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An Exploration of Principal Instructional Leadership Increasing Instructional Capacity Through Collaborative Relationships

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Walden University
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Abstract

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Michael Henry Myers Jr.

MA, Walden University, 2009

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

State and federal mandates designed to increase student learning and development through principal instructional leadership are based on research that demonstrates the potential benefits teacher collaboration can have on teacher efficacy, school culture, and student learning; however, many principals are inadequately trained for instructional leadership roles that utilize collaboration. The problem this study investigated is the lack of research about successful instructional leaders using collaboration to increase the instructional capacity of the teachers in high-achieving, suburban high schools. High-quality teaching is important and requires the collective skills and expertise of well-trained teachers. The organizational development theories of McGregor, the adult learning theory of Knowles, and the Tyler rationale served as the conceptual framework and basis for the research questions. This multiple-case study examined cases of three principals and four teachers successfully using collaborative relationships to increase the instructional capacity of their schools. The three research questions focused on understanding how principals experience, plan, utilize and evaluate collaborative relationships to increase the instructional capacity of teachers. Semi-structured participant interviews and corresponding document data were analyzed and coded. Individual cases were cross-case analyzed. The principals were found to gain teacher "buy in," use administrative authority and duties to enable collaboration, empower teachers, and effectively have "tough conversations." Social change implications include recommendations for developing supportive learning communities that utilize professional capital to increase the instructional capacity and efficacy of teachers.

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Dedication

This dissertation is dedicated to my parents, Mike and Kathi Myers, who have provided me with so much love and encouragement; to my wife, Angie, who stood by me as I pursued this dream; and to my son, Michael III, who inspires me to be a better person. I am a better person for having you all in my life.

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Chapter 1: Introduction to the Study

Teacher collaboration and supportive collaborative cultures have been shown to have a significant positive effect on instruction and thus student learning, teacher professional development, and teacher well-being (Akin & Neumann, 2013; Kelly & Cherkowski, 2015; Nicholson et al., 2016). Thus, many states have adopted legislation requiring school leaders to create collaborative cultures and structures within their schools to increase the instructional capacity of teachers (Buttram & Farley-Ripple, 2016; Goodwin & Babo, 2014; Hallinger et al., 2016; Poekert et al., 2016; Rigby, 2016). Although there is ample evidence that principal instructional leadership has been consistently, yet indirectly, related to student success and achievement (Goddard et al., 2015; Koşar et al., 2014; Kuh, 2016; Park & Ham, 2016; Ronfeldt et al., 2015) and teacher professional development (Buttram & Farley-Ripple, 2016; Goddard et al., 2015; Gray & Lewis, 2013; Kuh, 2016; Nicholson et al., 2016), little is understood of the motivations and beliefs that principals have about teacher collaboration and collaborative cultures, specifically as they seek to operate within their instructional leadership and administrative leadership roles.

These motivations and beliefs determine how and why principals use collaborative relationships to increase the instructional capacity of teachers. This study considered how and why high school principals utilize collaborative relationships within their instructional leadership role to facilitate increases in the instructional capacity of teachers within their schools. The terms “collaboration” and “collaborative relationships” will be used synonymously within this study to refer to individuals as well as groups of

individuals communicating for the purpose of achieving common goals that are complex, long-term, and interdependent (Dallmer, 2004; Kinsella-Meier & Gala, 2016; Odegard-Koester & Watkins, 2016). The findings of the study resulted in a conceptual framework that can be used to study the uses of collaborative relationships to increase teacher instructional capacity. The findings can also inform practices of using collaborative relationships for the same purpose and can be incorporated into principal preparation programs. Improved collaborative relationships that increase the instructional capacity of teachers can promote greater learning and development of students, increase teacher efficacy and well-being, strengthen communities in which stakeholders live, and benefit society.

In Chapter 1, I describe the various components of the study including the background, problem statement, purpose of the study, the conceptual framework, and the research questions (RQs). I also provide definitions that apply to the study and a discussion of the nature, scope, limitations, and significance of the study in this chapter. The chapter concludes with a summary.

Background

The National Policy Board for Educational Administration (2015) described the need for a multi-leveled approach to creating a "network of organizational supports" that develops the teaching staff professionally and the professional culture in which they work; promotes engagement with the families and community; and oversees the management of school operations. The administrative and instructional leadership roles of principals make them a driving force for creating the conditions and relationships

necessary to increase the instructional capacity of teachers within their schools (Fullan, 2014).

Accordingly, the U.S. Department of Education and the Ohio Department of Education have revised standards to incorporate teacher collaboration for teacher professional development and student growth. The Every Student Succeeds Act (2015) reauthorization of the Elementary and Secondary Education Act included mandates for greater emphasis on school leadership and teacher professional development. The Ohio Department of Education's [ODE] "Ohio Standards for Professional Development" (2015) required that school administrators develop the capacity for professional learning of teachers to increase teacher instructional capacity, which they are expected to do through collaboration and supportive professional development. They are also required to design and implement a professional learning resource plan that involved constructive feedback and a variety of data sources to plan and evaluate learning (Ohio Department of Education, 2015).

The Ohio Department of Education (2015) standards and Every Student Succeeds Act (2015) expanded the role and function of school administrators to develop collaborative relationships to increase the instructional capacity of teachers with the goal of increasing student learning and development (Fullan, 2014; Hargreaves & Fullan, 2012; Rigby, 2016), and many states and world governments have adopted legislation requiring school leaders to create collaborative cultures and structures within their schools (Hallinger et al., 2016; Poekert et al., 2016). However, state mandates for teacher collaboration to increase student and teacher learning and development were not

sufficient in meeting these goals, as results varied based on how well the principals understood and communicated the mandates as well as how they held teachers accountable (Buttram & Farley-Ripple, 2016). The results of the mandates varied widely based on how well the principals understood the mandate reforms, how well the vision and goals of the reform were communicated by the principals, how principals allocated resources and time, and the measures taken by the principal to make teachers accountable to high expectations (Buttram & Farley-Ripple, 2016).

In *The Principal: Three Keys to Maximizing Impact*, Fullan (2014) pointed out that principals need to contend with conflicting drivers of policy that put principals in an ambiguous and difficult position as instructional leaders and administrative leaders who are ultimately responsible for the quality of the instruction of teachers within their schools. He described the value of principal instructional leadership but argued that micromanaging through detail-specific instruction is counter-productive. Hargreaves and Fullan (2012) described the necessity of developing the professional capital of teachers to increase the quality of instruction. They described professional capital as the product of human capital, social capital, and decisional capital, and they argue that the role of leadership is to increase teacher quality and instruction through the development of professional capital using collaborative relationships.

McGregor (1960/2006) offered a theoretical model of leadership that aligns the motivations and goals of the individuals within an organization as a productive means of increasing organizational efficacy in meeting goals. In his Theory Y of organizational development, McGregor (1960/2006) provides a lens through which it is possible to

understand how principals, as managers of teachers within the school organization, utilize the collective professional capital of teachers to increase the instructional capacity of teachers.

There exists a gap in the research because little is known about the use of collaborative relationships by principals to increase the instructional capacity of teachers. Research is needed because high-quality instruction at every level requires the collective skills and expertise of well-trained teachers operating within a supportive environment that facilitates teacher learning and collaboration. It is necessary to develop the professional capital of teachers to increase the quality of instruction, which is the product of human capital, social capital, and decisional capital, and the role of leadership is to increase teacher quality and instruction through the development of professional capital using collaborative relationships (Hargreaves & Fullan, 2012). However, principal preparation programs lack adequate training for instructional leadership and focus primarily on administrative leadership skills; therefore, many principals lack adequate training to meet the requirements and goals of the federal and state mandates (Rigby, 2016; Taylor Backor & Gordon, 2015).

This research might inform the study site and similar schools in meeting the challenges of administrative and teaching personnel forming collaborative relationships to increase the instructional capacity of teachers. The positive social change implications for this study include recommendations useful for developing collaborative cultures that increase teacher instructional capacity and lead to increased student learning and development.

Problem Statement

Principals have an important role in the development and sustainment of successful collaborative cultures and structures that support teacher instructional capacity and indirectly foster student learning and development; however, little is understood about how principals use teacher collaboration and collaborative cultures specifically to increase the instructional capacity of teachers. Additionally, high-quality instruction at every level requires the collective skills and expertise of well-trained teachers working collaboratively, but many administrators are not prepared to operate in instructional leadership roles because most principal preparation programs focus primarily on facilitating administrative skills and lack a focus and training in areas of instruction and curriculum development, team building, and the use of research to improve schools (Rigby, 2016; Taylor Backor & Gordon, 2015). The lack of adequate instructional leadership training and the vital role that principals have necessitate a better understanding of principals successfully utilizing collaborative relationships to increase the instructional capacity of teachers.

Within both their administrative and instructional leadership roles, principals can have positive and negative effects on teacher collaboration, learning, efficacy, and well-being (DeMatthews, 2015; Duyar et al., 2013; Ham et al., 2015; Kraft & Gilmour, 2016). When principals successfully utilize collaborative relationships, there can be increases in instructional capacity (e.g., teachers sharing best instructional practices and instructional materials); improved formal and informal structures for problem-solving and data analysis; and meaningful professional development targeted to specific needs of the

teaching staff can be achieved when principals successfully utilize collaborative relationships (DeMatthews, 2015). The leadership and support of principals are instrumental to the success of collaborative teacher relationships through the way principals relate to others within the school; whether or not they support distributed leadership and social interactions; how they interpret and disseminate policies and promote the vision; and how they manage resources and time (DeMatthews, 2014; Pertel et al., 2018, 2018). Principal oversight of collaboration is also important for improving teacher efficacy and motivation to continue professional growth (Szczesiul & Huizenga, 2014). Collaboration and reflective practices with collaborations can increase the teaching efficacy of teachers, but instructional leadership is necessary for keeping the focus on the work and practices necessary for developing the instructional capacity of teachers (Kuh, 2016). For example, working with teachers through the teacher observational process can create opportunities for principals and teachers to collaborate and build instructional capacity. Principals can use observation data and collaborative discussions, which can inform professional development decision-making to improve the instructional capacity of teachers (Goldring et al., 2015).

Due to its importance, principals prioritize instructional leadership over other tasks when time permits; however, researchers found that only approximately 13% of the average day of a principal is utilized for instruction-related tasks (e.g., planning teacher professional development, walkthroughs, evaluations; Grissom et al., 2015). Further, the inconsistent results of state and federal mandates in meeting goals vary widely based on the levels of the understanding of principals of the mandate reforms, communication of

the vision and goals of the reform, principal allocations of resources and time, and measures taken by the principal to make teachers accountable to high expectations (Buttram & Farley-Ripple, 2016). But it will be difficult to meet the important goals of many of the reform efforts without adequate understanding of how principals successfully utilize collaborative relationships to increase the instructional capacity of teachers, which necessitates this research.

Additionally, although principals have been shown to affect the quality and focus of teacher collaboration, and teacher collaboration can increase the instructional capacity of teachers through the sharing of ideas and materials, it is unclear how principals (who are responsible for instructional and administrative leadership that is largely responsible for the instructional capacity of their schools) use collaborative relationships to improve the instructional capacity of teachers. It is also unclear how different process variables such as existing teacher collaborative relationships and principal leadership (instructional and administrative) practices interact (Duyar et al., 2013). The current understanding of the indirect importance of principal instructional leadership, the instructional capacity-building that collaborative relationships can achieve, and the policy initiatives and mandates created at the state and federal levels to increase collaborative teaching establish the need for further examination of how principals utilize collaborative relationships to increase the instructional capacity of teachers.

A review of the literature was conducted for this study. The literature review included numerous studies on the benefits of successful collaboration, the importance and need for principal leadership and support, as well as the contributing aspects of

collaborative culture. Gaps exist in current research concerning how principals manage their instructional leadership and administrative leadership roles while creating and sustaining collaborative opportunities to increase the instructional capacity of teachers. Research is needed to address how different factors may enhance or inhibit implementing and sustaining professional learning community (PLC) processes, collaborative communities of learning, and teacher-led instructional leadership (Demir, 2015; Vrieling et al., 2016; Wang, 2015), and how principals operate within those situations. There is a lack of research concerning how PLCs, school culture, and effective collaboration interact to improve schools (Carpenter, 2018) and how time management, goal outcomes, and other factors (e.g., workload, job autonomy, demographics, size of teacher workforce, etc.) may influence the effectiveness of principals in using collaboration to increase teacher instructional capacity (Grissom et al., 2015).

This study sought to narrow existing gaps in how principals identify instructional needs and create instructional goals, utilize the skills and expertise of faculty to meet instructional goals, and evaluate the effectiveness of collaborative relationships for instructional efficacy. This study contributes to the knowledge necessary to address the problem by exploring how principals of high-achieving, suburban schools, in their instructional leadership roles, utilize collaboration and collaborative relationships to increase the instructional capacity of teachers.

Purpose of the Study

The purpose of this study was to understand how principals of high-achieving, suburban high schools use collaborative relationships to increase the instructional

capacity of teachers. A multiple case study approach was used to explore how the beliefs about collaborative relationships inform the methods of control utilized by principals as they implement, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers. The underlying assumptions of principals were also be explored, as they influence the instructional and administrative decisions principals make to create and maintain effective collaborative relationships for the purpose of increasing the instructional capacity of teachers within their schools.

Research Questions

To understand how principals utilized collaborative relationships to increase the instructional capacity of teachers, I sought to answer the following RQs:

RQ1: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?

RQ2: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?

RQ3: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?

Conceptual Framework for the Study

The conceptual framework for this study is an integration of McGregor's (1960/2006) Theory Y with Knowles et al.'s (1973/2005) principles of andragogy and

Tyler's (1949/2013) rationale based on the similarities between managers and principals of schools. Managers are tasked with motivating and leading employees to achieve organizational goals, and principals, as instructional leaders, seek to utilize collaborative relationships to increase the instructional capacity of their teaching staff. Managers are referred to as principals in this study from this point forward. McGregor's (1960/2006) theories provided a lens for understanding the instructional leadership roles of principals, acting as school managers and teachers of teachers, as they utilize collaborative relationships as learning experiences to increase the instructional capacity of their teachers. Tyler's (1949/2013) rationale provided the basis for understanding the development of learning goals, methods, organization, and evaluation of learning experiences for teachers through collaborative relationships. Additionally, adult learners have different motivations and needs than those of children, so Knowles et al. (1973/2005) was used to understand the instructional needs of adult learners—in this case, teachers. The methods of motivation and control used by principals to successfully increase the instructional capacity of teachers through collaborative relationships is commensurate with Theory X and Theory Y goal attainment as measured by Tyler's (1949/2013) rationale for the adult learning needs of Knowles et al. (1973/2005). As adult learners working within the school organization, teachers have different learning needs than children, and principals, acting as managers of teachers, will have the positional authority to create, sustain, and evaluate collaborative relationships used for purposes of increasing the instructional capacity of teachers.

RQ1 deals with the developmental and evaluative aspects of how principals create goals, design methods to meet the goals, and evaluate the results, which aligns with Tyler's (1949/2013) rationale. Research questions RQ2 and RQ3 integrate aspects of motivation and control found in the theories of McGregor (1960/2006) and Knowles et al. (1973/2005). Understanding the methods of control, motivations, and evaluations used to create the collaborative relationships for the purpose of increasing the instructional capacity of teachers were the focus of the RQs and were used to guide the thematic analysis of data. An exploration of the conceptual framework theories and current literature is covered in more detail in Chapter 2.

Nature of the Study

The nature of this study was a multiple case study (Stake, 1995; Yin, 2014). Case study research focuses on a "bounded system" (or case) that is a complex yet specific and functioning thing (e.g., a person, a group of people, a program, etc.). Yin (2014) explained that "how" and "why" questions are explanatory and can lead to the use of case study research as the preferred method. Stake (1995) distinguished three types of case studies: intrinsic, instrumental, and collective. In this study, the use of "multiple-case study" by Yin (2014) and the use of "collective case study" by Stake (1995) were used interchangeably. Merriam and Tisdell (2016) also offered "multicase study," "comparative case study," and "multisite case study" as other interchangeable terms to represent case study research that utilizes more than one case. While intrinsic case studies seek to understand a particular case, the instrumental case study focuses on understanding and insights that can be achieved through studying a particular case.

Multiple case study research was consistent with the primary focus of this dissertation research because rather than understanding a particular principal, multiple-case studies are more often concerned with representation. In this case, by studying multiple principals, I aimed to learn about how the underlying assumptions and beliefs inform the principals' leadership practices and results within high-achieving, suburban high schools. I also sought to generate a deep understanding of how principals utilize their underlying assumptions (the meanings and subjective experiences that inform their decisions) and derivations about collaborative work and their subordinates to guide methods of control that are used to increase the instructional capacity and learning of teachers within their schools. The multiple case study method was also appropriate to answer the RQs because it is used to understand the complexity of the cases while providing balance, variety, and the opportunity to learn (Stake, 1995; Yin, 2014). It also can generate a refinement of understanding rather than a new understanding (Stake, 1995). A multiple-case study approach typically does not provide a statistical basis for creating generalizations, but instead focuses on topics that can later be used for cross-site analysis (Stake, 1995; Yin, 2014). The case study method focuses on understanding of the case, but there is an emphasis on the uniqueness that comes from a deeper understanding of the particulars of the cases. Additionally, as the cases are studied, the RQs may evolve (Stake, 1995), and as I gained a better understanding, the evolution of the questions led to even better questions that furthered my understanding. The underlying assumptions of principals and their methods of control was in general consistent with McGregor's (1960/2006) theories of organizational development, and

evaluated by Tyler's (1949/2013) rationale for the adult learning needs described by Knowles et al. (1973/2005).

This multiple case study approach to the RQs involved interviews of principals who are seeking to create or support existing collaboration efforts to increase the instructional capacity of teachers, observations of collaborations among teachers and administrators, professional development agendas, and other possible sources. Interview data and documentation data from the three cases was individually coded and analyzed thematically. The cases were then analyzed through cross-case analysis (Yin, 2014).

Definitions

The following terms and definitions were used throughout the study:

Collaborative culture: The formal and informal relationships that form among participants in a system that shares commonalities in purposes, values, and practices (Hargreaves & Fullan, 2012).

Collaborative relationships: Communication between individuals or groups of individuals "within two or more agencies communicate to achieve common goals that are interdependent, long term, and complex" (Kinsella-Meier & Gala, 2016, p. 5).

Collaborative inquiry: The investigation into instructional problems and instructional difficulties is a shared enterprise among teachers (and administrators) through the sharing of knowledge, skills, and collective responsibility for outcomes (Blase´ & Blase´, 1999; Cha & Ham, 2012; Copland, 2003; Glanz & Neville, 1997, as cited in Park & Ham, 2016)

Contrived collegiality: A top-down driven, formally developed, and bureaucratic set of procedures designed to increase teacher collaboration (Hargreaves & Fullan, 2012).

Principal instructional leadership: The actions, practices, policies, and other means used by a principal to increase the instructional practice of teachers and teacher professional learning to increase student learning (Fullan, 2014; Park & Ham, 2016; Rigby, 2016; Szczesiul & Huizenga, 2014).

Professional capital development: The development of high-quality instruction through committed and prepared educators who work collectively toward maximizing their improvement and utilizing all of their capabilities and experiences to make effective decisions concerning practices (Hargreaves & Fullan, 2012).

Professional learning community: A community of educators that works to improve educational practices and increase the learning students and educators by examining evidence, sharing knowledge, and de-privatizing practice (Fullan, 2014; Ronfeldt et al., 2015)

Teacher collaboration: Communication and joint work among teacher colleagues in which information and knowledge are shared and explored to improve instructional practices, work towards shared goals, and includes the social norming that occurs during the process (Carpenter, 2018; Hargreaves & Fullan, 2012; Kuh, 2016).

Trust: "A multifaceted construct" in which a person is willing "to be vulnerable to another based on the confidence that the other is benevolent, honest, open, reliable, and competent" (Mishra, 1996; Tschannen-Moran & Hoy, 1998; Tschannen-Moran & Hoy, 2000, as cited in Tschannen-Moran, 2014, pp. 19–20). When there are situations that

involve interdependence between participants, and the achievement of an interest cannot be achieved without reliance on another, trust is necessary and involves opening oneself to be vulnerable.

Assumptions

Beliefs are shaped though individual realities and experiences and the meaning from these experiences (Stake, 1995). Therefore, I assumed that the responses from my participants were honest and truthful about the usefulness and applicability of collaborative relationships to increase the instructional capacity of teachers within their schools. Second, I assumed that I could establish trust with my participants in order to enable them to speak openly and honestly with me about their authentic experiences and beliefs. A qualitative approach enabled me to explore, through open-ended interview questions and other sources of data, the perceptions and beliefs of principals who use collaborative relationships to increase instructional capacity of their teachers, and it allowed me to interpret the data to understand how principals use collaborative relationships for that purpose.

Scope and Delimitations

The scope of the study was delimited by a number of factors. One delimitation of the scope were the participants—namely, the participants were three high school principals and four teachers in high-achieving, suburban schools located in central Ohio that were identified as having principals that successfully utilize collaborative relationships for the purposes of increasing the instructional capacity of teachers. Principals who did not use collaborative relationships and demonstrate characteristics

commensurate with the top-down instructional leadership were not included. Coaches, parents, and students were not the focus of data collection so the focus remained on the perceptions of principals who use collaborative relationships as a means of increasing the instructional capacity of teachers and teacher learning. Another delimitation of the study was the data collection. Data was gathered from interviews with the principal participants and four teachers, collaboration documentation, and professional development agendas as was available. The size and scope of this study limited the transferability of the study, but the possible propositions that were created from this study have the potential to be transferable to similar high school settings.

Limitations

This multiple case study has some limitations. First, the findings of this study were not generalizable due to the location of the study. The study was limited to large, suburban high schools in Ohio. Second, the small number of participants did not allow the findings to be generalizable, and further research will be needed to expand the scope and generalizability of the findings. This study sought to explore the perceptions of three principals and four teachers in large, suburban high schools in the 2019 calendar year. Third, the demographics and existing school cultures of the schools may not be commensurate with other high schools. Finally, potential researcher bias could have influenced the interpretation of the results. During my 17 years of teaching high school English, I have worked collaboratively with many other teachers and administrators, but during an extended period while working under the leadership of a principal, collaboration became a negative experience for me and some of my colleagues due to the

policies and practices used by administration to ensure that teachers collaborated and used common assessments and practices. The top-down leadership style and accountability-focused methods of control and motivation were different from the other principals with whom I worked that seemed to value the professional judgment of teachers, encouraged teacher leadership, and exercised transparency in decision-making. However, my biases were identified and monitored in relation to the conceptual framework, and I took steps to reduce bias by describing how my personal biases may have influenced the collection and interpretation of data (Merriam & Tisdell, 2016).

To further reduce bias, I triangulated data (from the recorded interviews, my own journals, collaboration documentation, and professional development agendas) and utilized member checking. Data triangulation is the effort to determine if what one observes and reports would hold the same meaning in different contexts (Stake, 1995). Member checking is a method of reducing bias through the review of material by participants to determine if the material is accurate and palatable (Stake, 1995).

Significance

A large body of research explains the benefits of collaboration, the effects of collaboration on student learning and teacher professional development, and the importance of leadership in creating successful collaborations, but there is a dearth of information about how principals utilize collaborative relationships to increase the instructional capacity of teachers. This study contributes to a better understanding of how leadership can support the development of high-quality instruction by teachers for student learning and development. As Fullan (2014, pp. 65-66) noted, “teachers, working

together in purposeful ways over periods of time, will produce greater learning in more students. Thus, if principals directly influence how teachers can learn together, they will maximize their impact on student learning." The collective work of educators in supportive cultures can better meet the needs of students and prepare students to be productive citizens who can make a positive difference in the world.

Additionally, this study provides a better understanding of how supportive school cultures are created. In the United States, unsupportive environments lead to high teacher turnover, which impacts students, particularly students with the greatest needs who generally end up getting teachers with the least experience (Allen et al., 2018; Hargreaves & Fullan, 2012; Lee, 2019). Retaining high-quality, experienced teachers and providing new teachers with opportunities to learn and grow in a supportive environment that a strong collaborative culture provides could decrease teacher turnover and give more students access to high-quality teachers. As noted by Hargreaves and Fullan (2012, p. 70), "The secret to higher efficacy and to keeping teachers after the first 3 years is" to give teachers the opportunity to work in "well-led, dynamic, strongly supported schools" in which there exists "a belief in student success, a knowledge of how to bring it about, and a willingness and eagerness for everyone on the staff to keep learning and improving." Therefore, it is "*the culture of the school* [emphasis in the original] that makes the difference" (p. 70).

This study also provides contributions to positive social change through the advancement of information related to increasing the ability of principals to use collaborative relationships for supporting students and teachers. There exists a need for

better training for principals in the area of instructional leadership and professional development organization for teacher professional development (Demir, 2015; Ioannidou-Koutselini & Patsalidou, 2015; Rigby, 2016; Taylor Backor & Gordon, 2015), which this research could lead to. Understanding how principal leadership decisions are made by principals who successfully utilize collaborative relationships to improve the instructional capacity of teachers will provide a deeper understanding needed for designing effective principal instructional leadership development programs (Gray & Lewis, 2013; Ioannidou-Koutselini & Patsalidou, 2015), which can lead to more and better quality collaboration. Understanding successful methods of utilizing collaborative relationships could lead to increases in the frequency and quality of collaborations with teachers by providing principals with the means of encouraging and supporting teacher-learning through collaboration. Thus, the findings of this study could be used to develop effective training programs for principals that focus on creating strong collaborative relationships that provide opportunities to meet the social, emotional, and learning needs of students, which will help students be more prepared to make a positive difference in the world.

Summary

This study sought to address the lack of research on the perceptions and methods of principals, in their instructional leadership roles, who seek to use collaborative relationships to increase the teaching efficacy and learning of teachers within their schools. To address this gap in the research, I used a multiple-case study to explore principals' perceptions. In Chapter 1, I presented the research problem, the background of

the study, the purpose of the study, the conceptual framework, the limitations, the significance, and other pertinent elements of the study. Chapter 2 includes a description of the conceptual framework and its applicability as well as a review of current research on the instructional leadership role of principals, teacher professional development and learning, communication of vision, distributed leadership, school culture, and trust. The literature review provides information relevant to validating the study and understanding how collaborative relationships can be utilized within schools to increase the instructional capacity of teachers.

Chapter 2: Literature Review

Although there is a large amount of literature demonstrating how positive professional collaborative relationships can increase the professional growth and learning of teachers (Buttram & Farley-Ripple, 2016; Goddard et al., 2015; Gray & Lewis, 2013; Kuh, 2016; Meredith et al., 2017; Nicholson et al., 2016), little is understood about how principals increase instructional capacity within their schools through collaborative relationships. According to Marzano et al. (2011), the purpose of supervision is to increase the learning and achievement of students through the development of teacher pedagogical skills. Administrators can play a vital role in increasing the instructional capacity of their teaching staff by creating collaborative opportunities that lead to teacher efficacy, which leads to increased instructional capacity and thus student achievement (Goddard et al., 2015). Teacher collaboration and supportive collaborative cultures also have a positive effect on teacher professional development and teacher well-being (Kelly & Cherkowski, 2015; Nicholson et al., 2016). Carpenter (2018) suggests that leadership, workspace, and collaborative inquiry for instructional improvement should be a shared enterprise among teachers and administrators.

Although there is ample evidence that principal instructional leadership in general has been consistently, yet indirectly, related to student success and achievement and teacher professional development (Goddard et al., 2015; Koşar et al., 2014; Kuh, 2016; Miller et al., 2016; Park & Ham, 2016), few studies have investigated how principals increase instructional capacity and professional development through collaborative relationships. Therefore, it is necessary to understand how principals use collaborative

relationships as a professional development tool for increasing the instructional capacity of their schools.

The purpose of this multiple case study was to understand how principals increase instructional capacity through collaborative relationships.

Chapter 2 includes an examination of the literature that corresponds to how principals utilize collaborative relationships to increase the instructional capacity of their schools. Tyler's (1949/2013) rationale and Knowles et al.'s (1973/2005) principles of andragogy serve to support the use of McGregor's (1960/2006) organizational development theories Theory X and Theory Y as the framework through which to examine leadership in its attempt to build instructional capacity within the school environment, collaborative cultures, and goal-attainment through organizational development. The first section describes Tyler's four processes of curriculum development and Knowles' et al. principles of andragogy. The second section explores McGregor's Theory X and Theory Y with a focus on the methods leaders use to reach organizational goals through capacity building. The next section focuses on school administrators and instructional capacity-building roles. Collaborative cultures, school leadership, and teacher growth and development were examined for theoretical relationships. The final section provides an analysis of the outcomes in relation to positive social change.

