A Case Study of How Principals Create Collaborative Environments

Amy Blakey
Concordia University - Portland, amycathryn1971@gmail.com

Follow this and additional works at: https://digitalcommons.csp.edu/cup_commons_grad_edd

Recommended Citation
A Case Study of How Principals Create Collaborative Environments

Amy Blakey
Concordia University - Portland
Concordia University–Portland

College of Education

Doctorate of Education Program

WE, THE UNDERSIGNED MEMBERS OF THE DISSERTATION COMMITTEE
CERTIFY THAT WE HAVE READ AND APPROVE THE DISSERTATION OF

Amy Cathryn Blakey

CANDIDATE FOR THE DEGREE OF DOCTOR OF EDUCATION

James Therrell, Ph.D., Faculty Chair Dissertation Committee

Genelle Morris, Ed.D., Content Specialist

Jacqueline Lookabaugh, Ed.D., Content Reader
A Case Study of How Principals Create Collaborative Environments

Amy Cathryn Blakey
Concordia University—Portland
College of Education

Dissertation submitted to the Faculty of the College of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education in
Transformational Leadership

James Therrell, Ph.D., Faculty Chair Dissertation Committee
Genelle Morris, Ed.D., Content Specialist
Jacqueline Lookabaugh, Ed.D., Content Reader

Concordia University—Portland
2018
Abstract

This study examines the perceptions of principals and their respective teachers regarding the principals’ abilities to create a collaborative environment at the elementary level. Isolation of teachers has been a historical practice in most American schools and contributed to a lack of growth among practitioners. Increasing collaboration and ending isolation is one way to improve our country’s educational system for students and teachers. The methodology applied in this study employed a qualitative multiple case study design which provided an in-depth perspective of three elementary school principals and staff respective staff. The participants in this study included three elementary principals and their respective staff. The participants were selected through the process of non-probability convenience sampling, and all of the schools were located in the Pacific Northwest. The major findings of the data collected from interviews, focus groups and observations revealed leaders who possess abilities and support systems including: (a) servant oriented moral compass, (b) developing and maintaining professional relationships, (c) support roles, (d) structured periodic collaborative time, and (e) comprehensive communication are most able to create a collaborative environment. This study’s key themes were identified specific behaviors and character traits principals possess and practice who are able to create a collaborative environment. This study yielded important results which could be utilized to further research which would provide valuable insight for practitioners regarding how effective principals’ creation of collaborative teams were at ending teacher isolation.

Keywords: collaborative environment, principal, teacher, servant leadership
Dedication

This work is dedicated to my dad, Keith Welch, who passed before I completed this journey, he never doubted my ability to accomplish anything I determined to do, he was a loyal, humble, faithful man of God, an example of Christ to all who had the privilege to know him. He was my hero and I could not have attained this goal without his love and support. And to my loving mom, Connie Welch, and my three brilliant children, Leah, Olivia and Gabriel, and my perfect granddaughter, Isabelle, your encouragement, love, and patience with me during the last four years gave me the strength to finish the race. And to this passage from the Bible:

Therefore, since we are surrounded by such a huge crowd of witnesses to the life of faith, let us strip off every weight that slows us down, especially the sin that so easily trips us up. And let us run with endurance the race God has set before us. (Hebrews 12:1 New Living Translation)
Acknowledgements

The following people were instrumental in completing this dissertation. Dr. Therrell, thank you for your time, guidance, understanding, support, and positive encouragement. I would not have been able to reach the finish line without you. Dr. Morris, thank you for your time and the professional and academic lens you viewed my research through. Dr. Lookabaugh, thank you for your time and energy, patience and support, attention to detail, APA format, and willingness to accommodate my timelines. Dr. Beck, Dr. Morelock, and Dr. Deboy, your friendship, and professional support over the past four years enabled me to balance my responsibilities as a principal, student, mom, and daughter. I have sincere appreciation and love for each of you! Kari Montgomery for your humor, friendship, support and editing skills, with much love, thank you for helping to keep a smile on my face! Mary Ziadeh, for your wisdom, insight, friendship, and gift for the precision of detail to my manuscript, all my love and appreciation!
# Table of Contents

Abstract ............................................................................................................................... ii  
Dedication .......................................................................................................................... iii  
Acknowledgements ........................................................................................................... iv  
Table of Contents .............................................................................................................. v  
List of Tables .................................................................................................................... viii  
List of Figures ................................................................................................................... ix  
Chapter 1: Introduction ..................................................................................................... 1  
  The Study Topic .............................................................................................................. 1  
  The Context .................................................................................................................. 2  
  The Significance ......................................................................................................... 3  
  The Problem Statement ............................................................................................... 4  
  The Organization ......................................................................................................... 4  
  Conceptual Framework ............................................................................................... 5  
Chapter 2: Literature Review ........................................................................................... 9  
  Review of Research Literature and Methodological Literature ...................................... 9  
  Review of Methodological Issues .................................................................................. 11  
  Synthesis of Research Findings .................................................................................... 13  
  Critique of Previous Research ..................................................................................... 16  
  Summary ....................................................................................................................... 21  
Chapter 3: Methodology .................................................................................................. 23  
  Research Questions ..................................................................................................... 24  
  Purpose and Design of the Study ............................................................................... 24
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Population and Sampling Method</td>
<td>26</td>
</tr>
<tr>
<td>Data Collection and Procedures</td>
<td>27</td>
</tr>
<tr>
<td>Data Analysis Procedures</td>
<td>32</td>
</tr>
<tr>
<td>Limitations of the Research</td>
<td>35</td>
</tr>
<tr>
<td>Validation</td>
<td>35</td>
</tr>
<tr>
<td>Anticipated Findings</td>
<td>36</td>
</tr>
<tr>
<td>Ethical Issues</td>
<td>37</td>
</tr>
<tr>
<td>Summary</td>
<td>38</td>
</tr>
<tr>
<td>Chapter 4: Data Analysis and Results</td>
<td>40</td>
</tr>
<tr>
<td>Description of Sample</td>
<td>40</td>
</tr>
<tr>
<td>Research Methodology and Analysis</td>
<td>43</td>
</tr>
<tr>
<td>Methodological Grounding</td>
<td>45</td>
</tr>
<tr>
<td>Analysis</td>
<td>48</td>
</tr>
<tr>
<td>Summary of the Findings</td>
<td>51</td>
</tr>
<tr>
<td>Presentation of the Data and Results</td>
<td>53</td>
</tr>
<tr>
<td>Research Question: How Do Principals Create a Collaborative Culture at the Elementary Level?</td>
<td>54</td>
</tr>
<tr>
<td>Structured Periodic Collaborative Time</td>
<td>65</td>
</tr>
<tr>
<td>Chapter 4 Summary</td>
<td>91</td>
</tr>
<tr>
<td>Chapter 5: Discussion and Conclusion</td>
<td>93</td>
</tr>
<tr>
<td>Summary of the Results</td>
<td>93</td>
</tr>
<tr>
<td>Discussion of the Results</td>
<td>96</td>
</tr>
<tr>
<td>Discussion of the Results in Relation to the Literature</td>
<td>102</td>
</tr>
<tr>
<td>Limitations</td>
<td>104</td>
</tr>
</tbody>
</table>
Implication of the Results for Practice, Policy, and Theory.........................................105
Recommendations for Further Research........................................................................111
Conclusion ........................................................................................................................111
References..........................................................................................................................113
Appendices..........................................................................................................................121
Appendix A: Research Timeline.........................................................................................122
Appendix B: Principal Interview Questions ......................................................................123
Appendix C: Teacher Focus Group Questions ..................................................................125
Appendix D: Consent Form.................................................................................................127
Appendix E: Observation Rubric.........................................................................................129
List of Tables

Table 1 Elementary School Demographic Comparison ..........................................................3

Table 2 Participant Demographics..........................................................................................42

Table 3 Observable Evidence of a Collaborative Team at School A in April 2018 ................69

Table 4 Observable Evidence of a Collaborative Team at School A in May 2018 ...............74

Table 5 Observable Evidence of a Collaborative Team at School B in April 2018 ...............77

Table 6 Observable Evidence of a Collaborative Team at School B in May 2018 ...............79

Table 7 Observable Evidence of a Collaborative Team at School C in April 2018 ...............78

Table 8 Observable Evidence of a Collaborative Team at School C in May 2018 ...............84
List of Figures

Figure 1: Conceptual Framework .................................................................6
Figure 2: Revised Conceptual Framework ....................................................54
Figure 3: Venn Diagram Intersection of Commonalities of the Initial and Revised Conceptual Framework .............................................................103
Chapter 1: Introduction

For over a century the American education system has tended to isolate teachers from colleagues and rob them of the opportunity to learn and grow through collaboration (Little, 1987, 1990; Lortie, 1975; Powell, Farrar, & Cohen, 1985). Mike Schmoker (2006) stated, “Isolation is the enemy of improvement” (p. 23). In other professions, as novice workers transitioned from the University to the field, teams worked together to refine their craft, provide each other with real-time feedback, and grow under the direct guidance of veterans and experts, alongside other newcomers to the field. In the medical, legal, and engineering fields, this practice is expected, welcomed and systematized (City, Elmore, Fiorman & Teitel, 2009).

Contrary to these best practices, it was my experience as a first-year teacher, as well as the principal of several new educators over the last eleven years, that teachers are often given standards, curriculum, and class lists and told to change the world. Educators who are fortunate may have a mentor program in place at the schools where they work, perhaps some scheduled time for professional development, and a few hours a week to meet with their grade level teams. Unfortunately, as a professional currently working in the education system, it is my experience that there is a long way to go with respect to implementing grade level teacher teams to the same degree of effectiveness that has been established in other professional fields.

The Study Topic

Collaboration is an essential process for ending teacher isolation and transforming education. I have discovered that most teachers are amazing individuals who love to learn and want to share their passion for learning with their students. They need opportunities to continue to learn and grow to reach their full potential. Principals are responsible for creating these learning opportunities for their staff. Also, principals must build trust, promote positive
relationships, support innovation, foster creativity, and motivate their staff (Brown, Finch, MacGregor & Watson, 2012; Patterson, Grenny, McMillan & Switzler, 2013). Educational leaders start with establishing a shared vision among stakeholders. The literature suggests schools that have successful collaborative teams also have the same positive school culture with high levels of trust and strong relationships evident in their schools. As a result, my research question became: How do principals create a collaborative environment at the elementary level?

The Context

Over the past two decades, research on collaboration in education has increased. The awareness of the educational community with regards to the importance of ending teacher isolation, coupled with the work done by many districts in the area of professional learning communities, has brought to light the need for change (Schmoker, 2006). DuFour and Eaker (1998) have led the way DuFour specifically by sharing his experiences as an administrator, and leading his school to become a collaborative learning organization. However, in many schools across the country, a lack of collaboration persists. The literature suggests this is due to missing or dysfunctional systems and the overwhelming power of cultural status quo (Schmoker, 2006). This study takes place at three elementary schools located in the Pacific Northwestern United States. All three schools are kindergarten through fifth grade. Two of the schools have Spanish Immersion programs. The school demographics are summarized in Table 1, below.
Table 1

*Elementary School Demographic Comparison*

<table>
<thead>
<tr>
<th>Schools</th>
<th>Number of Students</th>
<th>Certificated Staff</th>
<th>Principal Tenure</th>
<th>Students Proficient in Math</th>
<th>Students Proficient in Reading</th>
<th>Socio-Econ Dist. %</th>
<th>EL Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A (Spanish Immersion)</td>
<td>562</td>
<td>32</td>
<td>18</td>
<td>55</td>
<td>61</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>School B (Spanish Immersion)</td>
<td>436</td>
<td>26</td>
<td>16</td>
<td>16</td>
<td>29</td>
<td>70</td>
<td>61</td>
</tr>
<tr>
<td>School C</td>
<td>558</td>
<td>30</td>
<td>8</td>
<td>51</td>
<td>55</td>
<td>44</td>
<td>31</td>
</tr>
</tbody>
</table>

The Significance

The continued research of collaboration in education is necessary for an increase in successful implementation of a systemic and cultural transformation of American schools (DuFour & Eaker, 1998). In high-achieving districts where a large percentage of their students are proficient or advanced, a sense of urgency to change may not be present. In schools like these, the challenge to inspire, motivate, and lead change can be daunting for principals. However, for the small percentage of students who are not growing academically, these changes are critical.

Principals and teachers in historically exemplary schools and districts can be resistant to change. Muhammad (2009) describes these educators as fundamentalists:

They are vanguards of tradition and the protectors of the status quo. They are relentless in their attempts to discourage change and protect a system that has allowed them to function and thrive, and they organize to protect this traditional way of practice. (p. 61)
The current system may be working for a significant percentage of the students, but not all of them. Educational leaders are tasked with creating a sense of urgency around the growth and success for all students, not just most or some (Buffum, Mattos & Webber, 2009; DuFour & Eaker, 1998; Muhammad, 2009). Additional research in the targeted area of high achieving schools and implementation of collaborative cultures would benefit many in the educational community. Furthermore, the research would support the work of leaders with a desire to end teacher isolation, increase collaboration, and academic growth for all students (Barnett & McCormick, 2004; Conner, 2015; Crum, Sherman, & Myran, 2009; Csiksezentmihalyi, 1997; Doidge, 2012; Gheusi, Ortega-Perez, Murray, & Lledo (2009); Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000).

The Problem Statement

How do principals create collaborative environments at the elementary level? In many schools across the country, a lack of collaboration between teachers persists. Elementary school teachers are unique in their needs regarding leadership style, culture, and systems, which can cultivate transformation. The literature suggests this is due to missing or dysfunctional systems and the overwhelming power of cultural status quo. Principals of elementary schools must balance the role of learning leader, as well as being the building and safety manager. These competing priorities can make leading a culture change a daunting task for even veteran leaders. Moreover, in historically high-achieving districts and schools, how are leaders able to motivate change among staff who are satisfied with the status quo.

The Organization

Review of the literature supports the conceptual framework of my study. As such, the following review begins with analyzing the importance of a shared vision (Barnett &
McCormick, 2004; Conner, 2015; Crum, Sherman, & Myran, 2009; Csikszentmihalyi, 1997; Doidge, 2012; Gheusi, Ortega-Perez, Murray, & Lledo (2009); Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Next, the six foundational components of collaboration include: (a) building trust; (b) promoting positive relationships; (c) supporting innovation; (d) fostering creativity; (e) leading the learning; and (f) motivating are reviewed. A majority of the research shares common themes and findings with regards to collaboration. For example, trust and positive relationships were observed in most studies that examine collaboration in schools. However, principals as learning leaders who model a growth mindset in their own work, and teacher motivation are not as frequently analyzed or focused on for data collection in connection to a collaborative culture. The literature review will thoroughly dissect scholarly articles, which encapsulate current research-based best practices in creating collaborative environments.

**Conceptual Framework**

Rativich and Riggins (2017) define a conceptual framework as, “An argument about why the topic one wishes to study matters, and why the means proposed to study it are appropriate and rigorous” (p. 3). A conceptual framework should move beyond a flow chart embedded in one section of a thesis. It should represent the essence of the work and correlate to each detail of the research, as illustrated in Figure 1, below.
Figure 1. A flow chart of describing the relationship of principal leadership and the social constructivist theory this study is based on, with the foundational components of culture and vision which support the five key factors needed for principals to create a collaborative culture.

The conceptual framework for this research is based on the collaboration theory which stems in large part from Vygotsky (1978) and his version of social constructivist theory. The application of this theory to my study translates into: when teachers learn together, they construct meaning and grow through the social interaction. Principals lead change by creating a collaborative culture which promotes transformation (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 2005). In the elementary setting, collaboration is defined “as teams of teachers who work interdependently to achieve common goals—goals linked to the purpose of learning for all—for which members are held mutually accountable” (DuFour & Eaker, 2009). The literature also states that specific characteristics are found in healthy organizations with high levels of effective collaboration (Barnett & McCormick, 2004; Connor, 2015; Crum, Sherman & Myran,
Some of those key characteristics are trust, positive relationships, innovation and creativity, learning, growth from success, and unsuccessful endeavors (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). This dissertation will explore these key characteristics, as well as the best practices and current research that recommend what educational leaders should do to create collaborative environments at the elementary level.

Educational leaders are responsible for creating a shared vision for their organization (DuFour & Eaker, 1998; Fullan, 2008). The vision is developed collectively and is a dream of what could be. Educators imagine the best instructional environment, student potential for learning outcomes, and utopian school—this is what a shared vision is (Conner, 2015; Crum, et al., 2009; Doidge, 2012; Gheusi, Ortega-Perez, Murray & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). The collective group lead by the principal develops this vision, which drives all of the work that is done moving forward (DuFour & Eaker, 1998). The importance of collaboration, creating vision, and setting a mission and goals, is similarly stated by Valdez and Ikemodo (2015):

Through an in-depth analysis of more than 200 public schools, New Leaders found that the most effective principals took action in three intersecting areas: as instructional leaders, principals support teachers in improving classroom instruction; as talent managers, principals manage staff (such as recruiting, hiring, developing, and retaining exceptional talent), build learning communities, and provide ongoing feedback; and as culture builders, principals create great places to work and learn. (p. 7)
The research by Valdez and Ikemodo (2015) shows the importance of principals possessing three distinct characteristics, (a) instructional leadership, (b) recruitment and retention of gifted educators, (c) creating a learning community, and (d) positive culture.
Chapter 2: Literature Review

The purpose of the research literature and methodological literature review is to present foundational evidence for the new study (Concordia, 2016, pp. 6–7). This review will provide empirical and theoretical analysis of the current research regarding the effectiveness of elementary school principals in creating a collaborative culture. The empirical review provides a synthesis of the state of the research, while the theoretical review provides analysis of the theories proposed in the research (Concordia, 2016).

Review of Research Literature and Methodological Literature

The foundation of the collaborative organization is built on trust (DuFour & Eaker, 1998; Fullan, 2008; Leithwood & Steinbach, 1995; Tschannen-Moran, 2000). The leader must establish the trust for relationships to grow and individuals to work effectively (DuFour & Eaker, 1998; Fullan, 2008; Leithwood & Steinbach, 1995; Tschannen-Moran, 2000). Trust is established by honoring commitments, following through with plans and being true to standards of excellence (Leithwood & Steinbach, 1995; Tschannen-Moran, 2000). Trust is created between the principal and teacher leaders, as well as within collegial peer groups. Trust allows for positive relationships to grow. Healthy relationships within a safe environment contribute to the collaborative process and enhance the ability of teams to accomplish tasks (Barnett & McCormick, 2004; Conner, 2015; Crum, et al., 2009; Csiksezentmihalyi, 1997; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczerzuls & Huizenga, 2014; Tschannen-Moran, 2000). The encouragement of connection between staff is an important part of the principal’s role as transformational leader (Christakis & Fowler, 2010; Hallowell, 1999; Hattie, 2009).
Furthermore, in the field of neuroscience, researchers have discovered special binding neurons called “mirror neurons” which connect humans mentally and emotionally (Iacobni, 2008). This finding—in combination with neuroplasticity, the ability of the brain to regenerate, repair, and grow—creates a scientific basis for endless possibilities when humans collaborate. This new brain research has implications for the working relationships of educators (Christakis & Fowler, 2010; Hallowell, 1999). Teachers work closely at the elementary level, often sharing students within grade levels as well as vertically. This unique dynamic creates many opportunities for interaction on a regular basis where staff discuss student growth and progress towards goals (DuFour & Eaker, 1998).

