing logistical structures that support PLCs such as time set aside for PLCs. Another way that principals can impact PLC development is by setting expectations for what happens when PLCs meet. It would serve a principal well to understand: “Essentially, leadership is about influencing others in positive and productive ways around organized purposes” (Wahlstrom & York-Barr, 2011, p. 23).

The third area of implication for practice is developing an understanding of the necessity of developing structures that support the work of PLCs. As found in this study, the structures are dependent upon school factors that vary from site to site. In order to
make decisions about PLC structures, it is imperative for principals to have a deep working knowledge of their own leadership style, the culture of the school, and the make-up of the staff. The principal will need to make decisions about time, frequency, content, and leadership for PLCs. Wahlstrom and York-Barr (2011) spoke to this role of the principal as they asserted:

If we are not satisfied with our student learning results, we must examine our systems and structures. The work of leadership is to create the conditions that support continuous professional learning that results in improved classroom practice such that students engage and learn at high levels. (p. 25)

**Does the Name PLC Matter?**

PLC has become a buzzword in educational circles. As the acronym has gained popularity, it is often used to describe any group of educators that come together for various purposes. In this study, the use (and nonuse) of the term was intriguing. Although strong practices associated with successful PLCs were in place, the term PLC was not used to describe the collaborative work groups that were in place. At Campbell Elementary School, the term was narrowly used to describe formal PLC meetings that were held on Thursdays with the literacy coach. Yet, other examples of groups that were practicing elements of PLCs were easily identified. Thus, one implication for practice is the need to gain perspective on the use of the term.

From this study, it became apparent that the term is not what defines professional learning communities. What really matters is the practices that are in place. As principals consider groups called PLCs, it is important to ask the following questions that arise from Hord’s (1997, 1998, 2008) five dimensions of PLCs:
1. How does evidence point to shared vision and values that are focused on students?

2. What evidence exists for shared and supportive leadership? How are teachers involved in leadership and in decision making?

3. In what ways are teachers sharing their practice with colleagues?

4. How are teachers learning collectively as they collaborate?

5. What structures are in place to support collaboration among staff members?

6. How would you describe the relationships (professional and personal) that exist among the staff?

The implication for practice is that simply naming a group a PLC does not mean that PLC practices are in place. As principals seek to assess the collaborative practices in their schools, administering the PLCA—R (Olivier & Hipp, 2010a) to staff members would provide valuable insight into the practices normally associated with strong PLCs.

Implications for Research

This study sought to examine the role of the principal in developing and sustaining professional learning communities. Although the research on PLCs pointed to the principal as playing an important role in PLCs, there was a lack of research focused on the role of the principal. While this study was designed to address the gap in the literature, the need for further studies continues to exist to extend the understanding of this phenomenon. As the data was analyzed and findings were presented, other areas that should be addressed surfaced.

The first implication of research is tied to the limitations of this study. The quantitative portion of the study was limited to a purposeful sample of public elementary
schools in a southeastern state that were implementing the concept of professional learning communities. While the school district included 50 elementary schools, the study was limited to the eight schools that elected to participate in Phase 1. The qualitative phase involved two elementary schools that served as cases. In order to gain a broader understanding of the role of the principal in developing and sustaining PLCs, it would be beneficial to expand the study to additional schools within the same school district or to schools outside of the school district.

Another implication for research that arose centered on the demographics of the elementary schools that served as cases for the qualitative phase of the study. The two schools were small, urban, community schools serving a high percentage of economically disadvantaged students. With similar demographics, questions arose concerning the transferability of the findings. Did the size of the schools matter? Would the results be similar in larger schools with larger faculties? Would the results be similar in schools with a different SES make-up? While the findings offered insight into the roles of the principal in developing and sustaining PLCs, further research that includes schools with greater differences in demographics could provide insight into the question raised about the demographic make-up of the participating schools.

The third implication for research lies in the area of relationships. In this study, the significant role of trusting and caring relationships was evident in both quantitative and qualitative data. With a history of principals operating s managers, it would be valuable to study the role of relationships in more depth. Greater insight into the role principals can play in developing relationships that foster collaboration is needed.
Summary

With research pointing to professional learning communities as a way to bring about sustainable change, seeking greater understanding of how the principal can foster or hinder PLCs is a worthwhile endeavor. In his forward to *Leading Professional Learning Communities: Voices from Research and Practice* (Hord & Sommers, 2008), Hargreaves stated:

> Professional learning communities are now ubiquitous. Few educational leaders and decreasing numbers of teachers remain unaware of what professional learning communities are meant to be—communities of professionals caring for and working to improve student learning together, by engaging in continuous collective learning of their own.

What still seems unclear to many school leaders is how they can get it started and how to keep it going. Thus, this study sought to examine the role of the principal in developing and sustaining professional learning communities.

As one of the principals in this study stated, “There is no cookie cutter mold for PLCs.” What this study does is to share the insight gained from those who are in the field. I found that relationships matter when educators are asked to share a vision, share their practice, and learn collectively. Without principal support that is demonstrated in beliefs and in actions, the development of PLCs can be thwarted. One of the most important insights gleaned from this study is that principals must play a role in determining the structures that are needed in their setting to cultivate PLC practices among the staff. In PLCs, the principal must be more than a manager. The principal must be a leader of leaders who is committed to “do whatever it takes” (Principal,
Bradford Elementary School) to see that the needs of the whole child remain at the center of the collaborative work of the educators in a building.
REFERENCES
References


Hipp, K. K., & Huffman, J. B. (2010). Demystifying the concept of professional learning communities. In K. K. Hipp & J. B. Huffman (Eds.), Demystifying professional
learning communities: School leadership at its best (pp. 11-21). Lanham, MD: Rowman and Littlefield Education.


School leadership at its best (pp. 23-28). Lanham, MD: Rowman and Littlefield Education.


School leadership at its best (pp. 73-85). Lanham, MD: Rowman and Littlefield Education.


Pankake, A. M., & Huffman, J. B. (2010). Case story # 2: Mineral Springs Middle School (6-8). In K. K. Hipp & J. B. Huffman (Eds.), Demystifying professional learning
communities: School leadership at its best (pp. 87-103). Lanham, MD: Rowman and Littlefield Education.