Literature Search Strategy

The research databases utilized were ERIC, Education Research Complete, Education Source, Education: A Sage full text database, ProQuest Central, ProQuest

Dissertations and Theses, and Academic Search Complete. The key research terms included the following: *teacher collaboration*, *teacher professional development*, *instructional leadership*, *principal leadership*, *collegiality*, *teacher leadership*, *principal preparation*, *professional learning community*, *trust*, *school culture*, *distributed leadership*, and *collaborative relationships*. Each study was analyzed for content related to how principals could utilize collaborative relationships to increase the instructional capacity of their schools.

Conceptual Framework

Integrating the Theories of McGregor, Tyler, and Knowles

An integration of McGregor's Theory Y with Knowles et al.'s principles of andragogy and Tyler's rationale as the conceptual framework for this study is based on the similarities managers and principals share. Principals can increase the instructional capacity of their teaching staff through collaborative relationships the same way managers motivate employees to achieve organizational goals. Tyler's (1949/2013) rationale was used to understand the development of learning goals, methods, structure, and evaluation of learning through collaboration, McGregor's (1960/2006) theories provided a lens for understanding the instructional leadership roles of principals to increase instructional capacity, and Knowles et al.'s (1973/2005) work helped explain how adults learn as teachers build instructional capacity. The methods of control through collaborative relationships that principals use to increase the instructional capacity of teachers successfully should be commensurate with Theory X and Theory Y goal attainment as measured by Tyler's rationale for the adult learning needs of Knowles.

Building the instructional capacity of teachers within a school is different from increasing the learning of school children. Teachers are adult learners, and while Tyler's (1949/2013) rationale is generally focused on developing curriculum and learning experiences for children, it does offer a strong theoretical base for adult learners as well; however, due to differences between children and professional adults within an organization, adult learning theory (Knowles et al., 1973/2005) and McGregor's (1960/2006) theories work well together to understand the needs and motivations of adult learners within a school organization.

Classroom strategies and behaviors, planning and preparation, and teacher reflection on teaching are all improved when school environments exhibit high levels of teacher collegiality and professionalism (Marzano et al., 2011). Collegiality and professionalism include three activities within this domain of teaching: a positive environment where administrators and teachers interact positively with each other, with parents, and with students; freely exchanged strategies and ideas aid in the development of teacher expertise; and school development is promoted through procedures and teacher participation in initiatives (Marzano et al., 2011). These all reflect McGregor's (1960/2006) Theory Y in practice, and in large part, school leadership is instrumental in creating the culture wherein these practices can manifest.

Adult Learning Needs and the Six Principles of Andragogy

With regard to adult learners, Knowles et al. (1973/2005) put forth six principles of andragogy, which also relate to principles from Tyler and McGregor. Adult learning needs to take into account the uniqueness of the adult learners and the particular learning

situation but generally follow these six core behaviors. The first principle is that adult learners need to have a purpose for their learning. Tyler's (1949/2013) principles focus on the relevancy of learning to the lives of the learners, though the self-directed nature of adult learning needs is not the focus, with the teacher designing the learning experiences and content with the relevance to the lives of the learners in mind. The self-directed nature of adult learning needs is not the focus; however, McGregor (1960/2006) puts the needs and motivations of the individual within the organization into the forefront of his Theory Y as a vital component that needs to be aligned with the organizational goals.

The second principle provided by Knowles et al. (1973/2005) describes the foundation that influences adult learners. These are the life experiences that underlie the foundation for their learning. Tyler (1949/2013) would argue that these are part of the foundation of the learner upon which new knowledge could be extrapolated from and built upon, but McGregor (1960/2006) suggested a more nuanced and layered understanding of experience as a foundation for further understanding. He pointed out that professionals have three means of gathering knowledge: from science, colleagues, and personal experience. Personal experience and observation, in McGregor's (1960/2006) view, can create assumptions. These assumptions, if not adequately questioned, can result in imperfect understandings, reinforced illusions based on biases, and attempts to control behaviors that result in unintended consequences.

The third and fourth principles are fundamentally in agreement with Knowles et al. (1973/2005), but in particular they relate to McGregor's (1960/2006) theories. The third is that adult learners require the ability to have a level of involvement and

responsibility for their learning that includes the planning and evaluation of the learning experience based upon their self-concept (means of understanding and assessing their own abilities, skills, and learning). Knowles et al. (1973/2005) explained that adult learners also tend to define themselves through their experiences, and a learning experience that disregards or rejects those defining experiences can create within adult learners a similar feeling. This supports both Tyler's (1949/2013) and McGregor's (1960/2006) beliefs that the value of the individual and the uniqueness of the individual should be considered within the learning experiences or role, respectively. Fourth is the principle of readiness. Adult learners typically demonstrate greater interest and motivation to learn that which is relevant to their own lives, both professionally and personally. McGregor's (1960/2006) Theory Y particularly reflects this principle as the motivations of the individual are to be aligned with organizational goals.

The fifth principle, orientation to learning, is based on the adult learning focus on problem-solving rather than content acquisition (unless that content can be used for demonstrable purposes). Tyler (1949/2013) and McGregor (1960/2006) suggested that individuals are resourceful and creative, as well as motivated to problem solve, which supports this fifth principle. In particular, McGregor's (1960/2006) underlying assumptions of Theory Y focus heavily on the human potential to problem solve and that providing the responsibility and ability to act independently is in its own right a motivating factor.

Finally, Knowles et al. (1973/2005) put forth that the motivations of adult learners are in general intrinsic rather than extrinsic. McGregor's (1960/2006) work supports this

statement. McGregor also went further regarding external motivators and explained that they, rather than intrinsic motivators, can only be utilized outside of the organizational purpose and therefore detract (assuming that the basic physiological and psychological needs are met) from the ability of the individual to grow within the organization.

Developing Curriculum Using Tyler's Theory

The Tyler Rationale and McGregor's Management by Objectives

The Tyler rationale represents the same mechanisms for designing curriculum as McGregor's management by objectives does for reaching organizational goals. Tyler (1949/2013) outlined four fundamental answers to questions that are necessary for the development of curriculum and plans for instruction. First, what are the educational goals? Second, what are the educational experiences and resources most likely to achieve those goals? Third, what is an effective way that the resources and experiences be organized? Finally, how are the outcomes to be evaluated to determine whether the educational goals have been met?

McGregor (1960/2006) outlined the ways that "management by objectives" is an example of Theory Y—integrating the goals of subordinates with the organizational goals—which fits Tyler's (1949/2013) model very closely. McGregor (1960/2006) explained that there were four steps: (a) the broad requirements of the position are clarified, (b) specific goals and targets are established within a limited time, (c) means of achieving the goals and targets are performed, and (d) the results are evaluated and appraised.

Tyler's Educational Philosophy and the Underlying Assumptions of Theory Y. Tyler (1949/2013) described four democratic philosophical values for education that align with the underlying assumptions of McGregor's (1960/2006) Theory Y. Tyler's (1949/2013) first educational value maintains that every individual needs to be valued and recognized as important. Likewise, McGregor's (1960/2006) Theory Y assumes that humans have intrinsic value and will work toward achieving goals to which they are committed. Second, everyone should be given opportunities to participate within all activities of the social groups. McGregor similarly found that helping individuals participate within the organization at all levels was a means of getting individuals to be invested in the organizational goals. Next, Tyler argued that the uniqueness of the individual should be encouraged rather than trying to get everyone to conform, which McGregor's work also supports. McGregor suggested that managers should utilize the unique abilities and skills of employees in ways that aligned with organizational goals, but the inherent abilities and potentials of individuals are not fully utilized. Finally, Tyler found that there should be a belief that individuals can be relied on to solve important problems through their intelligence rather than depending on the unilateral decision making of those with positional authority, and McGregor argued that humans are generally creative and resourceful in their ability to problem solve.

Other Organizational Learning Theorists

Many other theorists have put forth theories covering aspects of organizations and the ways that organizational efficiency and learning can be improved, but for the purposes of this study, McGregor's Theory Y provided a better focus for the conceptual

framework due to the focus on the behaviors and underlying assumptions of the principal acting as manager of teachers to improve the instructional capacity of teachers through collaboration. Regardless, the following sections will cover other theories that could have been applicable.

Argyris' Model I and Model II Theories-In-Use

A leading theorist in organizational learning, Chris Argyris (individually and in collaboration with Donald Schon; Argyris, 1957; Argyris & Schon, 1974) described two models of organizational learning—Model I and Model II theories-in-use. These theories are similar to McGregor's (1960/2006) Theory X and Theory Y respectively, but Argyris (1957) focused more on motivation and learning of the individual rather than the role of instructional leadership. Like McGregor, Argyris (1957) as well as Argyris and Schon (1974) drew heavily on Maslow's (1943/2013) theory of human motivation in developing their theories of how managers could better reach organizational goals through an alignment of the motivations of the individual with the goals of the organization. Consequently, both Argyris and McGregor share many similarities, but Arygris focusedon individual learning (at both the managerial level and the individual) through reflective practices (Argyris & Schon, 1974).

Model I theories-in-use are primarily based on single-loop learning and create the rigid thinking and conditions that impede individual and organizational growth (see also Argyris & Schon, 1974). Model I relies on single-loop learning that maintains an individual's sense of constancy by acting and interpreting events in such a way as to satisfy the following variables: maintain control, win instead of lose, distance oneself

from negative emotions, and act rationally in pursuit of objectives. These variables are the cornerstone of organizations that model McGregor's Theory X and also inhibit growth and the ability to achieve organizational goals.

In contrast, double-loop learning involves different variables that govern behaviors (also concurrent with McGregor's Theory Y), and the focus is on modifying the ways errors are detected and corrected. The first variable in double-loop learning entails gathering open and valid useful data that are observable and can be analyzed correctly by others openly and fairly, and the second variable involves maximizing the individual's opportunity to make a free and informed choice based on the information. Strategically, the individual uses the information to define objectives, define ways to achieve these objectives that are within the capabilities and needs of the individual. The consequences of utilizing the strategies to meet the needs of these variables are that individuals will be experienced as less defensive in both interpersonal and group dynamics due to a shift in their role from task organizer (Method I) to that of a facilitator or collaborator (Method II). The utilization of others and the open discourse involved in discussing the valid information to make informed decisions will result in double-loop learning that is reflective and reflexive (Method II) rather than the defense reasoning that often characterizes single-loop learning (Method I). All three of the variables are intrinsically tied, but the first two governing variables function similarly to the third. They involve the information that is utilized and the choices made based on relevant information

The third governing variable of double-looping involves the internal commitment to the choice and the monitoring of the implementation. The internal commitment comes through the intrinsic satisfaction one gets from growth and better interactions with others rather than the commitment basis of reward or punishment that is characteristic of Method I (Argyris & Schon, 1974), but growth is the focus for the individual and the group. Therefore, protection of the self is to be treated as a collective enterprise by all (this is in opposition to the self-focused protection strategy that is characteristic of Method I).

Ultimately, Argyris's theories, compared to McGregor's (1960/2006) theories, focus more on the process of creating sustainable and dynamic learning within individuals than organizational constructs created by leaders and the use of collaborative relationships as McGregor, which were the focus of this study.

Senge's Five Disciplines and Learning Organizations

A student of Argyris, Peter Senge (1990, as cited in Park, 2008) created the five disciplines model as a method of creating learning organizations. This model is similar to both Argyris and Schon's (1974) and McGregor's (1960/2006) theories, but this theory is largely a reiteration of other theories and has less of a focus on the role of leadership in developing capacities than on interconnectedness of organizational components and systems thinking. Senge's five disciplines are divided into two categories: individual and group focuses. The first category, the focus on the individual, involves three of the disciplines. The first discipline is personal mastery, which involves a commitment to the vision, personal growth, and life-long learning. The second, mental models, are the

beliefs, generalizations, and ideas that affect the way individuals understand the world that need to be openly shared in order to influence and be influenced by others. The third discipline, systems thinking, focuses on the interconnectedness the individual understands and practices. The second category encompasses shared vision and team learning, which Senge believed needed to complement one another. Like McGregor, Senge (1990, as cited in Park, 2008) suggested that the goals and vision of the individual were best met when aligned with the organizational vision or goals, and he also put forth that "unless teams can learn, the organization cannot learn" (Senge, 1990, as cited in Park, 2008, p. 272).

McGregor's Theory X and Theory Y

In his popular and often-lauded *The Human Side of Enterprise* that was published in 1960 and re-published in 2006 in an annotated edition, McGregor argued that successful managers had the ability to predict and control human behavior, and he felt that every management decision had consequences for the behaviors of subordinates. While he did not argue that managers' ability to control and predict human behavior was the only predictor of successful interventions used to meet organizational goals, he did posit that it is a significant predictor due to management's underlying assumptions of human nature that drive their decisions and lead to the outcomes that result from those decisions. McGregor's (1960/2006) theories are applicable to school organizations with the school administrator as the acting manager whose task is to increase the instructional capacities of teachers within a school.

McGregor examined traditional, formal organizational structures that existed during his time and found every managerial act and decision was based on the manager's assumptions and theories of human behavior. And, while he did not see the use of authority to make unilateral decisions inherently wrong or bad (particularly in situations where it was necessary or increased productivity), he did argue that in situations where the use of such authority failed to meet the intended goals, the problem was the result of using the incorrect form of influence the situation required (McGregor, 1960/2006). Given the complexity and interdependence of organizations today (such as schools whose ability to affect student learning and growth rests on many factors outside of the specific areas of control in which schools operate), formal methods of authority (while they cannot be completely disregarded or discarded) are a weak alternative to selective adaptations to human behaviors to promote collaborative relationships with the goal of increasing the instructional capacity of a school. When the exertion of authority fails, other methods of influence must be utilized to solve the problem (McGregor, 1960/2006).

McGregor (1960/2006) developed his Theory X and Theory Y as a means of describing how the underlying assumptions of managers (administrators) drive their decision-making and how those decisions affect the individuals in an organization and the organization's effectiveness in meeting goals (of both the individual and the organization).

According to Theory X, there is an implicit understanding in the modern world that the organizational goals supersede the needs of the individual. This is, in part, based on the notion that the individual has entered into a contract with the organization that

rewards will be provided if the individual concedes to the organization's external direction and control. Conversely, Theory Y argues for the creation of conditions that help individual members within the organization achieve their goals best by working to achieve the organization's goals. Theory Y maintains that the successful attainment of organizational goals will be realized more effectively through this synthesis of goals (McGregor, 1960/2006).

Theory X

According to McGregor (1960/2006, pp. 22-24), there are three particularly erroneous traditional principles upon which many of those in managerial roles have expounded as "laws" but for which there are numerous examples of contradictory evidence that preclude these "principles" as being true: the unity of command; the ethnocentric thinking of classical organizational theory; and the assumptions of human behavior that are not rooted in scientific study and rely on perpetuated beliefs without regard to actual evidence.

Underlying Assumptions of Theory X. The first "law" or assumption of managers that fit the traditional view of direction and control found in Theory X is that human beings dislike, and will avoid if possible, work (McGregor, 1960/2006). The second assumption relies on the first assumption: because humans dislike work, they must be directed, controlled, coerced, and threatened with punishment for them to work towards organizational goals (McGregor, 1960/2006). Finally, Theory X assumptions conclude that because the ordinary person values security more than anything else and has relatively low ambitions, people prefer to avoid responsibility and would rather be

told what to do rather than think for themselves. In particular, these assumptions frame the basis of Theory X, and the implications of these assumptions create a situation that does not utilize the full professional capital of individuals within an organization to its fullest.

Specifically, the first erroneous principle evolved from the idea that traditionally successful organizations (i.e. the Catholic Church and the military) should be emulated; however, this discounts the reality of comparison organizations that little resemble the environment in which most organizations (in particular modern organizations) exist (McGregor, 1960/2006). In the modern era, individuals within an organization often have to answer to multiple "superiors," and in a school, teaching professionals often have their behaviors controlled by administrators, curriculum departments, the community, individual education plans (IEPs), parents, students, unions, state and federal standards, etc.

According to McGregor (1960/2006), the second and third erroneous principles suffer from misconceptions rooted in the complexity and differences that exist in the world and the nature of human beings that pervade the social consciousness without regard to context. McGregor (1960/2006) provides the example of the importance of autonomy for infantry units in the military on the battlefield to adjust for circumstances they encounter to be able to meet broad objectives. This example can be likened to teachers existing in their classrooms with unique groups of students they encounter every day and the unique challenges that are presented. While the broad goal is to increase student learning and success, the necessary differentiation to meet that goal is not realized

in a highly structured, top-down organizational model that does not provide the necessary autonomy to meet diverse challenges and opportunities to meet the broader goal of increasing student learning and success.

Organizations that can rely on "dependent upward" conditions that exist in organizations, such as the military and the church (which rely upon a sacrifice of personal goals for a larger purpose), do not have to adhere to the same interdependence that characterizes the modern school system. In the modern school system, there exists a multi-directional dependence in which administrators can attempt to use disciplinary measures and teachers have the ability to make decisions that focus on their goals (McGregor, 2006). Ultimately, the price of specialization is interdependence (McGregor, 1960/2006).

Assumptions About Human Motivation and Theory X. McGregor (1960/2006) described the motivations that result when the needs of individuals, based on Maslow's (1943/2013) hierarchy of needs, in an organization are partially met through the formal organization's use of Theory X. He argued that the assumptions found in Theory X leadership stem from mistaking the symptoms of individuals whose needs are not met as the underlying human nature rather than these being behaviors the result of human beings not having their higher needs met. He explained that once the physiological needs of people are met (through wages and other forms of reward that enable individuals to satisfy physiological needs), offering more rewards that are meant to satisfy physiological needs actually inhibits full effort because those rewards can only be used outside of the work environment. The employee will only realize the benefit of the monetary rewards

away from the job and will begin to see work as a punishment that keeps them from meeting those higher needs (social and egoistic needs). Leaders will have to rely on threats of punishment or other measures to ensure increased performance. A large amount of research exists that demonstrates this holds true for teachers, and merit pay and accountability measures instituted with the goal of increasing teacher performance fail for this reason. Hargreaves and Fullan (2012) agree and further explain that teacher performance actually suffers due to merit pay because teachers are distracted by the short-term rewards from working towards long-term growth. Fullan (2014) described how accountability without capacity building creates dysfunction within a school. Ultimately, Theory X works well when humans are struggling for subsistence, but it begins to fail when the focus of the individuals in the organization shifts to higher level needs.

In school systems, teacher performance increases do not align well with Theory X assumptions because teachers are generally paid based upon a salary scale that does not lend itself to extra monetary rewards (with the exception of pay increases based upon continuing one's education through further coursework towards graduate degree attainment) and the fact that most teachers' basic physiological needs are taken care of through their salaries. According to McGregor's (1960/2006) reasoning, teacher performance would not be significantly increased through a physiological-based rewards system, and it would be necessary to increase teachers' ability to meet higher needs to increase their motivation to meet organizational goals.

McGregor (1960/2006) explained that results of this inability to meet higher needs have predictive results that could be erroneously interpreted by Theory X as being the consequences of the assumptions that underlie Theory X. He felt that without the satisfaction of the higher needs (social and egoistic) once the base needs (physiological) are taken care of, it was inevitable that idleness, resistance to change, an unwillingness to follow easy-to-follow directions, a lack or avoidance of responsibility, and passivity would result. Unfortunately, when these behaviors result, they are often misinterpreted as providing evidence for the three underlying assumptions of a Theory X view of human motivation and performance. He felt that these were symptomatic of organizations that were not allowing the individual to meet the higher needs rather than actual characteristics of human nature, and he argued that scientific studies unilaterally supported his view.

McGregor pointed out another shortcoming of Theory X regarding motivation based on the basic needs of individuals. In the view of Theory X assumptions, merit pay would be perceived as a motivator and any resultant success of this intervention as a motivation would be seen as proof of its success. Any failures of merit pay as a motivator would be perceived as evidence of the three underlying assumptions about human nature that McGregor (1960/2006) felt were incorrect. One of the most often discussed ways to increase teacher motivation and performance is merit pay, but as McGregor pointed out, given that base teacher pay provides the necessary requirements for fulfilling the basic physiological needs, it would not serve well as a motivator and could have negative effects on teacher performance. In his Theory Y, McGregor argued for better methods of

motivation that focus on the higher needs of the individual to motivate. In McGregor's view, once individuals have met their subsistence level needs, they are no longer motivated by those needs and require self-fulfillment as a motivation; however, management cannot provide intrinsic motivations, but it can create an environment that either enables or thwarts the attainment of those intrinsic motivators (1960/2006). It is this type of managerial control that forms the basis of Theory Y.

Methods of Influence in Theory X. One of the key focuses of McGregor (1960/2006) is the differentiation between different types of social influence that Theory X uses to improve performance. These involve the use of authority, attempts at persuasion, and professional "help." For these types of control, success is dependent upon the ability of individuals to achieve their needs. Modifications in the form of positive or negative rewards (e.g., bonuses, disciplinary action, etc.) may influence the individual's decision to give in to the control, but ultimately unless the needs of the individual are satisfied, the behavior and motivation will not be positively influenced. Furthermore, McGregor seemed to be indicating that there is a level of cost-benefit analysis on the part of the individual, in regards to the attempt to control by the authority that will be the determining factor as to whether or not the individual will submit to the desires of the other.

One of the limits of an authoritative approach to managing subordinates is the availability of countermeasures by those under the authority in the form of employee rights created through collective bargaining, legislation, and forms of organizational goals sabotage (McGregor, 1960/2006). The first of these two have been realized in the

context of education through the use of unions and legislation that has been championed by teacher unions; the third is often demonstrated by teachers who will either disregard directives or do the bare minimum to fulfill requirements that do not align with their goals. Teachers who are told to make changes or follow new standards without intrinsic motivation will most likely react as McGregor argued above (e.g., behave passively, resist change, avoid responsibility, etc.), and the authoritarian approach could very likely not result in the level of involvement or achievement that was desired. Other limits to an authoritarian approach that are less obvious involve indifference, protective behavior, low-performance standards, and the purposeful deflection of responsibility (McGregor, 1960/2006).

Forcing accountability for teachers when professional development is delivered without regard to the needs of teachers or changes within the organization that do not align with the goals of teachers could have the same results. Fullan (2014) described how accountability measures and standards that are created as a matter of policy with the goal of increasing student achievement and teacher growth have weakened teacher effectiveness and have resulted in many teachers and administrators exhibiting self-interest behaviors and counterproductive actions. As Maslow (1943/2013) argued, the thwarting of higher needs (such as those for satisfaction, esteem, and self-actualization) after base physiological needs are met is the cause of the maladjusted behaviors that McGregor (1960/2006) pointed out. Teachers who are not motivated intrinsically through the fulfillment of higher needs could react negatively. Low motivation and negative effects could occur if participation in a professional development model that was geared

towards increasing teacher efficacy and student learning and achievement was instituted unilaterally by an administrator and did not take into account those higher needs. Any school-wide organizational change enacted in such a way that did not take those teacher needs into account would run a significant risk of failure.

McGregor (1960/2006) described another possible avenue for Theory X administrators to maintain control that relies on the dependency of employees on the organization for employment. If an administrator seeks to decrease the feelings of safety, one of the base physiological needs that need to be met, in his or her employees, it can be used as a motivational tool. The possibility of being fired, favoritism, discrimination, unclear or surprising decisions by leaders, and unpredictable application of policy are all threats to an individual's feeling of safety. By taking away the feeling of safety, individuals can be motivated by the base physiological needs again, and the potential for safety to be regained or achieved can be a powerful motivator. Teachers who face these would experience the same threat to safety, and administrators themselves are vulnerable to the same threats to safety from above; it is easy to see how an administrator who operates under this threat may use the threat as well to achieve goals.

McGregor (1960/2006) described the negative outcomes that can occur when dependence upward is enforced through Theory X management, but he also highlighted one of the most important components of collaborative relationships in his discussion of goal interdependency. The school administrator and the teaching staff, like a manager and subordinates, are dependent upon one another. Just as the principal needs the staff to

fulfill their responsibilities to the organizational goals, the teachers are dependent upon the principal to satisfy theirs (McGregor, 1960/2006).

Ultimately, an administrator hoping to increase the instructional capacity of teachers through collaborative relationships would be more likely to achieve desired goals if he or she can make sure that the change aligns well with teacher higher needs and goals.

Administrator Difficulties Under Theory X. McGregor (1960/2006) recognized the difficult reality that school administrators might encounter regarding their position in the school organization. School administrators exist in a middle area between the teachers, who are lower in the organizational hierarchy, and the superiors and standards. As Fullan (2014) noted, this middle ground can create a situation in which administrators are forced to waste their energies in one of two ways: by engaging in accountability measures and processes that alienate them from teachers and are often unenforceable, or by knowingly providing perfunctory appraisals with the expectation that the system does not work. Above the school administrators are the superintendents, the school boards, and the local and state organizations that establish the standards and organizational goals. McGregor (1960/2006) described situations of managers who are at a level in an organization for which they cannot control the outcomes of many things for which they are responsible. Managers (like administrators who function as managers of teachers) might erroneously conclude that their authority equals the responsibility.

If the administrator subscribes to this line of thinking and takes responsibility for teacher professional development and student learning and achievement, which is beyond

his or her scope of control, significant conflicts resulting from the interdependence of teachers and the administrator can manifest. If the administrator anticipates the assumptions of Theory X (e.g., humans dislike and avoid work, need direction, have low ambitions, etc.) or lacks confidence in his teachers, he or she will likely resort to the types of control described earlier (e.g., rewards, punishment, coercion, etc.) in order to try to achieve organizational goals (McGregor, 1960/2006). This sense of responsibility does not work, according to McGregor (1960/2006), unless the administrator or manager has the means of influence to guarantee adherence to the control. In the case of teachers who are operating under a union or other protection in which complete control does not exist for the administrator within the organization, the use of authority is not appropriate and will not achieve the desired outcome. The reciprocal relationship of interdependence that exists precludes the use of authority in this way. McGregor (1960/2006) explained that authority might influence variables, but it cannot control them.

"Hard" and "Soft" Theory X. McGregor did make a distinction between two types of Theory X assumptions and practices: "hard" Theory X and "soft" Theory X. While the practices of managers under "hard" and "soft" Theory X behave very differently, they still rely on the same three underlying assumptions about human nature (i.e., people dislike work, people require coercion to work, and people prefer to be directed because they are unambitious, avoid responsibility, and value security). Theory X ultimately fails in its ability to increase productivity when authority or influence fails to reach the desired goals of the organization (McGregor, 1960/2006) because authority is limited in many situations. As subordinates are less dependent upon managers to have

their base needs met or have countermeasures available (ranging from ineffective compliance to sabotage), coercive measures that managers have available decrease in efficacy. “Hard” Theory X management practices are focused on coercive measures, strict control and oversight, and the threat of punishment or promise of reward to increase productivity and reach goals. As discussed earlier, these methods generally result in lower productivity and antagonism towards management.

“Soft” versions of Theory X rely on keeping everyone happy through the avoidance of conflict. This laissez-faire type of leadership that seeks to achieve harmony by avoiding conflict, but the manager ultimately abdicates responsibility for goal attainment. This version of Theory X results in delayed decisions and little effort on the part of managers to help subordinates meet their needs (Northouse, 2013). A kind of superficial harmony is created that is characterized by indifference towards the goals, lingering resentment towards management for unresolved issues, and low productivity (Bolman & Deal, 2013).

McGregor (1960/2006) characterized these two forms of Theory X as “carrot and stick” theory because the rewards and punishments are ultimately two methods of control based on the same assumptions about human behavior. Material rewards (increases in benefits, pay, and improved working conditions) are only effective means of motivating individuals whose base physiological needs are not met. Once those physiological needs are met, the individual will desire to have his or her higher-level needs (e.g., social, love, respect, self-actualization) met and will use these rewards to attain those higher-level needs outside of the organization. As McGregor points out, employment itself often

provides employees with the base needs and deprives management of the ability to use coercive methods of reward and punishment.

Discussion of Theory X and Teacher Professional Development. Under the Theory X organizational model and leadership, directives to meet the new standards would be difficult to enact beyond the superficial application of organizational change and would likely result in inefficiency and negative outcomes.