Once a solid foundation of trust and positive relationships has been established by the principal and staff, innovation and creativity are then given the space to thrive. Teachers need to feel supported and free to take risks without fear of negative evaluations (Conner, 2015; Crum, Sherman & Myran, 2009; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesniul & Huizenga, 2014; Tschannen-Moran, 2000). Principals model failing gracefully when their own schoolwide initiatives do not go as planned (Cherkowski & Walker, 2013). Learning from failed attempts can be transformational for individuals and organizations. Also, play and enjoyment increase innovation and creativity (Brown, 2009; Patterson, Grenny, McMillan, Switzler, & Maxfield, 2013).

An important part of leading collaboration is supporting the teachers in acquiring new knowledge and the skills necessary to provide the best instruction for their students (Conner, 2015; Crum, et al., 2009;; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesniul & Huizenga, 2014; Tschannen-Moran, 2000). Principals must take the time to establish trust, nurture relationships, and set the stage for
creative innovations. Their own learning, however, is equally important: principals must be learning leaders. The never-ending cycle of improvement is an internal process which begins with the educational leader (Conner, 2015; Crum, et al., 2009; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Successful principals prioritize their professional development and growth, maintaining their knowledge of current best practices in the field of education (Fullan, 2014). Their passion for growth is contagious and motivates staff, students and their communities to adopt their love of learning (Fullan, 2014; Hattie, 2009; Kirtman, 2013).

Part of the learning process is making mistakes. How a principal responds to a teacher’s misstep can dramatically influence the teacher’s future willingness to take risks, learn, and grow. The opportunity to learn from mistakes, improve, adjust, and try again is exactly how excellence is achieved. Principals who can create a collaborative culture celebrate success and learn from failures (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 2005). DuFour and Eaker (1998) emphasized the importance of celebrating small achievements along the journey. Take notice of any effort to move in the right direction. A kind word, specific verbal, face-to-face praise is powerful and will make a huge difference in morale (DuFour & Eaker, 1998; Hallowell, 2005).

**Review of Methodological Issues**

The term “methodological issue” is used to describe the analysis an author conducts of previous studies in the literature review process. Specifically, as Boote and Beile (2005) stated, “Any sophisticated review of literature should also consider the research methods used in that literature and consider the strengths and weaknesses of those research methods in relation to the state of the field” (pp. 7–9). Hence, a researcher should carefully conduct a review of the literature to gain clarity about the methodologies and methods used to knowledgeably choose
relevant, logical methods and ways to use methods which might then compensate for weakness or limitations of other studies.

The methodological analysis of the literature related to principals creating a collaborative culture in elementary schools reveals best practices in the field with logical methods used in the majority of the research (Conner, 2015; Crum, et al., 2009; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). The studies reviewed used mostly qualitative methods to gather data. More specifically, interviews, observations, and focus groups were the frequently identified used methods. The interviews and focus groups were informative. However, during the actual collaboration time, little observational data was typically gathered. In this study, in-depth interviews with principals and staff coupled with observations of real-time collaboration, could provide meaningful data regarding how administrators may create collaborative cultures.

Observations are used by researchers to collect accurate information to support their theses. Observations are time-consuming, however, they offer an in-depth perspective that is inaccessible by other methods of data collection. The opportunity to gather data from observations of collaboration in action would significantly improve the understanding of the process, and how principals can best support this effort in their schools (DeMatthews, 2014). Machi and McEvoy (2016) stated that high-quality data are accurate, precise, and authoritative, and the importance of the proximate standard. The authors stressed the closeness of the researcher who influences the relevancy of the data collected (p. 49). Therefore, the increased use of observations, in addition to interviews and focus groups, is a valuable part of a new research design.
Synthesis of Research Findings

The purpose of a literature review is to synthesize relevant studies in such a way as to support the design and research question of a new study. Synthesis of research findings is a major step in the process by which researchers may illuminate consistencies in the current research. Then researchers are able to support further studies or differences which may lead to the development of a unique framework and set of methodologies to answer their particular question (Connor, 2015; Crum, Sherman, & Myran, 2009; Doidge, 2007; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Furthermore, the synthesis of the literature is necessary for the researcher to establish an argument of authority for their study. According to Machi and McEvoy (2016), “The researcher uses an implicative argument of authority to justify the thesis” (p. 126). Therefore, the synthesis is a critical and foundational part of the literature review which guides the new research. The synthesis of literature regarding how educational leaders create collaborative environments appears to rely on three prominent theories: (a) culture; (b) relationship; and (c) systems.

Culture. First, the culture of a school influences the effectiveness of collaboration. Moreover, the evidence is clear that the school culture is strongly influenced by the leadership. In addition to school culture, the relationships and trust among the principal and staff, and between staff and their peers, is found to be another significant theory (Barnett & McCormick, 2004; Connor, 2015; Crum et al., 2009; Csikszentmihalyi, 1997; Doidge, 2012; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). The structure and systems in place impact collaboration in schools as well. Standardized and systemic approaches allow for
innovation and creativity, and the staff have more frequent and effective collaboration (Demir, 2015; Hallowell, 1999; Tschannen-Moran, 2000; Wasley, Hampel, & Clark, 1997; Weick, 1996).

The literature shows how successful principals must first develop a positive culture before implementing systemic structural change. At the August 2016 PLC Institute, Mattos (2016) stated, “Culture trumps structure every time.” Trust is the foundation on which a new culture can be birthed. Moreover, administrators are responsible for establishing trust by being authentic leaders, following through on commitments, honoring traditions, creating a shared vision, and leadership (DuFour & Eaker, 1998; Fullan, 2008; Leithwood & Steinbach, 1995; Tschannen-Moran, 2001). Fullan (2014) advises that principals can maximize their impact by adopting three key roles: those of “learning leader, system player, and agent of change” (p. 9). Organizational studies research by Weick (1985), cite a lack of trust as one of four reasons for resistance to change: “People persist when they don’t trust the person who tells them to change” (p. 306). DeMatthews (2014), Demir (2015), DuFour and Eaker (2009), and Tschannen-Moran (2000) theorize trust as an essential base for a healthy school culture.

**Relationships.** Relationships in an elementary school can be a powerful political asset or potential liability for principals who attempt to create a collaborative culture. The teacher-to-principal as well as teacher-to-teacher relationships are equally important. Tschannen-Moran (2000) theorized collaboration between these groups was correlated to the relationships between the groups and their level of trust. The research quantified the correlation between collaboration and trust. Kilinc (2014) examined the relationship between teacher leadership and school culture. The researcher theorized, “Teacher leaders can serve as facilitators of learning and teaching, mentors for their colleagues and experts in their fields” (p.1730). Kilinc (2014) refers to Fullan (1994) and the “Significant role in building positive relationships among colleagues,
facilitating professional learning for both themselves and others and leading change” (p. 1730). Positive principal-teacher connections are vital to creating a collaborative environment.

**Systems.** Principals who can establish systems and structures which encourage creativity, innovation, and collaboration are prevalent theories found in the literature review. Leaders who provide and protect time for staff to meet regularly empower teams to learn, experiment, explore and grow in their knowledge and skills, are successful in creating positive collaboration. Hallowell’s (2011) brain research theorizes that in order for individuals to “shine” there are five steps leaders can take to get the most out of their employees. Those steps include: (a) placement of people in the right jobs so their brains light up, (b) restoring positive human connections, which fuel peak performance; (c) encouraging play (i.e., imaginative engagement); (d) and grapple and grow to create conditions where people want to work (Hallowell, 2011, pp. 2–20). These structures and systems are purposefully implemented by the educational leaders who have the authority to establish new processes.

It is the principal’s responsibility to know their staff and ensure proper placement of teachers. Also, efficient and effective systems regarding curriculum, communication, and management of the school, are essential elements to sustaining collaboration (Fullan, 2014; Hallowell, 2011). Fahey (2011) theorized the “Critical Friends” protocols are a successful structure, “principals clearly needed the support and learning from each other the Critical Friends Group gave them. They became a PLC and were then able to go to their respective schools and implement the same types of structures” (p. 32). PLC stands for Professional Learning Community (Stoll, Bolam, McMahon, Wallace & Thomas, 2006). Stoll and colleagues (2006) assert that while there is no universally recognized definition of PLCs, it is understood this term generally applies to “a group of people sharing and critically interrogating their practice in an on-
going, reflective, collaborative, inclusive, learning-oriented, growth-promoting way” (Stoll et al., 2006, p. 223). Systems and structures of support for leaders as well as staff contribute to a collaborative culture.

**Critique of Previous Research**

The critique of the research analyzes the relationship between the theories/claims the literature presents, the findings and methodologies used, and the warrants/conclusions made by the researcher. Machi and McEvoy (2016) define literature critique as that which “interprets the current understanding of the research topic and logically determines how this knowledge answers the research question” (p. 108). The critique uses descriptive reasoning to assess the data and determine the “if, then” relationships presented in the literature (Machi & McEvoy, 2016). Machi and McEvoy (2016) list nine logic patterns, which can be applied to an argument in the research and determine the legitimacy of the conclusions drawn from findings. This study will use the reference to authority logic pattern, “The rule of logic states that because the expert finds the case to be true, and the expert is a valid source, then it is true” (Machi & McEvoy, 2016, p. 119). It is also the purpose of the critique to determine if the scientific process is flawed, contains weaknesses or fallacies in the arguments, findings, and/or conclusions drawn by the research. Furthermore, the outcome of the critique of the literature review can support the need for new research and contribute to the justification of a new claim (Machi & McEvoy, 2016).

The literature review indicates school culture and trust to be common characteristics found in schools which reported a collaborative environment. The study conducted by Tschannen-Moran (2000) used quantitative methods to determine the canonical correlation between the two variables of collaboration and trust. The study methods included two separate questionnaires developed by the research team, one pertaining to trust, the other collaboration.
The questions separated out perceptions of trust and collaboration with the principal, teacher and clients (parents and students). The research team conducted a pilot study prior to conducting the study with the 45 sample schools. The study found stronger correlations between trust and collaboration between the school and parents, as well as the teachers and their colleagues. However, “Collaboration with the principal had little influence” (p. 327).

Demir’s (2015) research examined the effect of trust of elementary staff with relations to their organization and the perception of the school’s culture of teacher leadership. The method used was a causal-comparative design with two scales for questions related to the personal information of teachers. Specifically, the Teacher Leadership Culture Scale-developed by Demir – and the Omnibus T-Scale were used in the research. The study found a principal’s ability to empower teacher leaders resulted in greater trust among staff, and an increase in positive culture and collaboration. Demir (2015), citing Angella, Nixon, Norton, and Niles (2011), “observed that in schools where the teacher leadership model is successfully implemented, school administrators gained the trust of teachers and changed school conditions favorably for teacher leadership” (p. 630).

A qualitative study of five high schools provided in-depth information on leadership and collaboration (Wasley, Hampel & Clark, 1997). Wasley, Hampel, and Clark (1997) used an interactive collaborative inquiry design model to collect data on school reform and change efforts, and the specific “clues” which focused on types of collaboration necessary to promote change. The data collected was from “snap shots” based on observations, focus groups, interviews, and journal notes completed by students and teachers that were collected as researchers shadowed students in the school over the course of the week. The data was then provided to the school staff for analysis and action was taken based on the results deduced from
the data. The process yielded the following important “clues” which address vision, continuous improvement, feedback, self-analysis, simultaneous redesign, and parental involvement (pp. 4-11).

The research conducted by Wasley, Hampel, and Clark (1997) was a significant part of the foundation DuFour and Eaker (1998) used in their work to develop the Professional Learning Communities (PLC) model. They define PLC’s as “an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve” (p. 11). Du Four and Eaker (1998) identify six characteristics of PLC’s: (a) shared mission, vision, and values; (b) collective inquiry; (c) collaborative teams; (d) action orientation and experimentation; (e) continuous improvement; and (f) results orientation. Despite the fact the work done by Wasley, Hampel, and Clark (1997) was taken from high schools, it has been my experience the fundamental components are true at the elementary level as well.

Another important theme evident in the literature review is the influence collegial relationships have in creating a collaborative culture. Relationships that principals have with their respective staff, as well as peer-to-peer educator relationships, all contribute to the collaborative culture. Crum, Sherman, and Myran (2009) conducted research on the best practices of elementary school leaders. Their design methodology was an inductive exploratory study which revealed how principals facilitate to promote a positive culture, which in turn leads to high student achievement. Twelve principals participated in in-depth interviews. The findings resulted in the following categories: “leadership with data; honesty and relationships; fostering ownership and collaboration; recognizing and developing leadership; and instructional awareness and involvement.” (p. 54) In the area of honesty and relationships, principals
reported the importance of trust in creating relationships, delegating and empowering staff to make decisions, working as a team, and specific feedback on performance (Crum et al., 2009).

The power of relationships is the key element and a common theme in most research regarding creation of a collaborative environment. The methodologies used in the literature review support the theories presented. Trust, transparency, and the ability for leaders to model this behavior is revealed in the methods used. The use of interviews, observations, focus groups, and surveys in several of the studies revealed the importance of healthy relationships between principals and teachers (Crum et al., 2009; Demir, 2015; DuFour & Eaker, 2004; Tschannen-Moran, 2000; Wasley, Hampel, & Clark, 1997).

The methodological analysis of the literature related to principals creating a collaborative culture in the elementary schools revealed best practices in the field with logical methods used in the majority of the research (Barnett & McCormick, 2004; Conner, 2015; Crum, et al., 2009; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Moreover, the methods used to collect data aligned effectively with the research questions upon which the studies were focused. The studies reviewed mostly implemented qualitative methods to gather data. Several of the studies used interviews of teachers and principals, focus groups, and observations of staff during collaborative times. The study conducted by Tschannen-Moran (2001) used empirical evidence linking collaboration and trust in schools. Tschannen-Moran (2001) clearly articulated the purpose of the study and significance of establishing a connection between trust and collaboration. The review of the literature was balanced incorporating research done by Leithwood and Steinback (1995) which presented data on characteristics of successful school principals. In addition, Tschannen-Moran (2001) included research done by Bartunek and Keys
(1975), which painted a less optimistic perspective on collaboration in schools. The synthesis of the research provided a clear rationale for the focus on trust and collaboration. The findings established stronger correlations between trust and collaboration between the school and parents, as well as the teachers and their colleagues. However, “Collaboration with the principal had little influence” (Tschanned-Moran, 2001, p. 327). The findings confirmed the hypothesis that collaboration and trust are strongly related in the relationships between teaching staff, and staff and parents.

The study conducted by DeMatthews (2014) examined principal and teacher collaboration and distributed leadership in learning communities. This qualitative multi-case study took place in six elementary schools in West Texas. The districts were similar due to the isolated areas where they were located. The schools were considered effective in their implementation of PLCs. The researchers used surveys, interviews and observations regarding the teachers’ perspectives of their collaboration. DeMatthews stated, “Teachers described their PLCs using a variety of terms including, “a safe place to share and grow”, and a place “where everyone comes together to solve problems, address concerns, and learn” (p. 189). The findings aligned with the hypothesis made by DeMatthews (2014). Several of the anecdotal notes described the principals’ views of the importance of teacher leaders and how they can influence a staff in a way that may elude to an administrator. The analysis procedures of the data collected were appropriate for the research. The findings explained in-depth the connections and common themes between each of the data points. The findings in the surveys, interviews and observations supported the validity of the data used, with each of them revealing positive outcomes in learning communities for schools where principals supported distributed leadership (DeMatthews, 2014).
Szczesiul and Huizenga (2014) collected qualitative data from two different schools located in the Northeastern United States. Teachers were interviewed and observed during their collaborative team meetings. The researchers gathered information on how principals motivated staff to engage in the professional development and implement best practices. The methods used were effective in collecting valuable and insightful data regarding the principals’ abilities to encourage collaboration. The results supported the hypothesis which identifies a burden of leadership for principals. The data revealed challenges for administrators with regards to implementing systems while creating a rationale and buy-in for real collaboration. The use of interviews and observations is a robust method for collecting meaningful data regarding behaviors principals use which affect collaboration positively or negatively (Machi & McEvoy, 2016).

Summary

The review of the current literature overwhelmingly supports further research and the importance of asking: How do principals create a collaborative culture at the elementary level? Because collaboration is a complex topic, additional focused studies are needed regarding how administrators can create healthy cultures. Regarding the study above, Machi and McEvoy (2016) stated, “Reference to authority is the most common argument pattern type used in forming a research question. The logic employed depends on reliable expert testimony or observation that directly applies to the case defined in the research question” (p.119). Therefore, additional in-depth case studies would be a valuable addition to the current body of research on the topic of principals’ leadership of collaboration. Moreover, an in-depth case study of principals and their teachers’ collaboration over the course of the school year could provide fresh insights beneficial to practitioners in the field of educational leadership.
Chapter 3: Methodology

The purpose of this chapter was to describe the methodology applied in this study to identify how principals create a collaborative culture at the elementary level. This chapter was the cornerstone of the study because it turned the theories regarding principal leadership into action, and provided practical application to the field as it relates to effective collaboration. The following information acted as a map for research, a guide to support replication, data collection processes, and to establish credible and valid findings (Krathwohl & Smith, 2005). The study connected previous research theories and findings to the goals and objectives of the conceptual framework in this study. This study employed a qualitative case study design which provided an in-depth perspective of three elementary school principals and their respective staff.

The philosophical foundation of this study was based on a non-positivism perspective. Trochim (2006) from the Web Center for Social Research Methods defines positivism, which is contrary to non-positivism, as:

A position that holds that the goal of knowledge is simply to describe the phenomena that we experience. . . . The purpose of science is simply to stick to what we can observe and measure. Knowledge of anything beyond that, a positivist would hold, is impossible (3rd para).

This study collected data on the perspective of the participants regarding the principal’s creation of a collaborative culture. The philosophy align with the reality of the participants and researcher as significant but was not strictly observable or measurable. The teachers' responses to interview questions or observations of a collaborative meeting is one example of observable perspectives. Therefore, the study philosophically represented non-positivism which states that reality is not directly knowable but is inferred by convention or consensus (Bruner, 1960).
This study was also based on a social constructivist philosophy with the purpose to gather a broad understanding of the situation. Vygotsky's theories stress the fundamental role of social interaction in the development of cognition, as he believed strongly that community plays a central role in the process of “making meaning“ (McLeod & Seashore, 2006). The goal of this study was to gather rich data about the creation of a collaborative culture through interviews and observation of the social interactions of the principal and staff. The stakeholders’ perspectives were critical to the process and generalized theories which support the inquiry. The study included an inductive research approach, which was focused on meaning outcomes and human interest.