378


APPENDICES
Appendix A

Summary of Empirical Studies Reviewed for Chapter 2
## Summary of Empirical Research Reviewed for Chapter 2

<table>
<thead>
<tr>
<th>Source</th>
<th>Sample</th>
<th>Research Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrews &amp; Lewis (2004)</td>
<td>3 schools in Australia involved in school renewal process called IDEAS (Innovative Designs for Enhancing Achievement in Schools)</td>
<td>Qualitative: Case Study&lt;br&gt;Data Collection: Interviews (teachers, students, parents), artifacts, documents</td>
</tr>
<tr>
<td>Bezzina (2008)</td>
<td>Catholic school in Malta</td>
<td>Qualitative: Case Study&lt;br&gt;Data Collection: Researcher worked with stakeholders over a five year period</td>
</tr>
<tr>
<td>Boyd-Dimock &amp; Hord (1994)</td>
<td>Urban elementary school in the south</td>
<td>Qualitative: Case Study&lt;br&gt;Summary of formation of PLC as the school went through changes that came with four principals</td>
</tr>
<tr>
<td>Dooner, Mandzuk, &amp; Clifton (2007)</td>
<td>Nonprobability sample of 7 Middle Years Teachers working in PLC over 2 years of study (October 2003-June, 2005)</td>
<td>Qualitative: Case Study&lt;br&gt;Data Collection: Participant journal submissions, three focus-group discussions, individual interviews covering over 300 hours per group member and 500 collected pages of data</td>
</tr>
<tr>
<td>Fleming &amp; Leo (1999)</td>
<td>Paper describing principal role in a sample of five schools involved in PLCs</td>
<td>Qualitative: Case Study&lt;br&gt;Data Collection: Gathered data about the principals’ leadership practices through observations and interviews</td>
</tr>
<tr>
<td>Giles &amp; Hargreaves (2006)</td>
<td>Purposefully selected sample of 3 schools chosen from Change Over Time project (Results from the wider qualitative case study warranted further research)</td>
<td>Qualitative: Grounded theory&lt;br&gt;Data Collection: Semi-structured interviews with retired and active teachers and administrators representing cohorts from the 1970s, 1980s, and 1990s; ethnographic observations from school visits and meetings with faculty, students, parents, and state officials; district and school documents</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Study Title</td>
<td>Methodology</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hargreaves &amp; Goodson (2006)</td>
<td>Purposive sample of 8 secondary schools in different communities &amp; varying cultures &amp; structures in Ontario, Canada and New York. (Change Over Time project)</td>
<td>Qualitative using archival and conversational data, oral testimonies of teachers and administrators who had worked in these schools over 30 yr. Period.</td>
</tr>
<tr>
<td>Hipp &amp; Huffman (2003)</td>
<td>Creating Communities of Continuous Inquiry and Improvement project</td>
<td>Multi-method</td>
</tr>
<tr>
<td></td>
<td>Five year (1995-2000) study of development of PLCs</td>
<td>Phase 1: Review of Literature</td>
</tr>
<tr>
<td></td>
<td>Phase 2: 30 educators from around U.S. participated in initial project</td>
<td>Phase 3: From the 12 schools remaining in project, 6 schools were identified as PLCs. The six sample schools included 2 rural, 1 urban, and 3 suburban schools located in either the south or the Midwest.</td>
</tr>
<tr>
<td>Huffman (2003)</td>
<td>Sample of 18 school sites that participated in Creating Communities of Continuous Inquiry and Improvement (Focused on role of shared values and vision in schools according to maturity level of the school’s professional learning community)</td>
<td>Qualitative:</td>
</tr>
<tr>
<td>Huffman &amp; Jacobson (2003)</td>
<td>Sample of 83 educators enrolled in Masters level courses in educational administration at a Texas university</td>
<td>Quantitative: Survey Research Design</td>
</tr>
<tr>
<td>Huggins, Sheurich, &amp; Morgan (2011)</td>
<td>Mid-sized urban high school professional learning community that included 3 school leaders and 6 teachers</td>
<td>Qualitative Case Study</td>
</tr>
<tr>
<td>Klein-Kracht (1993)</td>
<td>Two successful suburban Midwestern high schools (one public and one private)</td>
<td>Qualitative Case Study</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Study Title</td>
<td>Research Design</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Kruse, Seashore Louis, &amp; Bryk (1994)</td>
<td>Longitudinal study of school restructuring and teacher’s work conducted through Center on Organization and Restructuring of Schools Sample included 15 restructuring schools</td>
<td>Quantitative: Survey Research Design</td>
</tr>
<tr>
<td>Levine (2011)</td>
<td>Focused on experience of experienced teachers in two schools using PLCs in different ways in the midst of school change Sample: Two conversion high schools; focused on 3 experienced teachers at each school</td>
<td>Qualitative: Case Study</td>
</tr>
<tr>
<td>Lovett &amp; Cameron (2011)</td>
<td>Teachers of Promise longitudinal study examining the experiences of newly hired teachers Sample: 57 newly hired primary and secondary teachers in New Zealand who had been identified by teacher education providers as having potential to become strong teachers</td>
<td>Qualitative: Case Study</td>
</tr>
<tr>
<td>Lynn (1994)</td>
<td>Center on Organization and Restructuring of Schools research project Report of 3 schools from this study: one elementary, one middle, one high school</td>
<td>Qualitative: Case study</td>
</tr>
<tr>
<td>Maloney &amp; Konza (2011)</td>
<td>The Professional Learning Project, conducted over a 1.5 year period in collaboration with a local university. Co-facilitators were the deputy school principal and two university researchers who took a participant-observer role in the study Sample: 12 teachers and 8 educational assistants from a metropolitan primary school in Australia</td>
<td>Qualitative: Case Study</td>
</tr>
<tr>
<td>Monroe-Baillargeon &amp;</td>
<td>Researchers conducted a literature circle for professional development for 10 participants including</td>
<td>Qualitative: Case Study</td>
</tr>
</tbody>
</table>