If administrators base their views of teachers on the underlying assumptions that are characteristic of Theory X thinking, they would likely conclude that methods of control that are extrinsic and focus on the base physiological needs of teachers should be used to ensure that teachers actively participate in the collaboration. This would most likely result in less-than-ideal results and low motivation on the part of the teachers. As McGregor pointed out, predicated in all managerial decision-making exists the assumptions and beliefs held by those in management; the inability or refusal to understand or examine these assumptions and beliefs will ultimately slow progress (1960/2006). It could also decrease the likelihood that the organizational change would have the positive effect desired on student learning and achievement, and it might negatively affect the relationships between the administrators and teachers, further leading to some of the negative outcomes that can occur when Theory X leadership and organizational change methods are incorporated to control teachers whose base physiological needs are already taken care of.

As McGregor (1960/2006) explained, professionals whose basic physiological needs are already met require motivation addressing higher needs as presented by

Maslow (1943/2013) such as love, esteem, and self-actualization. Teachers would not necessarily perform better or participate more fully for monetary rewards that can only be utilized outside the school to meet these higher needs. Finally, if the outcomes do not meet the goals of teacher professional development and student learning and achievement, Theory X thinking would ultimately conclude that the underlying assumptions that negatively predict human behavior were correct and seek to use more methods of control and influence that can negatively affect the teachers. This would decrease their ability and desire to meet organizational goals of furthering student learning and achievement.

Theory Y

McGregor (1960/2006) argued for a new approach to organizational change and leadership that he called Theory Y. McGregor (1960/2006) used the analogy of an engineer who seeks to control the flow of water, likening a manager (administrator) to the engineer and the water to human nature. The engineer should not blame the water for not flowing uphill, and conversely, the administrator needs to understand the nature of teachers and not blame teachers for behaving in ways that are in keeping with their nature.

McGregor pointed out that the main distinction between Theory X management and Theory Y management is that Theory X focuses on the quality of human resources present in an organization while Theory Y focuses on the management's methods of control and the methods of utilizing the human resources (McGregor, 1960/2006). Ultimately, when an organization is failing to meet its goals, Theory X regards the human

capital as the restrictive element that impedes the reaching of the goals. Conversely, Theory Y implies that the cause of the inability to meet the goals lies with the management's use of control and organization and the management's lack of ingenuity in finding means to fully utilize the potential of the human resources (McGregor, 1960/2006). This distinctive element between the two theories exists due to the underlying assumptions that Theory X and Theory Y thinking possess. Theory Y's assumptions differ dramatically from Theory X's, and these assumptive differences result in vastly different approaches to using human capital for goal attainment. Once individuals have met their subsistence level needs, they are no longer motivated by those needs and require self-fulfillment as a motivation; however, management cannot provide intrinsic motivations, but it can create an environment that either enables or thwarts the attainment of those intrinsic motivators (McGregor, 1960/2006).

Assumptions About Human Motivation and Theory Y. The assumptions of Theory Y are the following: 1) Humans naturally put forth physical and mental effort towards work and play. 2) Humans will put forth the effort to meet goals to which they are committed, and external control and coercive measures are not the only means of getting humans to work toward goals. 3) Rewards can come in many forms and can be direct products of effort directed at the objectives of the organization. 4) Humans will accept and seek responsibility naturally under the right conditions. 5) In finding ways to solve organizational problems, humans are generally creative, imaginative, and resourceful. 6) In the modern industrial world, the inherent abilities and potentialities possessed by the employees are not fully realized (McGregor, 1960/2006).

These assumptions are extremely positive in comparison to the underlying assumptions managers using Theory X possess and use for their decision-making. Theory X assumes a transactional relationship between employee and employer that assumes that each is trying to gain the most at a cost to the other, but Theory Y assumes the relationship can be mutually beneficial and focuses on aligning needs and goals to make the relationship positive for both the employee and employer.

The first assumption of Theory Y depends on the situation, and humans do not inherently dislike work. Whether or not work is viewed as a reward (and will be performed voluntarily) or punishment (to be avoided) depends upon the conditions. Work that helps an individual achieve his or her goals will be seen as a reward. Conversely, if the individual's needs are already met, work would seem like a punishment that detracts from the individual's ability to enjoy the needs being met.

The assumptions of Theory Y assume that the individual will work hard to achieve organizational goals if the individual commits to the goals (McGregor, 1960/2006). When the goals of the individual and the organization are integrated, the individual will use self-direction and self-control to achieve the goals with little or no oversight. The individual will also seek responsibility (not run from it) and ways to solve organizational problems due to that commitment. The responsibility for organizational goals would not rest solely on the shoulders of Theory Y leadership, rather, the creativity and imagination of many individuals within an organization will be used to solve problems and more effectively use the human potential across the organization.

According to Theory X, there is an implicit belief that the needs of the individual are superseded by the goals of the organization; this is based on the notion that the individual has a contractual obligation to the organization that rewards will be provided if the individual concedes to the organization's external control and direction. Theory Y thinking, however, believes that creating a positive culture and supportive environment that enables individuals to meet their needs while also working to achieve the goals of the organization will effectively meet the needs of the organization better and more effectively (McGregor, 1960/2006).

Theory X and Y Views of Teacher Professional Development. Regarding teacher professional development, a Theory X administrator would see teachers as the impediment to their professional growth and student learning when student growth is not evident and disregard the multitude of factors that can influence teacher professional development and growth. If an administrator unilaterally instituted a professional development opportunity for teachers that was not seen as worthwhile to the teachers' needs or did not align well with the needs of the organization, teachers would not be able to use the professional development in any meaningful way to meet the goals of the school. Theory X thinking would assume that the professional development did not work due to the laziness, lack of intelligence, or inability of the teachers to use the professional development, and this would only serve to reinforce the Theory X thinking assumptions held by the administrator. Many policy changes (i.e., Race to the Top) brought about through legislation reflect Theory X assumptions and focus on assessing individual teachers' performance through evaluations that, while providing some important

feedback for educators, ultimately rely on incentives such as merit pay or other incentives that do not provide intrinsic motivation (Fullan, 2014). Extrinsic motivators, such as monetary rewards, often create the situation that the reward can only be used for motivational needs outside of the organization. Or, if an administrator instituted a policy change that created more work for teachers without an apparent benefit to their higher-level motivational needs according to Maslow's (1943/2013) Hierarchy of Needs, the teachers would most likely actively or passively resist the change, making it less effective in reaching the administrator's goals.

According to McGregor's (1960/2006) theories, administrators utilizing Theory Y would be much more effective in reaching organizational goals. The challenge for administrators using Theory Y would be the integrating of individual goals with the goals and needs of the organization. As McGregor explains, integrating individual goals with organizational needs and goals is not a static or idealized objective; rather, it involves "best" directing the individual to achieve goals through creating motivations that are more attractive to the individual than other, negative non-organizational goals (e.g., indifference, irresponsibility, anger, withdrawal, etc.) (1960/2006). Fullan (2014) described how countries such as Canada, Finland, and Singapore created high-performance cultures with high expectations by developing leadership to encourage teacher collaboration and transparency of methods in the practice of utilizing diagnostic data to improve student learning. In practical application, utilizing Theory Y involves helping individuals within the organization realize their goals with regard to the organization's goals, and management's role is to integrate those goals to create an

environment where the individual's and organization's goals are aligned and achieved (McGregor, 1960/2006) to build capacity within the organization (Fullan, 2014).

If the individual goals of the teachers are put in terms of Maslow's higher needs, they could be aligned in different ways according to the needs for love and socialization, esteem, and self-actualization. A Theory Y administrator would focus on aligning the needs of teachers with these higher needs in the form of creating opportunities for professional relationships to develop through collaboration and community. This would also take the form of allowing teachers to self-direct toward autonomy and responsibility that can lead to greater self-esteem and satisfaction. This does not mean that the administrator utilizes a laissez-faire attitude toward responsibility for goal achievement. Instead, there is an interdependence of responsibility as the administrator would be in a position to procure the resources (e.g., time, training, etc.) necessary for the teacher to develop and grow to increase teaching efficacy and student achievement. Fullan (2014) seemed to echo this line of reasoning and further provided an analogy comparing capacity building and accountability to finance and accounting. While accountability and accounting create only measures of performance and outcomes, finance is likened to capacity building through the strategic interventions that are utilized to develop the ability to achieve results. Esteem and self-worth would be generated for teachers through capacity building methods in line with Theory Y as they are allowed to have a voice in their development, share resources and knowledge that would contribute to the goals of the organization and other teachers, and work towards self-actualization.

McGregor (1960/2006) believed that Theory Y operated on a principle of self-control. Staff members and staff groups are viewed as resources for the entire organization, and each person and group are responsible for their own jobs, not the jobs of others above or below them. In this, McGregor made a key point: an administrator should not in any circumstances seek to use help from subordinates in ways that cause them to police themselves or others. By allowing for self-control (in terms of allowing individuals to be responsible for themselves and their organizations), administrators are required to take on certain risks by not focusing on control, but the delegation of responsibility and control creates the opportunity for subordinates to work towards their potential and realize the potential gratification of higher needs. McGregor (1960/2006) recognized that ambiguities exist, and he argued for this to be an ideal to be promoted rather than something that required rigid adherence to specific mandates. He also explained that under Theory Y administrator models, the subordinates under a Theory Y leader would understand the interventions by administrators because of the openness of information and commitment to goals. The individual should have the data he or she needs and the ability to control its use for subordinates to be able to function in a self-directed manner.

Fullan (2014) found this to be the case in countries such as Singapore, Finland and Canada where the focus is on a developmental approach to increasing teacher instructional capacity by operating in a transparent manner that allows teachers and principals to learn from one another as student data is utilized as a means of diagnostic information tied to improving instruction. Principals in these countries create a high-

performance culture by setting high expectations and supporting teachers as they monitor their progress and only step in if necessary (Fullan, 2014).

McGregor (1960/2006) recognized the ability of information technology to be misused by administrators. He explained how some managers complained that they delegated responsibility to subordinates but found the subordinates did not seem to want to take responsibility. He found, unsurprisingly, that these managers often monitored closely the performance data and day-to-day activities of subordinates below them (often multiple levels below them) and still took responsibility for these results on themselves (which is a Theory X leadership characteristic).

Data technologies allow for teachers to be monitored via their students' standardized achievement test scores and other measures. McGregor would have categorized the misuse of data by administrators as a means to control teachers' behaviors and practices as indicative of Theory X. A Theory Y approach would view the data as a means to delegate responsibility to teachers and groups of teachers by allowing them to interpret the data to increase performance.

This delegation of responsibility requires development and multilateral decision-making by administrators if teachers are to accept responsibility and use self-direction and self-control in meeting goals, both individual and organizational. As long as these are aligned, administrators will decrease the time and energy spent towards directing teachers, increase their own skill as administrators, and it will enable them to get the best results from their teachers by allowing them to achieve to their full potential (McGregor, 1960/2006).

Thematic Review of Current Literature Related to Key Variables and Concepts

In this study, I explored how principals utilized collaborative relationships as a way to increase the instructional capacity of their schools. During the review of the literature, a number of themes emerged.

Theme 1: Principal Instructional Leadership

The responsibilities of principals have dramatically increased over the last 20 years, the complexity of the position has grown, and standards and accountability measures, expectations, and culture have undergone many changes (Fullan, 2014; Hargreaves & Fullan, 2012; Tschannen-Moran, 2014). Hallinger et al. (2016) point out that there is greater importance given to principal instructional leadership in both practices and educational policy. For example, the addition of the "Equity and Cultural Responsiveness" standard to the Professional Standards for Educational Leaders 2015 (National Policy Board for Educational Administration, 2015, as cited in Rigby, 2016) demonstrates the increased presence of social justice in education and a change in the way the instructional leadership of principals in the United States is perceived (Rigby, 2016).

Even when a change initiative meant for improving teacher professional development is justified through research and backed by theory, the change must provide for the complexity of the factors involved in implementation that include levels of teacher engagement, availability of funding, teacher workload, and the educational policies already in place if the change is to be effective (Ioannidou-Koutselini & Patsalidou, 2015). These factors make it difficult for principals to effectively engage in instructional

leadership with a focus on increasing the instructional capacity of their schools. Furthermore, new evaluation system reforms have expanded the role and function of school principals due to the increase in time needed to perform the evaluations and the expanded role as instructional leader (Kraft & Gilmour, 2016).

Importance of Principal Instructional Leadership

The current research on principal instructional leadership demonstrates how important the role of the principal is in creating the conditions for increasing the instructional capacity of teachers. Bellibas and Liu (2018) conducted an international quantitative study of survey data collected in 2013 from the Organization for Economic Cooperation and Development (OECD) which utilized the two-part Teaching and Learning International Survey (TALIS) to gather data from over 6,000 participating schools in 24 countries (200 schools from each country with 20 teachers and one principal surveyed in each school). Bellibas and Liu (2018) analyzed the survey data to determine if the perceived distributed and instructional leadership practices of principals were predictors of school climate as indicated through mutual respect and school delinquency. The findings were supported by existing research, and the researchers found that principals who focus on distributing leadership and instructional leadership have positive effects on school culture and mutual respect. Specifically, they found that principals are essential for establishing a positive school climate with staff respect by involving staff, parents and students in decision-making, and by supporting collegial work of teachers that focuses responsibility and accountability for student learning and using strong instructional practices. School principals, through their instructional

leadership role, can shape staff development, curriculum development, expectations of performance, student assessment interpretation and analysis, teacher evaluations and feedback, and facilitate teacher learning opportunities. Kraft and Gilmour (2016) conducted a qualitative study and interviewed 24 district principals from the northeastern United States to understand the views and experiences of principals (in regard to their roles as instructional leaders) in the teacher evaluation process. They found that facilitation of learning opportunities can involve designing schedules with common planning times, creating opportunities for teachers to collaborate and observe one another, setting the goals and expectations within the school, and playing a major role in the development of a culture of high expectations (Kraft & Gilmour, 2016). The complexity of the role of principal was noted in virtually all of the research that discussed the resource management role of the principal, and creating the space for collaboration was an essential component of principals who were viewed as successful instructional leaders (Boylan, 2016; Buttram & Farley-Ripple, 2016; DeMatthews, 2014; Koşar et al., 2014; Kraft & Gilmour, 2016; Kuh, 2016; Park & Ham, 2016; Newton & Wallin, 2013; Nicholson et al., 2016; Owen, 2014).

Necessity of Formal Leadership Practices. The distribution of positional authority to allow for teacher leadership was found to be essential for collaborative work within many of the studies, but the formal authority of the principal was still found to be very important. DeMatthews (2014) interviewed six principals from two low-socioeconomic West Texas school districts, gathered data from 60 PLC meetings (10 from each school), and utilized other artifacts (such as a teacher survey that was used to

screen the schools for meeting effective PLC criteria) to determine how principals support effective PLCs by distributing leadership. DeMatthews (2014) found that while the principals of schools with successful PLCs agreed that teacher leadership was extremely important, they all felt that their formal authority was important to ensure that the teacher leadership was effective, organized, and aligned to the goals of the school. These findings were supported by Kuh's (2016) ethnographic case study that was conducted to understand what supports and hinders the focus of collaborative groups created to impact classroom practice. Kuh (2016) interviewed four teachers, a school principal, and a professional development coordinator that were part of a critical friends group (CFG) in a large school district in the northwest portion of the United States which had adopted the CFG model as a professional development tool. The principal created a sustainable collaborative culture with a "healthy tension" between the "top-down" and "bottom-up" leadership by using the CFG process (Kuh, 2016). The principal in Kuh's (2016) study was instrumental in creating and supporting the collaborative culture within her school. The principal used the CFG process to create the foundational experiences and did so by team building, creating experiences that helped create norms for collaboration, building trust, and supporting the autonomous groups as they developed to increase instructional efficacy and address school-wide issues. This was also confirmed by Owen's (2014) case study examination of three purposefully sampled innovative Australian schools to look at the key components for PLC development and developmental stages. Owen (2014) found that student learning and teacher professional growth can occur when teacher PLCs are provided with the necessary support (nurtured

development, financial support, and clear expectations) to develop beyond contrived collegiality.

Indirectly, principal instructional leadership was shown to have a significant effect on teacher professionalism and learning in a number of studies that are discussed in greater detail later (Carpenter, 2018; DeMatthews, 2014; Fairman & Mackenzie, 2015; Nicholson et al., 2016; Tam, 2015). Goddard et al. (2015) conducted a quasi-experimental design quantitative study based on Bandura's social cognitive theory to determine the ways principals can improve instruction for students through practices that increase teacher collaboration. Specifically, the authors sought to discover if teacher collaboration for instructional improvement and student achievement were positively associated with principal instructional leadership and what were the effects principal instructional leadership and collaboration efficacy beliefs had on student growth. The researchers studied 93 Midwestern elementary schools that were considered rural and impoverished. Data was gathered from surveys given to 1,606 teachers and student achievement scores from 2008-2010. Goddard et al. (2015) found that principal instructional leadership indirectly affected student achievement and collaborations while collective efficacy beliefs (leadership and collaboration) directly affected student achievement. The researchers demonstrated the importance of principal leadership but stressed that their study addressed an aspect that was not covered by other research, namely, that principal leadership is directly related to teachers' collective behaviors.

Buttram and Farley-Ripple (2016) sought to explore how principals could support PLCs (professional learning communities) to enable productive teacher collaboration. To

do this, a sequential mixed-methods study was conducted using four elementary schools in two districts located in Delaware that were purposefully sampled on the advice and direction of the two districts' superintendents. The Delaware Department of Education standards have a requirement for the use of PLCs to improve instruction, and the school principals, acting as instructional leaders, were to implement PLCs to achieve those goals. The qualitative data used to answer the first RQ came from semi-structured interviews with nine central office administrators; documents from principals and teachers; and meetings with teacher leaders and school leadership teams. The qualitative data was analyzed and its findings as well as portions of existing surveys on PLCs was used to create the survey for the quantitative portion of the study. Buttram and Farley-Ripple (2016) found that principals were instrumental in shaping the school culture of collaboration to increase the instructional capacity through routines they created; their decisions on who would participate and the frequency of that participation; and their control of the supports that were made available to help teachers collaborate effectively. Other means by which principals could influence the culture and procedures of PLC work through their position of authority were the expectations for collaboration and use of data, how much they focused on decreasing the autonomy of teachers and their practice through data sharing, modeling effective communication and collaboration skills, utilizing support and instruction for PLC work, and supervising and participating in PLC work (Buttram & Farley-Ripple, 2016). And, while principals were not found to directly contribute to an increase in teacher professional growth through PLCs, Buttram and

Farley-Ripple (2016) found they were instrumental in creating the space and resources for successful teacher collaboration and development.

Time Used for Instructional Leadership. The complexity of the role of principals and the number of administrative duties were shown to decrease the amount of time that principals spend in their instructional leadership role. The job performance of principals is difficult to measure due to the indirect nature of many of the outcomes used as measures (Hallinger & Heck, 1998; as cited in Grissom et al., 2015). Kraft and Gilmour (2016) looked at a number of studies to inform their research study that focused on the time use of principals before evaluation reforms were enacted and reported findings that suggest principals spend only a small fraction of their time on instructional leadership. Grissom et al. (2013; as cited in Kraft & Gilmour, 2016) found that instructional activities accounted for less than 13% of principal activities while researchers found that instructional leadership activities accounted for even less: 7% (Horng et al., 2010; as cited in Kraft & Gilmour, 2016) and 8% (Supovitz, 2011; as cited in Kraft & Gilmour, 2016) of principal instructional leadership activities. As part of a much larger study that focused on how principals used data to informal their human capital decision making, Goldring et al. (2015) surveyed 764 principals from six large, urban school districts from major cities across the United States and conducted over 90 semi-structured interviews (56 were school principals and the rest were central office leaders) to understand how and why do principals use teacher effectiveness measures for human capital decisions in practice. They also sought to discover what were the barriers to using those measures for decision-making. Goldring et al. (2015) argued that principals

do not spend enough time in classrooms or focus on teaching and learning enough, but they also called for more research to understand how the implementation of teacher observations and their use affect principal effectiveness, views, and roles. Grissom et al. (2015) utilized a modified version of the Time Management Questionnaire (TMQ) to assess the time management skills of 278 principals from the Miami-Date County Public School district and used trained observers to capture data at 5-minute intervals of approximately 50 job-related tasks of 98 of the principals in the course of a school day. Grissom et al. (2015) found that approximately 13% of the average day of a principal is utilized for instruction-related tasks (coaching, planning teacher professional development, and walkthroughs), but a single standard deviation increase in time management skills was associated with an increase in instruction management of approximately 2%. Better time management did not increase more time spent on organizational management, and this seems to indicate that principals with better time management can better focus on instruction within their schools.

The amount of time spent on instructional leadership practices was part of Hallinger et al.'s (2016) extensive and rigorous meta-analysis of 28 different studies that utilized the Principal Instructional Management Rating Scale (PIMRS) to determine if there were significant differences in perceptions of male and female principals' instructional leadership practices. The study drew upon 40 data sets created between 1983 and 2014 that included over 2000 principals and teachers. The PIMRS was developed from the instructional leadership framework created by Hallinger and Murphy (1985; as cited in Hallinger et al., 2016). Hallinger et al. (2016) found that female

principals may be more likely to engage in generalized behaviors that coincide with a principal's role as an instructional leader. In the United States, female principals have a slight majority at the elementary school level, but at the high school level, 70% of the high school principals are male (Bitterman et al., 2013; as cited in Hallinger et al., 2016).

A small yet significant difference was shown that suggests that female principals engage in more instructional leadership activities than male principals, but no specific principal functions appeared to account for the difference between the two groups, and the gender of principals seemed to indicate a general, rather than specific, effect on the difference (Hallinger et al., 2016).

Complexity of the Role of the Principal

The small amount of time devoted to instructional leadership activities in these studies is largely the result of the complex nature of principal leadership and its many dimensions. Managerial leadership activities, while necessary, seem to make it difficult for principals to focus as much time and energy to their instructional leadership role. Teacher observation evaluation systems are time-consuming, and Goldring et al. (2015) found that many principals reported that the workload created by them significantly decreased the quality and frequency of their informal discussions and interactions with students and teachers. New evaluation system reforms have expanded the role and function of school principals due to the increase in time needed to perform the evaluations and the expanded role as instructional leader (Kraft & Gilmour, 2016). Teacher evaluations are viewed by some as a means of increasing teacher focus and work through monitoring and accountability measures (including removing teachers considered

ineffective), but others, particularly policy makers, generally hold the view that evaluations create a framework that analyzes instruction, provides teacher feedback, and promotes teacher self-reflection (Kraft & Gilmour, 2016).

Some of the managerial leadership role activities are designed with improving the instructional quality of teachers, but the time and energy devoted to these teacher management activities seem to inefficiently utilize principal time rather than support the efforts of principals to increase instructional capacity of teachers. Formal teacher appraisal systems are time consuming and, according to Fullan (2014), can often lead to principal burnout through micromanagement or superficial adherence to the outlined procedures of the evaluations that are still a drain on time and energy for both principals and teachers. In Goldring et al.'s (2015) study, principals from all the districts reported challenges and reticence in using value-added measures (VAM) of the performance of their teachers for their human capital decisions, and they felt that observations provided a better picture of teacher strengths and areas in need of improvement. Taylor Backor and Gordon (2015) conducted a qualitative study of purposefully selected expert instructional leaders (five university scholars, five excellent teacher leaders, and five principals who they identified as effective instructional leaders) to determine how principal preparation programs should prepare principals as effective instructional leaders. The expert participants in Taylor Backor and Gordon's (2015) study generally agreed that traditional observations using evaluation instruments created by the state or district were not as effective or important as a long-term focus on teacher growth that requires principals who

can assess teacher professional growth needs and provide professional development aligned with teacher needs (Taylor Backor & Gordon, 2015).

Principals in Goldring et al.'s (2015) study of how principals used data to inform their human capital decision-making were expected (by the central office leaders) to utilize observation data to hold multiple "crucial conversations" with teachers throughout the year about areas of instructional strength and areas in need of improvement. According to the principals in the study, the data from observations was useful in helping build the instructional capacity of their teachers because observation data and evaluation tools helped discern teacher areas of strength and weakness, provide feedback that was specific and actionable, and could be used to develop growth plans (Goldring et al., 2015). Principals in Goldring et al.'s (2015) study preferred to use observation data because it enables specific and ongoing feedback, provides them with a greater understanding of individual teachers' performance. Furthermore, observations and the data gathered from them enabled principals to focus on building the instructional capacity of their teachers through individual and group professional development and, in some schools, helped principals inform their hiring practices (Goldring et al., 2015).

Kraft and Gilmour's (2016) findings were similar to Goldring et al. (2015). In Kraft and Gilmour's (2016) study, the new evaluation system created four major challenges that resulted in consequences that undermined the evaluation system's effectiveness. Principals in the study reported that the success of the evaluation system was dependent upon the buy-in of teachers in the evaluation system as a process of improvement (Kraft & Gilmour, 2016). The perceptions of principals of the purposes and

uses of an evaluation system significantly influenced whether or not the system was successful in helping teachers develop (Kraft & Gilmour, 2016). Also, the new evaluation system expanded the role and time spent on teacher evaluations. Principals reported a tremendous amount of pressure to carefully word the evaluations due to the visibility and permanence of the written evaluations, and the time spent observing, evaluating, and providing feedback significantly decreased the ability of principals to find time to effectively conference with the teachers (Kraft & Gilmour, 2016).

Duyar et al. (2013) utilized the data from the Teaching and Learning International Survey (TALIS) to determine if teacher collaboration and principal leadership practices could explain variances in the job satisfaction and self-efficacy of teachers. Survey data from 2,967 teachers and 178 principals in Turkey were analyzed, and the researchers found that professional collaboration had a positive effect on teacher self-efficacy and job satisfaction. To a lesser degree, principal leadership practices had a significant effect, but only one component, the supervision of instruction, had a significant positive effect (Duyar et al., 2013). While the cultural differences and uniqueness of many countries and schools make it difficult to extend the findings from this study to other settings, principal supervision of teacher instructional practices as a method for increasing teacher self-efficacy and work attitudes was supported by many other studies.

One particularly informative finding from Grissom et al.'s (2015) study was that instructional management increased when principals had better time management. This finding suggests that principals found instruction management a greater priority than any

of the other task areas, and principals generally allocated time resources to instructional leadership tasks when available.

Some responsibilities that also require principals to utilize the collective efforts and skills of other individuals within the organization to accomplish goals, and the instructional leadership of principals may be necessary to help the organization navigate difficulties. DeMatthews (2015) sought to understand the efforts and actions of a principal and the leadership team she utilized to increase the performance and inclusivity of her school that was located within a large urban district. Special education that requires collaboration may create complexities that teachers may not be able to adjust to without training due to the historically autonomous nature of teaching that is characterized by isolation and little supervision (DeMatthews, 2015). DeMatthews (2015) conducted a secondary analysis of an earlier study of five principals and their understanding and implementation of inclusion within their respective schools. The school chosen for the secondary study was selected using purposeful sampling based on criteria that the principal was committed to implementation of inclusion school-wide, distributed leadership existed within the school, and the school effectively supported students with disabilities (less than a 10% achievement gap between students with disabilities and non-disabled students). The chosen school was the only school that met the criteria, but this school was also the only one of the five schools that was high-income, and it was geographically separate from the rest of the large, urban district (DeMatthews, 2015). DeMatthews (2015) found that successful distributed leadership and instructional leadership applied to inclusion reform share similarities in that they both

emphasize teacher leadership, collaboration, problem-solving, and collective action (DeMatthews, 2015).

The role of the principal and their positional authority puts principals in control of a myriad of factors that can determine how effective their managerial role can be in building the instructional capacity of their schools. The control given to principals in resource and time management provide them with a unique opportunity to influence organizational structures, focus, and efficacy; however, due to the tremendous complexity of role, principals are often unable to directly involve themselves in instructional leadership and have to find ways to increase the instructional capacity of their teaching staffs.

Resource Management

Resource management includes the financial, professional, time, and focus of resources for instructional leadership, and principals have the positional authority to determine how these are allocated and utilized. A number of studies discussed the relatively inexpensive nature of utilizing distributed leadership and collaboration as methods principals utilize to develop learning cultures for increasing the instructional capacity of their schools (Kuh, 2016; Owen, 2014) , but most focused on the need for the principal to create the "space" for effective collaboration to increase teacher development and learning (Buttram & Farley-Ripple, 2016; Carpenter, 2018; DeMatthews, 2014; Grissom et al., 2015; Nicholson et al., 2016; Pertel et al., 2018). Ioannidou-Koutselini and Patsalidou (2015), however, explained the complexity that is inherent in change initiatives. Ioannidou-Koutselini and Patsalidou (2015) conducted a qualitative action

research study of teachers' response to action research training to increase teacher professional development. The study focused on 26 principals and 82 primary school teachers from 26 schools in Cyprus. The teachers and principals participated in a 2-day seminar in which they were taught action research philosophy and procedures and worked to develop action plans. Data was gathered from the teachers written reflections and case studies that were performed during the action research. They pointed out that the success of the change initiative is dependent on a complex relationship between factors such as teacher engagement, funding availability, the workload of teachers, and existing policies.