**Research Questions**

According to Creswell (2002), qualitative research is an inquiry-based approach where the researcher “explores a central phenomenon” and focuses on broad general questions (p. 58). A good qualitative research question seeks to explore, understand, and discover one key concept. The critical, overall question addressed that was presented in this research is: How do principals create a collaborative culture at the elementary level? The specific research question, which provides a reasonable scope and focus for study, then became: What specific strategies and systems do principals use with their teachers to develop a culture of collaboration? The case study gathered detailed information from the principal and staff on the conceptual framework of the study which included a shared vision, trust, positive relationships, innovation creativity, learning, and growth.

**Purpose and Design of the Study**

The purpose of this study was to gather rich descriptive data on the topic of collaboration in an elementary school. The focus was on the principal and how that individual created a
culture which supported authentic, interdependent teamwork with their staff. Ending teacher isolation is the key to ongoing continuous improvement of education practice (Schmoker, 2006). As the leader of the school, the principal has the authority to establish and support a culture and system which will end isolation and develop a collaborative environment (DuFour & Eaker, 1998). The literature includes overwhelming evidence that a principal’s shared vision, ability to create trust and positive relationships are the factors necessary to create a collaborative environment.

This study employed a qualitative methodology. The literature reviewed in chapter 2 of this study included several qualitative studies which used a variety of methods, including: (a) a canonical correlation by Tschannen-Moran (2000); (b) a causal-comparative design by Demir (2013); (c) the multi-case study by DeMathews (2014); and (d) a multi-case study by Szczesiul and Huizenga (2014). A qualitative case study provided detailed insight into the perspectives of three principals and their staff in their collaborative journeys.

The data collected from this process may contribute to the general understanding of how practitioners can improve upon their own collaborative culture. This study used Creswell’s (2013) process which enabled the researcher to envision the steps and plan for a successful case study. Creswell recommended the use of multi data collection sources including observations, interviews, documents, audio-visual recordings, and triangulation of the data to ensure validity. This study used: (a) interviews; (b) focus groups; (c) monthly observations of collaborative meetings; and (d) documents specific to the principal and teacher teamwork.

Observations of real-time team collaboration, interviews with the principal and staff, and focus groups were the methods employed in this study. Yin (2014) described the broad lens which a case study enables a researcher to adopt. A case study can provide a researcher with a
perspective unlike that of ethnographic or grounded theory approaches, yielding powerful, rich data on the topic. Merriam (1998) stated:

The researcher brings a construction of reality to the research situation, which interacts with other people’s constructions or interpretations of the phenomenon being studied. The final product of this type of study is yet another interpretation by the researcher of others’ views filtered through his or her own. (p. 22)

**Research Population and Sampling Method**

The schools’ populations ranged from 500–604 students in kindergarten through fifth grade. Each grade level had between three and four teachers for a total of 66 classroom certificated staff as well as several support staff. Creswell (2013) recommended five to 25 participants in a qualitative case study. The DeMathews study (2014) engaged six principals and their respective staff. Tschannen-Moran (2000) used 45 participants at one school which included the principal and teachers, and Szczesiul and Huizenga (2014) included fifteen teachers. In the fall of 2018, the subject school had a complete Spanish Immersion program with an immersion class offered at each grade level in kindergarten through fifth grade. The principals’ experiences as elementary school administrators ranged from eight to twelve years in the role of principal.

The sampling method for this study was non-probability convenience sampling which the literature cautions is more apt to contain bias (Creswell, 2013; Neuman, 2006). This method was used to produce a representative sample since randomization is not possible. The principals, and one volunteer team from each school site, were the focus of the study. In order to respect the role of each principal, their district policies and union relationships, this researcher did not invite the participation of individual teacher teams. Instead, after the principal agreed to participate, he
or she then shared the letter provided by the researcher, which outlined the purpose of the study and an invitation for teams to volunteer. Once those teams were identified, the principal provided the researcher with the contact information of the volunteers, and the consent to communicate with them in order to schedule focus groups and observations. The researcher was also invited to a staff meeting, and introduced to the teachers at the school as well as the participant team.

**Confidentiality.** As part of the consent process, participants were provided with details regarding the process and steps taken to protect their identities. The following language was included in the documents shared prior to the start of the study. Pseudonyms were used in the study to ensure confidentially of all participants:

> When we or any of our investigators look at the data, none of the data will have your name or identifying information. We will refer to your data with a code that only the principal investigator knows links to you. This way, your identifiable information will not be stored with the data. We will not identify you in any publication or report. Your information will be kept private at all times, and then all study documents will be destroyed three years after we conclude this study. (IRB Consent Form, 2018; see Appendix D)

**Data Collection and Procedures**

Case study data generation should capture the perspective of the participants (Creswell, 2013). In previous studies, data were collected during multiple observations, over the course of months and in a few cases, years (DeMathews, 2014; Demir, 2013; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). This study used observations of staff and team collaborative meetings, semi-structured interviews, and focus groups as methods of data collection. The
teachers’ focus groups and observations of collaborative team meetings generated data regarding how staff perceive their principal's ability to create collaborative culture. The interview and focus group questions are located in Appendices C and D.

**Interviews.** The purpose of the interviews in this case study was to generate data on the topic of a principal’s creation of a collaborative environment from the perspective of the teachers and administrator. Baškarada (2013) stated, “Interviews are guided conversations that are usually one of the most important sources of case study evidence” (p. 8). Seidman (2006) stated, “At the root of in-depth interviewing is an interest in understanding the lived experience of other people and the meaning they make of that experience” (p. 9). Seidman (2013) recommended that researchers implement a three-part interview series. Part one was the history of the participant as it relates to the focus topic, the second was the experience as it relates to the topic, and the third was the reflection on the meaning of the experience in the second part (pp. 6–19). The recommended length of each interview was 90 minutes. Seidman (2013) offered this as the ideal amount of time because one hour could cause participants to feel rushed, and two hours would be too long to sustain focus. Moreover, Seidman suggested a structure which allows for a few days in between each of the three interviews. This structure allowed for a positive relationship to be established and enough time between interviews to work with participants.

The interview questions were semi-structured to allow for more freedom of discussion, which allowed for exploration of priority themes or patterns that may have occurred with the participants during interview sessions (Creswell, 2013). The interview and focus group questions were created for the study, and piloted before use in the case study. The interviews were scheduled to be 60 minutes in duration, and focus groups sessions were intended to last for
60 minutes.

**Focus Groups.** There are many benefits to focus groups. This structure does not discriminate against participants who may be illiterate, it encourages reluctant participants, and empowers those who might not share their perspectives without the contribution and support of others (Kitzinger, 1995). Also, focus groups offer a more cost-effective approach to interviewing, and are time-saving for the researcher and participants. Initially, focus groups were used within communication and marketing industries. However, they are widely used to generate data in the educational setting. The focus group provides multiple perspectives and encourages reflection and innovation during the discussion which only happens in a group setting. Kitzinger (1995) recommends four to ten participants in each session using a theoretical sampling model. She also advises the groups be homogeneous in their general makeup and attitude to create a safe space for participants to authentically respond to questions (Kitzinger, 1995, pp. 299–302). Kitzinger (1995) stated sessions could run from one to two hours, taking place in a single meeting or a series of meetings. Moreover, a comfortable environment with refreshments and a circular configuration are advised. The researcher can use a range of activities with the participants to keep the focus on each other and the topic as opposed to the facilitator. An audio-visual recording or transcription is highly recommended. The data generated from this type of interaction between participants can be used to achieve seven main aims:

1. To highlight the respondents' attitudes, priorities, language, and framework of understanding;

2. To encourage research participants to generate and explore their questions and develop their own analyses of common experiences;
3. To encourage a variety of communication from participants – tapping into a wide range and form of understanding;

4. To help to identify group norms and cultural values;

5. To provide insight into the operation of group social processes in the articulation of knowledge (for example, through the examination of what information is censored or muted within the group);

6. To encourage open conversation about embarrassing subjects and to permit the expression of criticism;

7. Generally, to facilitate the expression of ideas and experiences that might be left underdeveloped in an interview and to illuminate the research participants' perspectives on the debate within the group (Kitzinger, 2006, p. 302).

Observations. Observations were the third method this study used to generate data. Kawulich (2005) stated:

Observation methods are useful to researchers in a variety of ways. They provide researchers with ways to check for nonverbal expression of feelings, determine who interacts with whom, grasp how participants communicate with each other, and check for how much time is spent on various activities. (para. 8)

Hancock and Algozzine (2006) presented five factors when designing an observation for research. The first and most important was identifying what must be observed to shed light on possible answers to the research question. Second, the authors suggested creating an observation guide with detailed information specific to the observation(s). For example, the guide should include setting, people present, date, time, location and other important environmental factors. Third, researchers must gain access to a proper research setting. Fourth, the researcher must
identify personal bias which will influence the generation of the data. Last, Hancock and Algozzine (2006) stated following ethical and legal requirements regarding research participants is critical.

**Procedures.** The interviews and focus groups began with the primary research question of this study, “How does your principal create a collaborative environment?” The questions are located in Appendices C and D. This study collected data using a systematic process, during pre-scheduled weekly collaborative meetings, as well as scheduled interviews and focus groups times, over the course of a seven-month period during the 2017–2018 school year. The researcher used audio recordings to support the internal validity and reliability, reduce bias, and decrease the rate of error of the data being collected (Creswell, 2013). The participants, as well as specific dates and times, are located in Appendix A.

This study began with an initial introduction to the staff of the researcher and the purpose of the study, detailing their involvement and the potential contribution of the findings to the field. The researcher reviewed the process, timeline and participants’ rights and responsibilities before starting the research. Volunteer teams were selected by each principal. Once the grade level teams were determined, the researcher scheduled observations and focus groups with the participating teachers.

The focus groups were conducted first to assist in developing the relationship between the researcher and participants. The groups were given the research question, “How do principals create a collaborative environment at the elementary level?” The researcher then used DuFour, DuFour, Eakers and Many’s (2010) PLC needs assessment survey tool to focus the discussion. A copy of the tool is included in Appendix E. Teachers rated their teams and
schools using the tool, and were asked to explain their rationale for the ratings given, citing specific examples to support their rating.

The first set of observations was conducted following the initial principal interviews. The second set of observations was conducted after the teacher focus groups, but prior to the final principal interview. This researcher was looking for evidence of a high-functioning team during observations of the collaborative meeting times. Solution Tree defined a collaborative team as, “A group of people working interdependently to achieve a common goal for which members are held mutually accountable. Collaborative teams are the fundamental building blocks of PLCs” (Global PD, 2014, p.19). The authors list the following as observable evidence of a collaborative team: (a) structured time to meet within the work week; (b) focus on the four learning questions; (c) generate products; (d) establish norms; (e) use SMART goals to assess progress; and (f) provide relevant information. A SMART goal is defined as a goal that is: (a) specific; (b) measurable; (c) achievable; (d) results-focused; and (e) time-bound (Doran, 1981).

A rubric was used to collect data on the observable evidence. Field notes were taken on related behaviors, the environment and reflection of the researcher’s personal bias as recommended by Hancock and Algozzine (2006). A copy of the observation rubric can be found in Appendix F.

Data Analysis and Procedures

This study used in vivo and pattern coding processes to analyze the generated data. Creswell (2009) recommended a detailed coding process which organizes the material into chunks or segments. Szczesiul and Huizenga (2014) stated:

We coded interview data thematically for core practices, attending specifically to teachers’ descriptions of how their principals carried out the practices…We then looked at how teachers’ descriptions of principal leadership practices related to the levels of
efficacy and motivation they described bringing to their collaborative interactions with colleagues during common planning time. (p. 180)

This study used a similar coding progress with the interview, focus group, and observational data. Creswell (2009) advised the following six step approach to coding data:

1. Organize and prepare the data for analysis.
2. Read through all the data. Gain a general sense of the information and reflect on the overall meaning.
3. Conduct analysis based on the specific theoretical approach and method (e.g. narrative, content, grounded theory, discourse, archival, semiotics and phonemic analysis techniques). This often involves coding or organizing related segments of data into categories.
4. Generate a description of the setting or people and identify themes from the coding. Search for theme connections.
5. Represent the data within a research report.
6. Interpret the larger meaning of the data

This study used the computer-assisted qualitative data analysis software (CAQDAS), Atlas-ti for Macs, to help code, disaggregate, manage the electronic data, identify emerging themes and support the analysis of the study. The interview data was coded for core practices that the principal and teachers’ perceptions identified as the administrator’s use of: (a) vision; (b) mission; (c) established trust; (d) positive relationships; (e) school culture; (f) innovation learning; and (g) celebration of success to create a collaborative environment. The focus group data was coded for the same aligned practices and common themes that emerged in the analysis process.
The observational data offered a third data point to uncover the relationship between the principal's practices, structures, and systems which support the collaborative environment. The interviews, focus groups, and observations allowed triangulation of the data. Creswell (2009) explained the need to “triangulate different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes” (p. 191). I anticipated that the data points would support each other by confirming the literature review theories regarding creating a collaborative environment with reoccurring themes and increase the validity of the research.

**Limitations**

Design limitations of a research study are contextual situations or events that could influence or restrain the study (Krathwohl & Smith, 2005; Smagorinsky, 2008). Limitations affect the creditability of the data generated by the researcher. Qualitative studies that are not generalizable though transferability may be developed and applied with due consideration of context by other researchers and practitioners in the field of education (Krathwohl & Smith, 2005; Smagorinsky, 2008). The following were anticipated limitations of this study:

1. The sample size of the case study was not representative of the general population and the findings cannot be quantified. The goal of this study was to discover and affirm practices that elementary school principals use successfully to create a collaborative culture. The research provided an in-depth look at three principals and one team of their teachers to gain a general understanding of best practices in leading via collaborative practices schools through the lens of three schools.

2. The second limitation of the study was the researcher bias. This researcher is an elementary school principal, and is therefore sympathetic to the opinions of the other
principals and less tolerant of the negative attitudes exhibited by some staff. This researcher was a classroom teacher for six years, and has since then been a site level administrator for eleven years. As such, this researcher’s personal career experiences influenced her role as researcher.

Regarding my first anticipated limitation, Reis (2009) similarly described case study limitations: “Perhaps because a case study focuses on a single unit, a single instance, the issue of generalizability looms larger here than with other types of qualitative research.” Reis thusly summarized Stake, “However, much can be learned from a particular case. Readers can learn vicariously from an encounter with the case through the researcher's narrative description” (para. 3).

Regarding my second identified limitation, Hamel (1993) similarly described case study limitations as:

The case study has basically been faulted for its lack of representativeness...and its lack of rigor in the collection, construction, and analysis of the empirical materials that give rise to this study. This lack of rigor is linked to the problem of bias...introduced by the subjectivity of the researcher and others involved in the case. (p. 23)

**Validation**

I ensured that the study was credible and dependable through the implementation of safeguards. Seidman (2006) referred to Lincoln and Guba’s definition of validity and suggested that the reader “substitute the notion of ‘trustworthiness’ for that of validity” (p. 23). In a careful exposition, they argued that qualitative researchers must inform what they do by concepts of “credibility,“ “transferability,” “dependability,” and “conformability” (p. 23). The trustworthiness of the generation of data, the analysis and consequential findings was increased
by investing time to establish a sense of trust and a relationship with the participants. The researcher did this by providing a safe and confidential space to allow transparency and candor on the part of the participants. The researcher was also aware of the potential for personal bias, and was dedicated to maintaining as objective a perspective as possible through the entire process (Seidman, 2006).

This study ensured dependable data by the researcher's implementation of expert recommendations for interviews, focus groups, and observation protocols. Seidman (2006) emphasized the importance of technique used by the researcher. He stressed the importance of listening, talking less, and following up without interruptions; “listening is the most important skill in interviewing. The hardest work for many interviewers is to keep quiet and to listen actively” (p. 78). The researcher’s adherence to the purpose, goals, focus on the main research question, pre-set schedule, and structure of the interviews, focus groups and observations supported the credibility of the research. The dependability of the research provided consistent and stable data. The triangulation of the generated data, researcher reflection, rich and thick description, and prolonged engagement were measures employed by the researcher to ensure dependable data, analysis, and findings (Seidman, 2006).

**Anticipated Findings**

The most likely findings for this study were predicted to support the conceptual framework, and align with the literature review studies which connected certain behaviors, structures, and systems that successful principals implement to create a collaborative environment. As stated in chapter 2, principals must build trust, promote positive relationships, support innovation, foster creativity, and motivate staff (Brown, Finch, MacGregor & Watson, 2012; Patterson, Grenny, McMillan, & Switzler, 2013). This case study generated data that
supported the current body of evidence, which connects a foundation of trust, positive relationships, innovative and creative adult learning, and celebrations of success to the creation of a collaborative environment. Moreover, the research findings supported the work of leaders with a desire to end teacher isolation, increase collaboration, and academic growth for all students (Barnett & McCormick, 2004; Connor, 2015; Crum et. al., 2009; Csikszentmihalyi, 1997; Doidge, 2007; Gheusi et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). New findings included leadership strategies, structures, behaviors and/or systems implemented by the principal which contribute to a collaborative culture.

**Ethical Issues**

**Conflict of interest assessment.** This study did not present any conflict of interest for this researcher and cooperating schools and districts. This researcher took measures to ensure if a conflict arose, it would be acknowledged and addressed appropriately with the district and university. Permission was obtained from the district leadership before the start of the research (Seidman, 2006). Participants completed informed consent documentation, and were made aware of their rights in writing. Confidentially of the research data and findings was maintained through the use of aliases for each participant mentioned in the findings. The data was electronically stored and secured on the researcher's laptop. Once the research was completed and finalized, the data used was kept secure until the determined university timeline was met, and then it was appropriately destroyed. The summary findings are shared, but are not traceable to the school, district, or individual participants. The information was kept private at all times, and all audio recordings were destroyed once their transcription and the initial analysis were completed.
Researchers’ position. This researcher aimed to maintain as objective a perspective as possible. As the researcher for this study, my position was in alignment with the general findings of the literature review, which identified key characteristics of principals who are successful in creating a collaborative environment at the elementary level. I anticipated the process would be a learning opportunity for the participants involved as well as the researcher. Furthermore, I believed the study would contribute to the field of educational leadership through this case study, which gave a unique insight into the perceptions of teachers and a principal regarding their experience as a collaborative school. As a principal studying the principalship, my personal bias and experience influenced the study. I found the principals in the study to be professional, motivated, and passionate about creating a collaborative environment in their respective elementary schools. Moreover, I found there were frustrations, barriers, and challenges to their abilities to carry out their vision. Also, I found teachers who were positive, early adopters, eager to learn, change and transform, some teachers who were satisfied with the status quo, and a handful of resistors.