384
<table>
<thead>
<tr>
<th>Author</th>
<th>Study Details</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shema (2010)</td>
<td>elementary school teachers, a guidance counselor, the librarian, and a member of the regional school support center who worked with the teachers on their SIP. Sample: One elementary school located within a large urban school district in the Northeast</td>
<td>Data Collection: Field notes and interviews</td>
</tr>
<tr>
<td>Newmann (1994)</td>
<td>Center on Organization and Restructuring of Schools research project Sample: 1500 U.S. elementary, middle and high schools Field research in 44 schools in 16 states;</td>
<td>Qualitative: Case Studies Data Collection: Interviews, observations</td>
</tr>
<tr>
<td>Olivier &amp; Hipp (2010a)</td>
<td>Longitudinal Study of rural, low-socioeconomic school involved in PLC implementation over 12 year Population: Lake Elementary (PreK-8)</td>
<td>Qualitative: Case Study Data Collection: Utilized both formal and informal assessments to follow the progress of PLC implementation</td>
</tr>
<tr>
<td>O’Malley (2010)</td>
<td>Descriptive account of four-year induction program for 13 teachers and an administrator which evolved as a PLC Sample: Teachers involved in induction program from University High School (part of Illinois State University)</td>
<td>Qualitative: Narrative Data collection: annual surveys, individual interviews, focus group interviews, and artifacts</td>
</tr>
<tr>
<td>Oper &amp; Pedder (2011)</td>
<td>Review of literature on teachers’ professional development practices, the generative systems of these practices, and the impact that learning experiences have on their knowledge and changes in classroom practices</td>
<td>Utilized a complex theory framework to review literature and develop a conceptualization teacher professional learning Data Collection: Utilized databases containing abstracts of empirical and theoretical research as well as tables of content for peer-reviewed journals to identify</td>
</tr>
<tr>
<td>Pankake &amp; Huffman (2010)</td>
<td>Longitudinal Study of low-income suburban School involved in PLC implementation Sample: Mineral Springs Middle School (6-8)</td>
<td>Qualitative: Case Study Data Collection: Utilized both formal and informal assessments to follow the progress of PLC implementation</td>
</tr>
<tr>
<td>Study</td>
<td>Sample</td>
<td>Data Collection</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>Purposive Sample including 19 out of 85 schools that demonstrated high level of maturity in PLCs. Sample included 276 elementary and secondary teachers</td>
<td>(Replicates Ellis (1998) study) Data Collection: Quantitative: School Professional Staff as Learning Community (SPSLC) and Change Facilitator Style Questionnaire (CFSQ) instruments Qualitative: 12 question Protocol for Principal Interview and Focus Group, and individual interview protocol</td>
<td></td>
</tr>
<tr>
<td>Roundtree &amp; Hipp (2010)</td>
<td>Federal Wallace Foundation Grant provided funding for primary author (the principal) over 1.5 years at a low-income urban school Sample: Metcalfe School (K4-8)</td>
<td>Qualitative: Case Study Data Collection: Utilized both formal and informal assessments and principals journal to follow the progress of PLC implementation</td>
</tr>
<tr>
<td>Scribner, Cockrell, Cockrell, &amp; Valentine (1999)</td>
<td>35 participants from 3 rural middle schools in Midwestern state</td>
<td>Qualitative: Collective case study Data collection: interviews of principal, leadership team, and randomly selected teachers; observations; artifacts; and documents</td>
</tr>
<tr>
<td>Stoll &amp; Temperley (2009)</td>
<td>Creative Leadership Learning Project (September 2006-February 2008) 11 school leadership teams (9 primary and 2 secondary) in South Gloucestershire in the South West of England and 5 local authority officers</td>
<td>Mixed Methods Data collection: Blend of research and development activities that included 201 interviews, 274 completed surveys, collaborative inquiry, targeted stimulus inputs from project coordinators, networking, and developing networks among participants</td>
</tr>
<tr>
<td>Underwood (2007)</td>
<td>1 rural middle school in S. Georgia which had implemented PLC</td>
<td>Mixed Methods: Descriptive Case Study Data collection: PLCA Instrument, focus groups, interviews with teachers</td>
</tr>
<tr>
<td>Wells &amp; Feun (2007)</td>
<td>Teams from 6 high schools, including administrators and teachers,</td>
<td>Mixed Methods Data Collection: Surveys and interviews</td>
</tr>
</tbody>
</table>
| Wahlstrom & Louis (2008) | National research project: Learning from Leadership  
Sample: K-12 teachers in 138 schools representing 39 school districts in the U.S. | Quantitative- teachers survey dev. of research project  
Data Collection: 108-item survey dev. for study- mailed to schools & completed in staff mtg. (4,165 completed surveys) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>York-Barr &amp; Duke (2004)</td>
<td>Utilized numerous small-scale qualitative studies</td>
<td>Meta-analysis investigated concept and practice of teacher leadership in research literature form past two decades</td>
</tr>
</tbody>
</table>
Appendix B

Professional Learning Community Assessment Instrument
Professional Learning Communities Assessment – Revised

Directions:

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

Key Terms:

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

Scale: 1 = Strongly Disagree (SD)  
2 = Disagree (D)  
3 = Agree (A)  
4 = Strongly Agree (SA)
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared and Supportive Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. The principal is proactive and addresses areas where support is needed.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. The principal shares responsibility and rewards for innovative actions.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. The principal participates democratically with staff sharing power and authority.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Leadership is promoted and nurtured among staff members.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. Decision-making takes place through committees and communication across grade and subject areas.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11. Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

COMMENTS:
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Values and Vision</strong></td>
<td>SD</td>
</tr>
<tr>
<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>14. Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>15. Decisions are made in alignment with the school’s values and vision.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>16. A collaborative process exists for developing a shared vision among staff.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>17. School goals focus on student learning beyond test scores and grades.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>18. Policies and programs are aligned to the school’s vision.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>20. Data are used to prioritize actions to reach a shared vision.</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>