Carpenter conducted a 10-year, longitudinal grounded theory research study of 70 teachers within five schools from three communities in order to determine how PLCs provided a means for the shared workspace (physically as well as intellectually) to help teachers "reach mutual values, vision, goals, and leadership of teaching and learning" (2018, p. 122). Carpenter's (2015; as cited in Carpenter, 2018) shared workspace model describes how both the intellectual and physical dimensions can be overlapped to help create a collaborative system that promotes positive school culture and improvement. Carpenter (2018) went further in discussing resource management and distinguished the physical aspects (e.g., lessons, ideas, and information that is exchanged) of shared practice from the intellectual (the ability of an individual to reflect, engage, and enact in a way that innovates practice), and he explained that these two aspects must overlap. Within a shared workspace, physical and intellectual collaboration is required for the evolution of relationships, outcome accountability, and collaborative inquiry (Carpenter,

2018). Administrators can focus on overlapping these two aspects to help develop positive collaborative relationships within their schools.

Principals were shown to indirectly influence teacher professional development and learning through the supports they can provide. Principals in Buttram and Farley-Ripple's (2016) study did not directly contribute to an increase in teacher professional growth through PLCs; however, they were necessary to create the space and resources for successful teacher collaboration and development (Buttram & Farley-Ripple, 2016). DeMatthews (2014) also stressed the importance of preparing principals to distribute leadership effectively, provide support for teacher leaders, and utilize managerial skills to make sure that PLCs are productive. Pertel et al. (2018) found that principals are responsible for the development of relationships with their teachers and making the information about changes accessible to them.

The research suggests that schools have different needs, and the resources used to support and increase instructional capacity should have an individual, needs-based focus. Pertel et al. (2018) conducted a four phase, longitudinal study of Finnish and Estonian schools that instituted a three-year learning-based work community intervention in order to answer the following RQs:

1. "How did the work community interventions affect the time use, management of workload, collegial atmosphere, information sharing, and cooperation of staff members within the Finnish and Estonian schools?

2. How did the changes in the areas listed above affect the individual and collective occupational well-being of the staff members within the schools?
3. How did the staff members evaluate the impact the interventions had on their personal and general occupational well-being in the working communities?" (Pertel et al., 2018)

The longitudinal study gathered information from 2009 to 2013 and was conducted in four phases. Phase 1 involved an initial measurement of 61 schools (21 Finnish and 40 Estonian primary and secondary schools) from 879 Finnish staff members and 1978 Estonian staff members using the "Well-being at your work index questionnaire" (Pertel et al., 2018). Phases 2 and 3 involved the development of the intervention based upon the "Promotion of School Community Staff's Occupational Well-Being Action Plans" and an early evaluation of the development, respectively (Pertel et al., 2018). Phase 4 involved a final measurement in 2013 of 21 Finnish primary schools and 38 Estonian primary and secondary schools (545 and 974 respondents respectively). The researchers found that principal-provided, school-specific activities designed to improve the work-based interactions of staff members were in general positive in their effects, and investment in well-being interventions was correlated positively with general occupational well-being (Pertel et al., 2018). Therefore, investing in the well-being of the community and individuals was shown to have positive effects on work-related interactions when utilized in site-specific interventions and based on site-specific developmental needs (Pertel et al., 2018).

The findings in Goodwin and Babo's (2014) quantitative study that surveyed 178 of the 365 National Teacher of the Year recipients (between the years 2006 and 2012 and representing all 50 states) confirmed Pertel et al.'s (2018) reasoning for site-specific interventions and use of resources because the teacher-participants reported that schools with different demographics and needs required resource distribution that met the needs of the site. Goodwin and Babo (2014) used a Likert scale survey to identify the leadership practices that support strong classroom instructional practice according to the expert teachers that responded to the survey which asked their level of agreement with survey items taken from the 21 leadership behaviors identified by Marzano, Waters and McNulty (2005; as cited in Goodwin & Babo, 2014). The researchers pointed out the need for principals who can focus resources and leadership practices according to what is determined to be the most effective based on the needs of teachers (Goodwin & Babo, 2014).

Schools are often financially limited, and PLCs are a relatively inexpensive use of in-house resources to increase the instructional capacity of schools. Owen (2014) also found that principal resource management can support student learning and teacher professional growth when teacher PLCs are provided with the necessary support (nurtured development, financial support, and clear expectations) to develop beyond contrived collegiality. The coaching professional and school principal in Kuh's (2016) study explained that the inexpensive nature of collaboration was one of the major reasons that CFGs were used as a focal point of their school improvement plan as it cost little to implement and maintain and was cheaper than outside professional development

opportunities that were short-term. Kuh (2016) also found that CFGs need clear goals and facilitators and coaches who support teachers in the transition to facilitate truly reflective practices that shift teacher practices to meet student needs. One of the most important aspects of the reflective practice necessary for CFGs to be effective, in regards to creating a collective responsibility, involves developing and maintaining strong social networks among teachers (and principals).

Overall, the current research provides ample evidence that principal resource management has a significant, yet indirect, effect on teacher professional development and learning through their management of a variety of supports for professional development focused on increasing the instructional capacity of teaching staffs.

One particularly interesting study explored principals in rural areas of Canada that also taught classes within their schools, and the findings describe the difficulties and rewards of principals operating as both teachers and administrators. Newton and Wallin (2013) conducted an interpretive description qualitative study to understand the phenomenon of the "teaching principal." Previous studies had indicated that the efficacy of a principal was increased when principals held the dual role of principal-teacher, yet many circumstances have led to an overall decrease in the number of principal teachers even though the phenomenon still exists in many rural areas. The authors interviewed twelve teacher principals (with a minimum of 20% time spent on classroom instruction) and examined how the dual role was experienced by the participants as it relates to the workload, dual-role challenges and opportunities, work-life balance, and multiple aspects of principal effectiveness. The findings seemed to indicate teaching principals were able

to have stronger relationships with teachers, an improved ability to provide instructional leadership, and greater satisfaction with their jobs. First, the teaching principals reported that they felt much more confident in their capacity as instructional leaders and had developed stronger collegial bonds with the teachers. Secondly, the teaching principals reported higher job satisfaction that most credited with their willingness to stay in their present positions despite offers for positions in larger schools that did not involve a teaching component as part of the principal's position. And third, the leadership ability and overall efficacy of the principals seemed to increase despite the higher workload and demands that the dual role created. Interestingly, even though the participants reported greater success as instructional leaders when teaching courses for which they were most qualified, most reported taking teaching assignments that they were not adequately qualified in due to strategic staffing concerns and to provide other teaching staff a preferred teaching assignment. Newton and Wallin (2013) also found another positive outcome resulted from principals teaching courses: student engagement. Teaching principals were able to maintain a clearer vision that was focused on the needs of students due to their daily contact with students and were better equipped to understand the needs of teachers and students that comprised the culture of the school. While this study does not address the experiences of the vast majority of principals, this study makes a strong argument for keeping principals involved directly with instructional teams so that the skills, relationships, and overall efficacy are maintained.

Principal Preparedness for Instructional Leadership

The current research on principal preparedness for instructional leadership demonstrates a number of areas in which principal training programs could better prepare principals-in-training as well as current principals. Overall, much of the research found significant gaps in principal preparedness programs and potential areas for improvement for principal instructional leadership training. Most of the findings are supported by a number of research studies that discuss other areas covered within this literature review, but the many areas of needed improvement ultimately demonstrate how complex the role of the principal is and how necessary the principal is for the success of collaboration focused on increasing the instructional capacities of schools.

For example, Grissom et al. (2015) recommend that time management training for principals be utilized due to the cost-effectiveness of the training which requires little time and financial investment but can be very beneficial in creating numerous positive school outcomes, but Hallinger et al. (2018) concluded that their findings suggest that principal preparation programs need to focus on increasing the ability of principals to communicate their vision, develop management skills in curriculum and instruction, and create positive school cultures that are supporting learning environments. The recommendation from Kraft and Gilmour (2016) concluded that principal training programs need to focus on developing instructional leadership and evaluation skills.

Hallinger et al. (2018) argued principal preparation programs, due to the positive effects that strong self-efficacy beliefs of principals can have on teacher commitment and collective affective change beliefs of the school, also need to bring to the forefront the

beliefs and assumptions of prospective school leaders so that the limits of what they believe can be achieved can be challenged and increased. Hallinger et al. (2018) found that positive self-efficacy beliefs communicated by principals had a positive effect on their ability to lead through their instructional leadership behaviors that modeled values and provided support for changes in teaching and learning.

While calling for better training of principals is laudable and necessary, Rigby (2016) explained that little is known about how the work of principals is affected by their principal-preparation programs or the conceptions of principals of themselves as instructional leaders. Research on principal-preparedness programs has been mostly quantitative and broadly focusing on areas such as student achievement scores and employment statistics (Rigby, 2016). Rigby (2016) contended that a focus on the conception of leadership (e.g., goals, modes of assessment, theories of change, etc.) rather than employment statistics, standardized test scores of students, and topics covered in principal preparation programs should be the focus in the preparation programs. Rigby (2016) concluded that it is necessary to understand the perspectives, approaches, and the social networks that influence principals in their roles as instructional leaders to identify and develop effective instructional leadership and instructional leadership training. Understanding these influences would probably lead to a greater understanding of the diversity of influences on principals and possibly account for the many different areas of need indicated by the various studies that concluded these different needs.

A focus on creating a dynamic and flexible program for principal preparation programs seems to emerge from much of the research so that principals can be responsive

to the individual needs of their schools. These subjective needs could possibly be a reason for much of the diversity in the conclusions. While many of the studies did focus on specific skills, a number of the studies seemed to indirectly point towards training for principals that would help them adjust leadership roles and techniques to meet the needs of their schools. Ioannidou-Koutselini and Patsalidou (2015) concluded that better training for school principals is required to equip them with the necessary knowledge and skills to organize professional development at the school level. As noted earlier in this chapter, school principals, due to their positional ability, can encourage professional development through the administrative and managerial role that can create co-teaching, collaboration, peer observations, and other opportunities for professional development.

According to Goodwin and Babo's (2014) survey, different school levels and demographics have different instructional leadership needs in order to increase the instructional efficacy of practices within classrooms according to expert teachers. Goodwin and Babo (2014) felt that principal preparation programs could benefit from a collaborative discussion with principal candidates about the instructional leadership behaviors construct to help candidates better understand instructional leadership and provide them with potential archetypes for defining practices associated with principal instructional leadership. Goodwin and Babo (2014) conclude the same need for flexibility leadership to meet the needs of the school found in other studies (DeMatthews, 2015; Ioannidou-Koutselini & Patsalidou, 2015; Taylor Backor & Gordon, 2015).

One case study demonstrated how principals might need comprehensive training to use collaboration for areas in which they may lack expertise. DeMatthews (2015)

sought to understand the efforts and actions of a principal and the leadership team she utilized to increase the performance and inclusivity of her school that was located within a large urban district. DeMatthews (2015) argued for better preparation for principals that focuses on content areas and experiences that principals may not feel comfortable dealing with that can make principals be more receptive to relying on teachers with expertise in those areas and experiences. IDEA (The Individuals with Disabilities Education Act of 2004 necessitates (through the complexity of legal, pedagogical, and collaborative nature of requirements that do not allow a single stakeholder to make a unilateral decision) collaboration through a variety of tasks and administrator actions (DeMatthews, 2015). DeMatthews (2015) conducted a secondary analysis of an earlier study of five principals and their understanding and implementation of inclusion within their respective schools. The school chosen for the secondary study was selected using purposeful sampling based on criteria that the principal was committed to implementation of inclusion school-wide, distributed leadership existed within the school, and the school effectively supported students with disabilities (less than a 10% achievement gap between students with disabilities and non-disabled students) (DeMatthews, 2015).

DeMatthews (2014) stressed the importance of preparing principals to distribute leadership effectively, provide support for teacher leaders, and utilize managerial skills to make sure that PLCs are productive. PLCs need principal leadership to overcome difficulties to be successful because principals are primarily responsible for the distribution of resources, can set expectations, and have a strong influence on the culture of the school (DeMatthews, 2014). This study looked at a specific area (i.e., Individuals

with Disabilities Education Act) in which a principal may lack adequate expertise, but the results of this study are comparable to a principal who lacks expertise in a subject area who is seeking to create valuable learning experiences for teachers in that subject area.

Taylor Backor and Gordon's (2015) study was one of the most informative on principal preparation programs, and the findings provided a large amount of evidence supporting the need for training principals to be better instructional leaders who can adapt and overcome challenges they may encounter. Taylor Backor and Gordon (2015) interviewed 15 participants (an equal number of professors, principals, and five teacher leaders) to determine how university principal preparation programs should prepare effective instructional leaders. Taylor Backor and Gordon (2015) sought to determine how principal preparation programs should prepare principals as effective instructional leaders by interviewing university scholars, excellent teacher leaders, and principals who were effective instructional leaders.

The interviews were used to determine the panel's perspectives on screening procedures for admittance into principal preparation programs; specific instructional functions a principal should be able to perform; the characteristics, knowledge, and abilities necessary for developing into an effective instructional leader; necessary instructional methods and strategies for developing instructional leaders; and supports needed for new principals in becoming effective instructional leaders. The responses were coded, analyzed, and then the researchers created a member-check survey that was administered to the participants to identify the themes that were most important to the participants. They explained that instructional leadership is an important component of

schools that needs to involve collaboration with teachers and teacher leaders, but it ultimately begins with the principal as the leader of the leaders.

Taylor Backor and Gordon (2015) found a number of important factors identified by the expert participants. Most of the participants felt that a personal interview should be a prerequisite for admittance into a program and there was some agreement as to the specific characteristics that should be demonstrated before entry into a program is granted, and this sentiment was also found in Hallinger et al. (2018) who felt that understanding the beliefs of applicants into a preparation program is important. Other specific areas that were addressed dealt with the skills and knowledge that needed to be contained in a principal preparatory program, but specifically significant to teacher professional development and the functions of an instructional leader, there were some interesting findings (Taylor Backor & Gordon, 2015).

For example, the participants reported that teacher evaluation was an important component that necessitated a long-term commitment to continuous growth rather than the traditional evaluation instruments. This was to be used to form the basis for professional development that the principal, acting as the instructional leader, should facilitate. The study's findings also stressed the need for communication training, collaboration-building development and collaborative learning as a teaching strategy training, and field experiences in a variety of settings (Taylor Backor & Gordon, 2015).

Taylor Backor and Gordon (2015) explained that instructional leadership is an important component of schools that needs to involve collaboration with teachers and teacher leaders, but it ultimately starts with the principal as the leader of the leaders. They

further explained that an important aspect of administrator instructional leadership described by their participants is the ability to develop and use group facilitation skills to pull others together for a common purpose (Taylor Backor & Gordon, 2015).

Respondents in Taylor Backor and Gordon's (2015) study recommended that principal preparation programs include collaborative learning as a teaching strategy and further recommended that case inquiry, action research, forms of data analysis and other strategies be included that help educational leaders become effective at asking better questions that lead to greater knowledge and better decision-making. Collaborative learning, while desirable, was something that participants felt was lacking in principal preparation, and participants pointed out that there is a difference between group work and collaborative learning that is often not covered; consequently, many participants felt that action research and other collaborative learning strategies (e.g., problem-based learning role-playing, etc.) needed to be covered in principal preparation programs (Taylor Backor & Gordon, 2015). Participants in the study all felt that principals need training in action research to lead school-wide action research and help teachers in collaborative groups (and teachers individually) use action research to improve practice (Taylor Backor & Gordon, 2015).

One method of specific training that could be adapted for principal preparation programs was the teacher leadership network (TLN). The TLN model was shown by Nicholson et al. (2016) to allow educators to experience firsthand how instructional leadership can function and support teacher learning for teachers by educating teachers in how to use student data to inform instruction, but it could be used to develop and train

principals as instructional leaders as well. The model is designed to train teachers as facilitators, and Nicholson et al. (2016) put forth that it is a valuable tool that demonstrates the power of distributed leadership.

Training in how to incorporate another model, the CFG, could be included in principal preparation programs. It is flexible enough to meet the individual needs of schools, potentially lasting, and less expensive than many other forms of professional development. In Kuh's (2016) case study, the principal was instrumental in the team building of a collaborative culture within the school, and this, combined with the CFG process, led to teachers effectively sharing practices and experiences that helped improve practice. These findings commensurate with another study involving professors and adult learners (students). Barney and Maughan (2015) utilized Argyris' action research and Beebe's rapid assessment process to determine if a university course on software development could be transformed into a student-centered, risk-taking-focused, course that focused on Kampis' complexity theory and would better prepare students for work in a professional workplace. The complexity-structured course in Barney and Maughan's (2015) study had benefits for both the professors that taught the class and the students in the class. The professors found that teaching the course reinvigorated them due to the interactions they had with students, and the students in the course experienced professional development as evidenced by their acquisition of knowledge and skills, their ability to take learning-risks, accept making mistakes as part of their learning growth, and their ability to learn from their mistakes (Barney & Maughan, 2015) much like the principal and teachers experienced in Kuh's (2016) study.

The qualitative data collected from the participants suggested that the adult students in Barney and Maughan's (2015) study felt more prepared to take risks and be successful in a professional setting, and this is largely the reason training in flexible and adaptable learning experiences like those found in complexity theory or CFGs could be beneficial to principal preparation programs. Furthermore, overall, students in the complexity theory-based classes felt more empowered and believed that the learning environment created lasting change. It is also noted that the students and faculty felt that by focusing on the needs of the learners, more learning occurred that was useful while using less time and effort for non-impactful work that considered less beneficial to learning (Barney & Maughan, 2015).

The research suggests that principal preparation programs do have many areas in need of improvement, but the many needs suggest the necessity of program changes that focus on providing future instructional leaders the skills in harnessing the collective professional capital of their staffs, utilizing resources effectively to best meet organizational and individual needs, adaptability to changes.

Theme 2: Teacher Professional Development and Learning

Virtually all of the literature on teacher professional development and learning found that collaborative work and sharing of ideas within a positive, collaborative school culture increased teacher professional development and learning more than top-down, one-size-fits-all professional development. Many studies demonstrated the importance of principal instructional leadership in promoting teacher learning and professional development.

Ioannidou-Koutselini and Patsalidou's (2015) qualitative action research study of teachers' response to action research training to increase teacher professional development focused on 26 principals and 82 primary school teachers from 26 schools in Cyprus. The teachers and principals participated in a 2-day seminar in which they were taught action research philosophy and procedures and worked to develop action plans. Data was gathered from the teachers written reflections and case studies that were performed during the action research. The researchers found that principal support was identified with greater improvement and positive changes that resulted from principals who created trusting cultures, motivated teachers, and supported the project by staying informed about the actions of the projects and utilized the trained teachers to provide support at the school level. A lack of support from principals reduced the effectiveness of the action research professional development for teachers in six of the 26 schools in Ioannidou-Koutselini and Patsalidou's (2015) study.

The use of PLCs were shown to increase teacher learning and provide the support and motivation for learning that aided teachers in their professional development (Buttram & Farley-Ripple, 2016; Carpenter, 2018; DeMatthews, 2014; Owen, 2014; Tam, 2015). Many policies call for principals to use teacher evaluations as a method of increasing teacher efficacy and growth. While traditional teacher evaluation instruments were generally found to be time-consuming and used for a variety of purposes, findings were mixed in terms of their effectiveness in promoting teacher learning and professional development.

Evaluation Instruments as Tools for Increasing Teacher Learning

Participants in Taylor Backor and Gordon's (2015) study generally felt that traditional observations using evaluation instruments created by the state or district were not as valuable as a long-term focus on teacher growth that requires principals who can assess teacher professional growth needs and provide professional development aligned with teacher needs. Participants in Taylor Backor and Gordon's (2015) described the importance of non-evaluative supervision that focuses on helping teachers improve practice and builds collegial relationships between administrator and teachers, and this is in alignment with McGregor's Theory Y.

In contrast, a study conducted in Turkey showed a positive effect of evaluative instruments but seemed to indicate that the overall net effect of evaluative instruments was detrimental to teacher learning and professional development. Duyar et al. (2013) utilized the data from the TALIS to determine if teacher collaboration and principal leadership practices could explain variances in the job satisfaction and self-efficacy of teachers. Survey data from 2,967 teachers and 178 principals in Turkey were analyzed, and the researchers found that professional collaboration had a positive effect on teacher self-efficacy and job satisfaction. To a lesser degree, principal leadership practices had a significant effect, but only one component, the supervision of instruction, had a significant positive effect (Duyar et al., 2013). While the cultural differences and uniqueness of many countries and schools make it difficult to extend the findings from this study to other settings, principal supervision of teacher instructional practices as a method for increasing teacher self-efficacy and work attitudes was supported by many

other studies. Furthermore, Duyar et al.'s (2013) research also supports McGregor's view that bureaucratic rules and policies of control that are found in Theory X decrease teacher self-efficacy and job satisfaction. Duyar et al. (2013) found that while the Turkish principals' accountability role had a significant positive effect on teacher self-efficacy, bureaucratic rules and policies had a significantly negative effect on teacher job satisfaction. The researchers attributed the positive effect on teacher self-efficacy to the accountability role responsibilities that focused on making sure teachers understand the school goals and focus on improving teacher efficacy and holding teachers accountable for student growth. Compliance policies, audits and reports, and other task-oriented bureaucratic rules that fell under administrative accountability roles were attributed to the decrease in job satisfaction among the teachers.

While Duyar et al. (2013) found that there were positives associated with accountability measures, Goldring et al. (2015) argued that more effort should be invested in developing high-quality observation systems rather than focusing on student growth measures for evaluations in order to help principals utilize teacher human capital better and transform school leadership processes. Working with teachers through the teacher observational process has the potential to create opportunities for principals and teachers to collaborate and build instructional capacity.

Kraft and Gilmour's (2016) study also found problems with evaluation instruments as a method of increasing teacher learning and professional development. This qualitative case study was conducted to better understand principals' experiences with a newly implemented teacher evaluation system that did not use student

achievement tests as evidence of teacher effectiveness. The study involved 24 district principal participants from the northeastern United States who were interviewed during the summer following the first use of the teacher evaluation system. Each of the 24 principals was interviewed for 45 to 60 minutes using a semi-structured protocol, and the interviews were recorded, transcribed, and analyzed for commonalities.

The researchers found a number of thematic challenges and corresponding consequences that the principals reported. First, the administrators in this study varied widely in the ways they interpreted and used the evaluation system, and the researchers concluded that the principals often did not utilize many of the ways the evaluations might be used to increase teacher learning and professional growth (Kraft & Gilmour, 2016). Some principals focused the evaluations accountability and weeding out ineffective teachers (reflective of Theory X management), some emphasized direct feedback, and others used the evaluations as a means of fostering teacher self-reflection (which is in line with Theory Y management). Second, the new evaluation system expanded the role and time spent on teacher evaluations. Principals reported a tremendous amount of pressure to carefully word the evaluations due to the visibility and permanence of the written evaluations, and the time spent observing, evaluating, and providing feedback significantly decreased the ability of principals to find time to effectively conference with the teachers (Kraft & Gilmour, 2016). Third, the researchers also found that principals had difficulty in providing feedback to teachers outside of the grade level or subject matter expertise possessed by the principals which caused the principals to focus on pedagogy primarily rather than content (Kraft & Gilmour, 2016). Finally, limited training

for the principals in matters other than rubric and procedural matters led many principals to report difficulty in having productive feedback conversations, difficulty identifying the nuances that separate a teacher who does not care about improvement versus a teacher who just lacks certain skills, and problems with the focus on ratings rather than ways teachers could improve (Kraft & Gilmour, 2016).

Evaluation systems have the potential to further teacher learning and professional development, but the perceptions of principals of the use and purpose of the evaluation systems is mostly a determiner of the effectiveness of the evaluation system (Kraft & Gilmour, 2016); however, principals who use evaluative tools from a Theory X perspective to elicit compliance and maintain control through accountability measures will probably be less successful in promoting teacher learning and professional development than those who align with Theory Y management. Half of the principals in Kraft and Gilmour's (2016) study felt that peer feedback and observation were better methods of increasing teacher growth than principal feedback in evaluations. This finding is supported by a large amount of literature on distributed leadership as a means of empowering teachers as instructional leaders (discussed later in this chapter).

In contrast to Kraft and Gilmour's (2016) study, Goldring et al. (2015) reported that principals did find value in teacher observations and used the data gathered from those observations to make their human capital decisions. As part of a much larger study that focused on how principals used data to inform their human capital decisions, Goldring et al. (2015) surveyed 764 principals from six large, urban school districts from major cities across the United States and conducted over 90 semi-structured interviews

(56 were school principals, and the rest were central office leaders). Principals in Goldring et al.'s (2015) study were expected (by the central office leaders) to utilize observation data to hold multiple "crucial conversations" with teachers throughout the year about areas of instructional strength and areas in need of improvement. According to the principals in the study, the data from observations was useful in helping build the instructional capacity of their teachers because observation data and evaluation tools helped discern teacher areas of strength and weakness, provide feedback that was specific and actionable, and could be used to develop growth plans (Goldring et al., 2015).

Goldring et al. (2015) found that the human capital decisions by principals regarding their teachers were primarily driven by teacher observations rather than value-added measures from standardized tests. This suggests that the interactions and relationships principals have with their teachers influence principal human capital decisions more than statistics from value-added measures that are often too late in the school year to be effectively used, often unavailable when hiring new teachers, difficult for many principals to understand how they were calculated due to a lack of transparency, and believed by the principals to be less valid than observations (Goldring et al., 2015). Principals preferred to use observation data in Goldring et al.'s (2015) study because it enabled specific and ongoing feedback, and it provided them with a greater understanding of individual teachers' performance. Furthermore, observations and the data gathered from them allowed principals to focus on building the instructional capacity of their teachers through individual and group professional development and, in some schools, helped principals inform their hiring practices (Goldring et al., 2015). This study

did not investigate whether or not the principals felt that teacher observations were the most effective method of increasing the instructional capacity of the teachers, so conclusions of the effectiveness of observations in increasing teacher learning and professional development should be taken within the limits of the focus of the study which only sought to determine whether value-added measures or teacher observations were used in human capital decision-making.

Some of the challenges and consequences found in Kraft and Gilmour's (2016) study that limited teacher learning and professional development could be addressed utilizing PLCs and distributed leadership.

Professional Learning Communities and Teacher Professional Development and Learning

Professional learning communities (PLCs) were shown to be powerful tools to increase teacher professional development and learning, and the literature suggests that principals play an important role in their success and focus. Many educational reforms focus on increasing the professional interactions of teachers through collaborative relationships (Carpenter, 2018). According to Goodwin and Babo (2014) who surveyed expert teachers, different school levels and demographics have different instructional leadership needs to increase the instructional efficacy of practices within classrooms, and due to these differences, principal leadership may look very different within different contexts.

Buttram and Farley-Ripple (2016) concluded that policy mandates that call for teacher collaboration are unlikely to result in increases in the instructional capacity of

teachers without a three-part focus by principals on setting high expectations, increasing teacher efficacy and professionalism, and providing the resources necessary to support capacity building. Furthermore, they found that high expectations without the other two components would result in, as others have also pointed out (Fullan, 2014; Hargreaves & Fullan, 2012; McGregor, 1960/2006), in a dysfunctional educational environment.

In support of McGregor's (1960/2006) theories, Buttram and Farley-Ripple (2016) found that the views and assumptions of principals were correlated with the way the policy mandate was instituted. Those principals who saw the mandate as an opportunity to build and support teacher collaborative teams and teacher leadership were more likely to achieve increases in teacher instructional capacity than those principals who focused the teacher collaboration on data use.

Distributed leadership can be used as a method of promoting teacher learning and professional development in PLCs. DeMatthews' (2014) qualitative study explored how six principals supported effective PLCs through distributed leadership, and while each of the schools differed somewhat in the way distributed leadership was used and focused, the principals and teachers all agreed, while conceding that it could be sometimes difficult, that the PLCs were worthwhile and powerful learning tools that enabled them to overcome challenges they faced (DeMatthews, 2014).