Summary

Chapter 3 described the non-positivistic philosophy and the constructivist theory that undergirds the methodologies, methods, and design of this qualitative study. Chapter 3 provided details regarding the process used to inform the main research question, “How do principals create a collaborative environment at the elementary level?“ The research structure, timeline, participants, setting, and data generation outline were provided in this chapter. Also, the process used in the analysis of the data, validation, limitations, likely findings, and ethical considerations were addressed in this chapter. This chapter was the foundation of the study that was conducted
and defined the purpose, structure, process, and details critical to the successful completion of
the research process.
Chapter 4: Data Analysis and Results

The purpose of this study was to gather rich descriptive data on the topic of collaboration in an elementary school. Research suggested that principals may use certain attributes, behaviors, and structures to support positive interdependence and cooperation among staff (Barnett & McCormick, 2004; Connor, 2015; Crum, Sherman, & Myran, 2009; Csikszentmihalyi, 1997; Doidge, 2007; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Furthermore, literature reviewed supported a conceptual framework for this case study, which included a shared vision, trust, positive relationships, support of innovation and foster creativity, leading the learning, motivating growth mindset, and celebrating success (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Tschannen-Moran, 2000). The research conducted for this case study focused on collecting and analyzing data directly related to the conceptual framework and the research question: “How do elementary principals create a collaborative culture at the elementary level?”

This chapter included the analysis and results found during the collection of data from principal interviews, teacher focus groups, and observations of collaborative meeting times. First, demographic information regarding the staff for each of the three schools who participated in the study was presented. The research methodology and analysis employed were then discussed, followed by a presentation of the data and results. The chapter concluded with a summary of the case study findings.

Description of Sample

This study’s sample population were located at elementary schools in Pacific Northwest. The schools were selected based on availability and accessibility to the researcher. Professional
colleagues of this researcher provided referrals of potential participants, and those principals were invited to participate. The schools were similar in size and demographics. This study’s participants included the principal from each school and a team of teachers recruited as volunteers by the principals. The research was conducted during the spring of the 2017–2018 school year. The detailed information regarding the selection invitation and consent process was included in chapter 3. The literature reviewed on school principals creating a collaborative culture supports the selection of three schools in alignment with other similar case studies (Barnett & McCormick, 2004; Connor, 2015; Creswell, 2014; Crum, Sherman, & Myran 2009; Csikszentmihalyi, 1997; Doidge, 2007; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000; Yin, 2014).
Table 2

Participant Demographics

<table>
<thead>
<tr>
<th>School</th>
<th>Name*</th>
<th>Ethnicity</th>
<th>Tenure</th>
<th>Role</th>
<th># of Years in Current Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Principal Miller</td>
<td>White</td>
<td>18</td>
<td>Principal Elementary</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>Principal Nova</td>
<td>Hispanic/Latino</td>
<td>16</td>
<td>Principal Elementary</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>Principal Johnson</td>
<td>White</td>
<td>8</td>
<td>Principal Elementary</td>
<td>3</td>
</tr>
<tr>
<td>A</td>
<td>Anna</td>
<td>Hispanic/Latino</td>
<td>22</td>
<td>Teacher Elementary</td>
<td>7</td>
</tr>
<tr>
<td>A</td>
<td>Maria</td>
<td>Hispanic/Latino</td>
<td>9</td>
<td>Teacher Elementary</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>Heather</td>
<td>White</td>
<td>20</td>
<td>Teacher Elementary</td>
<td>7</td>
</tr>
<tr>
<td>A</td>
<td>Kendra</td>
<td>White</td>
<td>8</td>
<td>Teacher Elementary</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Sara</td>
<td>Hispanic/Latino</td>
<td>9</td>
<td>Teacher Elementary</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>Rosa</td>
<td>Hispanic/Latino</td>
<td>11</td>
<td>Teacher Elementary</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>Debra</td>
<td>White</td>
<td>23</td>
<td>Teacher Elementary</td>
<td>14</td>
</tr>
<tr>
<td>C</td>
<td>Jennifer</td>
<td>White</td>
<td>5</td>
<td>Teacher Elementary</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Brittany</td>
<td>White</td>
<td>2</td>
<td>Teacher Elementary</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Cindy</td>
<td>White</td>
<td>27</td>
<td>Teacher Elementary</td>
<td>10</td>
</tr>
</tbody>
</table>

*Pseudonyms are used in this chart and throughout the study.
Research Methodology and Analysis

The purpose of this case study was to explore principal leadership at the elementary level and how principals create a collaborative environment. The case study design set the foundation for the research which established a clear purpose, and thus provided more focused data and a specific analytic process. The following section provided a brief summary of the methodology, as well as the conceptual and theoretical frameworks detailed in previous chapters. Included in this section was an overview of the methodological grounding, analytic strategies employed, key themes identified and a summary of the research. This section provided a step-by-step description of the implementation of the data collection process utilized. Also, the coding procedures selected to analyze and organize the data were explained in detail. Then the specific procedures used to identify themes/patterns based on the codes which emerged during the analysis were presented. This section also presented the study’s methodological approach which implemented a qualitative case study design. In addition, the phenomenology described communicated “the lived experience” of individuals who participated in this study; “this description culminates in the essence of the experiences for several individuals who have all experienced the phenomenon” (Creswell, 2014, p. 42).

This section described the step-by-step data collection process implemented throughout this study. Data was collected from three individual principal interviews, for a total of nine interviews. The initial interviews were 60 minutes in length, and follow-up interviews lasted 30 to 45 minutes. In addition to the principal interviews, there were six 1-hour observations, of the grade-level specific teacher teams’ collaborative meetings, two at each school site. Also, this study included three 60-minute teacher focus groups, one from each school.
During each of the interviews, focus groups and observations, this researcher restated the purpose of this study for the participants, the role of the participant and shared the importance of the interview, observation and/or focus group and how the data would be collected. Prior to the start of the study, each of the participants signed a consent form, and were given detailed information regarding this study (see Appendix D).

This researcher began each principal interview by sharing a copy of the semi-structured interview questions for the principal to reference. This researcher used her cell phone to audio record the interview using the Atlas-ti application, which was downloaded onto the cell phone. This researcher also used the recording capabilities on her computer as a backup, but did not need to use them. This researcher took notes on a Google document, which was shared with the respective principal, during each of the interviews. This allowed the principal to review the researcher’s notes and comment if they believed the researcher was inaccurate in anything that was recorded. This researcher used this same process for the teacher focus groups. Teachers were given the focus group questions, and the researcher typed notes that were shared with the teams during the focus groups. The Google document used for taking notes during the focus group was projected onto a screen during the focus group discussions. Teachers also had access to the notes and could comment on the discussion notes’ accuracy. However, they did not have editing rights to the document. During the observations, this researcher recorded objective observations of the meetings. Questions were not provided to the teacher team, nor were questions asked by this researcher during those sessions. This researcher simply arrived, greeted the team, reminded them of the purpose of observations, and sat with the team taking notes of their conversations and other important environmental factors this researcher believed to be noteworthy in this study.
At the completion of each of the data collection sessions, this researcher reviewed the recording of each respective session, added to her notes, and created transcripts of each session. The process started with the initial principal interviews, and the same day, the first observation at all three the schools over the course of a two-week period in early April 2018. They occurred back-to-back on the same day, either prior to the observation or immediately afterwards. The next step was teacher focus groups at all three schools. Those took place in late April 2018. The final observations and second follow-up interviews with principals took place in May of 2018. In July 2018, this researcher conducted the third and final interviews with the principals.

**Methodological Grounding**

The literature review provided a basis for the conceptual and theoretical framework of the research. The conceptual framework acted as a structure for communicating the rationale for the research question (Rativich & Riggins, 2017). The theoretical framework bridged the conceptual framework and the body of research to the constructivist approach to learning (Vygotsky & Cole, 1978). The intersection of the conceptual and theoretical framework coupled with a review of the literature supported the purpose of the research methodology and analysis of this case study.

The conceptual framework developed scaffolds the research into these key characteristics: (a) trust; (b) positive relationships; (c) innovation and creativity; (d) learning; (e) growth from success; and (f) unsuccessful endeavors (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Tschannen-Moran, 2000). The data analyzed and collected aligned with the key characteristics and collaborative leadership best practices. (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Tschannen-Moran, 2000).

This study was based on a social constructivist theory with the purpose to gather a broader understanding of the foundation for the research conducted (Vygotsky & Cole, 1978).
As previously stated in chapter 3, Vygotsky’s theories stress the fundamental role of social interaction in the development of cognition (McLeod & Seashore, 2006). The purpose of the methodological strategies employed was to gather rich data about the creation of a collaborative culture through interviews and observation of the social interactions of the principal and staff.

**Methodological Strategies**

The methodological strategies utilized with the participants in this study included individual interviews with principals, teacher focus groups, observations of teacher team collaboration, and evidentiary documents which were collected during the spring of 2017–2018 school year. Over the course of five months, principal interviews, teacher focus groups and observations were conducted with the participants of this case study. Initial principal interviews and team observations were conducted at the three school sites as part of the first phase during the month of April 2018. The second phase incorporated teacher focus groups at each of the schools in late April 2018 and May 2018. The third phase circled back to include follow-up interviews with principals and the second observations of team collaborative meetings in late May 2018. Originally, this researcher planned only two interviews with principals: one at the start of this study, and one at the conclusion. However, in June while analyzing the research and data collected, this researcher discovered that more detailed information from principals was required in order to answer the original research question. Therefore, this researcher implemented the fourth phase with the intent to seek clarification from the principals who participated in this study. This researcher conducted brief interviews with the principals in July 2018.

**Interviews with principals.** The individual principal interviews began in early April 2018, and were conducted at each principal’s respective school. Two of the three interviews
exceeded the allotted 60 minutes (75 and 90 minutes in length). With written permission of the participants prior to the start of the sessions, this researcher audio-recorded and transcribed each session. Each principal was asked the same set of 14 semi-structured questions in order to compare responses of the three principals, and identify similarities and differences with regard to the research question (see Appendix B). The fourteen questions were based on the original research question and conceptual framework, and followed the structure and protocols that experts recommended, as reviewed in chapter 3 (Creswell, 2014; Yin, 2014). Specifically, questions related to how principals and teachers believe that they themselves or their principals create a collaborative culture. Moreover, they included questions related to each of the five components of the conceptual framework (a) trust; (b) building positive relationships; (c) leading the learning; (d) celebrating success; and (e) responding to challenges. For example, two of the questions related to trust was, how important is trust in contributing to a collaborative environment, and what do you as the principal do to build trust between you and staff, and teacher to teacher trust?

Focus groups. The teacher focus group took place following the initial principal interview and the first observation of the teams. The questions used during the focus group were the same as those used in the principal interviews. The uniformity of the questions assisted my organization of the data collected, as well as similar or divergent data per the perspectives of each group (Baškarada, 2013; Creswell, 2014; Seidman, 2013). The teachers were volunteers recruited by the principals when the schools were invited to participate in the case study. With advance permission of the participants, the sessions were audio recorded and transcribed.

During the focus group the teachers were presented with the focus groups questions and took turns answering first, one at a time. The other teachers then shared if they had similar
thoughts or experiences, or opposite perspectives. If there was consensus around the initial answer then that was recorded as well. Teachers did the majority of the talking, and this researcher only stopped them for clarification or follow-up questions in order to ensure they were represented accurately regarding the intent of their responses. The follow-up questions asked were probing as well as clarifying. The teachers appeared to be very engaged in the discussion, but did not control the pace of the questions asked or topics raised. The discussion followed the outline and order of the questions (see appendix C). The focus groups lasted between 45 and 75 minutes. The focus groups had between four to six teachers. During one of the focus groups, a participant had to leave early, but she requested an opportunity to respond in writing to the questions. This researcher allowed her to e-mail her thoughts to add to the other teachers’ perspectives.

**Observations (teacher teams).** The two observations were conducted at each school for a total of six observations in early April and late May 2018. They took place during the after- or before-school weekly collaborative times, and were all 60 minutes in length. This researcher did not participate in the discussions or activities, just simply observed the dialogue and interactions of the staff. With advance permission of the participants, the sessions were audio recorded, and this researcher took notes to support the accuracy of the data collection process. Four of the six observations of teams took place in classrooms separate from the other teaching staff, and without the presence of an administrator for the majority of the time. However, one school held their collaborative time in the library with each grade-level team separated and spread out in their respective groups. The principal and other specialists would join groups as needed to support the discussion the team was having or the task the team was working on during the collaborative time.
Analysis

In this case study, I collected data using three distinct methods: interviews, focus groups, and observations. These three data sets helped to create a triangulation of the data (Creswell, 2009). This researcher employed an open coding process to analyze the generated data. Creswell (2009) recommended a detailed coding process which organizes the material into chunks or segments. After coding using constant comparison, this researcher looked for common themes in each data set (Szcesiul & Huizenga, 2014). This researcher followed Creswell’s (2009) model for coding which includes a six-step approach. After conducting the interviews, collecting notes and audio files, this researcher reviewed all of the data and listened to the audio recordings to gain a large-scale perspective of the overall meaning. Further analysis involved the use of grounded theory as this researcher coded, categorized, and then identified themes.

Coding. This researcher started with descriptive in vivo coding with the initial principal transcripts. Then this researcher implemented a constant comparison approach to the analysis and classification of the codes. Utilizing constant comparison allowed this researcher to narrow the number of codes as I worked with the other transcripts. For the second cycle of coding this researcher employed pattern coding. Saldana (2009) quoted Miles and Huberman as saying, “There are explanatory or inferential codes, ones that identify an emergent theme, configuration, or explanation.” This researcher selected these methods because I believed them to be the best fit of the analysis of the data I collected for my research. Saldana recommended the application of pattern coding when “examining social networks and patterns of human relationships” (2009,
Since the focus of my research is how do principals (humans) create a collaborative environment (social networks), this researcher believed it to be a good fit.

This researcher moved forward with analysis of each of the 15 individual transcripts: six transcripts for principal interviews, six rubrics and transcripts of observational data, and three transcripts of teacher focus groups. After the initial round of data collection, this researcher needed additional information to clarify and extend the depth of each data set, and then conducted the final round of follow up interviews with the principals to clarify and get great detail about collaboration. This researcher read through each transcript separately, listening to the corresponding audio recording and my notes of the particular interview, focus group or observation to ensure I had an accurate accounting of the statements made by the participants. This researcher repeated the process multiple times, between four to six times with each set of transcripts refining the codes and categories. This researcher used the comments feature in Word to note codes and then I highlighted them and color coded like themes. This researcher was then able to sort the codes under categories which included the participants’ feedback during individual principals’ interviews, each school’s focus group and then the separate observations. This researcher reviewed the similarities and differences between principals, focus groups and schools where the observations were conducted. There were several matching codes for each of these comparisons. For example, all three of the principals had eight of the same colors in common with individual outliers that their colleagues did not have. Principal B and C both had a color code for “praise of teachers,” but Principal A did not have that specific code.

This researcher created categories based on frequently identifying phrases and common descriptive words. Next, this researcher was able to identify 11 themes, which were narrowed to
the final five key themes with supporting sub themes related to the research question, how do principals create a collaborative culture at the elementary level?

**Thematic procedures**

This section describes the process that this researcher used to determine the key themes. During my analysis of the codes and patterns, meaningful themes started to emerge from the data (Saldana, 2009). This researcher used constant comparison during this process of reviewing the codes from the principal interviews, focus groups, and observations. Then this researcher identified a broad meaning, and was able to identify from the repeated patterns in each of the data sets. The broad themes initially identified were: (a) communication; (b) modeling; (c) sharing; (d) encouraging; (e) reflective (self-identified areas for growth); (f) support: and (g) structures and systems. To glean meaningful themes which related to the research question, this researcher re-coded some of the data and then employed the same process used to identify patterns and themes previously described. Five key themes came to the forefront: (a) servant oriented moral compass; (b) developing and maintaining professional relationships; (c) support roles; (d) structured periodic collaborative time; (e) comprehensive communication; and (f) nine sub-themes. These provided a foundation for a new conceptual framework regarding how principals create a collaborative culture as a result of the research conducted.

**Summary of the Findings**

The completion of analysis from each of the three data collection methods, which involved this study’s participants – specifically: (a) individual interviews of principals; (b) teacher focus groups; and (c) observations of teacher team collaboration – provided a meaningful perspective on the topic of creating a collaborative environment. Principal interviews allowed
this researcher to gather specific significant evidence regarding how principals view their leadership of collaboration in the schools.

The principals shared their views, opinions, and reflections on their behaviors, beliefs, and practices which supported: (a) a shared vision; (b) building positive relationships; (c) leading the learning; (d) celebrating success; and (e) responding to challenges. The initial and follow-up interviews of principals and observations of them with their respective teaching staff produced critical key themes: (a) servant oriented moral compass; (b) developing and maintaining professional relationships; (c) support roles; (d) structured periodic collaborative time; and (e) comprehensive communication. The leadership characteristics and behaviors of principals combined with structures, support, and communication were significant in the findings.

The teacher focus groups included very similar outcomes from questions regarding how their principal led a culture of collaboration. In each of the groups, the staff spoke about the integrity, knowledge and skills, mutual trust and positive relationships their principals embodied. During the focus groups, the teachers provided multiple examples and shared stories of situations or events where their principal used specific strategies, or specific personal skill sets to encourage, empower and unify the staff to accomplish a goal. Teachers were open and transparent regarding areas for growth, strengths and weaknesses for their leaders and themselves.

Observations of the teacher teams provided insight into the alignment or lack thereof between what the principals and teachers reported their collaboration to be, and evidence that was gathered. The rubric which was adopted from Solution Tree assisted in the data collection regarding systematic protected weekly collaborative time for teachers in schools and districts (DuFour & Eaker, 1998). According to the rubric, each of the schools have protected time for
collaboration, but the implementation of the other criteria used to determine if the teachers were a high functioning team varied. The data collection and comparison yielded inconsistency between what practitioners stated was taking place during collaborative meetings, and the actual interactions, focus and tasks teams performed.

**Presentation of the Data and Results**

This study presented the primary research question: how do principals create a collaborative environment at the elementary level? Participants’ responses to each question presented through interviews, focus groups, and in combination with observation results were coded and analyzed resulting in five identifiable key themes. The data collected from participants during the case study yielded essential findings. In this section, the data and results were presented as they related to the key themes. The overarching five key themes and corresponding subthemes include: (a) servant-oriented moral compass, (i) integrity, (ii) self-responsibility, (iii) trustworthy, (iv) commitment; (b) developing and maintaining professional relationships, (i) encouraging/celebrations; (c) support roles, (i) coaching/modeling; (d) structured periodic collaborative time, (i) implemented collaborative teams, and (e) comprehensive communication (see Figure 2).
Figure 2. A description of the revised conceptual framework for this study. This figure represents servant oriented moral compass to be at the core of the findings of this study and the others build on that foundation to the creation of a collaborative culture.

**Research Question: How Do Principals Create a Collaborative Culture at the Elementary Level?**

**Servant-oriented moral compass.** The data collection yielded evidence regarding the significance of a principal’s servant-oriented moral compass when creating a collaborative culture. “Leadership as moral action is a struggle to do the right thing according to a sense of values and what it means to be a human being” (Sergiovanni, 2005, p. 114). For this study, this researcher defined moral compass according to the Cambridge Dictionary, which states it is “a
natural feeling that makes people know what is right and wrong and how they should behave” (Cambridge University Press, 2008).