**COMMENTS:**
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collective Learning and Application</strong></td>
<td></td>
</tr>
<tr>
<td>21. Staff members work together to seek knowledge, skills and strategies</td>
<td>0</td>
</tr>
<tr>
<td>and apply this new learning to their work.</td>
<td>0</td>
</tr>
<tr>
<td>22. Collegial relationships exist among staff members that reflect</td>
<td>0</td>
</tr>
<tr>
<td>commitment to school improvement efforts.</td>
<td>0</td>
</tr>
<tr>
<td>23. Staff members plan and work together to search for solutions to</td>
<td>0</td>
</tr>
<tr>
<td>address diverse student needs.</td>
<td>0</td>
</tr>
<tr>
<td>24. A variety of opportunities and structures exist for collective learning</td>
<td>0</td>
</tr>
<tr>
<td>through open dialogue.</td>
<td>0</td>
</tr>
<tr>
<td>25. Staff members engage in dialogue that reflects a respect for diverse</td>
<td>0</td>
</tr>
<tr>
<td>ideas that lead to continued inquiry.</td>
<td>0</td>
</tr>
<tr>
<td>26. Professional development focuses on teaching and learning.</td>
<td>0</td>
</tr>
<tr>
<td>27. School staff members and stakeholders learn together and apply new</td>
<td>0</td>
</tr>
<tr>
<td>knowledge to solve problems.</td>
<td>0</td>
</tr>
<tr>
<td>28. School staff members are committed to programs that enhance learning.</td>
<td>0</td>
</tr>
<tr>
<td>29. Staff members collaboratively analyze multiple sources of data to</td>
<td>0</td>
</tr>
<tr>
<td>assess the effectiveness of instructional practices.</td>
<td>0</td>
</tr>
<tr>
<td>30. Staff members collaboratively analyze student work to improve teaching</td>
<td>0</td>
</tr>
<tr>
<td>and learning.</td>
<td>0</td>
</tr>
</tbody>
</table>

COMMENTS:
<table>
<thead>
<tr>
<th>Statements</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Personal Practice</strong></td>
<td></td>
</tr>
<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>35. Opportunities exist for coaching and mentoring.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>36. Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>37. Staff members regularly share student work to guide overall school improvement.</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>

**Comments:**
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supportive Conditions – Relationships</strong></td>
<td></td>
</tr>
<tr>
<td>38. Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>39. A culture of trust and respect exists for taking risks.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>40. Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>41. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>42. Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>

COMMENTS:
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supportive Conditions – Structures</strong></td>
<td>SD</td>
</tr>
<tr>
<td>43. Time is provided to facilitate collaborative work.</td>
<td>0</td>
</tr>
<tr>
<td>44. The school schedule promotes collective learning and shared practice.</td>
<td>0</td>
</tr>
<tr>
<td>45. Fiscal resources are available for professional development.</td>
<td>0</td>
</tr>
<tr>
<td>46. Appropriate technology and instructional materials are available to staff.</td>
<td>0</td>
</tr>
<tr>
<td>47. Resource people provide expertise and support for continuous learning.</td>
<td>0</td>
</tr>
<tr>
<td>48. The school facility is clean, attractive and inviting.</td>
<td>0</td>
</tr>
<tr>
<td>49. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>0</td>
</tr>
<tr>
<td>50. Communication systems promote a flow of information among staff members.</td>
<td>0</td>
</tr>
<tr>
<td>51. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>0</td>
</tr>
<tr>
<td>52. Data are organized and made available to provide easy access to staff members.</td>
<td>0</td>
</tr>
</tbody>
</table>

**COMMENTS:**

© Copyright 2008

Appendix C

Permission to Use PLCA – R
October 11, 2011

Ginger Teague
Doctoral Student, University of Tennessee
Teacher, Maryville City Schools
1709 Dunwoody Blvd.
Knoxville, TN 37919

Dear Ms. Teague:

This correspondence is to grant permission to utilize the *Professional Learning Community Assessment-Revised* (PLCA-R) as your instrument for data collection for your doctoral study through University of Tennessee. I believe your research on elementary teachers’ perceptions of the role of the principal in professional learning communities will contribute to both the research literature and provide valuable information relating to PLC development and sustainability. I am pleased that you are interested in using the PLCA-R measure in your research.

This permission letter allows use of the PLCA-R through a paper/pencil administration. In order to receive permission for the PLCA-R online version, it is necessary to secure the services through our online host, SEDL in Austin, TX. Additional information for online administration can be found at www.sedl.org.

Upon completion of your study, I would be interested in learning about your results. If possible, I would appreciate the opportunity to receive an Excel file of raw data from your administration of the PLCA-R (applicable only for paper/pencil version). This information would be added to our data base of PLCA-R administration. Additionally, I would also be interested in learning about your entire study and would welcome the opportunity to receive an electronic version of your completed dissertation research.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,

*Dianne F. Olivier*

Dianne F. Olivier, Ph. D.

Assistant Professor
Joan D. and Alexander S. Haig/BORSF Professor
Department of Educational Foundations and Leadership
College of Education
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
(337) 482-6408 (Office)
dolivier@louisiana.edu
From: Dianne L Olivier [mailto:dlo7569@louisiana.edu]

Sent: Wed 5/19/2010 8:47 PM

To: Teague, Ginger Mink

Subject: Re: Request for permission to us PLCA – R

Ginger,

Just a short message that acknowledge your request and to ensure that you do indeed have permission. I am responding to your message while I am away from home and the office. As soon as I can, no later than the beginning of next week, I'll respond in more detail and I'll send a formal letter for your records granting permission.

I'll get back with you soon,

Dianne Olivier

Dianne F. Olivier, Ph. D.
Assistant Professor
Educational Foundations and Leadership
College of Education
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
Office: 337-482-6408
Fax: 337-482-5262
Cell: 337-303-0451
Email: dolivier@louisiana.edu
Appendix D

Teacher Interview Protocol
Teacher Interview Protocol

The purpose of this study is to examine the role of the principal in developing and sustaining professional learning communities. The interview questions will ask about your experience and your opinions about PLCs and the roles that principals play.

1. Describe your experience as part of a professional learning community.
   a. How did PLCs get started at this school?
   b. Tell me about the professional learning communities that you are a part of at your school.
   c. What do you do in your PLCs? How do you work together?
   d. Is there anything that could make your experience with PLCs better? Can you elaborate?

2. How is your school organized to support PLC work?
   a. Is time set aside for working as a PLC? If not, when do you meet? How does this support your learning community?
   b. How did these structures come about? How could the principal contribute to supporting structures?
   c. In your opinion, what structures are needed at your school to foster PLC work?

3. Are there opportunities for teachers to share their practice with other teachers at your school?
   a. Can you give an example?
   b. In an ideal school, how could a principal encourage and enable teachers to share their practices?
   c. Can you think of ways that principals hinder teachers from working collaboratively?

4. When decisions need to be made at your school, how are teachers involved in discussing and making the decisions?
   a. What does the principal do with advice from staff members related to decision making?
   b. Can you give an example of a time when you were involved in decision making or initiating change at your school?