The effective inclusive school at the center of DeMatthews' (2015) study demonstrated an increase in teacher leadership capacity, an increase in effective collaboration, improved formal and informal structures for problem-solving and data analysis, staff professional development that was meaningful and specific to staff needs,

and more special education support throughout the school. These were attained through the efforts of the principal to take a distributed leadership approach (DeMatthews, 2015).

The principal in DeMatthews' (2015) study felt that teachers were not actively engaged in leadership and that the faculty lacked the capacity to problem solve, adapt to challenges, and participate in leadership. Over a two-year period, the principal focused on selective hiring of teachers with leadership experience or skills, greater transparency, the creation of leadership opportunities for teachers, engaging in collegial activities with teachers, high-visibility, coaching teacher leaders by providing support and feedback, and maintaining an open-door policy to promote a positive school culture that supported teacher leadership (DeMatthews, 2015). The principal also focused on creating a safe environment where teachers felt safe and heard to encourage collaboration, engagement, and teacher leadership (DeMatthews, 2015).

Transitioning from teaching in isolation to a collaborative environment can be difficult, but it is possible with support. In a longitudinal qualitative study, Tam (2015) performed three semi-structured interviews of 12 teachers within a Hong Kong school that was transitioning from a top-down, teacher-centered delivery of classic Chinese texts which left many teachers working in isolation and relying on text books for pre-scribed lessons to a PLC-based model that was developed with flexible structures and based on a long-term strategy for increasing collaborative relationships. The interviews were supplemented by observations of lessons and lesson planning, meetings, and other documents (Tam, 2015).

The Chinese teachers in Tam's (2015) study began to organize the curriculum and instructional materials themselves rather than following the central curriculum and adhering to textbook organization. Many of the teachers started to utilize interactive approaches to teaching students rather than simply transmitting knowledge, and they began to see content delivery and constructivist approaches as complementary. These practices demonstrated a marked change from the content delivery methods before the collaborations. Finally, the teachers changed their views on their roles as teachers and how to develop their own instructional capacity. They shifted from their position that teachers were to be authoritarian managers of student learning who worked in isolation to one that focused on active planning, reflective practice, and learning from colleagues through collegial work and shared practice (Tam, 2015).

Tam (2015) reported that teachers in the PLCs increased their instructional capacity and learning as the teachers shared ideas and practices regularly through their engagement with professional collaboration. Teaching in isolation seemed to reinforce top-down (didactic) teaching approaches, but PLCs helped to transform teaching practices and resulted in teachers being much more likely to utilize innovative teaching practices and collaborative learning within their classrooms (Tam, 2015). Tam (2015) found that teacher beliefs and practices were positively changed through effective PLCs over time, and teachers were more likely to take on more roles and actively participate in collegial learning. PLCs can foster teachers to examine their practices and beliefs by moving them away from isolation to a place where their previously private practices within a classroom are made public (Tam, 2015). Ultimately, successful PLCs can

positively change the practices and beliefs of teachers, and the culture, structures, learning activities, and leadership contribute to these positive changes (Tam, 2015).

These findings were supported by another study that examined how shared workspaces contributed to teacher professional development and learning. Carpenter (2018) conducted a 10-year, longitudinal grounded theory research study of 70 teachers within five schools from three communities to answer "How did PLCs provide a collaborative shared intellectual and physical shared workspace for teachers to reach mutual values, vision, goals, and leadership of teaching and learning?" Data was collected primarily from semi-structured interviews and observations that were coded, triangulated, and analyzed thematically. Shared leadership and decision-making abilities structures for teachers and administrators created productive interactions that resulted in emergent teaching activities, practices, and learning for the participants (Carpenter, 2018). Carpenter (2018) suggested that leadership, workspace, and collaborative inquiry for instructional improvement should be a shared enterprise among teachers and administrators.

Similarly, Liu (2016) found that the shared enterprise of working collaboratively contributed to positive outcomes for teacher learning and professional development. In the project-based learning (PBL) experiences that Liu (2016) studied, they enabled adult learners to develop strong bonds with one another and work collaboratively to achieve a common goal. In the process, emotional bonds develop through the support and help the members receive from one another, and this increased their sense of belonging (Liu, 2016). The cooperative work involved in PBL provided individuals within the groups to

utilize their unique skills and abilities to help solve problems. This helped the learners gain self-esteem and self-respect as their individual contributions gained them the respect of their peers (Liu, 2016). As a motivator, cooperative work supports McGregor's (1960/2006) Theory Y assumptions of motivation and the diffusion of responsibility also provides support for Theory Y's effectiveness in helping find solutions to problems and utilizing individuals to their fullest potential (Liu, 2016).

Cooperative work helps meet the three higher levels of motivation (psychological, sense of belonging, and self-actualization), but Liu (2016) cautioned that it could not create learning in one step. It requires a gradual progression of satisfying the needs and Liu (2016) pointed out that the problems to be solved using PBL need to be authentic, achievable, and supervision by the leader should be a facilitator to help learners achieve the task.

Owen (2014) also found that PLCs need help from leadership to develop. Owen (2014) performed a case study examination of three purposefully sampled innovative Australian schools to look at the key components for PLC development and developmental stages. School leaders can facilitate teacher professional growth and learning by developing PLCs beyond conviviality by helping PLCs utilize divergent views and negotiating conflict effectively (Owen, 2014). Student learning and teacher professional growth can occur when teacher PLCs are provided with the necessary support (nurtured development, financial support, and clear expectations) to develop beyond contrived collegiality (Owen, 2014).

Cooperative learning experiences that are authentic, challenging yet achievable, and facilitated closely through supervision can be used to motivate adult learners (Liu, 2016). These findings support McGregor's (1960/2006) Theory Y as a means of motivating adult learners (teachers). Principals should facilitate authentic opportunities for teachers and teacher leaders to solve real-world problems but also provide help in negotiating difficulties and conflict (Liu, 2016; Owen, 2014). Rather than an authoritarian approach (Theory X), the principal should be a facilitator who will diffuse responsibility, offer advice and support, and promote cooperation. The facilitative role of the principal will enable teachers to satisfy their motivational needs by allowing them to exercise their individual skills and problem-solving abilities in ways that create a strong sense of belonging within teachers, increase bonds among them, and benefit from the rewards and recognition that comes from exercising responsibility and achieving goals. School-specific activities designed to improve the work-based interactions of staff members were in general positive in their effects, and investment in well-being interventions were correlated positively with general occupational well-being (Pertel et al., 2018). Therefore, investing in the well-being of the community and individuals was shown to have positive effects on work-related interactions when utilized in site-specific interventions and based on site-specific developmental needs (Pertel et al., 2018).

While principal leadership in negotiating conflict is important, Kuh (2016) found that collaborative communities that were successful in increasing teaching practices had specific practices and protocols that focused mutual engagement upon reflective practices of individual teachers and maintaining relationships with others that focused upon student

work and teaching practices. Without protocols and practices that maintain this mutual engagement, collaboration groups would default to focusing on school-wide issues. While there was room for focusing on school-wide issues, teachers and leaders keeping the focus on the work and practices were necessary for developing instructional capacity (Kuh, 2016).

Liu's (2016) findings were supported by another study that looked at how PBL can be used to increase learning and professional growth. Barney and Maughan utilized Argyris' action research and Beebe's rapid assessment process to determine if a university course on software development could be transformed into a student-centered, risk-taking-focused, course that focused on Kampis' complexity theory and would better prepare students for work in a professional workplace. This study, while focusing on college professors and students in a course, provides support for the use of PBL as effective learning experiences for principals to use to increase teacher learning and professional development. The study mirrors the efforts of teachers as learners coming together to solve real-world problems they face and the learning and professional development that results. The RQs of the study focused on student growth, whether or not risk-taking helps prepare students for professional careers, student perceptions of readiness for professional careers, and implications for course designs. The authors compared the principles and purposes of complexity theory, action research, and rapid assessment process and found that there were significant overlaps among the three theories.

The researchers conducted a rapid assessment process study that they combined with action research to determine if student growth and professionalism would be increased if a software development course was transitioned from being teacher-centered with structured assignments and specific assessments to a course based on problem-solving rooted in complexity theory (Barney & Maughan, 2015).

The researchers found that the professionalism and growth were greater when the complexity theory model course was used and that students were more prepared for professional work, demonstrated greater ability to work with leaders and mentors, took greater ownership of their learning, and were less risk-averse. The findings of this study demonstrate that Theory Y leadership in group learning is applicable within groups of adult learners and is consistent with McGregor's Theory Y management.

Many of the students in the study reported anxiety at the lack of direction in how to accomplish the learning targets for the class, but the student-teacher interactions that developed and grew strong calmed the students, increased their desire and ability to take risks, and the student-teacher relationships helped students to professionally approach topics and explore them (Barney & Maughan, 2015). By providing students with the opportunity and control over their learning, this study highlighted a number of the positives of Theory Y and demonstrates that when individuals are motivated and the leadership encourages strong relationships, the self-direction and self-control of the individual will result in greater commitment with less oversight needed (McGregor, 1960/2006) and the positive social attitudinal changes that Tyler (1949/2013) argued

would arise as positive relationships were nurtured during learning experiences that are based on problem-solving.

According to the researchers, the often-utilized analyze, design, develop, implement, and evaluate (ADDIE) method of course design (much like a one-size-fits-all model of teacher professional development often will not) did not meet the immediate needs of students in a course as complex as the one being studied, and the researchers decided to focus on Chun's (2004, as cited in Barney & Maughan, 2015) Agile Teaching/Learning Methodology (Barney & Maughan, 2015). This methodology values the interactions between teachers and learners over the teaching approach used and the learning, practice over knowledge, communication between the learner and the teacher, and a focus on the needs of learners instead of scheduling (Barney & Maughan, 2015). The approach could apply to teacher learning in that it ties in McGregor's Theory Y with the needs of adult learners as described by Knowles et al. (1973/2005).

Overall, this study was an interesting one that helps make the argument for progressive learning opportunities that focus on the needs of the learner rather than specific outcomes. This ties in well with the concept of double-loop learning because participants in the class (including the teachers) will ultimately challenge their own preconceived notions and take part in the open evaluation of theories in use (Argyris & Schon, 1974; McGregor, 1960/2006). Also, the self-reflection, interactions, and metacognitive nature of learning in such a classroom position the learner in the forefront of the focus that is based on individual needs. This focus enables the leader to make the learning more accessible and needs-based. The design of the course and the continual

refining of this type of learning environment to adjust to the changing needs of learners within the classroom reflects the double-loop learning that is essential for deeper understanding. The ability to adapt to the diverse and dynamic landscape of education using double-loop learning could be utilized by principals to further teacher learning and professional development.

Professional learning communities, while effective, do need direction and focus to be successful. Kuh (2016) conducted an ethnographic case study to understand what supports and hinders the focus of collaborative groups created to impact classroom practice. Kuh (2016) interviewed four teachers, a school principal, and a professional development coordinator that were part of a CFG in large school district located in the northwest portion of the United States which had adopted the CFG model as a professional development tool as part of its district-wide professional development initiative. Data was collected from semi-structured interviews, a demographic questionnaire, observations, and other data sources (Kuh, 2016). Kuh (2016) analyzed the data from the meetings and interviews and found recurring themes that were coded and compared to meeting transcripts and interviews of the coach and principal. Member checking was used to confirm the themes to the entire CFG.

Kuh (2016) found that the leading cause for a loss of focus on reflective practice and sharing within the CFG group was a tendency to deviate from classroom practice (looking in) to discussions about the larger school environment (looking out). Kuh (2016) cautioned that CFGs and other collaborative communities may not produce an increase in

instructional capacity of teachers without an explicit focus on critical examination of student work and teacher practice despite trust, collaboration, and collegiality.

Specific language found in CFG protocols may provide help for emergent collaborative communities because the language is specific and aids teachers in moving from providing advice to focusing on the process of inquiry (Kuh, 2016). For example, the protocols delineate between clarifying questions that elicit more information and probing questions that seek to get the presenter to think deeper to help the collaboration group members understand the distinctions between questions that focus on details rather than deeper meanings (Kuh, 2016).

Kuh (2016) found that CFG protocols utilized a variety of methods to elicit reflective practices and noted that the teachers in the study reported that the protocols helped them focus on reflective practice when it would have been easy to get off track and focus on subjects outside of teaching. The teachers also reported that the protocols were important methods of helping them work efficiently despite the time constraints they faced and kept them focused on teacher practices.

Kuh (2016) found that collaborative communities that were successful in increasing teaching practices had specific practices and protocols that focused mutual engagement upon reflective practices of individual teachers and maintaining relationships with others that focused upon student work and teaching practices. Without protocols and practices that maintained this mutual engagement, collaboration groups would default to focusing on school-wide issues. While there was room for focusing on school-wide

issues, teachers and leaders keeping the focus on the work and practices was necessary for developing instructional capacity (Kuh, 2016).

While Kuh (2016) found that CFGs are good at developing trust and getting teachers to work together to make improvements, Kuh found that reflective practices that increased teaching efficacy needed to be developed and facilitated by the leaders and coaching groups that set specific goals. This supports the idea that leadership is crucial for providing the support and direction for collaborative groups.

At the root of all of these studies that looked at PLCs, the importance of focus on the overall vision and goals within stood out as one of the most important aspects that leadership can provide. Principal support for attaining the vision and goals of the school begins with communicating the vision to the stakeholders involved in achieving them.

Theme 3 and Theme 4: Communication of Vision and Distributed Leadership

McGregor's (1960/2006) "management by objectives" that integrates the goals of subordinates with the organizational goals was also reflected in the literature under the themes of "communication of vision" and "distributed leadership." Principals who were successful at both communicating the organizational goals and utilizing the talents and goals of teachers within the schools were shown to be successful in developing supportive school cultures that utilized collaboration to increase the professional development and learning of teachers to meet those goals. Principal oversight and participation were shown to be critical factors in whether or not the goals of the vision were met and the effectiveness of using distributed leadership.

Communication of Vision

Hallinger et al. (2018) surveyed 345 teachers, 111 principals, and 111 supervisors from 111 primary schools from seven districts in Mashad, Iran to understand how principal self-efficacy and instructional leadership influence the collective teacher efficacy in developing countries as traditional administrative principal roles are transitioned to meet calls for administrators to focus on instructional leadership. Hallinger et al. (2018) found that the communication of the vision is supported and enhanced when the vision is made tangible through the modeling the values of the vision, providing effective support for teachers, and nurturing intellectual pursuits. One key finding from another study was that principal participation in PLCs was instrumental in whether or not teachers viewed their work in PLCs as critical to the goals and success of their schools (Buttram & Farley-Ripple, 2016). Buttram and Farley-Ripple (2016) concluded that policy mandates that call for teacher collaboration are unlikely to result in increases in the instructional capacity of teachers without a three-part focus by principals on setting high expectations, increasing teacher efficacy and professionalism, and providing the resources necessary to support capacity building. Furthermore, they found that high expectations without the other two components would result in, as others have also pointed out (Fullan, 2014; Hargreaves & Fullan, 2012; McGregor, 1960/2006), in a dysfunctional educational environment.

Buttram and Farley-Ripple (2016) recommended administrators present a transparent action plan based on the vision that builds trust and investment from teachers, set high expectations for teacher and student learning while holding teachers accountable

for both, and monitor the on-going implementation of the PLC efforts. This finding is supported by McGregor's (1960/2006) Theory Y view that openness of information and a focus on commitment to the goals would lead employees (teachers) functioning in a self-directed manner towards those goals.

The increase in trust and investment in the plan could be, as Pertel et al.'s (2018) results seem to indicate, that principal leaders decrease the negative feeling of uncertainty among teachers when they inform teachers of changes. Other studies confirmed the correlation between leadership for change and teacher work satisfaction (Aydin et al., 2013; Wahab et al., 2014; as cited in Pertel et al., 2018).

Duyar et al. (2013) found that the supervision of the instruction of teachers through classroom observations, monitoring the work of students, and providing teachers with suggestions for instructional practices were associated with significant increases in the self-efficacy of teachers. They concluded that the self-efficacy of teachers increases when principals utilize these instructional leadership activities (Duyar et al., 2013). Collaborating with team members and being visible is an important component for principals to develop because it demonstrates a willingness to devote time and energy in others and has a positive impact on the relationships and culture (Taylor Backor & Gordon, 2015).

Duyar et al. (2013) utilized the data from the TALIS to answer the following RQs: (1) Does teacher collaboration significantly explain the variation in teacher self-efficacy and teacher job satisfaction within and across schools? (2) Do the managerial

and instructional leadership practices of school principals significantly explain the variation in teacher self-efficacy and teacher job satisfaction within and across schools?

Survey data from 2,967 teachers and 178 principals in Turkey were analyzed, and the researchers found that professional collaboration had a positive effect on teacher self-efficacy and job satisfaction. To a lesser degree, principal leadership practices had a significant effect, but only one component, the supervision of instruction, had a significant positive effect (Duyar et al., 2013). This is supported by Szczesiul and Huizenga (2014) who found that principal oversight of collaboration can help increase teacher efficacy and motivation to continue professional growth. While the cultural differences and uniqueness of many countries and schools make it difficult to extend the findings from this study to other settings, principal supervision of teacher instructional practices as a method for increasing teacher self-efficacy and work attitudes was supported by many other studies. Furthermore, Duyar et al.'s (2013) research also supports McGregor's view that bureaucratic rules and policies of control that are found in Theory X decrease teacher self-efficacy and job satisfaction.

Duyar et al. (2013) found that while principals' accountability role had a significant positive effect on teacher self-efficacy, bureaucratic rule-following had a significantly negative effect on teacher job satisfaction. Duyar et al. (2013) found that while principals' accountability role had a significant positive effect on teacher self-efficacy, bureaucratic rule following had a significantly negative effect on teacher job satisfaction.

Administrators who have effective communication skills can be more successful in helping stakeholders understand school goals, supporting collegial relationships, and meeting other instructional aspects, but it is also important to communicate without threat (Taylor Backor & Gordon, 2015). One participant in the study explained the importance of administrators who can ask questions effectively, paraphrase ideas of others, describe, and discuss ideas with others (Taylor Backor & Gordon, 2015). Another valued aspect of administrator instructional leadership that participants described is the ability to develop and use group facilitation skills to pull others together for a common purpose (Taylor Backor & Gordon, 2015). This can be accomplished through the use of distributed leadership via departmental heads. In Tam's (2015) study, distributed leadership helped empower teachers within the school, and the empowered teachers became more involved, innovative, and took greater ownership of their learning communities and their teaching development (Tam, 2015).

Simply communicating the vision may, by itself, be less effective if other aspects of instructional leadership are lacking. Of the 21 leadership behaviors surveyed by Goodwin and Babo (2014), Focus (the establishment of clear goals and maintaining the attention of the school on those goals) was perceived by the expert teachers surveyed as being the least effective leadership practice across all categories of schools and teachers in the survey. This suggests that while communicating the vision of the school with clear goals may be important, it may, according to the expert teachers, have the least impact of all the instructional leadership practices of principals and be less important than other leadership practices (Goodwin & Babo, 2014).

Overall, the research suggests that communication of the vision is an important component of principal instructional leadership, but without principal involvement, a supportive school culture, transparency, effective support and resources for teachers, and the formal authority of principals, the communication of vision not adequate to create a positive change.

Distributed Leadership

The research on distributed leadership generally finds that the distribution of responsibility and control creates the opportunity for positive changes and growth, but the role of the principal is extremely important if those positives are to be realized within a school (Carpenter, 2018; DeMatthews, 2014; DeMatthews, 2015; Fairman & Mackenzie, 2015; Kraft & Gilmour, 2016; Kuh, 2016; Poekert et al., 2016; Tam, 2015). PLCs and other collaborative groups that have been shown to increase teacher learning and professional development require the formal authority of the principal for support and direction.

The principals of schools with successful PLCs in DeMatthews' (2014) study agreed that teacher leadership was extremely important, and they all felt that their formal authority was important to ensure that the teacher leadership was effective, organized, and aligned to the goals of the school. PLCs within schools that shared leadership and decision making were shown to have more intellectual interactions, well-established norms for participation, and a greater incidence of innovative teaching and learning (Carpenter, 2018). Often, teachers are often better equipped to make leadership-related decisions due to their familiarity with students and their needs (DeMatthews, 2015).

Successful distributed leadership typically involves individuals chosen for leadership based upon expertise or ability to lead and planning is used to set the expectations and actions to achieve them (Leithwood et al., 2006; as cited in DeMatthews, 2015).

One multi-country study that examined the relationship between distributed leadership and school climate as well as the relationship between instructional leadership and mutual respect found positive effects in both instances suggesting that distributed leadership has a positive effect on school climate and instructional leadership has a positive effect on mutual respect (Bellibas & Liu, 2018). However, principal and school characteristics were not found to be significant predictors of either school climate or mutual respect among colleagues. This suggests that, while there exists a spectrum of behaviors that indicate instructional leadership and distributed leadership, these behaviors do have positive effects on school climate and mutual respect.

Teacher leadership and empowerment can produce positive change, but the formal authority of principals is needed to ensure the focus of the organization and to provide necessary supports. These supports can come in the form of resources and time, coaching, direction, professional development, and, when necessary, the negotiation of conflict. Teacher leadership within DeMatthews' (2014) study did not negate the need for the formal authority of the principals, but the relationships provided teacher leaders and principals the opportunities to learn from one another. The complexity, demands, and expertise necessary to support successful PLCs is far too great to leave to only principals, and it requires a diffusion of leadership (Hallinger & Heck, 2010; as cited in DeMatthews, 2014). The CFG groups' teachers in Kuh's (2016) study felt that it was

important for teachers to feel empowered to deal with school issues and that the collective responsibility for school-wide issues necessitated equality and empowerment for the strong social networks to be sustained.

While distributed leadership can provide numerous positives, formal authority is necessary to maintain a focus on improving the instructional capacity of teachers. As Kuh (2016) found, empowering teachers can have a negative effect on efforts to increase the instructional capacity of teachers when the focus deviates from improving practice to school-wide issues. While school-wide issues are important, teachers in collaborative groups often will try to deflect from personal practice and classroom-level issues to larger topics for a variety of reasons (e.g., it is unfamiliar and frightening to expose oneself to group evaluation, a desire to discuss another topic of interest, etc.). While Kuh (2016) found that CFGs are good at developing trust and getting teachers to work together to make improvements, Kuh found that reflective practices that increased teaching efficacy needed to be developed and facilitated by the leaders and coaching groups that set specific goals. This supports the idea that leadership is crucial for providing the support and direction for collaborative groups.

For many teachers, however, the term “teacher leadership” is often identified with formal leadership roles, and many teachers avoid taking on leadership roles that may suggest a hierarchy among teacher peers (Fairman & Mackenzie, 2015). In Fairman and Mackenzie’s (2015) study of teacher leadership, shared leadership through leadership teams rather than teachers acting as individual teacher-leaders helped some teachers avoid uncomfortable conflict as the teachers who led the change realized that conflict

could result as they raised expectations for teachers and students; the leadership teams helped to mitigate the conflict against individuals.

In one respect, Poekert et al. (2016) took a slightly different approach to formal and informal leadership by describing leadership as a stance rather than a formal position or role that focuses on improving performance through responsiveness and motivation. In a three-phase, grounded theory study designed to understand how teachers become teacher leaders, Poekert et al. (2016) used semi-structured, hour-long, interviews of 49 teachers from 14 high-poverty schools in the Miami-Dade County Public School District, to develop and validate a theory of teacher leadership that first evolved from a study of the Florida Master Teacher Initiative. The initiative was meant to improve the instructional quality and student learning in Florida elementary schools by providing early childhood training in a job-embedded graduate degree program, opportunities for the graduates to share ideas and practices in inquiry-based and collaborative learning groups, and providing support for administrators to create distributive leadership opportunities. The researchers argued that the complexity and unpredictability of teacher leadership development creates the opportunity to appreciate the complexity and levels of interactions, novel ideas, and new opportunities that can produce responsive school environments and systems that develop teacher leadership and teacher professional development when the appropriate conditions and catalysts are provided (Poekert et al., 2016).

Carpenter (2018) conducted a 10-year, longitudinal grounded theory research study of 70 teachers within five schools from three communities to understand “How did

PLCs provide a collaborative shared intellectual and physical shared workspace for teachers to reach mutual values, vision, goals, and leadership of teaching and learning?" Data was collected primarily from semi-structured interviews and observations that were coded, triangulated, and analyzed thematically. Carpenter (2018) found that professional relationships were strengthened when administrators worked with teachers, and the level of cohesion was dependent upon the amount of parity, the collaborative inquiry, and shared decision making within the PLCs. Shared leadership and decision-making abilities structures for teachers and administrators created productive interactions that resulted in emergent teaching activities, practices, and learning for the participants (Carpenter, 2018).

Schools in Carpenter's (2018) study that did not have shared leadership structures demonstrated greater teacher frustration due to the low investment of teachers and goals that were created in a top-down manner by administrators that were poorly communicated and seemed to only focus on teacher accountability. Many of the teachers in schools with top-down structures felt that the productivity and benefits of the interactions were virtually non-existent due to the predesigned forms, diagrams, and mandatory participation in PLCs with those schools (Carpenter, 2018). Top-down goal-setting and decision-making decreased the richness of physical and intellectual interactions among participants (Carpenter, 2018). The top-down systems with administrator-created goals did not include an action research system and resulted in low responsibility for outcomes for many PLC members, only a few members participating on the work, and little time spent on effective interactions that could be productive.

Schools where there was a lack of shared leadership structures and no expectations for action research outcomes viewed PLC participation as mandatory and did not demonstrate a need to grow from participation (Carpenter, 2018). Toxic cultures with little professional collaborative inquiry resulted within these schools. A disconnection from decision-making responsibility resulted in low participation in the collaborative activities; consequently, teaching professional growth and productive discourse seldom occurred in these settings (Carpenter, 2018). A lack of shared leadership and shared decision making in PLCs combined with mandatory participation created was correlated with higher anxiety and frustration among teachers, and these PLCs were not as successful in creating innovative teaching practices and learning among members (Carpenter, 2018).

This was supported by DeMatthews (2014), who found that top-down leadership in schools that focuses on accountability and standards-based reforms limits the sharing of expertise among teachers, creates the situation where teacher time is micromanaged, and does not promote reflective practices of teachers that increases learning. PLCs need a collaborative culture that focuses on collaborative work and inquiry, shared values, and a collective responsibility; principal leadership is necessary to overcome the barriers that limit PLCs and their ability to increase teacher learning (DeMatthews, 2014).

Successful PLCs can produce positive changes when there is a transformation of teacher culture, new structures are created, teachers engage in learning activities, and teacher leadership is promoted (Tam, 2015). Distributed leadership via departmental heads helped empower teachers within the school, and the empowered teachers became

more involved, innovative, and took greater ownership of their learning communities and their teaching development (Tam, 2015).

Utilizing teacher leadership in the form of department heads makes sense in many instances. Kraft and Gilmour (2016) suggested that the lack of experience with some subjects and grades combined with the myriad of administrative duties that stretch administrators needs to be addressed. They put forth two solutions: 1) consolidate administrator responsibilities under one administrative position to provide principals with the opportunity to focus on instructional leadership, or 2) utilize peer evaluators to decrease the evaluation responsibilities of principals and enable them to focus more on instructional leadership (Kraft & Gilmour, 2016). This is supported by McGregor (1960/2006) as he advocated for integration and self-control.

In those areas in which principals may lack experience, distributing leadership to teacher experts makes sense. DeMatthews (2015) studied how a principal in a high achieving elementary school was able to increase the instructional capacity of the school through distributed leadership in an effort to support inclusive reform. The Individuals with Disabilities Education Act of 2004 necessitates (through the complexity of legal, pedagogical, and collaborative nature of requirements that do not allow a single stakeholder to make a unilateral decision) collaboration through a variety of tasks and administrator actions (DeMatthews, 2015). The principal and teacher leader were able to attain improvements by supporting teacher leadership and providing teachers with leadership opportunities, encouragement to be leaders, and meaningful support and time to grow into leaders (DeMatthews, 2015). This study demonstrated that distributed

leadership can help support students with disabilities and increase the likelihood of inclusion program success (DeMatthews, 2015). DeMatthews (2015) stressed the need for administrators to utilize teacher leaders who have skills and expertise, but he also explained that administrators need to be comfortable with and willing to learn and grow with teachers who may possess knowledge and expertise the administrators lack. Successful teacher leadership and PLCs often encounter problems and need strategic support from principals who can provide that support through their formal authority (DeMatthews, 2014). Ultimately, an effective distribution of leadership that utilizes principles based on McGregor's (1960/2006) Theory Y can increase organization-wide learning, problem-solving, and invest those involved in their own performance (DeMatthews, 2014).