During the participants’ principal interviews, teacher focus groups and observations, each of the individual principal’s servant-oriented moral compass subthemes and/or character traits was a proximate theme during the collection of data. All three of the principals spoke about one or more of the following subthemes: (a) integrity/self-responsibility; (b) trustworthiness; (c) commitment; and (d) humility and reflective practices concerning their leadership in creating a collaborative environment.

**Integrity/self-responsibility.** Each of the principals shared openly about their shortcomings as reflective practice regarding their areas for growth and improvement. Moreover, they led by modeling a strong servant-oriented moral compass in their behaviors and actions. Principal Miller reflected:

> I am a very positive person, and I set that example for my teachers. I expect others to treat each other right...follow through, own my mistakes, get them what they need, I try to be honest and transparent- as much as possible.

Setting an example and high moral standards for interactions with staff was mentioned by all three principals when asked how they create a collaborative culture. “One of the biggest challenges is presuming positive intent...it is super important to make sure you give people the benefit of the doubt,” shared Principal Johnson during the initial interview.

The teacher focus groups expressed similar feedback when it came to the servant-oriented moral compass of their respective leaders. They spoke about the integrity and honesty they exhibited, and the mutual trust shared between teachers and principals. Sara described her principal, Ms. Nova by stating, “She states she trusts us and I am there for you.” Her teammates
echoed her sentiments, “She is very supportive, she shows us she cares and has our back, I trust her!” Rosa added. Debra agreed with her colleagues and stated, “Principal Nova does the right thing, she is fair and follows through on her promises, she is very supportive.” The other principals, Miller and Johnson, are leaders with a high degree of integrity as well. They spoke about owning their mistakes and that this was difficult but that it created a safe space for teachers to take risks without fear of retribution or negative evaluation.

During observations of interactions with the staff and principal it was apparent through the humorous banter, personal small talk, and inquiries about the teachers lives outside of school, there was genuine care and mutual collegial respect between the principals and staff as well as teacher to teacher. The principal was shown respect by using a collegial tone when communicating, not directive or authoritarian, and their professional opinion valued by the teachers. The body language of the principal was engaged and present. He appeared to be intently listening to teachers’ thoughts. In turn, the teachers’ expertise was highly regarded by the principal. Principal Miller shared during an interview his opinion of his staff and their expertise and experience, and that veteran teachers as well as new teachers have value and add to the learning for everyone. During a collaborative team time, the following dialogue was an example of the degree of integrity demonstrated by the principal.

Sara requested of Principal Nova, “Were you able to get additional support for the dual programs small group reading time?” Principal Nova responded:

I am so sorry, I completely dropped the ball. When we finish up here, I will call the Director of Elementary Education at the district office, and find out if we can get the additional full-time person…I can't believe I totally forgot about that.
The team accepted her apology and strategized a way to make the small group configuration work given the delay in additional staff. The team remained positive evidenced through their body language, smiles, tone of voice and focus on solutions. They seemed to be understanding of the principal’s lack of follow through and continued to focus on the other essential agenda items. Immediately following the meeting Principal Nova reached out to the Director of Elementary Education for her district, and was granted additional support personnel. Principal Nova was able to share the good news with her staff later that day, and her integrity was evident during this particular event.

**Trustworthiness.** The literature identifies a foundation of trust in leadership as a critical component to creating a collaborative environment (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Tschannen-Moran, 2000). Over the course of this study, the ability of a principal to establish trust with their staff was referred to multiple times by principals and teachers. When asked “what do you as the principal do to build trust between you and staff?” Principal Miller responded:

Trust goes away when people don’t know why things are happening, and if we are not willing to share our errors or wonderings…Reality is there is a power differential, people will have their own opinions of the principal, and I can only be there for you if my supervisor is there for you.

Principal Miller spoke about teachers’ suspiciousness and lack of trust at times in the central office, and the importance of transparency and openness. He mentioned it is important for site level leaders to help their teachers see the connection between their requests and the resources the district provides, and that he is the conduit of this information. For example:
When a teacher needs support with a child from an Educational Assistant (EA), another adult to support a student, with major behavior challenges, it’s good for them to know we only have that person because the district office approved the funds.

In this example, Principal Miller identified his part in building systemic trust, and how vital it is to the success of the district, not confined to his school. He explained the trust his staff places in him he must place in the district, and the foundation of trust relies on interdependency in the whole organization.

Principal Nova mentioned, “When we first started collaborative teams it was hard for teachers to open up, this is my 9th year, it took roughly a couple of years, and staff turnover to build trust.” She described the importance of hiring people who are willing to collaborate, coaching staff who struggled and encouraging those who chose to continue to work independently to consider working in a different school where collaboration was not an expectation. Sara, one of Principal Nova’s teachers commented, “We trust her because we know she has our best interest and heart… she advocates for students and families while keeping us in mind.” I noted there was a focus on student growth during both observations of the third-grade team at this school but not at the expense of the relationship between the staff. In areas where there was room for growth teachers were open and transparent about the data, willing to take feedback from colleagues and the principal. Trust had to be established in order for the teachers to be vulnerable and share about areas for improvement.

During the focus group, teachers spoke about the safe space created by their principal to be vulnerable and open. Heather described the environment in her school as, “We are like a work-family. Teachers feel empowered to lead because we trust each other, and we have that because our principal allows us to take risks and fail, and it’s not a big deal.” Heather’s
teammates agreed with her statements. They contributed with examples of initiatives which Principal Miller brought which were not as successful as he had hoped. The teachers shared that when the initiatives failed Principal Miller took responsibility and the teachers’ feedback on how to make it better next time. Kendra shared:

We implemented this new intervention model and it did not go well at all but we kept at it, and when we shared our failures at the large staff meeting, we got great ideas from other teachers on how to make it better…and Principal Miller praised our efforts- even though we did not get it all right the first or second time.

The team noted the importance of keeping a sense of humor which the teachers believed also made it a safe space.

When Principal Johnson was asked “How important is trust when creating a collaborative environment and what do you do to promote that?”, she replied, “Trust in terms of their teams is incredibly important …it’s a must...they have to trust if they are going to collaborate.” She spoke about the use of norms regarding how to handle conflict, providing specific processes and structures which need to be put in place. Principal Johnson reflected on how she had to support teams in implementing norms and accountability by modeling these tough conversations. She believes all of the pieces (norms, structures, agendas) work together to increase staff trust in her and each other. Principal Johnson mentioned how her follow through or lack of it also impacted trust, “If teachers perceive me as not addressing their concerns or not meeting their needs it erodes trust, even if it was not my intent.” She spoke about how quickly trust can be lost and tough to regain.
During the teacher focus group, Principal Johnson’s teachers mentioned how the perceived lack of follow-through by some affected morale and trust. Cindy, one of the first-grade teachers at Principal Johnson’s school, stated:

We have a few negative people on staff and if they think she (Principal Johnson) is not handling things the way they want her to they spread a bad attitude and it really hurts the trust and morale of our staff…it's not good. And I feel frustrated because she had always reacted quickly to my requests for support, so that has not been my experience.

The staff at Principal Johnson’s school reported different experiences with the principal. However, this was supported by what Principal Johnson reported. She acknowledged not all of her staff agreed with how she handled student discipline and believed this affected trust and relationships. Principal Johnson shared this wore heavily on her at times, and she made a focused effort to support those teachers who struggled with student behaviors, “I do my best to follow through with tasks and requests, I have candid conversations with teams about tough issues and for teachers who are on board, I believe this works to increase trust.”

**Commitment.** The literature referred to the significance of principals and their ability to demonstrate commitment to their core values, best practices in education, and dedicated leadership (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Tschannen-Moran, 2000). Each of the principals discussed their commitment to their work, their staff, and students in their specific communities.

Principal Miller shared his dedication to the work even when it gets difficult. He shared his ability to “persevere and not give up on people” was one of the characteristics which brought him long-term gains with creating a collaborative culture at the schools he worked. Miller stated, “Not all of my staffs have been this positive, and it takes commitment to a cause greater
than you to hang in there when the bullets start being fired.” He said his commitment to the students and what is best for them, not what makes adults comfortable, can require energy and endurance.

Principal Nova expressed her commitment to the teachers and students of her community. She expressed the importance of teachers knowing they can count on you to be there even when emotions are elevated and people face challenges, “They need to know you are in it for the long hall. I have been at this building for nine years and there is a level of security with the staff because of my time with them.” She shared memories of challenging times where it would have been tempting to give up, but she was so grateful she was able to make it work with the staff, and that most people are better because of those experiences.

Principal Johnson shared commitment to her beliefs and values as a principal were one of the things she is most proud of. Johnson stated, “When I make a commitment to a student or staff member I honor that.” She shared it was important for teachers to see that you are not going to leave simply because there are tough times. Johnson shared, “All schools experience a rough patch, but commitment to the work keeps me focused and driven to stay.”

**Humility & reflective practice.** The literature supports the importance of humility in leadership (Collins, 2001; DuFour & Eaker, 1998; Fullan, 2008; Sergovanni, 2005). Collins (2001) states that Level 5 leaders “build enduring greatness through a paradoxical blend of personal humility and professional will” (p. 20). Each of the principals who participated in this study was humble concerning their success as leaders. This humility was evidenced as they gave credit to their staff and colleagues for the student growth, positive culture, and celebratory focus. Each as individuals come across as self-aware of their strengths and weaknesses, and appear to
be his or her own harshest critiques. While confident in their beliefs and convictions they spoke about specific ways in which they had failed as leaders and were better for it.

Principal Nova described a teacher who had been struggling with classroom management. She felt she was not giving her the right type of feedback and was feeling like she was not doing a good job as a mentor and guide for the novice educator. Nova said that after two years of frustration and a lack of progress with the teacher she sought out support from her peers. She shared the challenges the teacher was having with a small group of other elementary principals, a pseudo “critical friends” group, in her district. She was transparent about her area of weakness and inability to support the new teacher. Nova’s colleagues provided her with support and specific strategies they had used with teachers in similar situations and what had been successful with their staff. Nova implemented the new feedback process with the teacher and started to see growth and improvement in the teacher’s ability to maintain engagement and routines with the students. The negative behaviors with the students decreased and the teacher had a better attitude overall. Nova shared:

   It was a lot of hard work for both of us, but I thought to myself afterward, why did I wait so long to get support from my colleagues… now when stuff comes up with the staff, I do not hesitate to bring it to them for their ideas and support, my pride got in the way I guess. It was a lesson learned…one of many in my career!

Principal Miller had similar stories of failure in his early years as a principal. He admitted, “I had no clue what I was doing. I meant well, but I know I made people crazy,” he laughed. Miller shared during his first principalship he assumed everyone shared his passion and zest for the new district initiative on growth mindset, “I spent so much energy and time presenting lessons, and providing professional development…some were on board but not the
old guard.” Miller confessed he never made the “why” clear, he said he made the huge mistake of assuming everyone knew the “why” and was ready to get on board with the changes. He shared, “The thought did not cross my mind others would not want to do what I believed was best for kids?” Miller described the push back, union involvement and toxic culture which he said he contributed to by not allowing everyone to have a voice in the changes. He reflected, “You can have the right intent and absolutely the right program, but if you do not have buy-in it will not matter, I learned that the hard way.” Miller shared he still makes mistakes but is more cognizant of the process and importance of having key political people on board and apart of the process.

When I observed Principal Miller with his staff, he was warm, humorous and genuine. His self-deprecating jokes and light-hearted approach endeared his staff to him. He was quick to clarify misunderstandings, responsive and supportive to requests and passionate about his growth and learning. He credited his staff with being the ones to keep the celebrations regular, “It's not what I am good at, I need to work on this. It's the teachers who are the ones who keep us celebrating; I need to a better job at that.” During the observation of the team collaborative time, he stopped by to check in. It was evident by his body language and facial expressions he was unsure why the teachers were spending time on the task at hand instead of focusing on the student growth data, and the writing lesson. However, he allowed them to deal with what they felt was a priority, and knew they would address the student learning and writing lesson at some point.

When I asked him about this during the follow-up interview, he said there were other teams in the past where he would have had to take a more active role in monitoring their focus to ensure they would complete the task assigned. Miller explained, “They will get it done either
before school or later when I am not present, but I know they will do it. I have learned the hard
way which battles to pick.”

During the teacher focus group Principal Miller’s staff commented that his intentions
were always positive and if he did make a mistake, he was very transparent about it and took
responsibility, at times even if it was not his fault. Heather commented, “He is very modest and
takes heat for stuff that isn’t his mess up. He is a great person.” They praised him for his efforts
and did not focus on negative events. They spoke about a change in culture, and that the teachers
who did struggle with a bad attitude, either retired or transferred to another school or district.
The teachers credited Principal Miller for these changes.

Principal Johnson was open and transparent about her areas for growth. She was self-
aware and reflective during the interview. The youngest of the three leaders in the study,
Principal Johnson voiced her frustrations with not being able to meet the needs of all her staff.
Johnson stated, “I know there are students with challenging behaviors, and I want to be
supportive, and I do my best to respond and follow up, but I know some of the staff are not
happy.” She described the increasing number of children with emotional and social challenges,
and felt at a loss at times with how to best support the staff. Johnson was very critical of her
leadership and spoke well of her staff, but was open about a few of the staff who pushed back at
times when presented with alternative approaches to handling their student discipline
frustrations. Johnson spoke about her growth as a leader and her ability to have tough
conversations, “My role as an instructional coach prepared me for many of the challenges I face
as a principal, but I have room for growth.” Johnson shared she believes that if she could help
improve staff morale that would improve her ability to lead positive collaboration.
Principal Johnson’s teacher focus group, expressed some division in the staff. They spoke about how they felt Johnson was humble and supportive, but that they have a few colleagues who would not say the same, and they expressed frustration with their peers’ negative attitudes. Brittany shared, “Most of us work great together and can be very productive during team collaboration, but I know not all of our teams’ function like mine.” Her colleagues agreed and added that most of the teams were worked well, and Johnson’s leadership was the main reason why but acknowledged a few teams were still not on board.

I was not able to observe Principal Johnson interact with the teacher team. During the two observations I conducted, the staff was focused, on-task and highly collaborative. There was no evidence of an unhealthy culture or negative attitude towards the collaboration process.

**Structured Periodic Collaborative Time**

**Implementation of collaborative team process.** The literature on collaboration consistently emphasized systematic protected weekly collaborative time for teachers in schools and districts that want to provide an environment that promotes an authentic culture of collaboration (DuFour & Eaker, 1998). Solution Tree defines a collaborative team as, “A group of people working interdependently to achieve a common goal for which members are held mutually accountable. Collaborative teams are the fundamental building blocks of PLCs” (Global PD, 2014, p.19). For this study, it was essential to define the word interdependent in the context of teacher collaboration.

Rick DuFour (2009) provided an analogy to explain the difference between a group and a team. During a Solution Tree lecture, he compared Michael Jordan to Tiger Woods: both men are superior athletes and set a goal to win championships. However, Tiger was not dependent on other golfers to accomplish his goal, but Michael Jordan was dependent on the other members of
his team to accomplish his goal. Tiger was part of a group and Jordan was part of a team. This distinction is vital because DuFour asserts the majority of teachers in American schools are part of groups, not teams. During the six separate observations, I used a rubric to collect data on evidence of collaboration as well as field notes of the setting and participants interactions (see Tables 4–9).

Each of the three schools that participated in the study had a district-wide system to support weekly collaboration for teachers. One school had a weekly late start for principals to implement 60 minutes of teacher collaboration. The other two had set time after school for collaboration and team meetings. In all of the schools, the agenda was set by the principal on weeks the entire staff was together, the other weeks when individual teams met they worked from agendas they set independently as a team or with guidance from the principal and leadership team. In one of the three schools, their collaboration time was always held in the library whether it was a staff-wide meeting or individual teams. The entire staff in one location allowed for the principal and specialists to rotate between different teams to support their work efficiently. It also allowed for vertical articulation between teams. The other two schools only met as a large group monthly when the principal or teacher leaders were providing professional development or adult learning. During the other three weeks in the cycle, teacher teams met in separate groups, usually in one of the team members’ classrooms.

All three elementary schools had a system which supported the implementation of a collaborative team process, but the components were unique to each school. In this section, I presented a profile of each school based on the data collected during observations. I utilized the rubric tool and my field notes form the observations, artifacts, and audio recordings and
transcripts collected during interviews and focus groups to develop profiles for each school in this study.

It is important to note that the perspective of all three of the principals with regards to the purpose and use of the collaborative time was different from the perspective of the teachers in each of the three focus groups. The principals saw the purpose of the collaborative or PLC time as: (a) being focused on the four learning questions; (b) time for adult learning; (c) focused on student growth data; or (d) making instructional changes, planning interventions or enrichment opportunities based on common formative assessments. However, in all three of the teacher focus groups, the frustration of teachers as it related to competing priorities for this time was evident. The teachers shared they believed the time should be used for whatever was most pressing for them as a team, and the top priority should not be adult learning or data analysis. They shared they felt at times other “housekeeping” or “nuts and bolts” items needed to be considered. This difference of opinion was clear during some of the observations, where teachers were not focused on any of the items listed as top priorities from principals, but other items were addressed.

Some of the teams were off-task during their collaborative time doing a variety of things other than what they had been directed to do, such as: (a) sharing frustrations about their day; (b) discussing upcoming field trips; or (c) complaining about a new initiative they had concerns about. While their behavior was not overtly unprofessional or negative, it was also not reflective of what was communicated by the principals regarding appropriate use of their time. This type of off-task behavior was not observed in School B, only Schools A and C. However, during all three of the teacher focus groups at each school, teachers referred to the lack of time to get
everything done, and how they wished they had part of the collaborative time to spend on other “must do’s”.

School A. In School A, Principal Miller’s school, there are two separate afternoons in the work week for teachers to collaborate. At one of the afternoon meetings, the focus was on learning and student growth goals, and the other was focused on nuts and bolts items for the grade level specific team. I observed the meeting focused on learning and student growth goals. One observation was in April 2018, and the other took place in May 2018. These were weekly meetings one with the entire staff, and the other three were with grade-level teammates. The meetings took place in one of the teachers’ classrooms, separate from the other teams. The principal was not present the entire time, and joined the teams upon request or when he believed they may need support.
<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.