5. What would you say are the beliefs or values that guide the work of educators at your school?
   a. What do the teachers, administrators, and other staff members value most at this school? Can you tell me how that value is put into practice?
   b. How would I see that belief in action in the school?
c. How does the principal contribute to developing and seeing that the beliefs of the school are practiced?

6. Tell me about teacher leadership at your school.
   a. What opportunities exist for teacher leadership?
   b. In what ways are teachers seen as leaders?
   c. How is teacher leadership promoted or discouraged by the principal?
   d. Would you describe the principal as one who shares leadership? Can you explain?

7. Some would say that the principal of a school plays a role in the success of PLCS by either fostering or hindering the collaborative work of the PLCS. How would you respond to that?
   a. In your opinion, what (if anything) role has your principal played in the creation of PLCs at your school?
   b. What would you like to see a principal do to keep the work of PLCs going?
   c. How can principals hinder the work of PLCs in a school?

8. Can you tell me about a time in which the principal was proactive in addressing an area where support was needed at your school?
   a. How was the principal involved in developing these supportive structures or conditions?
   b. In an ideal school, how would the principal be involved in developing or sustaining supportive conditions (structural and relational conditions)

9. Describe the relationships that exist among the staff at your school.
   a. In your opinion, how can a principal play a role in developing caring and trusting relationships among a school staff?
   b. In your opinion, what actions of a principal could hinder developing caring and trusting relationships among a school staff?
   c. Could you give an example of a time when your principal has contributed to building positive relationships that encourage the work of PLCs at your school?

10. If you were a principal and could start over in developing PLCs, what would you do differently? The same?

11. Is there anything else that you would like to share about the principal’s role in PLCs?
Appendix E

Principal Interview Protocol
Principal Interview Protocol

The purpose of this study is to examine the role of the principal in developing and sustaining professional learning communities. The interview questions will ask about your experience and your opinions about PLCs and the roles that principals play.

1. Describe your experience as part of a professional learning community.
   a. Tell me about the professional learning communities that you are a part of at your school.
   b. How did PLCs get started at this school?
   c. What do you do in your PLCs? How do PLCs work together?

2. How is your school organized to support PLC work?
   a. Is time set aside for working as a PLC? If not, when do PLCs meet? How does this support your learning community?
   b. How did these structures come about?
   c. In your opinion, what structures are needed at your school to foster PLC work? How could you contribute?

3. Are there opportunities for teachers to share their practice with other teachers at your school?
   a. Can you give an example?
   b. In an ideal school, how could a principal encourage and enable teachers to share their practices?
   c. Can you think of ways that principals hinder teachers from working collaboratively?

4. When decisions need to be made at your school, how are teachers involved in discussing and making the decisions?
   a. What do you do with advice from staff members related to decision making?
   b. Can you give an example of a time when teachers were involved in decision making or initiating change at your school?

5. What would you say are the beliefs or values that guide the work of educators at your school?
   a. What do the teachers, administrators, and other staff members value most at this school? Can you tell me how that value is put into practice?
   b. How would I see that belief in action in the school?
   c. How do you contribute to developing and seeing that the beliefs of the school are practiced?
6. Tell me about teacher leadership at your school.
   a. What opportunities exist for teacher leadership?
   b. In what ways are teachers seen as leaders?
   c. How do you promote teacher leadership as the principal?
   d. Would you describe the leadership at this school as shared leadership?
      Can you explain?

7. Some would say that the principal of a school plays a role in the success of PLCS by either fostering or hindering the collaborative work of the PLCS. How would you respond to that?
   a. In your opinion, what (if anything) role has your principal played in the creation of PLCs at your school?
   b. What would you like to see a principal do to keep the work of PLCs going?
   c. How can principals hinder the work of PLCs in a school?

8. Can you tell me about a time when you were proactive in addressing an area where support was needed at your school?
   a. How have you been involved in developing these supportive structures or conditions?
   b. In an ideal school, how would the principal be involved in developing or sustaining supportive conditions (structural and relational conditions)

9. Describe the relationships that exist among the staff at your school.
   a. In your opinion, how can a principal play a role in developing caring and trusting relationships among a school staff?
   b. In your opinion, what actions of a principal could hinder developing caring and trusting relationships among a school staff?
   c. Could you give an example of a time when you believe that you contributed to building positive relationships that encourage the work of PLCs at your school?

10. If you could start over in developing PLCs, what would you do differently? The same?

11. Is there anything else that you would like to share about the principal’s role in PLCs?
Appendix F

Letter Sent to Principals
March 25, 2011

[Principal name, address]

Dear XXXX:

My name is Ginger Teague and I am a doctoral candidate in the Educational Leadership and Policy Studies Department at The University of Tennessee and also a teacher at Maryville Intermediate School in Maryville. Permission has been received through your school district to conduct research in elementary schools in [school district name]. A copy of the permission is included. I am writing to request permission for [school name] to participate in my doctoral research. The study, The Role of the Principal in Developing and Sustaining Professional Learning Communities: A Mixed Methods Case Study is designed to explore the ways in which the principal can impact the work of PLCs. An explanation of the participation requirement follows.

Participation in the first phase of the study will involve teacher completion of a web-based survey designed to measures perceptions of school practices related to five dimensions of professional learning communities: shared and supportive leadership; shared values and vision; collective learning and application; shared personal practice; and supportive conditions. The survey takes approximately 15 minutes to complete. After data is analyzed from the first phase, two schools will be asked to participate as cases for phase two of the research. In phase two, interviews of the principal and teacher volunteers will be conducted lasting approximately 30 minutes. Data will also be collected through observations of PLCs at work and artifacts related to the study.

The confidentiality of your school and the participants will be maintained throughout the study. The study will be conducted between April and June of 2011. For Phase 2 participants, interviews and observations will be conducted at the convenience of the teachers and principal.

A summary of the data will be available to you if you are interested. Findings from the study may provide valuable insight into the ways in which school leaders can contribute to the implementation of professional learning communities.

I look forward to speaking with you about the possibility of [school name] participating in this study. Please contact me at 865-406-9304 or at gteague1@utk.edu if you would like more information prior to my contact with you. Thank you for your consideration of participation.