Liu (2016) recognized the similarities between adult learners in a classroom to employees in an organization and demonstrated that motivation to commit and perform to a job-related goal was similar to adult students and their motivation to actively engage in their learning. PBL is dependent on their effectiveness in motivating learners to engage in learning, and McGregor's (1960/2006) management theory was used by Liu (2016) to understand the way a teacher's attitude toward teaching adults learning business English motivates learners just as a manager's attitude can motivate employees. Otokiki (2006; as cited in Liu, 2016) distinguished the tight control and lack of development that characterizes Theory X. In comparison, Otokiki (2006; as cited in Liu, 2016) described Theory Y management as "liberating" and "empowering". Theory Y achieves control,

continuous improvement, and goal attainment through shared responsibility and empowerment through participative management.

Finding effective teacher leaders to empower and to participate in distributed leadership may require new evaluation systems for teachers. Goldring et al. (2015) argued that more effort should be invested in developing high quality observation systems rather than focusing on student growth measures for evaluations in order to help principals utilize teacher human capital better and transform school leadership processes. Working with teachers through the teacher observational process can create opportunities for principals and teachers to collaborate and build instructional capacity. Principals can utilize observation data and these collaborative discussions to inform their professional development decision-making on and individual level as well as for large groups.

Theme 5: School Culture

The existing literature suggests that principals can have a strong effect on school culture, and the creation of a positive and collaborative culture can have a profound effect on teacher learning and school effectiveness (Bellibas & Liu, 2018; Fairman & Mackenzie, 2015; Ioannidou-Koutselini & Patsalidou, 2015; Newton & Wallin, 2013; Ronfeldt et al., 2015; Ross & Cozzens, 2016; Taylor Backor & Gordon, 2015). The professional relationships that are created, developed, and maintained within positive and supportive school cultures is shown to increase teacher learning and efficacy, and principals support is generally shown to be an important component that indirectly can influence teacher learning and growth (Fairman & Mackenzie, 2015; Owen, 2014; Pertel et al., 2018). Hallinger et al. (2018) found that the instructional leadership of principals

can have a positive effect on the commitment of teachers due to the collective sense affective change that can occur within the school and the classrooms of the teachers.

One of the most important benefits of effective school culture can be the benefit to students. Ronfeldt et al. (2015) conducted a large-scale, quantitative study of 9,000 schools in Florida to determine whether the collaboration practices within the schools could predict student achievement. Using teacher surveys and administrative data, the researchers found that collaborative schools outperform schools that do not have professional cultures that utilize collaboration. The end goal of increasing teacher efficacy and teacher learning is the benefits it can produce for student learning and growth, so it is important to understand how collaborative cultures can influence teacher professional development and learning with the end result being a positive benefit for students.

Developing School Culture

In order to develop and promote a positive and collaborative school culture, the research suggests that the school principal can influence the culture in numerous ways. Overall, virtually all of the studies that discussed school culture reflected the theories of McGregor (1960/2006), and the positive and collaborative school cultures reflected the underlying assumptions about motivation outlined in his Theory Y. While some studies focused specifically on the leadership of the principals, most indicated that distributed leadership practices of principals were instrumental in facilitating supportive and positive school cultures.

In Ioannidou-Koutselini and Patsalidou's (2015) qualitative study of teachers' response to action research training to increase teacher professional development, the researchers found that principal support was identified with greater improvement and positive changes that resulted from principals who created trusting cultures, motivated teachers, and supported the project by staying informed about the projects actions and utilized the trained teachers to provide support at the school level. Collaborating with team members and being visible is an important component for principals to develop because it demonstrates a willingness to devote time and energy in others and has a positive impact on the relationships and culture (Taylor Backor & Gordon, 2015).

Even though Newton and Wallin's (2013) study of the role of "teaching principals" (principals who also taught classes within their schools) is not the norm, the findings seemed to indicate that teaching principals had stronger relationships with teachers, an improved ability to provide instructional leadership, and greater satisfaction with their jobs. It could be surmised that the greater level of involvement in the work and shared responsibilities contributed to a better school culture.

Much like Ioannidou-Koutselini and Patsalidou (2015) who found principal support to be a determining factor of positive school climate, Ross and Cozzens (2016) found that the competencies of the school principal impacted the school climate. Ross and Cozzens (2016) surveyed 250 public school and 125 private school teachers in Tennessee (two public high schools, two elementary schools, and three private schools) to determine how the 13 core competencies according to Green (2010; as cited in Ross & Cozzens, 2016) were exhibited by principals in the schools and how the core

competencies affected the perceptions of teachers of the climate of their schools. The researchers found that all of the principals exhibited the 13 core competencies; the 13 core competencies were positively associated with positive school climate; diversity (support of different ideas, opinions, etc.), professional development, and professionalism were the three core competencies that had the greatest effect on school climate; and there were differences in the perceptions of the core competencies between the public and private schools but not levels of professionalism and diversity. While this study focused primarily on the leadership of the principal, the three core competencies do indicate aspects and levels of distributed leadership (e.g., support for different ideas and opinions which indicates distributed leadership practices rather than top-down leadership).

That support for diverse opinions is crucial for developing school culture, and navigating difficulties is one of the important functions that necessitates the formal authority of principals. School leaders can facilitate teacher professional growth and learning by developing PLCs beyond conviviality by helping PLCs utilize divergent views and negotiating conflict effectively (Owen, 2014). Bellibas and Liu (2018) found that principals are essential for establishing a positive school climate with staff respect by involving staff, parents and students in decision-making, and by supporting collegial work of teachers that focuses responsibility and accountability for student learning and using strong instructional practices. Bellibas and Liu's (2018) study suggests that principal instructional and distributed leadership practices have a significant effect on positive school culture and climate through the development of interpersonal relationships that promote staff respect and trust. When teachers created safe and

supportive collaborative environments in Fairman and Mackenzie's (2015) study, the teachers reported learning and growth, development in their interpersonal skills and communication, and an increase in mutual respect and recognition of the individual strengths of others when the teachers described the establishment of positive and professional relationships (Fairman & Mackenzie, 2015).

Owen (2014) found that the teams demonstrated characteristics consistent with the developmental phases of DuFour (2004; as cited in Owen, 2014) and Mulford (1998; as cited in Owen, 2014) which described PLC development ranging from individual PLCs operating in isolation to interdependent PLCs that shared values and a commitment to collegial learning as well as student learning. This demonstrates that professional learning at the organizational level is a developmental process, and the development of relationships and distributed leadership with an alignment of goals that characterizes growth in instructional capacity is reflective of Theory Y.

Kuh (2016) also found that there are stages to developing a successful collaborative culture within a collaboration group. It begins by building trust, putting the focus on teaching practice, and finally teachers observing other teachers, but Kuh (2016) found that it was of the utmost importance for collaboration groups to put student work and teaching practices as the focus of their conversations, and as DeMatthews (2014) pointed out, the formal authority of the principal is instrumental in keeping that focus. Wennergren (2016) also found that when PLCs are used to improve teacher learning and instruction practices, a key aspect that needs to be present is a clear focus on student outcomes.

Interestingly, Bellibas and Liu (2018) found a positive relationship between staff mutual respect and instructional leadership, but of all the principal and school characteristics controlled for the various countries in the study, only gender predicted the mutual respect found, and this suggests that female principals demonstrate a greater positive attitude toward mutual respect within their schools. A significant positive effect was not found between the variables of perceived instructional leadership and distributed leadership and school delinquency index, but the size of the school and the socio-economic factors did account for a large part of the variation in school delinquency index scores (Bellibas & Liu, 2018). Bellibas and Liu's (2018) study and Owen's (2014) study suggest that principal instructional and distributed leadership practices have a significant effect on positive school culture and climate through the development of interpersonal relationships that promote staff respect and trust.

When developing working communities with the goal of promoting the health and well-being of the community, the framework for building the community needs to exist across professional boundaries and take into consideration the needs and potential of the community (Pertel et al., 2018).

School improvement efforts can be sustained and helped when working relationships are improved by engaging in collective learning endeavors (Fairman & Mackenzie, 2015). A collegial climate supports teacher leadership and improvement for schools (Fairman & Mackenzie, 2015). Teacher leadership is an evolving, interactive, continual process that is focused on improving learning for students (Fairman & Mackenzie, 2015). Teacher leadership can improve the professional culture of a school

through direct or indirect means that utilize formal and informal professional relationships with colleagues (Fairman & Mackenzie, 2015). Fairman and Mackenzie (2015) found examples of teachers who had worked in schools that lacked collegiality and where there existed apathy and low moral toward instructional improvement who improved the situation by creating collaborative opportunities and sharing of practices.

School principals were shown to have a significant effect on school climate through their involvement. Ioannidou-Koutselini and Patsalidou's (2015) action research study focused on 26 principals and 82 primary school teachers from 26 schools in Cyprus. The teachers and principals participated in a 2-day seminar in which they were taught action research philosophy and procedures and worked to develop action plans. Data was gathered from the written reflections of teachers and case studies that were performed during the action research. The teachers reported that the important factors for their professional development were opportunities for self and group reflection, the action research process itself, the school as a learning community, and school principal support for teacher professional development. The case studies indicated that professional development and learning was more effective when principals were actively engaged in the promotion of teacher collaboration, observations of lessons, and made suggestions. Furthermore, teachers reported positive changes in school culture due to the supportive climate created by the involvement of principals. They also reported improved attitudes toward trying new practices, increased motivation, and the teaching of critical thinking skills.

There is support for the empowering of teachers to create positive school cultures that did not include a focus on principal leadership and culture-building. Working community interactions are comprised of the working atmosphere and feeling of appreciation for the work of others, sharing of information and cooperation, and management of work and use of time (Pertel et al., 2018), but many of these aspects of community interactions were shown to be influenced by principal instructional leadership behaviors. These factors relate to occupational well-being in Pertel et al.'s (2018) study of Finnish and Estonian schools that was discussed earlier, but positive school cultures that possess these attributes are found in much of the research that discusses positive aspects of distributed leadership.

While the intervention did generally have positive effects on the themes examined (positive work management and time use, collaborative work-related interaction factors, appreciation and work atmosphere, and cooperation and information sharing), particularly in the Finnish schools, it was not particularly significant in creating collective changes, and changes were generally more positive in school-specific development areas (Pertel et al., 2018). Based on the research, the researchers recommended that school staff members work collaboratively to develop the occupational well-being of their own communities and individuals based on their own development needs (Pertel et al., 2018), and these findings were supported by many other research studies.

Risk and Culture

The complexity-structured course in Barney and Maughan's (2015) study had benefits for both the professors that taught the class and the students in the class. The

professors found that teaching the course reinvigorated them due to the interactions they had with students. The students developed professionally as evidenced by their acquisition of knowledge and skills, their ability to take learning-risks, accept making mistakes as part of their learning growth, and their ability to learn from their mistakes (Barney & Maughan, 2015). The qualitative data collected from the participants suggested that the students felt more prepared to take risks and be successful in a professional setting. Furthermore, overall, students felt more empowered and felt that the learning environment created lasting change. It is also noted that the students and faculty felt that by focusing on the needs of the learners, more learning occurred that was useful while using less time and effort for non-impactful work that considered less beneficial to learning (Barney & Maughan, 2015).

When teachers avoid risk-taking, they miss opportunities for problems to become a means for creating reflection and learning (Wennergren, 2016). Wennergren (2016), as part of a larger five-year study that involved a university and two schools participating in a five-year school development program, conducted a qualitative action research study of 66 teachers (33 critical friend pairings) during the second year in order to understand the characteristics of different phases of the enquiry procedure within critical friendships. Using data gathered from participant reflections, 200 pages of shadowing logs, 33 case descriptions (of each of the pairings), and observations, Wennergren (2016) found that when teachers come to see mistakes and obstacles as opportunities to learn and grow, they can accept change and challenge more readily which can lead to professional growth. Inquiry-based PLCs such as CFGs can, when teachers have a positive attitude

towards professional learning, are empowered to take risks and master multiple skills, and provided with the ability to make choices based upon the phase of inquiry-based learning, provide the collaborative environment that can increase teacher professional development and learning (Wennergren, 2016).

McGregor (1960/2006) felt that risk-taking and making mistakes were excellent methods of learning from problem-solving, and he reported that the way managers handled mistakes was correlated with their success in meeting goals. Authoritarian punitive measures tended to decrease individuals' propensity to take risks and learn from mistakes, but when individuals are free to explore and learn from such outcomes, social relationships can be increased and learning can occur.

In a longitudinal qualitative study, Tam (2015) performed three semi-structured interviews of 12 teachers within a Hong Kong school that was transitioning from a top-down, teacher-centered delivery of classic Chinese texts which left many teachers working in isolation and relying on text books for pre-scribed lessons to a PLC-based model that was developed with flexible structures and based on a long-term strategy for increasing collaborative relationships. Tam (2015) sought to determine what the features of a PLC are that help create changes in the beliefs and practices of teachers and what were the changes in belief and practice experienced by the teachers. The interviews were supplemented by observations of lessons and lesson planning, meetings, and other documents (Tam, 2015). The researcher found that successful PLCs can positively change the practices and beliefs of teachers, and the culture, structures, learning activities, and leadership contribute to these positive changes (Tam, 2015). Tam (2015)

found that teacher beliefs and practices were positively changed through effective PLCs over time, and teachers were more likely to take on more roles and actively participate in collegial learning. Tam (2015) found that PLCs can be a positive and productive way to develop teacher relationships that are open, reflective, and collaborative. Tam (2015) found that collaboration helped teachers develop constructive relationships that increased the commitment of the teachers. Tam (2015) found that collaboration in PLCs helped create supportive environments where teachers felt appreciated, supported, and encouraged.

Collaborating and sharing can be risk-taking behaviors when trust is lacking. In Carpenter's (2018) study, trust was a significant issue for teachers who feared being negatively judged by peers, and trust was the most common topic among the teachers, but teachers within schools and PLCs that had parity and shared leadership reported greater trust, appreciation for other teachers, and desire to collaborate intellectually. PLCs need principal leadership to overcome difficulties to be successful because principals are largely responsible for the distribution of resources, can set expectations, and have a strong influence on the culture of the school (DeMatthews, 2014). Principals play an instrumental role in facilitating the core elements necessary for successful PLCS through the way they relate to others within the school, whether or not they support distributed leadership and social interactions, interpret policies, and manage resources and time (DeMatthews, 2014).

In DeMatthews' (2015) study that demonstrates how many of the fundamentals of Theory Y can benefit organizations and their ability to utilize distributed leadership to

positively impact the organization on a number of levels, a supportive and positive school environment emerged when teachers were present in the decision-making processes that allowed them to take ownership of the process and engage in leadership. The principal in DeMatthews' (2015) study felt that teachers were not actively engaged in leadership and that the faculty lacked the capacity to problem solve, adapt to challenges, and participate in leadership. Over a two-year period, the principal focused on selective hiring of teachers with leadership experience or skills, greater transparency, the creation of leadership opportunities for teachers, engaging in collegial activities with teachers, high-visibility, coaching teacher leaders by providing support and feedback, and maintaining an open-door policy to promote a positive school culture that supported teacher leadership (DeMatthews, 2015).

Collaborative Groupings

Several studies covered specific aspects of school culture pertinent to collaborative endeavors aimed and increasing the instructional capacity of teachers. Some of the aspects of collaborative grouping seemed to overlap, but formal and informal groups, subgroups within school cultures, cultural differences, and shared spaces for collaboration demonstrate the levels of complexity that principals may have to navigate in order to utilize collaborative relationships for the purposes of increasing the instructional capacity of teachers.

Meredith et al. (2017) used online survey responses that included a sociometric question from 760 secondary education teachers from 13 schools to identify and investigate patterns of interactions. Using portions of Leonard's (2002; as cited in

Meredith et al., 2017) scale that focused specifically on collaboration within the school to create the survey, the researchers used the Exponential Random Graph Model framework to identify subgroups and overlapping subgroups that participants were in. Meredith et al. (2017) found that subgroups are a more meaningful unit of analysis for conceptualizing and measuring collaborative culture within secondary schools. Furthermore, according to the researchers, to understand collaborative cultures and intervene successfully, it may be beneficial to understand that perceptions of collaborative culture are dependent upon the frequency and types of relationships that occur informally rather than those that are structurally imposed. Informal subgroups, which are composed of teachers having frequent work-related interactions, are an important component of secondary schools when measuring school culture (Meredith et al., 2017).

Informal subgroups have greater homogeneity compared to the school as a whole, and due to the difficulty of collaborating with all school team members, the informal subgroups are better units for analysis rather than whole-school units (Meredith et al., 2017). Meredith et al. (2017) found that informal subgroups of teachers that frequently interact professionally develop, maintain, and evaluate secondary school collaborative culture, and they may be relevant for school-wide concepts of organizational culture. Even though schools in this study had different formal structures (i.e., some had formal structures based on subject, department, and/or grade level, but some did not have formal structures), the social network approach overcame the differences and identified the actual subunits and interactions taking place that made this approach more meaningful in understanding the way social-structural and cultural aspects of secondary schools are

linked (Meredith et al., 2017). Informal subgroups view collaborative culture much more similarly than do all members within a school team, and teachers perceive and evaluate the collaboration culture based upon those with whom they interact with within their own networks (Meredith et al., 2017).

Carpenter (2018) suggested that leadership, workspace, and collaborative inquiry for instructional improvement should be a shared enterprise among teachers and administrators. Effective collaboration requires teachers and administrators to interact both physically and intellectually to improve practice (Carpenter, 2018). Variability among school cultures exists because the acceptability of physical and intellectual contribution varies by school culture (Carpenter, 2018).

Carpenter (2018) distinguishes the physical aspects (e.g., lessons, ideas, and information that is exchanged) of shared practice from the intellectual (the ability of an individual to reflect, engage, and enact in a way that innovates practice), but he explains that these two aspects must overlap. Within a shared workspace, intellectual and physical collaboration are required for the evolution of relationships, outcome accountability, and collaborative inquiry.

The paradigms of collaborations and school culture are inextricably overlapped and form the collaborative culture of practice in schools (Deal & Peterson, 2010; Talbert, 1991; as cited in Carpenter, 2018). The physical act of collaboration involves communicating with others and working toward a goal, but there is also the social norming that occurs during the process of working towards common purposes and goals (Dufour et al., 2004, 2008; Feger & Arruda, 2008; as cited in Carpenter, 2018).

Carpenter (2018) found that when administrators and teachers spent more time together collaborating, trust and respect among collaborators increased as well as the depth of the intellectual interactions. When parity was evident in PLC groups that had an action-research focus, the groups were more outcome-orientated, members participated much more, and members took more responsibility for establishing steps to increase goal.

One study looked at how collaborations were arranged based on how the collaborations were created. Wang (2015) purposefully sampled 20 participants taken from two Chinese schools to conduct an exploratory and interpretive case study. They sought to answer the following three RQs:

1. What are the characteristics of organizational structures that support teacher professional learning?
2. What is the nature of teacher collaboration? Are teacher collaborative activities characterized by imposed, contrived collegiality or arranged, genuine collegiality?
3. What are the key factors that contribute to genuine collegiality?

Wang found that one of the effective strategies for improving teacher instructional ability was utilizing different strategies to teach a designated topic in a particular subject using strategies gained from collaborative work among teachers. While the collegiality in the PLCs was intentionally arranged, the shared responsibility and promoted disciplined collaboration allowed team members to improve their skills while maintaining their individuality through the promotion of their strengths and professional judgment (Wang, 2015). Wang (2015) found that an inclusive school culture characterized by emotional

bonds and mutual trust contributed to genuine collegiality in the schools, but the demands of high-stakes testing, compliance with group expectations/norm, and external constraints could limit teachers' ability to develop individually.

PLCs and networks can be used to overcome barriers such as subject and department constructs, but they can also provide teachers with the opportunity to share unique perspectives and teaching strategies; however, the development of such communities requires system and community support (Wang, 2015).

Positive School Culture. According to Prelli's (2016) study, having high expectations of students and staff, consensus building, and the development of a shared vision were the three most important components of transformational leadership action associated with encouraging collegiality and collaboration. Leaders who are effective at creating strong collaboration opportunities that lead to an increased collective efficacy among the teachers they lead are more effectively of creating strong, collective efficacy in their schools that leads to increased student achievement (Goddard et al., 2015).

Principals need to understand the efficacy levels of the school and the individual teams. This requires collective engagement and collaboration between the principals and team members. Goddard et al., (2015) argued that principals need to support sustained instructional collaborations with and among teachers to improve teaching and learning that fosters student achievement and learning. The four strongest correlations between perceived leadership behavior and collective teacher efficacy were leaders' actions to improve school quality, common vision focus work, achievement of consensus with the teachers to the goals, and individual support of teachers (Prelli, 2016). Prelli (2016)

suggested that principals should focus on empowering teachers and creating leadership teams when their schools already display strong efficacy in order to continue to grow. This can be accomplished best by capitalizing on the expertise of teachers and teams to share best practices through collaborative learning while focusing on past and present successes as persuasive methods for sustaining and increasing efficacy. Goddard et al. (2015) confirmed these findings and concluded that principals need to be knowledgeable about effective instructional practices and assessments, be directly involved with teachers in improving instructional practices, set high standards, often participate in observations and discussions with teachers to improve instruction, and support teachers' collective efforts to improve school formal structures.

Setting high standards and expectations for the teachers and students can have an unintended negative effect on teacher effectiveness and collaborative cultures even though it has been shown to aid in fostering better teaching practices and results. Prelli (2016) pointed out that directives focused on ensuring success and addressing the needs of all students can be a source of anxiety for many teachers when student populations change that upset the status quo and require change on the part of the teachers. The anxiety that may occur can have a negative effect on collective efficacy, so principals might need to provide extra support for the teachers and their teams as these changes occur. This is another way that principal leadership can be used to address needs, but this should be done collectively and be needs-based. Overall, setting high expectations for students and staff is generally beneficial (Buttram & Farley-Ripple, 2016; Goddard et al., 2015; Gray & Lewis, 2013; Prelli, 2016), but as many of the studies show, when high

expectations are coupled with strong collaboration between leaders and teachers, these negative effects are mitigated by the positive outcomes.

Negative School Cultures. Conversely, a school principal can have a negative effect on school culture. Teacher professionalism is directly related to the levels of positive school culture that support that professionalism, and principal behaviors and leadership styles directly contribute to that culture (Koşar et al., 2014). Teacher professionalism can be divided into three dimensions that affect student learning and achievement: behavioral, attitudinal, and intellectual (Koşar et al., 2014). Koşar et al. (2014) found, as McGregor (1960/2006) discussed, that coercive power and legitimate (positional) power use decreased the professional behaviors of teachers as teachers had less decision-making ability and a decreased role in the decision-making process. This supports McGregor's findings and illustrates the need for an interdependence between administrators and teachers in decision-making if the goal is to increase motivation and professional behaviors (such as seeking to increase skill development). Teachers that do not feel like professionals or those who do not feel as if they are treated as professionals are more likely to have low motivation and commitment to the profession of teaching; these perceptions could have a significantly negative effect on their teaching efficacy and student learning (Koşar et al., 2014). Principal support is necessary to motivate teachers to increase student learning and success as well as to motivate teachers to make meaningful contributions to the school organization.

These different aspects of collaboration for the purposes of increasing the instructional capacity of teachers reflect the need for the formal authority of principals to

create the space for collaboration, provide necessary resources and professional development, individualize collaborative activities based on site-specific needs, develop supportive structures for the distribution of authority, and maintain the focus on improving the instructional capacity of teachers. One of the most important themes that emerged in the literature concerning principals utilizing collaborative relationships to increase the instructional capacity of teachers was "trust."

Theme 6: Trust

"Trust" is a versatile word with numerous connotations and interpretations, and the versatility of the word also provides a window into the complexity of its role within school organizations. Tschannen-Moran (2014) described five facets of trust that affect vulnerability within an interdependent relationship: benevolence honesty, openness, reliability, and competence. She defines "trust" as the willingness to be vulnerable to another or others based on the belief that the other is benevolent, honest, open, reliable, and competent (Mishra, 1996; Tschannen-Moran & Hoy, 1998, 2000; as cited in Tschannen-Moran, 2014). Tschannen-Moran (2014) described how trustworthy school leaders are the most responsible for creating a trust-filled environment and by modelling trusting relationships with students and parents and by serving as examples for teachers. Hierarchal power structures in organizations and the complexity of interpersonal relationships and interactions can make it difficult to develop high-trust relationships, but school leaders can overcome the difficulties by demonstrating commitment and caring through their behaviors and leadership (Tschannen-Moran, 2014).

Teacher leadership can lead to school improvement, but trusting relationships must be developed in order to create the space for shared power and responsibility, effective collaborative culture, and professional control for those directly tasked with increasing student learning (Nicholson et al., 2016). The relationships principals create and support can significantly influence the levels of trust in relationships, the collaboration, and the sharing of knowledge and expertise within a school (DeMatthews, 2014).

Supporting McGregor's (1960/2006) Theory X and Theory Y, Carpenter (2018) found that top-down management was associated with a decrease in quality intellectual interactions, lower levels of trust, and decreased desire to spend time with colleagues. When trust was absent, participants reported greater fear of being negatively judged by peers within collaborations (Carpenter, 2018). Wang (2015) agreed and further argued that genuine collegiality in school culture includes emotional bonds and trust. Teachers within schools and PLCs that had equal status among collaborators and shared leadership reported higher levels of trust, a greater appreciation for other teachers, and an increased desire to collaborate (Carpenter, 2018).

Trust was shown to be a determining factor in the ability of collaborative groups to increase teaching efficacy and teacher learning through the sharing of best practices and risk-taking. Carpenter (2018) found that when the amount of shared decision making, trust, and feelings of being valued for the ideas and contributions felt by PLC team members was higher, the teachers experienced greater feelings of motivation, stronger intellectual exchanges, and valued as professionals. The opposite occurred when these

aspects were lacking, and teachers who were in PLC teams that did not have shared decision making, trust, or the ability to share information expressed the need for the ability to have an impact on the PLC, the school improvement process, and their own professional growth and learning (Carpenter, 2018). Concurrent with many of the other studies, the participants in Taylor Backor and Gordon's (2015) study described the importance of trust and relationship building for the development of a positive learning environment. Wennergren (2016) explained that it takes time to develop the trust necessary for a professional community of learning, but that there were three essential factors that could lead to learning in professional communities: the attitude toward professional learning, the complexity of using action research to master more than one skill at the same time, and active choices based on the different phases within the inquiry-based learning.

The principal is in a unique position to encourage or discourage trusting relationships that can facilitate teacher learning. Bellibas and Liu's (2018) study suggests that principal instructional and distributed leadership practices have a significant effect on positive school culture and climate through the development of interpersonal relationships that promote staff respect and trust. The principal in DeMatthews' (2015) study focused on creating a safe environment where teachers felt safe and heard in order to encourage collaboration, engagement, and teacher leadership. The qualitative data collected from the participants in Barney and Maughan's (2015) study demonstrates that empowerment and preparedness to take risks increases feelings of preparedness to be successful in a professional setting, and this is a form of trust in that the individuals had

trust in themselves to have the power to create needed change. Principals in DeMatthews' (2014) study felt that distributed leadership helped to promote teacher learning in indirect ways. Some felt that distributed leadership enabled teacher leaders to be role models for other teachers. All the principals in this study felt that it enabled them to have more opportunities to develop better trusting relationships, support teachers and PLCs, and gave the principals more opportunities to solve problems because the teachers were more likely to share ideas and problems, experiment with new instructional practices, and advocate for new or different policies (DeMatthews, 2014).

Trust-based relationships can increase the likelihood that teachers will collaborate and grow professionally, but the positional authority of the principal and evaluative role can come into conflict. While trust was necessary for the buy-in of teachers, the perceptions of principals of the use and purpose of the evaluations could increase or decrease the necessary meaningful conversations about instructional improvement (Kraft & Gilmour, 2016). Since teachers in Kuh's (2016) study originally defined "getting feedback on their practice" in a way that was aligned with principal observations and feedback, Kuh (2016) observed that it was essential to CFG success that this established norm be dismantled and replaced with a collaborative, internal feedback system based on trusting relationships among collaborating teachers where the majority of focus was on improving teacher instructional efficacy through analysis of student work and teacher classroom practice (Kuh, 2016). Kuh (2016), like Wennergren (2016) found that it took time for teachers to develop the trust necessary to overcome barriers to effective focus on improving instruction. Kuh (2016) cautioned that CFGs and other collaborative

communities might not produce an increase in instructional capacity of teachers even when trust, collaboration, and collegiality are present if there is not a focus on critical examination of teacher practices and the work of students.