Present at the team meeting where all four of the fourth-grade teachers: Anna, Maria, Heather, and Kendra. At the April observation of the collaborative team meeting, only one of the six components were observable during the 60-minute observation. Heather is the team lead and she came late to the meeting. She generally facilitates the meetings, but Anna took charge of the team since she was late. The team was meeting in Anna’s classroom. I was seated at the table where the team would meet. During the book sort, I sat to the side waiting for them to
complete the sort, while taking notes on my observations. I had been previously introduced to
the team at a brief site visit to the school a month prior to starting the research, so an introduction
at this point was unnecessary. Each team member shared their thoughts on the reading books
they were reviewing. They also shared their opinions on how they might organize the lessons
affiliated with each book. No one was recording the comments being made; it was a verbal
discussion. The team spent approximately 30 minutes sorting through social studies texts and
separating them out by theme and Lexile level to ensure each teacher had a set for their class to
use for the upcoming unit. Principal Miller was present during the first ten minutes of the
meeting time. He assisted the team in sorting the texts. However, he made a few facial
expressions which seemed to convey his confusion as to why this was the task the team chose to
focus on. During the follow-up interview, he shared that that was not the expectation nor was it
a proper use of their time. Principal Miller allowed the teachers to continue because he wanted
to respect the team leader’s decision, and he trusted her to complete the discussion at another
time since she had always been able to share data or products he had requested of the teams. His
assumption was that it was getting done, however, he expressed frustration because that was not
what he was hoping to be observing during that particular check-in.

The team spent the last 30 minutes of the meeting discussing student achievement from a
recent math assessment. There was no designated leader to facilitate the discussion. Only one of
the four teachers brought their students’ data as a point of reference and to share with her
colleagues. Two teachers had not finished scoring the assessment. The fourth teacher was not
responsible for teaching the math lesson because she was the dual-language teacher; her students
had math with one of the other teachers during the time she delivered a language arts lesson in
Spanish. The team did their best to discuss what was successful about the lessons they had
presented, and what they might do differently in the future. However, they did not address the four learning questions referenced in the rubric (see Table 3). The team had not generated a product to share with each other, the principal or with other teams. While the team did not have formal, agreed upon norms for the meeting or an agenda which they were using to facilitate the meeting, informal norms were observable. The teachers were respectful of each other, they asked clarifying questions, and appeared to have a positive working relationship. They referred to student growth goals during the discussion but did not have evidence of students’ achieving SMART Goals in the form of documentation. They worked as a group and seemed professional and collaborative, but were not an interdependent team. They did not rely on one another to accomplish their goals, and therefore did not meet the criteria of a team as previously defined.

The second observation of School A took place in May of 2018, and all four of the fourth-grade teachers (Anna, Maria, Heather, & Kendra) were present. The team and I again met in Anna’s classroom. Heather facilitated the meeting. However, she did not use an agenda, nor did she document the team’s discussion. This researcher did not participate in the conversation and only asked a clarifying question regarding the assessment they planned to give. The results in the second observation were similar to the first, and the team met two of the six components listed on the rubric. The team focused part of their time discussing the four learning questions. The team shared their students’ data which each member had brought with them. They discussed the students’ results, regrouped them according to the common formative assessment data, and strategized how to re-teach and enrich the lesson previously taught. They did not generate a product nor did they use formal norms, SMART Goals or show evidence of interdependent work. While the teachers shared with each other the plan of action they would independently implement with their students, they were not reliant on each other as a team for support. Each
teacher had independent goals, and worked in isolation to accomplish those goals. They did not collaborate around developing instructional strategies, lessons, or assessments as a team.

The team had a robust conversation about the pacing of the math lesson they were presenting in the upcoming weeks. Kendra shared her concerns:

I know that some of my EL’s are not following and I am trying to remember to use sentence frames for them, but I have a group of boys who disengage during the lesson and it can be tough to them back on track. What are you using to help with the concept and keeping them engaged, what vocabulary did you choose to frontload the lesson with?

Anna responded to Kendra’s comments:

I have some sample sentence frames you can see, and what I have done with my small group of children who check out, I pull them to the back at the small table away from the other distractions. There are usually about three or four in my group sometimes I have one more come over. I do this after I present the large group part of the lesson, and then I can be right there to guide them, and keep them on task. Then I have the students who finish early work on their passion writing project or they can choose to read, work on rocket math, or the extension activity.

Kendra was excited by these suggestions and commented how she needs to remember that this strategy can be used in math as well as the small group reading time. Kendra shared she had not considered utilizing the small group table during the math block, but would instead visit students who were struggling at their desks. Kendra said, “That makes so much more sense to pull them back to me instead of me circulating the room.”

Heather agreed with Anna and mentioned how she uses her back table to pull students throughout the day for a variety of reasons. Maria shared that she grouped her students together
based upon their needs for similar levels of support. However, Maria stated, “I end up with the low table for most of the time, they need more support.” Maria meant that her students with the lowest skills were sat together, and because they needed the most support from her, she spent most of her time at that table with those particular students.

The last 15 minutes of this meeting was spent discussing a variety of items not related to the four learning questions or student data. The participants made small talk with one another since they felt they had completed the expected tasks. They discussed their personal lives, upcoming field trips, and an upcoming cultural event at the school. Table 4 shows the results based on the rubric from this May 2018 observation of School A:
Table 4

**Observable Evidence of a Collaborative Team at School A in May 2018**

<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.*

**School B.** The first observation of School B took place in April 2018. The entire staff gathered in the library, and was separated into grade-level teams. I was placed with the third-grade team to conduct my observations. The team consisted of two general education teachers, Sara and Debra, and one dual-language teacher, Rosa. Sara, Debra and Rosa were present during the observation. I sat next to them. Principal Nova came by and introduced me to Sara, their team lead, prior to the start of the meeting. Principal Nova had previously briefed the team that I
would be coming and what the purpose of my observation was, and she reminded them again once they all arrived and she had made introductions. The team was friendly and excited to have me present. I told them I was collecting data on their collaborative meeting, and would not participate. They asked me questions over the course of the observation. When Sara mentioned the electronic tool they used, she asked if something similar was used at my school. I answered her question, but kept my response brief and they continued with their meeting agenda items.

The entire staff was together in the library with other teams seated next to us, working on their own agenda items and tasks specific to their teams. I noticed the principal stopping by to check in with most of the teams. While the noise level was higher than it would have been if they were meeting in isolation, the close proximity did not make it difficult for the team observed to conduct their discussion, nor did it appear to be a distraction. I noticed specialists visit groups as well. At one point during the observation, the English Learner Teacher (EL) for the school stopped by to discuss the most recent assessment she had given to a few of the students that Debra and Rosa shared.

Debra expressed frustration with one of the students in her group. She shared, “He does not belong in my group. He is really too high and is bored, and so he gets others off-task.” Then the EL teacher presented the recent assessment scores and informed Debra he still had not met all of the criteria to move to the next level and join Sara’s group. Debra appeared reluctant to accept the response from the EL teacher; her body language and facial expressions communicated her frustration with the fact the student would stay with her group. Sara offered to send the Teacher’s Assistant (TA) to support this particular student during the small group time, and Debra expressed relief to have support. Debra remarked:
That would be great! Thank you, I really believe he knows more than is being
demonstrated on the assessment and the additional adult focused on assisting him could
make a big difference for him and his friends in the class. Thank you so much!

The team continued to discuss other students who had not made the growth expected.
The team used an electronic agenda and data collection tool to facilitate the meeting. Sara was
the lead and recorded the notes and data for the team. Each of the grade level teams working in
the library had similar agendas and the same data collection tool appropriate for his or her grade
(see Appendix F). The team met four of the six components on the rubric, refer to the table
below:
Table 5

*Observable Evidence of a Collaborative Team at School B in April 2018*

<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.

The team met weekly, used an agenda focused on the four learning questions, they had evidence of SMART goals, and worked interdependently as a team. They did not generate a product during the April 2018 observation, nor did they have formally established norms. Despite the lack of formal norms, the team worked very well together. They were focused, kind, respectful, and accomplished the goal of the meeting. It was evident the that norms, clear expectations established by the principal, had been communicated and were being implemented by the team even though there was not a formal document referenced for behaviors or process.
The second observation at School B took place in May 2018 with all members present. The team consisted of Sara and Debra, and one dual language teacher, Rosa. I was seated with the team, but did not participate in the discussion. However, it is worth noting the positive energy of the entire staff as well as the team I observed. They greeted me with smiles and asked how the research was going. They were excited to share what they had been working on since my previous observation a month earlier. The team once again met in the library with the rest of the grade level teams. The team met five of the six components listed on the rubric, as noted in Table 7, with the exception of the written norms. During the first 20 minutes of the observation, Sara led the discussion and took notes on the data collection electronic document. Then, Principal Nova stopped by to check in with the team. They did not have specific questions for her, but Principal Nova inquired:

What do we think is contributing to the lack of growth for him? I noticed when I compared his baseline data to the last two progress monitoring CFA’s he made no growth. In fact, he regressed. Do you guys think something is off at home? I can reach out to his mom. What could it be?

Rosa responded to Principal Nova’s question:

He has been struggling with behavior, and I think reaching out to his mom or grandpa would be a good idea. They were concerned at the beginning of the year. I also think we might need to refer him for testing if we cannot get some progress with him.

The team agreed with Rosa and shared the same concerns for this student. Debra commented that he did not seem like himself and offered suggestions for Rosa to help reach him. Debra mentioned the student worked very well when paired with another student, and that seating him in a different location during the independent time might help. Debra and Rosa both
expressed similar concerns and their plan for the intervention of the student. Their discussion only lasted a few moments and then Principal Nova moved to the next team.

Table 6

**Observable Evidence of a Collaborative Team at School B in May 2018**

<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Note.* Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.

Sara led the team in transition to a discussion of the bridging of the English-Spanish language lessons, and the team aligned their daily schedule and lessons for the next week. Debra volunteered to create a draft of a common formative assessment to share with the other two teachers at their next meeting so all three could provide feedback based on the instruction they would give students in between this meeting and the next. This discussion took the remainder of the meeting time.
School C. School C’s first observation occurred in April 2018 with the first-grade teaching team consisting of Cindy, Brittany, and Jennifer. Jennifer was the leader of the team and facilitated the meeting. The team was notified by Principal Johnson that I would be observing. Principal Johnson escorted me to Brittany’s classroom where the team meeting was about to start. After a brief introduction, Principal Johnson then excused herself and she was not present for the remainder of the first-grade collaborative meeting because she was needed at another team meeting to support the facilitation and discussion. Jennifer and Brittany asked me a few questions about the research and school district where I worked. Cindy was late to the meeting, so the others discussed an upcoming fieldtrip until she arrived a few minutes later. I sat at the same table with the team, but did not participate in the discussion. No one on the team made direct statements to me after their discussion started. The feeling amongst the team was not one of warmth or of being friendly; it was instead a very “focused on the task at-hand” meeting. There was not much laughter or smiling during the meeting and they maintained a serious intent to get through the agenda items.

Jennifer used an electronic tool which kept the team focused on student growth and learning. The team met five of the six components of the rubric. They had a set agenda, they had a data protocol tool to keep them focused, and they generated a finished product to share with their principal and colleagues during the next staff-wide collaborative meeting. They used SMART goals which were articulated and included in the data collection tool, and they worked interdependently to accomplish the team goals. Cindy, the veteran teacher on the team, requested support with a technology frustration. Brittany offered to stop by the next day to help Cindy adjust the settings in the software so she could access the same report that her colleagues were using.
Table 7

Observable Evidence of a Collaborative Team at School C in April 2018

<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>D. Establish norms</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Note. Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.

The team was efficient, completed all tasks assigned, and finished ten minutes early. While they were able to accomplish a great deal, they seemed to lack the positive relationships observed with the other two teams. They did not use humor with each other, and there seemed to be a coolness from Jennifer with her colleagues. It was not disrespectful or unprofessional, but was absent of laughter and warmth. The team functioned well together, but they did not have the same unity or sense of cohesion as observed in other elementary school grade level teams.
The second observation of School C’s first-grade team took place in May 2018. All of the first-grade team, Cindy, Brittany, and Jennifer, were present the entire time. Jennifer led the discussion again and facilitated the meeting but Principal Johnson did not check in. The team met in Brittany’s classroom. The observation was very similar to the first one. The focus of the discussion was on how to calibrate the writing assessment they were about to give. Cindy asked:

Do either of you have the graphic organizer we used the last time we taught this unit? It was the one with the writing web students could use to fill in their big ideas before they start their free write. I think that really helped with some of my little ones who are stuck and cannot generate ideas.

Brittany answered Cindy and said she thought she had a few copies of the graphic organizer she could give her. Brittany also went to a Google document and shared it with Cindy. She said she used the graphic and it supported her struggling students with their writing, and also gave those more advanced students a way to organize thoughts as well. Jennifer added to the discussion and agreed with Cindy the unit was difficult and that teaching writing to first-graders who have such different needs was challenging. The team discussed how they could level students by ability for a writing intervention the following week, and Jennifer offered to take the lowest group and try out a new strategy with them. Jennifer shared her recent success using a digital platform, and had students using the iPads to write their stories on. Jennifer shared:

They really love iPad time and this is such a great tool to get them engaged and thinking about what they might want to write about. They can also record themselves reading their writing, and we can post to the Seesaw (a digital, private social media site) account for parents to watch the video as well. This seems to really motive them to complete
their writing …if they know they can “publish” their work on Seesaw. And parents get so excited too! It’s a win-win!

I observed a difference in the body language, and overall feeling of the team. They all seemed to be more relaxed in my presence and excited about the new technology. They spent the majority of the time discussing the digital resource and what other ways they could incorporate the Seesaw account.

The team met five of the six components: (a) held the weekly meeting; (b) focused on the four learning questions; (c) generated a product for the team to use and principal to check in digitally; (d) used SMART Goals; and (e) worked interdependently. Brittany brought an instructional strategy on a math concept they had all been working on to share with the team. Her colleagues were engaged, and they all agreed to try it out. They discussed sharing students during the intervention and what each of them would do with the groups. Evidence of the team’s incorporation of five of the six components of the rubric can be seen in Table 8.
Table 8

Observable Evidence of a Collaborative Team at School C in May 2018

<table>
<thead>
<tr>
<th>Criteria Observed</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Note. Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.

While all three of the schools had a designated time in the week for collaboration, the processes, structures, systems, involvement and expectations of administrators during those times varied considerably. Based on the data collected during the six observations, School B and School C were observed to have more of the critical components of a highly effective weekly collaborative time, according to literature and experts (DuFour & Eaker, 1998).

Support. The literature states effective leaders provide coaching and modeled desired behaviors for staff regarding creating a collaborative environment (Conner, 2015; Crum, et al., 2008).
Leithwood and Jantzi (2000) state:

- building school vision and establishing school goals;
- providing intellectual stimulation;
- offering individualized support;
- modeling best practices and important organizational values;
- demonstrating high-performance expectations;
- creating a productive school culture, and developing structures to foster participation in school decisions. (p. 114)

The data collected from interviews, focus groups and observation provide evidence of the practice of individualized support and modeling best practices.

**Coaching/Modeling for teachers.** Principal Nova shared about her support for teams and the individual teachers during her time as a principal. Specifically, she shared about a team who was wrestling with an issue over which supplement curriculum would be best to use with an intervention group. The team dynamics were strained and they were unable to agree. Principal Nova first went to each member of the team to get their perspective on the matter. Once she was able to assess the perspectives of the individual team members, she then brought them together and supported them in discussing the pros and cons of each program. She created an atmosphere of trust and confidentiality, which allowed the teachers to feel safe. She modeled using clarifying questions and “I” messages, giving people think time and allowing all voices to be heard. Principal Nova admitted, “It was not enjoyable or fun, it was a tough conversation…much emotion. However, we reached an agreement, and the team was able to move forward.” She spoke about “how tough conflict resolution can be, but it is a skill people can learn, and it gets easier over time.” Principal Nova supported the teachers' personal lives as well as professional obligations. She expected her staff to put their own personal families first, and emphasized self-
care. Her teachers reported she encourages them to keep balance and never expects them to sacrifice their personal lives for work.

Principal Johnson shared a similar experience and how she supported two teachers who were struggling with their working relationship. One of the teachers felt excluded from decision-making, and the other was frustrated with the lack of effort she perceived her colleague to be putting forth. Johnson said, “They both needed to get it out, have an opportunity to express their feelings and work it out.” She shared the two were able to move past it, but eventually one of them requested a grade level switch, and that was ultimately how the situation resolved itself. Johnson stated, “Some people are not a good mix or good fit – this was one of those examples. I coached and encouraged movement for one of them, and she was so much happier with the change after she made the move.” Also, Principal Johnson supports her staff by addressing their needs and requests. However, based on feedback during the principal interview and teacher focus group, some of the staff feel she is not as responsive regarding student discipline. Principal Johnson acknowledged there are a handful of staff who she was aware did not feel supported by her in the area of school-wide student behavior expectations. However, based on her assessment and feedback from teachers the majority of staff do feel supported.

Principal Miller shared during the interviews that he makes a concerted effort to get teachers what they need in order to do their work, i.e. everything from curriculum and supplies to professional development. The teachers at his school mentioned several times how supportive he is professionally and personally. They talked about different requests they had and his quick response to get those needs met. Anna shared, “When we wanted to take our students on a field trip, and the cost was an issue, he found the money.” Her colleagues agreed that he will do whatever he can to support the staff and students. Miller’s teachers talked about his care for
people and the compassionate, generous heart he has as a leader. It was evident the teachers felt Principal Miller was doing his best to support their work.

**Developing and maintaining professional relationships.** As found in the literature, positive working relationships are identified as a hallmark trait of effective leaders when creating a collaborative environment (Brown, Finch, MacGregor & Watson, 2012; Patterson, Grenny, McMillan & Switzler, 2013). All three of the principals valued relationships and spoke about the important that those relationships have in creating a collaborative environment. Some commonalities among the three principals was a positive attitude, flexibility, openness, and relationship-building skills. Each of the principals in the study have different personalities and leadership styles, but there were fundamental practices that all three principals used to create positive working relationships and to provide a collaborative environment.

**Encouraging staff celebrations.** An essential part of developing and maintaining professional relationships are staff celebrations and team building activities both during staff meetings as well as off-site non-work-related events. All three of the schools involved in the study possessed some degree of staff tradition celebrations, including: (a) monthly birthday potlucks; (b) Friday happy hour; (c) baby showers; and (d) back-to-school and end-of-year BBQ’s. Each of the principals shared that this was an area they wanted to include more of during staff meetings, but that their teachers made these events a significant part of the school culture. Teachers and office support staff were reported to take the lead in much of the social events and staff celebrations.

Principal Nova was highly visible and involved in the day-to-day running of the school. This enabled her to develop and maintain professional relationships with staff. She was strategic in the connections she made with teachers in order to foster a collaborative environment.
Principal Nova mentioned “checking in” with individual members of each team to gain an idea of their feelings regarding current initiatives before she met with the entire team. She mentioned this was a great way to build relationships and get a more accurate perspective of where individuals and teams stood with their collaborative meetings. During my observations of Principal Nova at the team meeting (of which she attended a portion), I noted the focused approach she used to relate with the team in order to support collaboration. She was kind and easily approachable, but also kept things on-task and moving. Principal Nova’s ability to develop and maintaining professional relationships influenced the teams’ relationships with each other and their ability to accomplish their tasks. Her mere presence seemed to influence behavior and focus for all of the team members.