Sincerely,

Ginger M. Teague
The Role of the Principal in Developing and Sustaining Professional Learning Communities: A Mixed Methods Case Study

Overview
The purpose of this study is to examine the role of the principal in developing and sustaining professional learning communities in elementary school settings. The purpose of the study will be achieved through data collection methods that include an online survey, interviews, observations, and artifacts. The objectives for this study are:

- To examine the extent are the following dimensions of a professional learning community evidenced in elementary schools: shared values and vision; shared and supportive leadership; collective learning and application; shared personal practice; and supportive conditions
- To examine teacher and principal perceptions of the roles of the principal that foster or hinder the successful implementation of professional learning communities.

Design of the research:

- **Phase 1:** Administer a web based survey that measures perceptions of school practices related to five dimensions of professional learning communities: shared and supportive leadership; shared values and vision; collective learning and application; shared personal practice; and supportive conditions.
  - Links to the survey will be sent to principals.
  - Principals will be asked to forward the link to all teacher email addresses requesting voluntary participation.
  - Surveys should take approximately 15 minutes to complete and can be completed from any computer with internet access.
  - Participants will not be asked to disclose their name. All data will be aggregated to the school or district level. Teachers will be identified by a number only.

- **Phase 2:** Two schools participating in Phase 1 will be asked to participate in the second phase of the study.
  - Interviews will be conducted with the principal and teacher volunteers (8-10) regarding their perceptions of professional learning community practices and the ways in which principals impact PLC work. Interviews will be scheduled at the convenience of the participants and will last approximately 30 minutes.
  - Observations of PLCs at work will be scheduled as applicable to the individual school settings.

What is needed from you?

- Email sent to all teachers informing them of your approval of the research project. With the email, please also call their attention to the link to the online survey. After accessing the link, teachers will be given the opportunity to participate or not to participate.

Contact Information:
Ginger M. Teague  
gteague1@utk.edu  
865-406-9304
Appendix G

Descriptive Statistics of PLCA – R by Descriptor and by PLC Dimension
PLCA – R DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHARED and SUPPORTIVE LEADERSHIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>107</td>
<td>1.64</td>
<td>4.00</td>
<td>3.0926</td>
<td>.53623</td>
</tr>
<tr>
<td>The principal incorporates advice from staff members to make decisions: <strong>SHARED and SUPPORTIVE LEADERSHIP</strong>.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.05</td>
<td>.732</td>
</tr>
<tr>
<td>Staff members have accessibility to key information.</td>
<td>107</td>
<td>2.00</td>
<td>4.00</td>
<td>3.13</td>
<td>.600</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.13</td>
<td>.790</td>
</tr>
<tr>
<td>Opportunities are provided for staff members to initiate change.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>2.94</td>
<td>.684</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions, the principal participates democratically with staff sharing power and authority.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.02</td>
<td>.765</td>
</tr>
<tr>
<td>Leadership is promoted and nurtured among staff members.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.16</td>
<td>.702</td>
</tr>
<tr>
<td>Decision-making takes place through committees and communication across grade and subject areas.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.06</td>
<td>.787</td>
</tr>
<tr>
<td>Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>2.82</td>
<td>.737</td>
</tr>
<tr>
<td>Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>107</td>
<td>2.00</td>
<td>4.00</td>
<td>3.48</td>
<td>.538</td>
</tr>
<tr>
<td><strong>SHARED VALUES and VISION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared sense of values among staff.</td>
<td>107</td>
<td>1.56</td>
<td>4.00</td>
<td>3.1350</td>
<td>.50389</td>
</tr>
<tr>
<td>Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>107</td>
<td>1.00</td>
<td>4.00</td>
<td>3.11</td>
<td>.649</td>
</tr>
</tbody>
</table>
Staff members share visions for school improvement that have an undeviating focus on student learning.

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
<th>Frequency</th>
<th>Trend</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisions are made in alignment with the school’s values and vision.</td>
<td>3.25</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.600</td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared vision among staff.</td>
<td>3.10</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.628</td>
</tr>
<tr>
<td>School goals focus on student learning beyond test scores and grades.</td>
<td>2.86</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.946</td>
</tr>
<tr>
<td>Policies and programs are aligned to the school’s vision.</td>
<td>3.22</td>
<td>2</td>
<td>4</td>
<td></td>
<td>.537</td>
</tr>
<tr>
<td>Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>2.92</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.631</td>
</tr>
<tr>
<td>Data are used to prioritize actions to reach a shared vision.</td>
<td>3.36</td>
<td>2</td>
<td>4</td>
<td></td>
<td>.573</td>
</tr>
</tbody>
</table>