In order to determine how organizational trust affects teacher leadership cultures, Demir (2015) conducted a causal-comparative quantitative study using primary school teachers in Turkey. Demir (2015) surveyed 378 teachers using the Omnibus T-Scale and the Teacher Leadership Culture Scale. The Omnibus T-Scale was used to measure teachers' perception of the organizational trust level of a school, and the Teacher Leadership Culture Scale (developed by Demir) was used to measure the level of school culture that supports teacher leadership based on three areas: teacher collaboration, principal/managerial support, and supportive work environment. Tschannen-Moran's work formed the theoretical basis of the study, and the findings of the study largely supported the theory.

Overall, it was found that relationships that exhibit trust in social and professional relationships can have a significant positive effect on teacher leadership, professional development, and a supportive work environment that promotes positive changes within an organization (Demir, 2015). "Trust" in an organization is a multi-faceted concept that can, if positively used, provide a successful collaboration environment that can lead to teachers learning from one another, the development of leadership in teachers, and organizational success in meeting goals. One of the most significant findings of the study that is supported by the literature, is the necessity of support from administrators who instill trust in the teachers (Demir, 2015). Teachers were found to trust managers who

provided motivation, encouraged participation and teacher-leadership in school-related decision-making, encouraged self-development, and enabled the teachers to feel respected. Ultimately, Demir (2015) found that trust in supervisors enables teachers to build stronger trust relationships with other teachers, parents, and their students.

Ultimately, trust is an important component within collaborative relationships. Collaboration endeavors with trust can provide support for teachers to take risks and learn from challenges, encourage sharing best practices and feedback amongst collaborators, and increase the overall efficacy of collaborations.

Summary and Conclusion

The current literature on the instructional leadership role of the school principal suggests that the role of the school principal is an incredibly important role. It is also a very complex role that necessitates school principals align the interests and goals of subordinates (teachers) with those of the organization to create collaborative opportunities that invite teachers to grow and learn from one another, encourage trust among school leaders and teachers, utilize teacher skills and abilities, create high expectations with the means to reach them, and facilitate a supportive school culture. McGregor's (1960/2006) theories find support from the findings in the literature, but what is not known is how school principals, in their instructional leadership role, utilize and support collaboration to increase teacher instructional capacity.

Much of the literature focuses on the benefits of collaboration and how collaboration can support teacher learning and professional development when there is a supportive school culture, teacher leadership is encouraged, and the collaboration focus is

on student outcomes, but the methods that principals use and their underlying assumptions about collaboration as a means of increasing teacher learning and professional development are not known. Much of the literature also establishes trust and teacher leadership as important components of collaboration endeavors, but little is known of the methods and beliefs of principals as they seek to encourage positive collaborative relationships and teacher leadership for the purposes of facilitating teacher learning and professional development.

This study will seek to fill in this gap in the literature by examining the methods and underlying assumptions of school principals who are using collaborative relationships to increase teacher instructional capacity. In particular, I want to understand how the underlying assumptions about collaborative relationships held by the principal shape the collaborative culture and affect the professional learning of teachers. In addition, understanding the underlying assumptions of principals that inform their theories in action can help develop better ways to prepare principals for instructional leadership roles and lead to growth in the areas of teacher professional development and student learning.

A multiple-case study research method will be used to narrow the existing gaps in the literature dealing with how principals identify and create instructional goals, utilize the knowledge and skills of their faculty to meet instructional goals, and ascertain the effectiveness of collaboration as a means for increasing the instructional capacity of their schools.

Chapter 3: Research Method

As discussed in Chapter 1 and Chapter 2, collaborative cultures have been shown to have a positive effect on teacher professional development and learning, as well as other benefits, and mandates at the federal and state levels now require school administrators to create collaborative cultures and structures within their school. Many administrators are not prepared to develop these structures and cultures due to principal preparation programs that primarily focus on facilitating administrative skills and lack sufficient focus and training in areas such as instruction and curriculum development, team building, and the use of research for the improvement of schools. There is a significant amount of evidence that indirectly links principal instructional leadership to teacher professional development and student learning, but little is understood about how principals use collaborative relationships as a means of increasing the instructional capacity of teachers. The information from this study may contribute to positive social change by providing a better understanding of how leadership can support the development of high-quality instruction within schools; a deeper understanding of how supportive school cultures can be created and developed; and an advancement in knowledge of how principals use collaborative relationships for the purposes of supporting students and teachers in their learning and development. The findings of this study provided information that could inform principal preparation development programs and collaboration initiatives.

Due to the lack of understanding of how principals utilize collaborative relationships to increase teacher instructional capacity, a multiple-case study method

(Stake, 1995; Yin, 2014) within a qualitative framework constituted the overall design of this study. This multiple case study sought to understand how principals, in their instructional leadership role, use collaborative relationships successfully to increase the professional development and learning of teachers within their schools.

In this chapter I establish the overall research design with justifications for the design, described the methods for answering the RQs through data collection and analysis, and described how I ensured the ethical nature of the study. I also establish my role as the primary instrument for data collection and analysis.

Research Design and Rationale

To understand how successful high school principals as instructional leaders utilize collaborative relationships to increase teaching efficacy and teacher learning, I sought to answer the following RQs through a multiple case study research design:

1. RQ1: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?
2. RQ2: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?
3. RQ3: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?

A qualitative research design was chosen because there is a lack of research regarding how collaborative relationships are used by principals to increase teacher professional development and learning. The goal of qualitative research is to uncover how individuals construct meaning out of their lives and experiences and interpret those meanings (Merriam & Tisdell, 2016). Yin (2014) provided a twofold definition of case study that distinguishes the scope and the features of case study. The scope involves in-depth study of a contemporary phenomenon when there exists a lack of a clearly discernible division between the phenomenon and the context in which the phenomenon exists. In the second part of the definition that focuses on features of case study inquiry, the investigation deals with a specific situation in which numerous variables outnumber the data points and will therefore require triangulation from multiple sources of data (Yin, 2014). Yin (2014) explained that these features of case study inquiry might make it necessary to develop theoretical propositions before data is gathered and analyzed.

Multiple sources of data were necessary to answer the RQs at the basis of this study. This study was not experimental in nature, and the focus was understanding how participants within a bounded system make meaning of their experiences.

Though I chose a multiple case study, I considered several research designs. Ethnography focuses on members of a specific community that is defined by the shared beliefs, values, and attitudes that drive the behavior patterns of the community in order to understand that community (Merriam & Tisdell, 2016), but the focus in this study was not on the culture nor was it on using the culture as a lens to understand the phenomena. I also considered grounded theory approach, which seeks to develop or build a theory

through an analysis of patterns and the relationship between the patterns (Merriam & Tisdell, 2016), but theory creation was not the goal. Further, there are rationales for conducting a single case study: when the case is common and can help reveal social processes, when the case is critical and may confirm or challenge a theory, when the case is revelatory because the phenomenon has been inaccessible, when the case is extreme because it deviates from norms, or when the case needs to be studied multiple times (i.e., a longitudinal case; Yin, 2014). Single-case study research design can be justified when the case is common (common case) and can reveal the social processes in relation to a theoretical interest, or if the (critical case) case lends itself to confirming, extending, or challenging a theory. Another justification for single case study design was when the case is revelatory (revelatory case) and presents the researcher with the opportunity to study a phenomenon that was inaccessible to social science research (Yin, 2014). Also, the case may provide an extreme case by deviating from theoretical norms or common occurrences. Finally, a longitudinal case study can be justified when a case needs to be studied multiple times in order to see how the case has developed over time. The RQs for this study did not meet the rationales for single case study research design because little is known about the phenomenon, the RQs do not seek to explain a theory, the cases are not inaccessible to researchers or extreme, and the development over time was not the focus.

In order to understand how high school principals use collaborative relationships to increase the professional development and learning of teachers, I conducted a multiple case study. A multiple case study uses theory to generalize the lessons learned from

studying the cases (Yin, 2014). Though multiple case study research may require more time and resources to conduct, it offers more evidence and a greater chance for replication (Yin, 2014). Focusing on common topics early in the research helps the researcher later when cross-site analysis is performed (Stake, 1995).

Role of the Researcher

Qualitative research is experiential in nature, and qualitative researchers seek to understand complex and often unique cases and contexts (Stake, 1995). Qualitative researchers are instruments of data collection, and for this case study, I functioned as an interviewer, observer, and data interpreter who sought to create a narrative with rich description that tells a cohesive story of multiple cases that served as the data sources (Stake, 1995; Yin, 2014).

For unbiased and capable case study research, the researcher needs to be able to ask good questions (and interpret the responses fairly), listen well, adapt to new situations and challenges, and avoid traps based on preconceptions or ideologies (Yin, 2014) My own preconceptions and values could be a potential source of bias, and I attempted to separate my own views and experiences as much as possible while being open to contradictory evidence (Janesick, 2011, p. 51). I had to separate my preconceptions of what collaborative relationships look like that were based on my own professional experiences with administrators and teachers with whom I have worked. I have worked within a number of collaborative settings during my teaching career, and some collaborative relationships have been positive while others have not, but as the researcher, I strove “to preserve the multiple realities, the different and even

contradictory views" (Stake, 1995, p. 12) to achieve a greater understanding of the issues. I also reflected critically and journaled to help me understand and identify my own assumptions and biases (Merriam & Tisdell, 2016).

To avoid biases, I also did not study principals with whom I have a working or social relationship (see Janesick, 2011). This reduced the potential for bias in my role as the research instrument, and it decreased the likelihood that participants would refrain from sharing their experiences with me due to any professional or social issues. Furthermore, I recorded the interviews to decrease the likelihood of bias during data collection to provide an accurate account of the interview information (Creswell, 2009).

To further help avoid bias, I followed a formal protocol for collecting data that involved asking participants the same set of questions (a modified version for teacher-leaders). Protocols are useful to increase the reliability of case study research, and Yin (2014) recommended a four-section protocol that includes the overview of the study, data collection procedures, the (semi-structured) interview questions and possible follow-up questions, and a guide for the report of the case study. Qualitative case study interviews often do not involve a strict adherence to standardized questions that will be asked of each respondent due to the unique experiences and stories that respondents will provide to the interviewer (Stake, 1995). Stake (1995, p. 65) recommended that the interviewer utilize a "short list of issue-oriented questions, possibly handing the respondent a copy, indicating there is concern about completing an agenda" and stay in control of the data gathering. Therefore, I conducted interviews following a semi-structured set of questions that limited (by design) deviations from the protocol (Stake, 1995). Following a case

study protocol is necessary for multiple-case study research and serves to increase the reliability of case study research through the sustained focus on the topic, the preparedness that helps anticipate potential problems, the consistency of the data collection questions for each case, and the establishment of a clear guide for the case study report (Yin, 2014).

Further, during the interviews, I took steps to ensure that I was a "good listener" (Yin, 2014, p. 74). I took notes during the recorded interviews and asked clarifying questions as necessary, but I also allocated time immediately after the interviews in order to write an interpretive commentary of my immediate thoughts and experiences (Stake, 1995) and sought corroborating evidence for any inferences that I made (Yin, 2014).

Using the same semi-structured interviews protocols and active listening reduced bias, but studying multiple cases also helped me decrease bias. Yin (2014, p. 64) explains that single-case design requires an "extremely strong argument in justifying" the choice of a single case and likens it to a single experiment. He also explains that the inclusion of other cases can provide the possibility of replication which increases the strength of the study and support for the findings (Yin, 2014). Gomm et al. (2009) pointed out that one or two cases may be studied in great depth while subsequent studies can be examined in less depth to provide a means of establishing whether or not the findings are generalizable to the primary case studies. Neither Yin (2014) nor (Stake, 1995) established clear guidelines for the number of cases to be included in multiple case study research. Stake (1995) explained that case study research is not sampling research; therefore, the first focus should be on what can be learned from the case. Sometimes

typical cases can answer questions better, but other times a unique case can provide opportunities to examine things often overlooked in typical cases.

I offered no monetary or other incentives to entice participants to participate in this study. Participants were given copies of transcripts of their interviews, and each will receive a copy of the final version of this dissertation. Ethical issues, participant criteria and selection, as well as IRB approval are covered later in this chapter.

Methodology

Participant Selection Logic

The cases for this study were selected from principals of suburban high schools in central Ohio that have been identified (either by others or self-identified) as principals who successfully use collaborative relationships to increase the professional development and learning of teachers within their schools. The cases (principal participants) had to meet several requirements. First, the site (school) must have established collaboration time within the school day for teachers and administrators to collaborate actively. Second, there must be an established goal for collaboration that in some way focuses on increasing the professional development and learning of teachers. Third, the schools had to be located in the suburbs in Ohio and demonstrate high levels of achievement as evidenced by state or national standards. School documents provided information about the characteristics of the schools and their demographics.

Stake (1995) explained that a multiple-case study may be designed to provide representation, but small sample sizes are difficult to justify. He further explained that time and resources are often limited, so it is often necessary to choose cases that are

useful for the purpose of the inquiry and easy to access (Stake, 1995). Purposeful sampling refers to the selection of sites or people that meet specific criteria (Merriam & Tisdell, 2016; Stake, 1995) and is useful for this study because I interviewed principals who use collaborative relationships to increase professional development and learning of teachers as well as teachers who were identified as teacher-leaders by the principals. To locate potential participants who met the criteria that I established for this study, I used snowball sampling (also known as "chain" and "network" sampling; Merriam & Tisdell, 2016). This entails asking early participants for references of other potential participants to help generate information-rich cases to include in the study. Though sampling for a balance and variety is important, cases that provide the opportunity to learn are most important (Stake, 1995). Strategies such as convenience sampling and random sampling would most likely not lead to information-rich cases because the cases may not meet the criteria. Another form of sampling, theoretical sampling, is used to develop a theory while data is collected and analyzed, but it focuses on generating a theory rather than answering the RQs.

Rationale for Number of Cases

A multiple case study may be designed to provide representation, but small sample sizes are difficult to justify (Stake, 1995). However, though a multiple case study can elicit a more significant amount of satisfying and comprehensive data due to the greater number of cases, it requires significantly more investment in time and resources (Yin, 2014). Because time and resources are often limited, it is often necessary to choose cases that are useful for the purpose of the inquiry and easy to access (Stake, 1995).

For this study, I planned on studying five cases (and ultimately studied three), and I planned on adding more cases if I needed to establish generalizability (Gomm et al., 2009), if the findings were varied and an explanation for the disparity was not discovered, or if saturation was not met. Yin (2014, p. 64) explained that single-case design requires an "extremely strong argument in justifying" the choice of a single case and likens it to a single experiment. He also explained that the inclusion of other cases can provide the possibility of replication which increases the strength of the study and support for the findings (Yin, 2014). Gomm et al. (2009) pointed out that one or two cases may be studied in great depth while subsequent studies can be examined in less depth to provide a means of establishing whether or not the findings are generalizable to the primary case studies. There are no established guidelines for the number of cases to be included in multiple case study research (Stake, 1995; Yin, 2014), but the inclusion of other cases can provide the possibility of replication, which increases the strength of the study and support for the findings (Yin, 2014). Stake (1995) explained that case study research is not sampling research; therefore, the first focus should be on what can be learned from the case. Sometimes typical cases can answer questions better, but other times a unique case can provide opportunities to examine things often overlooked in typical cases.

Replication logic is the reasoning for the number of cases (Yin, 2014). Two to three cases are generally adequate for literal replication when "how" and "why" evaluations are performed using selected cases with strong outcomes in relation to the evaluation (Yin, 2014). Creswell (2013, pp. 101-102) explained that "the more cases an individual studies, the less the depth in any single case" and pointed out that "researchers

typically choose no more than four or five cases." In this study, the exemplary cases were the principals who were identified as successful in their use of collaborative relationships to increase the instructional capacity and learning of teachers. Semi-structured interviews of teacher-leaders identified by the principals in their schools helped triangulate the findings and ensure I reached saturation.

Other issues may emerge that require attention. For example, there is a lack of research on the interactions among PLCs, school culture, and effective collaboration for school improvement (Carpenter, 2018), and there exists a lack of research on the influence time management, goal outcomes, and other factors (e.g., workload, job autonomy, demographics, size of teacher workforce) that may have on the effectiveness of principals in using collaboration to increase teacher instructional capacity (Grissom et al., 2015). Though these areas were not the focus of the study, they could have also been explored if new issues became apparent and the study design required "progressive focusing" and evolved, enabling a narrow inquiry (Parlett & Hamilton, 1976, as cited in Stake, 1995). Due to the nature of researching something new, as the problem areas become better understood, "progressive focusing" could have entailed a narrowing of the breadth of the enquiry (Parlett & Hamilton, 1976; as cited in Stake, 1995) or an elaboration of the central research question (Peshkin, 1985; as cited in Stake, 1995); however, a commitment to common topics helped enable later cross-site analysis (Stake, 1995). Care should be taken when adapting a research design because any adaptation should not decrease the rigor of the case study procedures (Yin, 2014), so the focus

remained on the central RQs and any unexpected data was discussed in relation to the central topics.

Procedures for Recruitment and Participation

I conducted seven semi-structured interviews and collected archived data. I conducted and recorded semi-structured interviews following the interview protocol refinement framework of three principals who have been identified as successfully using collaborative relationships to increase the professional development and learning of teachers within their schools and at least one teacher-leader from each school.

Several school districts within central Ohio were sent letters of cooperation, but due to concerns regarding the COVID-19 pandemic, none of the school districts would participate in the study. I submitted a Request for Change in Procedures Form to the IRB to use the district in which I work, and I was granted conditional approval (contingent upon receiving approval from the district). Once I received the permission, the principals were sent an invitation to participate via letter and email, given a detailed written explanation of the purpose of the research, and provided with an opportunity to ask questions about the study. Upon agreeing to participate, participants were sent an informed consent form.

I asked the principals at the center of the study to provide me with the names of teachers within their schools that they feel are teacher leaders. I then followed the same protocol as used to recruit the principals and sought to obtain interviews from the teachers identified as teacher leaders (after providing them with the opportunity to ask questions and obtaining informed consent forms).

Instrumentation

For qualitative multiple case study research, the qualitative researcher functions as the primary instrument for data collection and analysis (Stake, 1995; Yin, 2014). The interview protocol refinement (IPR) framework (see Table 1), a four-phase procedure for the creation and improvement of interview protocols that can increase data quality and the reliability of interview process, was followed in order to develop the interview protocol (Castillo-Montoya, 2016). The sources of the data came from video recorded, face-to-face, semi-structured interviews of principals and teacher-leaders and other archived data, as a qualitative researcher needs to keep an open mind toward discovering documents and artifacts that might be useful (Merriam & Tisdell, 2016). The archived data that I sought to obtain included district, school, and personal goal statements from participants; district and school newsletters; collaboration logs and schedules; and professional development agendas. During the interviews, I asked the participants for archived data, and some participants provided me with goal statements, collaboration logs, and collaboration schedules. The district mission statement was accessed from the district website. These sources aided in understanding how principals use collaborative relationships to increase the professional development and learning of teachers.

Video and audio of the semi-structured interviews provided an opportunity to review and check the transcripts of the interviews for accuracy. During the interviews, I listened, asked for clarification when necessary, and took notes rather than tried to write copious amounts of transcription (Stake, 1995). A data gathering form is useful for research question-focused, triangulating data that provides the opportunity to record

information, identify areas of concern, and add commentary (for information and interpretation; see Appendix A). I also provided time for myself immediately after the interviews to create a facsimile of the interview with my interpretive commentary. Member checking enabled me to establish the validity of the information gathered from the interviews.

Interview Protocol Refinement Framework

Research interview quality is dependent upon the access and selection of participants; the levels of trust achieved between the interviewer and interviewee; the length and location of the interview; the use of well-worded, quality questions; and the procedural methods followed during the operation of the interview (Castillo-Montoya, 2016). The interview protocol refinement consists of four phases. In order to align the interview questions with my RQs (Phase 1 of the interview protocol refinement framework), I followed Castillo-Montoya's (2016) suggestion to map the alignment with a matrix (see Table 1) that will allow me to identify potential gaps or redundancies in my interview questions and read a script before each interview (see Appendix B).

Table 1

Interview Protocol Matrix for Research Question Alignment

Interview Questions	RQ 1: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?	RQ 2: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?	RQ3: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?
Please describe the collaborative relationships within your school that are designed for increasing the instructional capacity of teachers?	X	X	
In the instructional leadership capacity, what are the instructional goals (or vision) you have for collaboration within your schools?	X		
i) How do you create the instructional goals for collaborative relationships?	X		
ii) How do state and federal mandates affect the creation of instructional goals for collaborative relationships within your school?	X	X	
iii) What role does collaboration with teachers and teacher-leaders have in the creation and development of instructional goals within your schools?	X	X	X
5) How do you manage resources and time to facilitate collaborative relationships for the purposes of increasing the instructional capacity of your school?			X
6) Within your school, how do you create and/or develop collaborative relationships with and among the teachers in your school?	X		X
How effective is collaboration for the purposes of increasing the instructional capacity of teachers?	X	X	

(table continues)

Interview Questions	RQ 1: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?	RQ 2: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?	RQ3: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?
7) How do you evaluate the efficacy of the collaborative relationships you have created or sustained for the purposes of increasing the instructional capacity of teachers within your school?	X		
8) What are the challenges and obstacles you face as an instructional leader in regards to creating and sustaining collaborative relationships for the purposes of increasing the instructional capacity of your teachers?		X	X
i) What are the methods you use to overcome or meet the challenges?			X
ii) What has been the most effective methods(s)? The least effective method(s)?		X	X
9) Is there anything else you would like to add about using collaborative relationships to increase the instructional capacity of teachers?			

In Phase 2 of the interview protocol refinement framework procedure, I further refined my interview questions by wording and ordering the interview protocol and making sure interview questions were worded in ways that are "meaningful and useful in understanding the interviewee's perspective" (Patton, 2015; as cited in Castillo-Montoya, 2016). Furthermore, I augmented my key questions with a number of other types of questions (i.e., introductory, transition, and closing questions), created possible follow-up questions, and followed a script that "supports the aim of a natural conversational style" to help make the interview script be more interviewee-friendly (see Appendix C) and likely to lead to an inquiry-based conversation (Castillo-Montoya, 2016, p. 824).

In order to follow the framework to its completion, I asked my dissertation chair and committee member to review my interview questions and protocols (Phase 3) before I moved on to conducting a practice interview (Phase 4) utilizing my school principal (who verbally agreed to participate). The practice interview was not included in the final report (Yin, 2014).

Data Collection

Creswell (2009) explained that qualitative researchers generally gather data from participants through face-to-face interactions so that the participants can be observed behaving and acting within their natural setting (Creswell, 2009). Therefore, I sought to conduct 30 to 45-minute, semi-structured interviews at the high schools where the principals work and within the classrooms (or collaboration areas) of teacher-leaders to observe them in their natural setting (Creswell, 2009). Due to Covid-19, however, I

instead utilized Skype to conduct and record the interviews. After the interviews, I thanked the participants and provided them with contact information.

The interviews took place between from June to July of 2020, and two of the principals participated from their offices and one from the principal's home. The three of the teachers participated via Skype from their homes, and one teacher participated from her classroom. The Skype calls were recorded using my laptop and cellphone (audio was recorded using the cellphone in case the video recording did not work). The semi-structured interview recordings were kept on my personal computer that is password protected to assure their confidentiality, and each participating principal, teacher, and site were given pseudonyms to protect their identity (Yin, 2014). Copies of the interview transcripts were provided to the participants.

After the documents were gathered and analyzed and the recording transcripts were finished, member checking was performed to ensure the accuracy of the information and allowed participants to suggest improvements or additions to better describe their perspectives (Merriam & Tisdell, 2016). Member checking furthered add to the trustworthiness of the study (Merriam & Tisdell, 2016). After the study concludes, I will provide copies of the dissertation to the participants.

While I initially had intended to focus on five principals, I ultimately focused on three principals and four teachers (one teacher from each of the two traditional schools and two teachers from the academy). Yin (2014) pointed out that even one more case than a single-case study can create a situation in which cross-case conclusions can be drawn.

Data Analysis Plan

Data to answer all three RQs was collected and analyzed from the recordings and transcripts of the semi-structured interviews and archived data. Multiple case study analysis consists of two analysis stages, the within-case analysis and the cross-case analysis (Merriam & Tisdell, 2016; Yin, 2014). For the within-case analysis of the individual cases, typological analysis of the main topics present in the RQs was conducted for each case study because it is appropriate for "interview data that have been collected using structured guided questions" (Hatch, 2002, p. 178). Data from the archived documents was used to increase the confirmability of the data from the semi-structured interviews. The archived documents collected from the participants included two goal statements, and a collaboration plan; the district mission statement was accessed via the district website. The data from the semi-structured interviews and archived documents, was partially organized using NVivo12, but Microsoft Word was the primary tool used to compile and compare data. There are many advantages to using a computer program such as the ability to organize large amounts of data, to locate specific data with greater ease, to create content-mapping visuals, and to be able to sort data quickly (Creswell, 2013). The individual cases, representing principals who have been identified as successful in using collaborative relationships to increase the instructional capacity of teachers, having similar profiles, can be "considered instances (replications) of the 'type' of general case" (Yin, 2014, p. 166).

The cross-case analysis stage is used to inductively develop a general explanation that fits the individual cases, but most likely (due to the typological analysis focus of the

first stage) will result in themes that conceptualize the typologies across the multiple cases (Merriam & Tisdell, 2016). Contrasting cases (or discrepancies) can be used for "theoretical replication" in which the differences could be "predicted explicitly at the outset of the investigation" (Yin, 2014, p. 63) based on the conceptual framework. The challenge in creating a cross-case synthesis is the interpretive nature (rather than a numeric tally) of the analysis which requires the development of plausible and strong interpretations that are data-supported (Yin, 2014). The cross-case analysis seeks to inductively create a general explanation (in spite of the differences among the individual cases) that encompasses all of the individual cases (Khan & VanWynsberghe, 2008; Merriam & Tisdell, 2016), and Yin (2014) describes a process of creating word tables that array the categories or features of each case that will be used for analyzing the results of this study. After the word tables were created, the cases were analyzed to determine if the cases are general replications of each other (or not), and the results was used to confirm (or disconfirm) that the findings align with the prior research that was reviewed when developing this research study (Yin, 2014).

Yin (2014) described a method of multiple-case study reporting that I followed in which individual single-case reports are not published to protect the anonymity of the participants, but the cross-case analysis report is created and reported as a composite of the cases (the cross-case synthesis). Yin (2014) explained that in some cases, the individual-case study reports may be placed in the appendices of a study.

Issues of Trustworthiness

Internal validity, or credibility, can be increased through triangulation, and one of Denizen's (1978; as cited in Merriam & Tisdell, 2016) four types of triangulation is the use of multiple sources of data. The sources of data were the semi-structured interviews (audio, video, and transcripts); archived data (i.e., goal statements; newsletters; collaboration logs and schedules; and professional development agendas), and my own journals. The inclusion of multiple levels and perspectives of the same phenomenon (data from the interviews of the principals and teacher leaders) triangulated the data, helped the reliability of the results, and increased the likelihood that data saturation was reached (Fusch & Ness, 2015). I further increased the credibility by asking my participants about their views on the credibility of my findings and interpretation. Lincoln and Guba (1985, p. 314; as cited in Creswell, 2013, p. 252) considered member checking to be the "most critical technique for establishing the credibility."

The use of multiple cases is a useful means of increasing the likelihood of external validity and generalizability of research conclusions, also known as transferability (Merriam & Tisdell, 2016; Yin, 2014). Stake (1995) described the importance of providing "thick description" to convey to the reader the experience to facilitate understanding. My observations and descriptions were accurate and captured the experience as deeply as I could to increase the transferability of the study. As discussed earlier in this chapter, I used criterion-based sampling to help establish the transferability of the study. I also provided an audit trail of how data was collected, analyzed, and interpreted (Merriam & Tisdell, 2016) to increase the dependability and

credibility of the conclusions of the study. The archived documents provided evidence of collaboration goals, the focus of collaboration, and collaboration activities that were directly aligned with the district mission statement. Confirmability was established from the cross-case analysis, and my committee chair and committee members reviewed my transcripts, coding, typological (thematic) analysis, and cross-case analysis to ensure my conclusions are reliable and credible.