Principal Miller seemed to have a great rapport with staff, students, and the community based on feedback his teachers provided, his own statements during the interviews, and this researcher’s observations. His use of humor and outgoing, spirited personality contributed to the energy of the school. He was a natural relationship builder. It was evident he loves his work, has a heart for kids, and cares about his teachers. Miller employed political savvy when he “worked the room” while meeting with staff, and asked meaningful questions to keep the collaboration focused when he facilitated the large group. Miller stated, “I bring chocolate to meetings, keep it humorous and engaging, but most important I stress the ‘why’ behind our work!” He was present for a short time during one of the team meetings I observed, but was not present for the other. During the teacher focus groups, his staff shared how much they respected him and his ability to build positive relationships with even the most jaded individuals. Anna shared, “He makes everyone feel a part [of the group]. He is great at building relationships with everyone!” The other three team members strongly agreed with her.
Principal Johnson was the youngest of the three principals, and the most reserved. She is warm-hearted and reserved, not speaking very much. Johnson was a good listener and had a thoughtful approach to building relationships. During the interview, she spoke about how she builds relationships, “I try to touch base with teachers regularly and inquire about their personal lives as well as work.” She encouraged her teachers to practice self-care, and had a subtle approach with her relationship building. During the teacher focus group, her staff openly praised her saying she excelled at building relationships and was well-respected for her care and concern of her staff. Johnson was supportive of community-building and icebreakers activities to start off the school year and help build connections with the staff, but added she would like to do more of those type of activities.

**Communication.** All of the key themes previously mentioned are important for principals to build a collaborative culture, but communication is the glue which connects all of the individuals who are part of the school’s culture. Literature on building a collaborative culture in a school stresses the importance of leaders providing frequent, transparent, honest, relevant communication (Collins, 2001; DuFour & Eaker, 1998; Fullan, 2008; Leithwood & Jantzi, 2000; Sergovanni, 2005). Effective communication supports all aspects of leadership, and a lack of it can seriously impede a principal’s ability to bring out the best in their school.

**Sharing important information.** Principal Miller described his modes of communication which include weekly staff email and parent e-mail communication, social media forums, and website updates. Miller stated:

What, why and how you say something or communicate are all import…especially if you are making a change…Even something that might seem minor like a new traffic flow pattern. Any change in routine or schedule can be a deal breaker. Some people do not
like their “cheese” moved and if you do not communicate it right or well it can become a fiasco.

Miller reflected on a change that was not communicated well, and how it took months to get things back on track. He shared an incident regarding a last-minute change to a schedule for a field trip, and the teachers did not get the information in time. He commented that it took several events going well and over communication before staff let go of anxiety around assemblies, field trips or other out-of-the-routine events.

Principal Johnson has similar communication tools in place at her school. She uses social media instead of e-mail or hard copy newsletters, and teachers have Seesaw accounts to share out information to the parents and fellow staff. The Seesaw information is also used as a data collection tool to share student work electronically. Johnson emphasized how critical accurate and regular communication is for staff to collaborate effectively. She shared the agenda a week ahead of a meeting, and provided support with written documents for topics they discussed during their staff-wide PLC. Johnson also provided specific written and oral directions with clear expectations for the process during team time when they were working independently. Johnson stated, “Without all of the various forms of communication, teachers could easily lose focus during their team time or a staff professional development opportunity.” Johnson said she believed transparent and frequent communication was a vital structure that supported collaboration.

Principal Nova used a mix of traditional and social media communication methods. Nova stated, “You really cannot communicate enough…some people might grumble about the constant saturation of information, but I would rather that than an absence of accurate communication.” Also, she said when supporting collaboration, communication must be clear
and expectations concise with those expectations communicated verbally and in writing. Nova mentioned the use of the electronic data tool teachers complete during collaboration. The tool was a method for them to communicate progress on student growth goals and allows the principal to provide feedback to the team.

Summary

This study’s data collection process yielded findings which aligned with the literature and current research related to the study’s question: how do principals create a collaborative environment at the elementary level? (Barnett & McCormick, 2004; Connor, 2015; Crum, Sherman, & Myran 2009; Csikszentmihalyi, 1997; Doidge, 2007; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Specifically, as a result of the analysis of the interviews, teacher focus groups and observations, five key themes surfaced to the forefront: (a) servant-oriented moral compass: (i) integrity, (ii) self-responsibility, (iii) trustworthy, (iv) commitment; (b) developing and maintaining professional relationships: (i) encouraging/celebrations; (c) support roles: (i) coaching/modeling; (d) structured periodic collaborative time: (i) implemented collaborative teams; and (e) comprehensive communication. The findings were supported through the triangulation of the data. Each of the key themes was drawn out by the common evidence of those concepts in each of the individual interviews, focus groups, and observations documented. The participants in the study provided their perspectives based on their professional experiences as those related to collaboration. While the schools and participants contained distinct variables, the analysis of the data produced consistent commonalities in the five key areas despite the environmental differences between the schools. Chapter 5 of this study will
encompass analysis, interpretation, and recommendations based on the findings presented in chapter 4.
Chapter 5: Discussion and Conclusion

The purpose of chapter 5 is to present a summary and discussion of the results of this study. Also included is a discussion of the results in relationship to the literature review presented in chapter 2. Limitations of the study and any unintended outcomes or consequences are shared. The implications of the results for practice, policy and theory as applicable are also presented in this chapter. My personal insight, analysis and evaluations of the results is also provided in addition to a connection to the existing research and possible contribution to new research in the field of education. The chapter contains an assessment of the quality of the dissertation, and how the research question aligns with the intent of the study and conceptual framework.

Summary of the Results

The purpose of this study was to gather rich, descriptive data on the topic of collaboration in an elementary school. As discussed in chapter 1, teachers need the opportunity to continue to learn and grow to reach their full potential. Principals are responsible for leading this learning for their staff and must: (a) build trust; (b) promote positive relationships; (c) support innovation; (d) foster creativity; and (e) motivate staff (Brown, Finch, MacGregor & Watson, 2012; Patterson, Grenny, McMillan & Switzler, 2013). The literature suggests schools that have successful collaborative teams also have the same positive school environment with high levels of trust and strong relationships evident in their schools (Brown, Finch, MacGregor & Watson, 2012; Patterson, Grenny, McMillan & Switzler, 2013). As a result, the research question of this study was: How do principals create a collaborative environment at the elementary level?
Theory

This study was based on a social constructivist philosophy. This philosophy was directly connected to my study because it was based on the concept that teachers learn through relationships, social interaction, and the discussion of their questions regarding student learning, their instructional practices, and their own learning. “Constructivism is the philosophical and scientific position that knowledge arises through a process of active construction“ (Mascolol & Fischer, 2005, p. 49). Vygotsky's theories stressed the fundamental role of social interaction in the development of cognition, as he strongly believed that community played a central role in the process of “making meaning“ (McLeod & Seashore, 2006). The goal of this study was to gather rich data about the creation of a collaborative environment through conducting interviews and observation of the social interactions of the principal and staff. The study included an inductive research approach, which was focused on meaning outcomes and human interest. The significance of this study was based on the need for continued research of collaboration in education, which is necessary for an increase in successful implementation of a systemic and cultural transformation of American schools (DuFour & Eaker, 1998).

Seminal literature. A brief review of the seminal literature supported the purpose of this study. The literature showed successful principals need to develop a positive culture, and trust is the foundation on which a new culture can be birthed (Barnett & McCormick, 2004; Conner, 2015; Crum, et al., 2009; Csiksezentmihalyi, 1997; Doidge, 2012; Gheusi, Ortega-Perez, et al., 2009; Hallowell, 1999; Hattie, 2009; Mitchell & Castle, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). Leaders are responsible for establishing trust by being an authentic leader, following through on commitments, honoring traditions, creating a shared vision, and providing clear leadership (DuFour & Eaker, 1998; Fullan, 2008; Leithwood & Steinbach, 1995;
Tschannen-Moran, 2001). A principal who is successful in creating a collaborative environment maximizes his or her influence by leading the learning of the staff, by implementing new systems, and by being a change agent (Fullan, 2014). The research regarding organizational behavior stated individuals will continue to resist new initiatives if they do not trust the leader who is asking them to change (Weick, 1985). Moreover, researchers theorized that trust is an essential base for a healthy school culture (DeMatthews, 2014; Demir, 2015; DuFour & Eaker, 2009; Tschannen-Moran, 2000). Since the literature review for this study was completed in January 2016, there has been no further significant research on the topic of elementary school principals creating a collaborative environment that this researcher was able to locate.

**Methodology.** The methodology applied in this study employed a qualitative case study design which provided an in-depth perspective of three elementary school principals and their respective staff. The purpose was to identify how principals create a collaborative environment at the elementary level. The methodology transferred the theories regarding principal leadership into action, and provided practical application to the field as it relates to effective collaboration. The methodology was a guide for future research and supported replication, data collection process, and establishment of credible and valid findings (Krathwohl & Smith, 2005). The study connected previous research theories and findings to the goals and objectives of the conceptual framework in this study.

As referenced in chapter 4, the completion of analysis from each of the three data collection methods provided a meaningful perspective on the topic of creating a collaborative environment. Principal interviews, teacher focus groups and observations provided specific significant evidence regarding how principals viewed their leadership of collaboration in the schools. The principals shared their experiences and perspectives regarding leading their staffs
in collaborative work. During the teacher focus groups, I was able to hear their unique perspectives, and I observed behavior that met the definition for what constitutes a team (DuFour, 2009). All of these opportunities provided rich data that supported the evolution of the conceptual framework from the initial concepts to a new conceptual framework. The findings yielded five key themes of: (a) servant-oriented moral compass; (b) developing and maintaining professional relationships; (c) support roles; (d) structured periodic collaborative time; and (e) comprehensive communication. While the initial conceptual framework and the new framework birthed from the research have foundational similarities, the key themes provided a fresh perspective to the research question.

Discussion of the Results

The study’s data collection and analysis findings produced five key themes: a) servant-oriented moral compass; (b) developing and maintaining professional relationships; (c) support roles; (d) structured periodic collaborative time; and (e) comprehensive communication. These themes presented a new conceptual framework for considering the research question: how do principals create a collaborative environment at the elementary level? The revised conceptual framework is represented in Chapter 2, Figure 2.

Findings

The findings of the data collected from interviews, focus groups and observations revealed leaders who possessed a strong moral compass to be at the core of the ability for principals to create a collaborative environment. This was the first key theme presented in chapter 4. It is based upon the foundation of a strong moral compass that a principal was deemed able to build positive working relationships, and provide professional support to the staff. The systems and structures which are essential to building true team collaboration began
with weekly collaborative time, and tools and resources to promote focused team time. Effective and efficient communication was the glue that bound all of the components of the framework, and enabled the principals to create a collaborative environment.

Sergiovanni (2005) spoke about servant leadership and the struggle leaders face to act according to their values, and make the right decisions as principals. The data presented in chapter 4 addressed Sergiovanni’s (2005) statement regarding the struggles that leaders face. The data presented included these subthemes: (a) integrity; (b) self-responsibility; (c) trustworthiness; (d) commitment; (e) humility; and (f) reflective practice concerning their leadership in creating a collaborative environment. Multiple data points were collected from interviews, focus groups and observations regarding the individual principals and the character traits they have in common.

During the individual interviews, each of the principals spoke about having personal integrity and high expectations for themselves and their staff. They shared specific examples of situations which required them to have difficult conversations, accept responsibility for a failure, and follow through on commitments. During the teacher focus groups, the principals’ respective teachers reported what good people they believed their principals to be. The teachers believed that the principals cared about their staffs, students and communities. As a result, trust was evident in the relationships between the leaders and their teachers. It was evident the principals set the tone for their schools based on observations of interactions between the three principals and their staff, and the teachers with each other.

In School A, Principal Miller’s outgoing, humorous and engaged personality spread throughout the school. He regularly joked with staff, inquired about their work and personal lives, and modeled commitment, kindness and professionalism. Principal Nova’s leadership
style was more subdued but kind, inviting, and focused on student learning. Her compassion coupled with a sense of urgency brought out those same qualities in her teachers. Nova displayed high moral character and her teachers spoke about her dedication, loyalty to the staff and the community. Principal Johnson was the most reserved of the three in her leadership and made strong connections with individual teachers. Her staff spoke highly of her knowledge as an instructional leader, and her ability to lead with humility and high standards.

**Key theme analysis and interpretation.** At the beginning of the study, the ability to build trust and positive relationships was one of the theorized components of the conceptual framework. The findings of this study strongly suggested a moral compass is at the heart of successful leadership, and is essential for a principal to be successful in creating a collaborative environment. This researcher underestimated the significance of a principal’s: (a) integrity; (b) self-responsibility; (c) trustworthiness; (d) commitment; (e) humility; and (f) reflective practice concerning their leadership in creating a collaborative environment.

**Servant-oriented moral compass.** This first of the five key subthemes is the servant-oriented moral compass. The other four key subthemes: (a) developing and maintaining professional relationships; (b) support roles; (c) structured periodic collaborative time; and (d) comprehensive communication, were supported and connected to the core key theme of a servant-oriented moral compass. Based on the research collected during the study, this researcher concluded that a principal’s ability to: (a) build positive working relationships; (b) offer professional support; and (c) communicate effectively, is directly related to their core values. The external supports and structures of weekly collaborative time, which included: (a) norms; (b) SMART goals; (c) data collection tools to support discussion and focus on the four
learning questions; and (d) team interdependency, were enhanced and improved by the principal’s values, beliefs, knowledge, skills and ability.

**Developing and maintaining professional relationships.** The second identified key theme in this study is the ability of principals to develop and maintain professional relationships. During interviews with participants who were principals, each individual spoke about how important collegial relationships were for them and their staff. They shared examples of expressing care and concern for their students and staff by showing interest in their community’s traditions, celebrations, and extracurricular activities. During the teacher focus groups, the participating teachers described their leaders as kind and compassionate individuals. While each of the principals was described as having very different personalities by their respective staff, the teachers commented on similar traits amongst the principals. The comments included examples such as, but not limited to: (a) people person; (b) positive outlook; (c) good-natured; (d) gets along well with everyone; and (e) able to build positive relationships with a variety of personality types. Based on this feedback, it was evident the principal’s ability to build strong professional relationships contributed to a collaborative culture.

**Support roles.** The third key theme identified in this study was the supportive role that the principals played. The participants spoke about how they modeled for their staff, and coached them for a variety of reasons. One example of modeling was conflict resolution, and another was how to have a difficult conversation. The principals clarified using intentional speech when they wanted to encourage their teachers to feel comfortable around sharing their thoughts and emotions. An example of what a principal might say was, “Tell me more about that,” or, “Can you explain why you did?” The principals also shared stories of how they coached teachers around their instructional strategies, or encouraged teachers to observe other
master teachers while they (the principal) covered their class for them. The teacher-participants reported similar supportive behaviors from their site administrators. Therefore, this researcher concluded this supportive role by principals as a key contributor to the creation of a collaborative environment.

*Structured periodic collaborative time.* Observations conducted during weekly collaborations produced important findings. As mentioned in chapter 4:

While all three of the schools had a designated time in the week for collaboration the processes, structures, systems, and involvement and expectations of administrators during those times varied considerably. Based on the data collected during the six observations School B and C were observed to have more of the critical components of a highly effective weekly collaborative time according to literature and experts than School A.

This researcher’s interpretation and evaluation of these differences was the lack of focus on the four learning questions, and interdependency with the teachers in School A was at least partly due to: (a) the lack of direct presence of the principal; (b) the absence of agreed upon data collection tools; and (c) the absence of set agendas.

When comparing the rubrics from School A to Schools B and C, it was evident there was something different in terms of expected accountability and structures to support the collaborative process. The expectations of the principals were the same, and the goals of the teams were also very similar, all based on student growth data. When the principals were asked about the purpose of the weekly collaboration times, their responses were consistent. The same was true for the teacher focus groups; the general consensus was that the expectation and purpose of weekly collaborations was to: (a) examine student growth data; (b) discuss common formative assessments; and (c) consult regarding instructional practices, alignment of pacing,
and groupings of students. However, the actual activities performed during the observations conducted did not align with those stated by the principals and teachers.

**Comprehensive communication.** The fifth key theme of this study was comprehensive communication. Repeatedly, communication was referred to as essential to a successful collaborative environment. Principal-participants shared communication strategies which included weekly newsletters to the community and staff using social media and apps, such as Twitter, to communicate upcoming events or highlighting exciting activities where students were involved. The principals spoke about the idea of over-communication, specifically that this was not likely to happen when serving in the role of principal. Principal Miller stated, “You cannot communicate enough. There is no such thing as over-communication in this role.” Principal Nova shared regular effective and frequent transparent communication is vital to a healthy school culture. She shared, “Staff need to feel in the ‘know’ as much as possible.”

Teacher-participants expressed how much they appreciated the open lines of communication. They talked about the void it left when communication was lacking, and how the absence of communication can be damaging to morale. Heather stated, “Teachers will start to assume the worst, or get offended if they feel they are unable to communicate with the principal.” Specifically, communication about changes seemed to be a significant topic. Also, it was noted how important it was for principals to get input and feedback from as many of the staff as possible prior to implementing any changes. Moreover, the amount of detail provided in the communication was also said to be critical for teachers. Based on the literature and findings from this study, communication appeared to be the glue which holds all of the other components together. While the servant-oriented moral compass is at the heart of the characteristics from this study, communication is the connector for all of the key themes.
Discussion of the Results in Relation to the Literature

This section of chapter 5 explores three specific components of the results discovered from this study: (a) “how the results relate to the community of practice; (b) how the results relate to the literature; and (c) how the results relate to the community of scholars” (Concordia, 2018, p. 4).

Literature. The results of the study supported the literature and research on the topic of principals creating a collaborative culture. This study’s data collection and analysis yielded the anticipated results based on research from previous studies and literature on similar topics related to collaboration. However, the findings of the current study revealed a focus on the character of the leader as primary catalyst to create the environment needed to motivate teachers to collaborate. The structures and systems were also revealed to be significant, although they were not a significant part of the initial framework. The new conceptual framework included the five key themes and nine sub-themes: (a) servant-oriented moral compass: (i) integrity, (ii) self-responsibility, (iii) trustworthiness, and (iv) commitment; (b) developing and maintaining professional relationships: (v) encouraging, (vi) celebrations; (c) support roles: (vii) coaching, (viii) modeling; (d) structured periodic collaborative time: (ix) implemented collaborative teams; and (e) comprehensive communication, surfaced in the data collected and analyzed during the study were supported by the literature (Barnett & McCormick, 2004; Connor, 2015; Crum, Sherman, & Myran 2009; Csikszentmihalyi , 1997; Doidge, 2007; Fullan, 2008; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, E., 1999; Hattie, 2009; Leithwood & Jantzi, 2000; Mitchell & Castle, 2005; Sergiovanni, 2005; Szczesniul & Huizenga, 2014; Tschannen-Moran, 2000).
The Venn Diagram (see Figure 3) shows the comparison of the initial conceptual framework with the new conceptual framework, and the intersection of commonalities. I created the Venn Diagram to visually express the transition from the initial framework of this study and how it evolved. The diagram also shows the key concepts which were included from the start of the research and arose as significant components of the study. The four concepts which reside in both the initial and final conceptual frameworks are: (a) trust; (b) positive relationships; (c) celebrations; and (d) growth mindset (continuous improvement).