**COLLECTIVE LEARNING and APPLICATION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
<th>Frequency</th>
<th>Trend</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>3.33</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.546</td>
</tr>
<tr>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>3.39</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.626</td>
</tr>
<tr>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>3.40</td>
<td>2</td>
<td>4</td>
<td></td>
<td>.627</td>
</tr>
<tr>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>3.18</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.642</td>
</tr>
<tr>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>3.28</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.626</td>
</tr>
<tr>
<td>Professional development focuses on teaching and learning.</td>
<td>3.28</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.611</td>
</tr>
<tr>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>3.04</td>
<td>1</td>
<td>4</td>
<td></td>
<td>.628</td>
</tr>
<tr>
<td>School staff members are committed to programs that enhance learning.</td>
<td>3.36</td>
<td>2</td>
<td>4</td>
<td></td>
<td>.536</td>
</tr>
<tr>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>3.42</td>
<td>2</td>
<td>4</td>
<td></td>
<td>.567</td>
</tr>
<tr>
<td>Description</td>
<td>Code</td>
<td>Mean</td>
<td>SD</td>
<td>Median</td>
<td>Correlation</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Staff members collaboratively analyze student work to improve teaching and learning.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.37</td>
<td>.607</td>
</tr>
<tr>
<td><strong>SHARED PERSONAL PRACTICE</strong></td>
<td>107</td>
<td>1.86</td>
<td>4.00</td>
<td>3.0254</td>
<td>.47169</td>
</tr>
<tr>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.57</td>
<td>.688</td>
</tr>
<tr>
<td>Staff members provide feedback to peers related to instructional practices.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.79</td>
<td>.640</td>
</tr>
<tr>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.44</td>
<td>.569</td>
</tr>
<tr>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.14</td>
<td>.679</td>
</tr>
<tr>
<td>Opportunities exist for coaching and mentoring.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.11</td>
<td>.649</td>
</tr>
<tr>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.21</td>
<td>.545</td>
</tr>
<tr>
<td>Staff members regularly share student work to guide overall school improvement.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.92</td>
<td>.779</td>
</tr>
<tr>
<td><strong>SUPPORTIVE CONDITIONS—RELATIONSHIPS</strong></td>
<td>107</td>
<td>2.20</td>
<td>4.00</td>
<td>3.2804</td>
<td>.53190</td>
</tr>
<tr>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.52</td>
<td>.555</td>
</tr>
<tr>
<td>A culture of trust and respect exists for taking risks.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.24</td>
<td>.725</td>
</tr>
<tr>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.25</td>
<td>.702</td>
</tr>
<tr>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.09</td>
<td>.680</td>
</tr>
<tr>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.29</td>
<td>.614</td>
</tr>
<tr>
<td><strong>SUPPORTIVE CONDITIONS—STRUCTURES</strong></td>
<td>107</td>
<td>1.70</td>
<td>4.00</td>
<td>3.00</td>
<td>.481</td>
</tr>
<tr>
<td>Time is provided to facilitate collaborative work.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.80</td>
<td>.806</td>
</tr>
<tr>
<td>The school schedule promotes collective learning and shared practice.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.94</td>
<td>.750</td>
</tr>
<tr>
<td>Fiscal resources are available for professional development.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.70</td>
<td>.815</td>
</tr>
<tr>
<td>Appropriate technology and instructional materials are available to staff.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.06</td>
<td>.738</td>
</tr>
<tr>
<td>Resource people provide expertise and support for continuous learning.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.11</td>
<td>.619</td>
</tr>
<tr>
<td>The school facility is clean, attractive and inviting.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.10</td>
<td>.752</td>
</tr>
<tr>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.03</td>
<td>.795</td>
</tr>
<tr>
<td>Communication systems promote a flow of information among staff members.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>3.09</td>
<td>.721</td>
</tr>
<tr>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>107</td>
<td>1</td>
<td>4</td>
<td>2.98</td>
<td>.644</td>
</tr>
<tr>
<td>Data are organized and made available to provide easy access to staff members.</td>
<td>107</td>
<td>2</td>
<td>4</td>
<td>3.17</td>
<td>.591</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

Descriptive Statistics of PLCA – R for Case Study Sites
Bradford Elementary School Data by Item

<table>
<thead>
<tr>
<th>PLCA – R Item</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHARED and SUPPORTIVE LEADERSHIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.00</td>
<td>.447</td>
</tr>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.09</td>
<td>.539</td>
</tr>
<tr>
<td>Staff members have accessibility to key information.</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>2.91</td>
<td>.302</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.00</td>
<td>.632</td>
</tr>
<tr>
<td>Opportunities are provided for staff members to initiate change.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>2.91</td>
<td>.539</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.00</td>
<td>.632</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.18</td>
<td>.603</td>
</tr>
<tr>
<td>Leadership is promoted and nurtured among staff members.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.00</td>
<td>.632</td>
</tr>
<tr>
<td>Decision-making takes place through committees and communication across grade and subject areas.</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>2.82</td>
<td>.405</td>
</tr>
<tr>
<td>Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.18</td>
<td>.751</td>
</tr>
<tr>
<td>Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.55</td>
<td>.522</td>
</tr>
<tr>
<td><strong>SHARED VALUES AND VISION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared sense of values among staff.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.27</td>
<td>.467</td>
</tr>
<tr>
<td>Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.36</td>
<td>.505</td>
</tr>
<tr>
<td>Description</td>
<td>Score 1</td>
<td>Score 2</td>
<td>Score 3</td>
<td>Score 4</td>
<td>Score 5</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.36</td>
<td>.505</td>
</tr>
<tr>
<td>Decisions are made in alignment with the school’s values and vision.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.64</td>
<td>.505</td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared vision among staff.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.18</td>
<td>.405</td>
</tr>
<tr>
<td>School goals focus on student learning beyond test scores and grades.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.00</td>
<td>.894</td>
</tr>
<tr>
<td>Policies and programs are aligned to the school’s vision.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.27</td>
<td>.467</td>
</tr>
<tr>
<td>Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.09</td>
<td>.701</td>
</tr>
<tr>
<td>Data are used to prioritize actions to reach a shared vision.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.64</td>
<td>.505</td>
</tr>
<tr>
<td><strong>COLLECTIVE LEARNING and APPLICATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.27</td>
<td>.467</td>
</tr>
<tr>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.55</td>
<td>.522</td>
</tr>
<tr>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.45</td>
<td>.522</td>
</tr>
<tr>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.09</td>
<td>.302</td>
</tr>
<tr>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.36</td>
<td>.505</td>
</tr>
<tr>
<td>Professional development focuses on teaching and learning.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.36</td>
<td>.674</td>
</tr>
<tr>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>3.18</td>
<td>.603</td>
</tr>
<tr>
<td>School staff members are committed to programs that enhance learning.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.36</td>
<td>.505</td>
</tr>
<tr>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>3.64</td>
<td>.505</td>
</tr>
</tbody>
</table>
Staff members collaboratively analyze student work to improve teaching and learning.  

<table>
<thead>
<tr>
<th>Shared Personal Practice</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>3.55</td>
</tr>
<tr>
<td>Staff members provide feedback to peers related to instructional practices.</td>
<td>3.60</td>
</tr>
<tr>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
<td>3.45</td>
</tr>
<tr>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>3.40</td>
</tr>
<tr>
<td>Opportunities exist for coaching and mentoring.</td>
<td>3.60</td>
</tr>
<tr>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>3.45</td>
</tr>
<tr>
<td>Staff members regularly share student work to guide overall school improvement.</td>
<td>3.45</td>
</tr>
</tbody>
</table>

Supportive Conditions—Relationships

Caring relationships exist among staff and students that are built on trust and respect.  

<table>
<thead>
<tr>
<th>Supportive Conditions—Relationships</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A culture of trust and respect exists for taking risks.</td>
<td>3.73</td>
</tr>
<tr>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>3.45</td>
</tr>
<tr>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>3.45</td>
</tr>
<tr>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>3.55</td>
</tr>
</tbody>
</table>

Supportive Conditions—Structures

Time is provided to facilitate collaborative work.  

<table>
<thead>
<tr>
<th>Time is provided to facilitate collaborative work.</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>The school schedule promotes collective learning and shared practice.</td>
<td>11</td>
</tr>
<tr>
<td>Fiscal resources are available for professional development.</td>
<td>11</td>
</tr>
<tr>
<td>Appropriate technology and instructional materials are available to staff.</td>
<td>11</td>
</tr>
<tr>
<td>Resource people provide expertise and support for continuous.</td>
<td>11</td>
</tr>
<tr>
<td>The school facility is clean, attractive and inviting.</td>
<td>11</td>
</tr>
<tr>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>11</td>
</tr>
<tr>
<td>Communication systems promote a flow of information among staff members.</td>
<td>11</td>
</tr>
<tr>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>11</td>
</tr>
<tr>
<td>Data are organized and made available to provide easy access to staff members.</td>
<td>11</td>
</tr>
</tbody>
</table>
### Campbell Elementary School PLCA – R Data by Item

<table>
<thead>
<tr>
<th>PLCA – R Dimension</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHARED and SUPPORTIVE LEADERSHIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members are consistently involved in discussing and making decisions about</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>most school issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The principal incorporates advice from staff members to make decisions.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.55</td>
<td>.605</td>
</tr>
<tr>
<td>Staff members have accessibility to key information.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.60</td>
<td>.503</td>
</tr>
<tr>
<td>The principal is proactive and addresses areas where support is needed.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>Opportunities are provided for staff members to initiate change.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.50</td>
<td>.513</td>
</tr>
<tr>
<td>The principal shares responsibility and rewards for innovative actions.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>The principal participates democratically with staff sharing power and authority.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.60</td>
<td>.503</td>
</tr>
<tr>
<td>Leadership is promoted and nurtured among staff members.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>Decision-making takes place through committees and communication across grade and</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.80</td>
<td>.410</td>
</tr>
<tr>
<td>subject areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholders assume shared responsibility and accountability for student learning</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.20</td>
<td>.410</td>
</tr>
<tr>
<td>without evidence of imposed power and authority.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members use multiple sources of data to make decisions about teaching and</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.75</td>
<td>.444</td>
</tr>
<tr>
<td>learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SHARED VALUES AND VISION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared sense of values among staff.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.45</td>
<td>.686</td>
</tr>
<tr>
<td>Shared values support norms of behavior that guide decisions about teaching and</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.45</td>
<td>.605</td>
</tr>
<tr>
<td>learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>Decisions are made in alignment with the school’s values and vision.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>A collaborative process exists for developing a shared vision among staff.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.45</td>
<td>.510</td>
</tr>
<tr>
<td>School goals focus on student learning beyond test scores and grades.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.80</td>
<td>.410</td>
</tr>
<tr>
<td>Policies and programs are aligned to the school’s vision.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.65</td>
<td>.489</td>
</tr>
<tr>
<td>Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.20</td>
<td>.616</td>
</tr>
<tr>
<td>Data are used to prioritize actions to reach a shared vision.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.80</td>
<td>.410</td>
</tr>
<tr>
<td><strong>COLLECTIVE LEARNING and APPLICATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.55</td>
<td>.510</td>
</tr>
<tr>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.80</td>
<td>.410</td>
</tr>
<tr>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.70</td>
<td>.470</td>
</tr>
<tr>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.45</td>
<td>.605</td>
</tr>
<tr>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.50</td>
<td>.607</td>
</tr>
<tr>
<td>Professional development focuses on teaching and learning.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.45</td>
<td>.510</td>
</tr>
<tr>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.45</td>
<td>.605</td>
</tr>
<tr>
<td>School staff members are committed to programs that enhance learning.</td>
<td>20</td>
<td>2</td>
<td>4</td>
<td>3.60</td>
<td>.598</td>
</tr>
<tr>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>3.65</td>
<td>.489</td>
</tr>
<tr>
<td><strong>SHARED PERSONAL PRACTICE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members provide feedback to peers related to instructional practices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities exist for coaching and mentoring.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff members regularly share student work to guide overall school improvement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SUPPORTIVE CONDITIONS—RELATIONSHIPS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
</tr>
<tr>
<td>A culture of trust and respect exists for taking risks.</td>
</tr>
<tr>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
</tr>
<tr>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
</tr>
<tr>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SUPPORTIVE CONDITIONS—STRUCTURES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time is provided to facilitate collaborative work.</td>
</tr>
<tr>
<td>The school schedule promotes collective learning and shared practice.</td>
</tr>
<tr>
<td>Fiscal resources are available for professional development.</td>
</tr>
<tr>
<td>Appropriate technology and instructional materials are available to staff.</td>
</tr>
<tr>
<td>Resource people provide expertise and support for continuous.</td>
</tr>
<tr>
<td>The school facility is clean, attractive and inviting.</td>
</tr>
<tr>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
</tr>
<tr>
<td>Communication systems promote a flow of information among staff members.</td>
</tr>
<tr>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
</tr>
<tr>
<td>Data are organized and made available to provide easy access to staff members.</td>
</tr>
</tbody>
</table>
VITA

Ginger Mink Teague grew up in Knoxville, Tennessee. She pursued her Bachelor of Science in Education at The University of Tennessee at Knoxville, graduating in 1980. In 2005, she earned her Masters of Arts in Instructional Leadership from Tennessee Tech University.

As a classroom teacher, Ginger has taught middle school and elementary school in both Knoxville and Maryville, Tennessee. Her most recent teaching assignment has been as a fifth grade math teacher at Maryville Intermediate School in Maryville, Tennessee since 2000. Serving as a Tribes TLC trainer for Maryville City Schools, Ginger has trained classroom teachers and administrators in developing classroom and school environments designed to enhance the development of students. At this time, she is involved in planning the STEM program for a new intermediate school slated to open in the fall of 2012.

In 2009-2010, she served as an Orin Graff Scholar in the Educational Leadership and Policy Studies Department at The University of Tennessee. As a doctoral student, she participated in multiple research studies with her professors and fellow cohort members that were presented at the UCEA and AERA conferences. Research interests include professional learning communities, teacher leadership, and instructional practices. Ginger was also selected as a 2011 David L. Clark Scholar. In 2012, Ginger completed her Doctor of Philosophy degree in Education with a concentration in Leadership Studies at The University of Tennessee.