**Figure 3.** A Venn diagram intersection of commonalities of the initial and revised Conceptual framework. On the left are the components believed needed to create a collaborative environment and the right side are the components identified in this study, the middle is the common components present prior to and after the research was completed for this study.

The implications of the connections to the literature are evident in the comparison of the initial conceptual framework and the conceptual framework resulting from this study, and the current literature available (Barnett & McCormick, 2004; Connor, 2015; Crum, Sherman,
This study began with one of the problems facing the American education system and the tendency to separate teachers from each other, and deprive them of the potential to learn and grow through relationship with their colleagues (Little, 1987, 1990; Lortie, 1975; Powell, Farrar, & Cohen, 1985). This study sought to uncover how principals can contribute to ending the isolation of the teachers by creating a collaborative environment at their schools. This study produced evidence that aligned with current research that principals can reduce teacher isolation in the manner they lead their schools. Specifically: (a) a principal’s personal character, and (b) the systems and structures they: (i) put in place, (ii) monitor, and (iii) support, can create a collaborative environment. In light of the problem of teacher isolation, this study provided insight based on the perspectives of three principals and their teachers that principals can reduce teacher isolation, and support authentic collaboration.

Limitations

This section discusses the research design limitations, and identifies possible differences which could have strengthened the study. This study could have been improved upon with an increased number of observations of teacher collaboration. More observations would increase the reliability of the data collected. Six observations were conducted – two at each of the three school sites. Monthly observations over the course of the school year would have been ideal. If it had been possible to: (a) conduct the study from September 2017 through May2018; and (b) have two focus groups, one at the beginning of the research study and one at the end of the study, this researcher believes the data collected may have been richer. It is also possible the data may
have provided more evidence of specific ways principals either added to or took away from creating a collaborative environment. Video recordings of the meetings would have also increased the accuracy of the data collected. The audio recordings supported the accuracy of the research; however, due to a lack of equipment resources, video recordings were not employed. Some of the questions which related to the conceptual framework could have been removed or rewritten to encourage more dialogue focused on the central research question. This researcher could have included survey data and employed a mixed method design in addition to the interviews, focus groups, and observations.

**Implication of the Results for Practice, Policy, and Theory**

This section presents the implications of the results for practice, policy, and theory as it relates to the research question, literature review and conceptual framework of this study. The conceptual theory this study was based on was the social constructivist theory. The purpose for this was to gather a broader understanding of the foundation for the research completed in this study (Vygotsky & Cole, 1978). Vygotsky's theories stressed the significance of social interaction in the development of cognition. Therefore, the social interaction of adults in the educational setting is related to the research conducted in this study (McLeod & Seashore, 2006). The literature review in relationship to the conceptual framework functions as the foundation of this study, and it evolved over the course of this study (Crum et al., 2009; DeMatthews, 2014; Demir, 2015; DuFour & Eaker, 2004; Tschannen-Moran, 2000; Wasley, Hampel, & Clark, 1997).

**Theory and Literature**

The constructivist theory and literature drove the research in this study. The results of this study inform that theory, and in turn that theory informs the results. This study was based on
the theory that principals have the ability to create a collaborative environment in their schools. Furthermore, the results of this study yielded evidence which supports the broad social constructivist theory as well as the literature review. Conversely, the theory informs the results because the theory acts as a foundation from which the study is based on and was a catalyst for this study. The implication was that prior studies supported: (a) the foundational theory of this study; (b) the conceptual framework; and (c) the key findings of this study. The literature related to principals creating a collaborative culture in elementary schools revealed strong connections in findings of similar studies in the majority of the research (Crum et al., 2009; DeMatthews, 2014; Demir, 2015; DuFour & Eaker, 2004; Tschannen-Moran, 2000; Wasley, Hampel, & Clark, 1997).

The study conducted by Tschannen-Moran (2000) supported the findings of this study regarding the importance of trust in building collaborative environments at schools. Tschannen-Moran found trust was a critical factor in successful collaboration. This study found that trust was one of the significant character traits present within the broader concept of a principal’s moral compass. This study also found character traits of: (a) integrity; (b) self-responsibility; (c) commitment; and (d) trustworthiness to be related to a principal’s ability to create a collaborative culture.

The study by DeMatthews (2014) found similar results regarding a principal’s ability to create and maintain the positive relationships required for staff to work collaboratively in a PLC. The data and analysis for this study yielded results which placed a significant value on the relationships fostered between principals and their staff.

DuFour and Eaker (2004) stated there are five critical components needed for teachers to function as a team and move beyond group work to transformative team work. One of the key
themes of this study included the structures and systems which support collaboration. Specifically, weekly collaborative meetings that are structured with the following elements produced a high functioning PLC team: (a) a focus on the four learning questions; (b) SMART goals; (c) norms; (d) generated products; (e) interdependency relationships; and (f) the ability of the principal to establish and foster those with his or her staff.

**Practice.** The selection of this particular research question for this study was birthed from my own wonderings regarding one of the greatest challenges I faced as a principal, that of creating a collaborative environment. I hypothesized, based upon personal experiences as an educator, that the first step was to end teacher isolation and support positive collaborative environments for teachers. The responsibility for creating the environment lies at the feet of the building principal. The implications for practice were clear: based on the literature and the results of this study, in order for principals to create a collaborative culture, they need: (a) to possess a strong moral compass; (b) have the ability to build trust and positive relationships; (c) demonstrate integrity; (d) demonstrate self-responsibility; and (e) establish structures and systems, like weekly collaborative time, with tools and resources to keep the time focused (DuFour & Eaker, 1998). Moreover, humility and commitment are essential for long-term success as a principal to create a collaborative environment. For practitioners in the field, the implications are multi-faceted and complex (DuFour & Eaker, 1998; Fullan, 2008; Hallowell, 1999; Hattie, 2009). The knowledge base and skill set of a principal are demanding and require the willingness and ability to: (a) reflect when mistakes are made; (b) learn from those opportunities; and (c) consider them opportunities for growth and improvement (Csikszentmihalyi, 1997; Doidge, 2007; Fullan, 2008; Hallowell, 1999; Hattie, 2009; Leithwood & Jantzi, 2000; Sergiovanni, 2005; Szczesniul & Huizenga, 2014; Tschannen-Moran, 2000).
Resistance. One of the most difficult things principals can encounter are resistant staff. The principal-participants of this study spoke about their experiences in dealing with teachers’ resistance to collaboration. They described the unique challenges they encountered in dealing with negative attitudes, resistance and at times a toxic culture. All of the participants concluded these issues present a barrier when a principal is working to create a collaborative environment. The resistance to collaborate was something each of the principals spoke about experiencing at some point in their careers as leaders. It was mentioned by all three of the principal-participants that one method used to address these types of relationship challenges is to model how to have a difficult conversation. Each of the principal-participants shared personal stories of how they addressed teacher-to-teacher relationship challenges, or principal-to-staff relationship conflict. Each of the principal-participants mentioned one strategy which seemed to be effective the majority of the time. The intervention referred to most often was to model for teachers how to address conflict so all parties involved felt heard, and how to create a safe space for them to discuss the issue. The principals mentioned presuming positive intent by all parties, and keeping the discussion focused on solutions. Unfortunately, this and other strategies mentioned were not always successful at resolving the conflict. Each of the principals mentioned that natural turnover due to retirements or transfers of those teachers who were unable to collaborate with others was at times the only solution. This leads me to wonder how much influence a principal can have in certain situations around creating a collaborative environment if the ultimate solution is removal of the teacher by attrition or other means.

Principal Nova spoke specifically about how particular she was when hiring staff. She mentioned, “If they are not willing and able to collaborate, they will not be a good fit.” Principal Nova went on to say that it took her years to create a healthy culture of collaboration, and that it
would not have happened if the negative and resistant staff had been allowed to remain. Principals Miller and Johnson shared similar stories in their interviews when being vulnerable about the challenges leaders face when implementing authentic collaboration. As a former elementary principal for 11 years, I did my best to remain unbiased when collecting this information, since I too had shared similar experiences when attempting to create a collaborative environment at the three elementary schools where I was a principal.

During my student teaching in the fall of 2000, at a small rural Illinois school district, I was required to interview the principal. Over the course of our time together he made a statement to me which I have never forgotten. In reference to hiring new teachers he said, “I can help anyone be a good teacher, but I cannot make someone a good person.” I could not help but become reflective regarding this statement while listening Principal Nova speak about the importance she places on hiring a collaborative person. Furthermore, the connection to the first key theme of servant-oriented moral compass and the significance of a leader possessing strong values also resonated with my own experiences as a teacher and principal. A former superintendent of mine shared that a colleague of his from southern California was making huge gains in student growth in her district. The superintendent inquired as to how she had led the change which resulted in student academic growth and achievement. The other superintendent responded that her district offered an early retirement incentive, which provided veteran staff a motivation to leave. This created room for new teachers who were ready to embrace a new way of working. The superintendent believed that the changes in student growth were directly related to the attrition of some of the veteran staff who refused to adopt a new way of teaching. The early retirements of resistant veteran staff attributed to the significant student academic growth.
Bias. I acknowledge that my personal bias as a principal influences my perspective of the study. However, the three principals involved in the study have drawn the similar conclusions regarding particular types of teachers who are resistant to change and or collaboration. As referenced earlier in chapter 2, Muhammad (2009) spoke about a particular type of resistant staff who will only respond when forced to by means of discipline or dismissal. Muhammad describes them as very few in number but if not forced to collaborate by the principal, have the potential stop positive transformation for an entire school, and the creation of a healthy collaborative environment.

Hope for change. Research conducted by neuroscientists provide hope for principals wishing to improve their abilities in any of those research-based recommended areas as well as lead teachers to change their practice as it relates to collaboration (Christakis & Fowler, 2010; Hallowell, 1999). Ending teacher isolation and creating collaborative environments entails change, and changing human behaviors was not an easy endeavor (Schmoker, 2006). As referenced previously in this study, the neuroscience researchers have discovered special binding neurons called “mirror neurons” which connect humans mentally and emotionally (Iacobni, 2008). This new finding, in combination with neuroplasticity, the ability of the brain to regenerate, repair, and grow, creates a scientific basis for the endless possibilities when humans collaborate. This new brain research has implications for the working relationships of educators (Christakis & Fowler, 2010; Hallowell, 1999). Therefore, despite resistance and toxic cultures, implementation of authentic collaboration is possible.

Recommendations for Further Research

This study yielded important results which could be utilized to further research on the question of how principals create a collaborative environment at the elementary level. Due to the
qualitative case study design of this study, the findings cannot be generalized. However, transferability may be developed and applied with due consideration of context by other researchers and practitioners in the field of education (Krathwohl & Smith, 2005; Smagorinsky, 2008). The study could be expanded to include a larger sample size, and extended to cover the span of several years. This would provide valuable insight for practitioners regarding how effective principals’ creation of collaborative teams were at ending teacher “isolation, the enemy of improvement” (Schmoker, 2006, P. 23).

Conclusion

The purpose of this case study was to explore principal leadership at the elementary level and how principals create a collaborative environment. The literature and this study’s results of data collection, analysis and findings conclude principals create a collaborative environment by possessing: (a) a servant-oriented moral compass: (i) integrity, (ii) self-responsibility, (iii) trustworthiness, (iv) commitment; (b) developing and maintaining professional relationships: (v) encouraging, (vi) celebrations; (c) support roles: (vii) coaching, (viii) modeling; (d) structured periodic collaborative time: (ix) implemented collaborative teams; and (e) comprehensive communication (Barnett and McCormick, 2004; Connor, 2015; Crum, Sherman, & Myran 2009; Csikszentmihalyi, 1997; Doidge, 2007; Fullan, 2008; Gheusi, Ortega-Perez, Murray, & Lledo, 2009; Hallowell, E., 1999; Hattie, 2009; Leithwood & Jantzi, 2000; Mitchell & Castle, 2005; Sergiovanni, 2005; Szczesiul & Huizenga, 2014; Tschannen-Moran, 2000). This study did not yield significant new knowledge or innovation for the field of educational leadership. However, this study did highlight the contribution and perspective of three unique individual principals and their teachers. The open willing hearts and minds of the principals and staff to allow me opportunity to interview them and observe the crux of their work regarding collaboration. The
experience I had conducting the research was both an honor and a privilege. This was an incredible experience for me, and hopefully will become a thought-provoking resource for the field of education. I am forever grateful for the opportunity to learn from each of those who participated in this study, to reflect upon my own practice as a principal and leader, and to contribute in a small way to the learning and growth of others.
References


## Appendix A: Research Timeline

### School A

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Participants</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2018</td>
<td>Observations</td>
<td>4th Grade Team</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Interview</td>
<td>Principal</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Focus Group</td>
<td>4–6 Teacher Volunteers</td>
<td>45–60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Observations</td>
<td>4th Grade Team</td>
<td>60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Interview- Follow Up</td>
<td>Principal</td>
<td>30–45 min</td>
</tr>
</tbody>
</table>

### School B

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Participants</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2018</td>
<td>Observations</td>
<td>1st Grade Team</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Interview</td>
<td>Principal</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Focus Group</td>
<td>4–6 Teacher Volunteers</td>
<td>45–60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Observations</td>
<td>1st Grade Team</td>
<td>60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Interview- Follow Up</td>
<td>Principal</td>
<td>30–45 min</td>
</tr>
</tbody>
</table>
**School C**

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Participants</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2018</td>
<td>Observations</td>
<td>Grade Level Team</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Interview</td>
<td>Principal</td>
<td>60 min</td>
</tr>
<tr>
<td>April 2018</td>
<td>Focus Group</td>
<td>4–6 Teacher Volunteers</td>
<td>45–60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Observations</td>
<td>Grade Level Team</td>
<td>60 min</td>
</tr>
<tr>
<td>May 2018</td>
<td>Interview- Follow Up</td>
<td>Principal</td>
<td>30–45 min</td>
</tr>
</tbody>
</table>
Appendix B: Principal Interview Questions

Based on conceptual framework of the research study:

Collaboration

- How do you create a collaborative culture at your school?

Shared Vision

- How do you as the principal develop and encourage leadership within others to support and drive the vision, mission and culture of learning throughout the school?

Culture

- Do teachers have time to “play” together? For example, ice-breakers or team building activities are used regularly at team or staff collaborative times which are not related to work responsibilities?
- Please describe the staff morale.
- What factors most affect staff morale?

Trust

- How important is trust in contributing to a collaborative environment?
- What do you as the principal do to build trust between you and staff, and teacher to teacher trust?

Positive Relationships

- How do you as the principal promote positive relationships?
- When relationships encounter conflict how do you as the principal encourage healthy conflict resolution among staff?
Creativity/Innovation

- What systems and or structures have you implemented to support adult learning?
- What opportunities do you as principal provide or support which promote innovation/creativity of staff?

Celebrations

- Describe how you as the principal celebrates success of the school?
- How do you as the principal promote and celebrate teacher growth or success?

Challenges

- When a school-wide initiative fails what are the principal’s reactions and or responses?
- How does the principal determine next steps to move forward after an unsuccessful experience?
Appendix C: Teacher Focus Group Questions

Based on conceptual framework of the research study:

Collaboration

- How does your principal create a collaborative culture at your school?

Shared Vision

- How does the principal develop and encourage leadership within others to support and drive the vision, mission and culture of learning throughout the school?

Culture

- Do teachers have time to “play” together? For example, ice-breakers or team building activities are used regularly at team or staff collaborative times which are not related to work responsibilities?
- Please describe the staff morale. What factors most affect staff morale?

Trust

- How important is trust in contributing to a collaborative environment?
- What does your principal do to build trust between her or himself and staff, and teacher to teacher trust?

Positive Relationships

- How does the principal promote positive relationships?
- How does the principal encourage healthy conflict resolution?

Creativity/Innovation

- What systems and or structures has the principal put in place which support adult learning?
• What opportunities does the principal provide or support which promote innovation/creativity of staff?

Celebrations

• Describe how the principal celebrates success of the school or individual staff
• How does the principal promote and celebrate teacher growth or success?

Challenges

• When a school-wide initiative fails what are the principal’s reactions and or responses?
• How does the principal determine next steps to move forward after an unsuccessful experience?
Appendix D: Consent Form

Research Study Title: How do elementary principals create a collaborative culture at the elementary level?
Principal Investigator: Amy Blakey
Research Institution: Concordia University Portland
Faculty Advisor: Dr. James Therrell

Purpose and what you will be doing:
The purpose of this survey is to gather information and research which characteristics, behaviors, systems and structures principals exhibit and or use that contribute to a collaborative culture. We expect approximately 24 volunteers. No one will be paid to be in the study. We will begin enrollment on February 2018 and end enrollment on June 1, 2018. To be in the study, you will participate in observations of the staff and individual teams collaborative meetings, individual interviews, and focus groups. I will be observing several of the collaborative whole staff and team meetings. Then, I will facilitate focus groups with two of the teams, and conduct individual interviews. Doing these things should take less than a few hours of your time between February 2018 and June 2018.

Risks:
There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside my laptop. When we or any of our investigators look at the data, none of the data will have your name or identifying information. We will refer to your data with a code that only the principal investigator knows links to you. This way, your identifiable information will not be stored with the data. We will not identify you in any publication or report. All audio tapes will be destroyed once transcribed and initial analysis complete.

Benefits:
Information you provide will help the researcher gather the staff, team and individual perspectives regarding the collaborative culture at your school. This data will contribute to the field of education specifically the principalship. You could benefit from participating in this study by experiencing your own growth and self reflection regarding collaboration, as we journey through the process together.

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety.
Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Amy Blakey at email [Researcher email redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cuportland.edu or call 503-493-6390).

Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_______________________________                   ___________
Participant Name                   Date

_______________________________                   ___________
Participant Signature                   Date

_______________________________                   ___________
Investigator Name                   Date

_______________________________                   ___________
Investigator Signature                   Date

Investigator: Amy Blakey
Email: [Researcher email redacted]
c/o: Professor Dr. James Therrell
Concordia University – Portland
2811 NE Holman Street
Portland, Oregon 97221
### Appendix E: Observation Rubric

(Adapted from Solution Tree, Global PD, 2014)

<table>
<thead>
<tr>
<th>Observable Evidence of a Collaborative Team</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Structured time to meet within the work week</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>B. Focus on the four learning questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What do we want students to learn? (essential standards)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. How will we know if they have learned? (team-developed common assessments)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. What will we do if they don’t learn? (systematic interventions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What will we do if they already know it? (extended learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Generate products</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>D. Establish norms</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>E. SMART Goals to assess progress and provide relevant information</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>F. Working Interdependently</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Adapted from Solution Tree’s (2008) Global Professional Development, GPD facilitators guide. Copyright Solution Tree.