Ethical Procedures

While the principals who were the participants in this study are not considered protected populations, it was imperative that I follow ethical procedures to protect my participants and the data gathered from them, obtain IRB approval, and anticipate any possible ethical issues and conflicts that could jeopardize my study. Walden University's approval number for this study is 03-17-20-0085624 (valid until March 16th, 2021).

Stake (1995) described the invasive nature of gathering data from educational settings and stressed the need for acquiring the necessary permissions from all involved. In order to ethically gain those permissions, a qualitative researcher needs to make sure to provide participants and other parties with the nature of the study, the planned activities, the primary issues that will be studied, the duration of the study, and means by which the privacy and confidentiality of the participants and the information they provide will be protected (Stake, 1995; Yin, 2014). According to the National Research Council (2003, pp. 23-28; as cited in Yin, 2014), researchers need to gain informed consent from participants, protect participants from harm, maintain the privacy and confidentiality of participants, utilize special precautions when participants are members of vulnerable

populations, and treat participants equitably and fairly. Frankfort-Nachmias and Nachmias (2008) explained that informed consent has four elements: the individual giving consent is able to maturely and responsibly make decisions, the individual has the legal capacity to give voluntarily consent, the participant is reasonably informed (e.g., of the purpose and procedures, right to withdraw, etc.), and the participant comprehends the risk involved.

In order to conduct and ethical study that protects my participants, I took a number of steps. First, I obtained IRB approval (see Appendix B) for my study. I also provided a description of how I planned to interact with my participants, my protocols of data collection, the means by which I protected the confidentiality and privacy of my participants, how I protected participants from harm, and copies of the informed consent documents and permission requests (Yin, 2014). Second, I obtained written permission from the schools and completed informed consent (see Appendix B) forms from the participants. Qualitative studies can result in ethical dilemmas for researchers due to the researcher-participant relationship or other possible situations that require steps to protect the well-being of individuals, and I sought participants with whom I have no prior work or social ties. The lack of prior relationships decreased the likelihood of problems that could endanger the validity or otherwise compromise the integrity of the research study (Merriam & Tisdell, 2016; Stake, 1995).

The anonymity of the participants was protected through the use of pseudonyms, and any contact information or other identifying information is not used or appear anywhere in the study. Any identifying information about the participants, individuals

that are referred to by participants, locations, and other descriptive information that could be used to identify either the participants or their place of work was omitted and replaced by descriptive language in brackets to assure anonymity. The interviews and interview data is kept on a secured computer that requires a password to access that only I possess, and the destruction of interviews and data will occur within five to ten years of the completion of the final submission of the study (Merriam & Tisdell, 2016).

Summary

This chapter addresses the usefulness in using the multiple-case study methodology to explore the RQs. The chapter includes the rationale for the qualitative study methodology as well as the overall research design, context and population to be studied, ethical considerations, the data collection methods and procedures, and how the data will be analyzed in the next chapter.

Chapter 4: Results

This chapter details the analysis of the data used to complete this study, which sought to understand how administrators utilize collaborative relationships for increasing the instructional capacity and efficacy of teachers within their schools. To accomplish this, a multi-case study was conducted using principals and teacher-leaders from a high-achieving school district. In this chapter, I provide a review of the research questions and identify the setting and participant demographics. Next, I outline my process for data collection and explain my analysis of the data. I also provide evidence of trustworthiness and conclude with the results of the research.

Three research questions guided this research study:

1. RQ1—Qualitative: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?
2. RQ2—Qualitative: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?
3. RQ3—Qualitative: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?

Setting

Due to the COVID-19 pandemic, all the semi-structured interviews were conducted using Skype, an Internet platform that enables video calls. At the appointed time for each interview, I called the participants from my home computer. Two of the principals were in the offices at their schools at the time of the interviews, and one principal (Principal C) was at home recovering from a recent surgery. Three of the four teacher participants were at their homes at the time of the interviews, but one participated in the interview from her classroom. All the interviews took place between 9 a.m. and 4 p.m.

Unique Circumstances

With the advent of the COVID-19 pandemic, all the school districts that met the criteria for inclusion in the study in the central Ohio area that were contacted by email declined to conduct research at their schools and also declined or did not respond to requests that the interviews be conducted via telephone or Internet calls. The school districts that rejected the requests cited the pandemic as the reason that they were not allowing researchers to conduct research within their districts. Some of the districts explained that the uncertainties and extra work that accompanied the mandatory school building closings and subsequent attempts to continue utilizing virtual schooling through online platforms had caused them to suspend allowing outside researchers access for the foreseeable future.

Steps Taken Due to Complications

To continue with the study and gather data, I turned my attention to my own school district, which also fit the criteria—the principals were all principals of suburban high schools in central Ohio that have been identified (either by others or self-identified) as principals who use collaborative relationships to increase the professional development and learning of teachers within their schools. The district also utilizes unique and beneficial collaboration opportunities and has a well-established reputation for successfully using collaboration as a means of increasing teacher efficacy. I contacted the IRB and requested a change in procedures that was granted on condition that I received permission from the partner organization. Emails were sent to the district superintendent and chief academic officer requesting permission to conduct research within the district, and permission was granted. I made the initial contacts with the principal study participants by email and then followed up with more emails to get the necessary permissions.

At the end of the 2019–2020 school year, I initially emailed three of the four principals of the traditional high schools (the one I did not email is my current principal due to concerns that our working relationship may decrease the validity of the data gathered for the study). The district chief academic officer suggested that I also contact the principal of the academy (it includes the district's STEM program and a community transition program for special needs students) as well due to the strong collaborative culture at the academy. I emailed the academy principal and received the necessary

permissions. Two of the three principals from the traditional high schools agreed to participate, and the principal of the academy also agreed to participate.

At the close of each of the Skype interviews I conducted with the three principals, I asked for and was given the names of teacher-leaders who were instrumental in helping develop collaborative relationships for the purposes of increasing instructional efficacy. These teachers were emailed and asked to participate in the study. Upon receiving permission from the teachers (one from each of the two traditional high schools and two from the academy), I corresponded via email with the teachers to arrange interviews.

Over the course of a 10-week period, I collected documents and conducted semi-structured interviews of the principal and teacher participants virtually using Skype. The participants were either within their homes or schools during the interviews. Once the interviews were completed, the interviews were transcribed using the NVivo transcription service platform, and I listened to the recordings as I read the transcripts to ensure the transcript was accurate.

Interview Settings for Data Collection

Three principal participants and four teacher-leader participants participated in semi-structured interviews. Each semi-structured interview was conducted during a Skype call while the participants were either at their school or within their homes, and the recordings of the call were downloaded. All the semi-structured interviews were between 45 minutes and 1-and-a-half hours in length, and most were conducted during normal business hours (9 a.m. to 5 p.m.) on weekdays. Originally the interviews were to be conducted either in person or through a phone call, but concerns about the pandemic and

the availability of Skype through the school district allowed me to collect the interview data using Skype, and some participants emailed examples of goal statements and collaboration goals and expectations that were also used as data for this study. Data was also collected from the district website that contained demographic information and the district mission statement.

Demographics

District

The school district in which this study was conducted is a large, partially rural suburban district located in central Ohio. According to National Center for Education Statistics (2018), there are over 20,000 students (mostly White—approximately 20% identifying as one or more minority groups) within the district's schools, and over three-fourths of the parents possess a bachelor's degree or higher. Each of the two traditional high schools have approximately 2,000 students and a teaching staff of between 90–100. The academy has approximately 250 students (but the students also attend the traditional "home" school as well) and a teaching staff of less than 20 (including teachers and counselors).

Individual Case Demographics

The cooperating school district contains four traditional high schools and one non-traditional academy that includes a STEM program and a special education community transition program. The principals of two of the traditional high schools and the academy participated in the study, and at least one teacher (two from the academy) from each school provided data as well to help achieve the following goals: (a) narrow

existing knowledge gaps relating to how principals identify instructional needs and create instructional goals, (b) increase the understanding of how administrators utilize the skills and expertise of their faculty to meet instructional goals, and (c) understand how administrators evaluate the effectiveness of collaborative relationships for the purposes of increasing instructional efficacy.

All three of the principals interviewed for this study were in their early 50s and had previously served as vice principals within the district (see Table 2). All three principals had been in their current administrative position for 2 to 3 years but had previous administrative experience (as either a vice principal or principal). One principal had been a principal of two other schools outside of the district, but the other two had served as vice principals within their current district. Two of the principals were male, and one was a female. There were four teacher participants (three females and one male), and all of them had worked within the district for at least 4 years (see Table 2). One teacher was interviewed from each of the two traditional high schools, and two teachers were interviewed from the academy.

Table 2

Demographics of Participants

Pseudonym	Gender	Age (approx)	Years at Current Position (approx)	Years of Experience (current role)
Principal A	Female	Early 50s	3	6
Teacher A1	Female	35-40	<5	???
Teacher A2	Female	30-35	5-10	10+
Principal B	Male	Early 50s	3	13
Teacher B	Male	45-50	10-15	10+
Principal C	Male	Early 50s	2	10+
Teacher C	Female	30-35	5-10	5-10

Data Collection

Three principal participants and four teacher-leader participants participated in semi-structured interviews (see Appendix A) over Skype, which were recorded and downloaded. All the semi-structured interviews were between 45 minutes and 1-and-a-half hours in length, and most were conducted between 9 a.m. to 5 p.m. on weekdays. Originally the interviews were to be conducted either in person or through a phone call, but Skype was used due to concerns about the pandemic and the easy access to Skype through the school district allowed me to collect the interview data using Skype, and some participants also emailed documents that were used as data for this study. Data were also collected from the district website that contained demographic information and mission statements.

Participants

I had originally planned to gather data on five cases (principals) from different school districts, but the COVID-19 pandemic made this difficult. Though some districts that fit the criteria for inclusion did not respond to my requests to conduct research, the school districts that did respond explained that they were suspending research partnerships with their organization due to concerns regarding COVID-19 and the difficulties that schools within the state were having adapting to new state mandates (resulting from COVID-19) while also attempting to find ways to educate students and plan for the upcoming school year. To complete the study, I spoke with my committee and decided that the best course of action that would still enable me to answer my RQs would be to contact the school district in which I work to seek permission to conduct my

research using participants from my own district. After seeking and obtaining permission from the IRB, I also sought and received permission from my own school district.

Traditional Cases

Within the district there are four traditional high school and one academy that houses the STEM program and a special education program that focuses on helping students with special needs transition into the community through vocational and life skills development. I chose not to use the high school in which I work as one of the cases due the possibility that there may be a conflict of interest and concerns that it would be difficult to remain completely objective (Janesick, 2011). Of the other three traditional high schools, all three principals initially agreed to participate, but one did not respond to my follow-up emails. The two who did respond to the follow-up emails granted permission for me to interview them and were interviewed.

The district's chief academic officer suggested that I also include the principal of the district's academy high school, and at this suggestion, I reached out and was given permission. Thus, with three principal participants as individual cases, I conducted the semi-structured interviews and asked the principal participants to supply me with the names of teacher and/or teacher-leaders would also provide me with information about collaboration within their respective schools. Thus, through snowball sampling (Merriam & Tisdell, 2016), I was able to locate potential teachers as participants. I then contacted them via email and gained the necessary permissions to interview them. For this study, I was able to get two teacher participants from the academy school, and one teacher from each of the traditional high schools. The use of teacher participants and available data

from the documents I was given by the participants provided the necessary information to triangulate the data as well as reach saturation.

Unique Case

Although the inclusion of the teacher participants added to the overall richness of the data collected, the inclusion of the academy principal offered a unique case as an opportunity. The main focus should be what can be learned from a case, and the unique situation at the smaller academy provided the opportunity to view collaborative relationships and the role of an administrator in a different situation (Stake, 1995). Ultimately, this case provided me an opportunity to learn more about successful development and ways to sustain effective collaborative relationships in a setting with which I had little experience.

Data Analysis

Once the semi-structured interviews were completed, transcribed, and sent to the participants for member checking (participants either did not respond or said the transcript was accurate), I began to develop a list of a priori codes from the conceptual framework, the literature review, the RQs, and from words and phrases that I encountered during the interviews. Some of the a priori codes used initially were *trust*, *conflict*, *teacher leadership*, *goal creation*, and *collaboration time*. I first conducted individual case analyses by precoding (underlining, highlighting, and bolding the text using Microsoft Word) and preliminary jotting by recording my initial thoughts, observations, and connections I encountered (Janesick, 2011).

The archived documents mostly provided confirmation for data gathered from the semi-structured interviews. The goal statements (see Appendix C) provided documentation evidence of principal-directed, collaboratively created goals and methods used by the principals. The district mission statement, which was directly referenced multiple times by the principals and clearly was utilized as part of their rationale for their decision-making, provided more supportive evidence. Neither the goal statements, the mission statement, or schedules contributed directly to the codes, but they did provide confirmation for the data from the semi-structured interviews and were useful in supporting the choices of some of the codes and themes that were generated from the interview data.

Then I revisited the transcripts and began my primary coding of the transcripts using the a priori codes initially while I simultaneously continued to add to the list, refined some of the codes, and developed categories for the codes. Some of the subcategories such as *administrative role* encompassed codes such as *scheduling* (which would comprehensively include examples of principals arranging the daily schedule to facilitate collaboration and examples of principals adjusting individual teaching schedules to enable teachers to observe one another or meet collaboratively), which was used in another subcategory. To compensate for so much cross-categorization, I combined some subcategories into larger categories. I quickly realized how interconnected many of the concepts and topics were, and I realized that I would have to develop larger categories (that I based upon the RQs).

The organization of the semi-structured interview questions, which were based on the RQs, resulted in many of the responses provided by the participants to be already organized in this manner. Using the more comprehensive categories and codes within them helped in the coding process during the cross-case analysis that was performed next. I found that many of the codes under the larger categories, based on the literature review and conceptual framework, were still used for multiple categories, which indicated the interconnectedness of many of the topics covered by this study.

The categories for RQ1 and RQ2 were different from those for RQ3. The final, larger categories for RQ1 and RQ2 (see Table 3 and Table 4) were the following: collaboration development, collaboration management, evaluation of collaboration, motivation, and control. The final categories for RQ3 (see Table 5) were administrative duties, managerial role, relationships, and motivation. During the individual case analyses and the subsequent cross-case analysis, I continued to add to the list, refine some of the coding, and inductively make connections between some of the codes to generate larger themes which were instrumental in answering RQ2.

Table 3

Codes, Categories, and Themes Discovered for Research Question 1

Codes	Category	Theme(s)
• Hiring • Interviewing/hiring • Collaboration norms • Common collaboration time • Developing culture • Goals • Importance of vulnerability/trust • Relationship-Building	Collaboration Development	Using the administrative role to facilitate effective collaboration Relationship-building Hiring the "right" people
• Administrative role • Collaborative culture • Collaborative goal-setting • Conflict • Importance of vulnerability/trust • Trust • Scheduling	Collaboration Management	Sustaining effective collaboration through norms Relationship-building Using the administrative role to facilitate effective collaboration
• Best practices • Common assessments • Collaborative goal-setting • Organizational goals	Evaluation of Collaboration	Using the administrative role to facilitate effective collaboration
• Importance of vulnerability/trust • Teacher empowerment • Teacher leadership • Teacher motivation • Trust • Teacher-driven professional development	Motivation	Relationship-building Sustaining effective collaboration through norms
• Administrative role • Collaborative goal-setting • Common collaboration time • Conflict resolution • Hiring • Scheduling • Teacher leadership	Control	Using the administrative role to facilitate effective collaboration

Table 4

Codes, Categories, and Themes Discovered for Research Question 2

Code	Category	Theme
• Hiring • Interviewing/hiring • Collaboration norms • Common collaboration time • Developing culture • Goals • Importance of vulnerability/trust • Relationship-Building	Collaboration Development	Buy-in is important. Collaboration is a powerful tool.
• Administrative role • Collaborative culture • Collaborative goal-setting • Conflict • Importance of vulnerability/trust • Trust • Scheduling	Collaboration Management	Buy-in is important. Conflict is inevitable and essential.
• Best practices • Common assessments • Collaborative goal-setting • Organizational goals	Evaluation of Collaboration	Teacher empowerment produces results.
• Importance of vulnerability/trust • Teacher empowerment • Teacher leadership • Teacher motivation • Trust • Teacher-driven professional development	Motivation	Conflict is inevitable and essential. Teacher empowerment produces results.
• Administrative role • Collaborative goal-setting • Common collaboration time • Conflict resolution • Hiring • Scheduling • Teacher leadership	Control	Buy-in is important. Teacher empowerment produces results.

Table 5

Codes, Categories, and Themes Discovered for Research Question 3

Codes	Category	Theme(s)
• Administrative role • Common collaboration time • Developing culture • Goals • Hiring • Interviewing/hiring • Scheduling	Administrative duties	Positional authority as a method of control
• Administrative role • Collaboration norms • Collaborative goal-setting • Common collaboration time • Conflict resolution	Managerial role	Positional authority as a method of control
• Best practices • Collaborative culture • Collaborative goal-setting • Common assessments • Conflict resolution • Importance of vulnerability/trust • Organizational goals • Relationship-Building • Trust	Relationships	Motivation and empowerment to control
• Collaborative goal-setting • Importance of vulnerability/trust • Teacher empowerment • Teacher-driven professional development • Teacher leadership • Teacher motivation • Trust	Motivation	Motivation and empowerment to control

Evidence of Trustworthiness

Credibility

I was able to increase the credibility of my findings through the triangulation of multiple sources of data as well as the use of multiple perspectives that were included. The data for this study came from the Skype video recordings of the semi-structured interviews, the document data gathered from the district website (district mission statements) as well as documents provided by the participants (the schedules, collaboration agendas, and goal statements). One of the collaboration documents, an example of a social studies department goal statement (see Appendix C), provided substantive corroborating evidence for an integration of the individual and departmental goals through collaboration as the teachers were to work together to collaboratively create goals for the 2019-20 school year based on their individual and departmental needs. All three principals referenced the district mission statement during their interviews as a guide for their instructional and administrative leadership. As Yin (2014) explains, the construct validity of case studies is stronger when multiple sources of evidence are used, and it allowed for me to corroborate the findings and increase the likelihood that my study of each case is represented accurately. The documents provided corroboration for data gathered during the interviews. The teacher participant interviews and documents were used to corroborate the data collected during the principal participant interviews and offered different perspectives on the instructional leadership of the principals. This helped ensure that data saturation was reached as well (Fusch & Ness, 2015).

I also sent copies of the transcripts to the participants in the study approximately one to two weeks after the interview in order to utilize member checking to help increase the credibility of the study (Lincoln & Guba, 1985; as cited in Creswell, 2013); none of the participants responded with any proposed changes or addendums to their transcribed responses, but some participants did respond with additional data (documents) that were used to corroborate information provided in the interviews.

Transferability

Due to the small size of this study, the limited number of cases, and the uniqueness of the purposeful scheduling of collaboration found within this district, the findings and conclusions of this study may not be particularly transferable to other similar high school settings that do not provide the same access to collaboration resources (i.e., daily opportunities to collaborate with other teachers). However, some of the resulting propositions involving collaborative relationship building and teacher-led problem solving may be transferable and provide a means of understanding the importance of fostering collaborative relationships for the purposes of increasing the learning and professional development of teachers.

Dependability

In order to increase the dependability of my study, I saved copies of all of my transcripts that included my thoughts and insights as I analyzed the data. I also saved multiple drafts of my work that were given file names that included the date in which I had redrafted my work. While I did not keep a thorough independent journal chronicling my research, I created a cross-case analysis matrix of the data from the interviews and

screenshots of data documents. This matrix was used to document my analysis, and I made copious notes to myself (which were dated by Microsoft Word) in the document comments. I had initially tried to keep a running journal, but this did not work for me as well as putting the notes in the comments of the matrix and the transcripts of the interviews. I was able to revisit these notes often and use them to help me document my thoughts and discoveries.

Confirmability

Once I analyzed the individual cases for recurring themes, I conducted a cross-case analysis of the cases in order to determine if the themes were represented across the three cases, and I found that themes were consistent across the cases and supported by the literature. My committee members also aided in adding confirmability by reviewing my work and findings (Janesick, 2011).

Results

In presenting the results of this multiple-case study, I focus on the cross-case analysis in order to describe the results. While specific references to the individual case analyses are embedded within the description of the results, the primary method of reporting the results of this study lends itself to the results found in the cross-case analysis and are presented through the analysis of themes found regarding the specific RQs. This structure allows me to better answer the RQs while providing a comprehensive yet thorough discussion of the findings. As Yin explains, “In a multiple-case study, the individual case studies need not always be presented in the final manuscript…and may be cited sporadically in the cross-case analysis” (2014, p. 228). The following representation

of the results is commensurate with the "linear-analytic" compositional structure described by Yin (2014) that is explanatory, descriptive, and exploratory in its purpose. Furthermore, many of the findings were inextricably tied together and supported by data from the archived documents (see Appendix C). Things such as building strong relationships with the teachers furthered the principals' ability to intervene when necessary, but also allowed the principals to identify and facilitate problem-solving by providing them with the knowledge of teachers' strengths and weaknesses that could be leveraged in order to find solutions and create supportive relationships between and among teachers. In order to identify the individual results and still provide the context for understanding the interplay between many of the practices and thematic elements discovered, I have grouped the resulting practices and themes under the corresponding RQs that guided this study and have provided further analysis and evidence when appropriate to describe and capture the ways in which the different themes interact with one another.

Research Question 1: Collaboration Development, Maintenance, and Evaluation

The themes discovered in answer to the first RQ, "How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?" provided an overall blueprint for successfully using collaborative relationships as a means of increasing teacher efficacy and learning (See Table 4).

Development and Maintenance of Collaborative Relationships

There were a number of themes that were found to be common among participants as they described the development and maintenance of successful collaborative relationships, but the first common theme, relationship-building, was probably the most important as it seemed to be the lynchpin that held collaborative relationships together and allowed for the interpersonal relationships that are found within successful collaborations. Other important practices emerged as well such as hiring the "right" people, facilitating effective collaboration through administrative duties, and developing norms.

Theme 1: Relationship-Building. All three of the principals described the importance of building relationships with and among the staff. Principal A explained, "It starts with relationships …You've got to be self-reflective about YOU [emphasis added] and how you impact others in order to even get to a place of sharing ideas, best practices, moving forward. … it takes relationships and trust." Principal A described how she "spent the first year, really, relationship-building" in order to learn from the teachers because "Why would I ever come into a leadership position and instructionally, or otherwise, want to change things before I–I know about what you do and how you do it?" Likewise, the other principals in this study explained the importance of fostering strong relationships because they were the firm foundation that allowed successful collaboration to occur. According to Principal B:

> I had built those relationships … if you ask most of our teachers here, they will tell you that … that I have their backs, and that they trust me. We may not always

> see eye-to-eye on certain things, but … we're able to have those … those hard conversations because of the relationship that's been built.

Teacher A2 described a similar approach used by Principal A when Principal A started in her current position:

> This is her third year. So she wasn't there at the beginning [when the academy was created]. So to get her on … on board with us, she was great. I mean, she really was a good listener. And she took like, you know, asking questions and things, but then added her own ideas and looked for ways to elevate what we already had rather than coming in and, you know, changing everything. She was really good about listening and learning and. Yeah. So now, that's awesome.

The importance of listening was an important component involved in the creation and maintenance of successful collaborative relationships. According to Principal B, "I think that the biggest thing that I have found that that works, at least it works for me, is just having a genuine interest in a person outside of what is going on in the classroom. Listening. Learning about their family, you know? And that does … it DOES take time." All three principal participants agreed that the relationships that they developed with their staff were integral to their success in fostering strong collaborative relationships, and the relationships they developed with and among their staff members were found to be extremely (if not the most) important component to utilizing collaborative relationships effectively to develop the instructional capacity of teachers on their respective staffs.

The teacher participants seemed to agree that it was important, but also explained the importance of strong relationships as a way to support one another. According to Teacher A1,

> [Speaking of Principal A's efforts to build relationships with and among the staff] You know, it's just little things like that where it makes it feel a little less formal and a little more family that we we're … we're able to kind of get more comfortable with each other. We definitely have … we definitely don't see eye-to-eye on everything, but we know each other well enough and we all respect each other enough that we can … we can have honest conversations with each other, even if they're uncomfortable and we can still come back together.

Theme 2: Hiring the "Right" People. Another common way that the administrators developed successful collaborative cultures was through the vetting process of potential teachers. Teacher C reflected on the hiring process:

> I think back to when I first interviewed at [School C] and the, like, the question that … And … And even when I was, like, on the interview committee like two years ago when we were interviewing for new English teachers, the question that kept coming up was like, "How do you work with other people because you have to collaborate here?" So I think it was really established from the get-go that, like, [School C] is a very collaborative-heavy, like, that is … that is … that is like a tenet of, like, [School C]'s course development, if that makes sense. Where the expectation is that you are going to collaborate and that you are going to work well with others and that you are going to, like, engage in those discussions, you

know? So, I think administration does a really good job of that, like, establishing that from the get-go.

The principals at all three schools described the competitive nature of getting hired in the district and how this allows them to find quality teacher candidates to fill their staff. Hiring effective teachers provided the principals the professional capital that they could rely on for much of the "in house" instructional and professional development that they felt was important.

At the academy, the hiring process included a unique element. Teachers were commonly found to be a part of the overall hiring process of new team members, but during interviews at the academy, prospective hires were vetted through a three-interview process in which candidates meet with the collaboration team members to see how they performed with the group:

> And then we narrowed it down to a couple of candidates. And then our third interview, which actually started with our first principal … this is how I interviewed, um, third interview we gave them a list of our quarter three standards, an … um … we gave them an example of a project that we have done in the past that was lacking in the English department. And so we wanted to see what their ideas were on how they could enhance the project … the existing project. So [Principal A] helped us, you know, format that document and stuff like that. And then another sophomore teacher and I [that] have been there for a long time, we kind of put together the document and then asked the other teachers, like, "Hey, can you put in your information? So, you've basically listed out what

> are the things that we cover?" And then we wanted to see how they thought that they could … they could fit in. So, the first project, it was one that we've already done that we wanted to improve in the English area. And then the second part of the interview was the … um … give him all of our standards. "And is there a project that you would want to do? Like, is there something that you would want to do that you see that stands out? That could be really fun to do … like if you could just do whatever you wanted?" So those were kind of interesting … to see the different takes. (Teacher A)

Theme 3: Using the Administrative Role to Facilitate Effective Collaboration. Another key component of the development and maintenance of effective collaborative relationships is the administrative control that principals use to schedule collaboration, dedicated resources, and align goals. Specific administrative roles and control allow principals the ability to coordinate the schedule to support collaborative relationships. Both Principal B and Principal C described ways that collaborative relationships were supported by modifications of schedules and intentional pairings and groupings of teachers to facilitate the time and space for collaboration to occur. According to Principal B:

> If we do have to maybe make an adjustment in the master schedule because we want people to … we want to get people working together who we think will be successful, then we know that we're just not throwing them to the wolves with creating a brand-new prep and they've never taught it. And so, I think you try to

> do those things in the meantime to lessen that. Lessen that fear, if that makes sense.

Principal B also provided a specific example of adjusting the schedule and classroom assignments in order to facilitate a way that a new teacher could work collaboratively with another teacher even though the two teachers did not have an available time to collaborate during the school day:

> So, the way that we set it up was, they did not have their … and just because the way things worked out … they did not have their collaboration period together. But we gave the new teacher that was going to do this … we gave him his planning period first period. They were side-by-side in a room with an open wall. So the first period, he could watch [the other teacher] do his lesson. The second period, they opened up the wall and they taught together.

All the principals reported different ways that their administrative role enabled them to foster collaborative experiences for teachers. The ability to create the necessary environment for developing the instructional capacity of teachers was a fundamental aspect of the leadership style and intent of all three principals.

At the academy, however, the cross-curricular nature of the STEM program created a different set of challenges than the more structured schedule found at the traditional schools. Principal A, discussing the previous collaboration schedule explained, "Before it never worked out very well. It was more informal meetings versus formal meetings … But this year we were very intentional about building a schedule, so that

collab happens during the day. And if they needed to touch base and meet at the end, they could do that."

Teacher C provided an example of how principals would purposefully assign teachers to certain courses (a new one in this case) in order to match the skills, experience and personalities of teachers to develop collaborative relationships to develop new courses:

> I was told that I was … I was going to develop the Honors 9 curriculum… Everything else in the past we've done, like, a survey where it's like, "What are you interested in teaching?" Like, "What would you like?" "What don't you want to teach?" You know, that kind of thing. So that was the only time. … and I'm not like upset about it. I'm really happy to have, you know, done the Honors 9 … uh … core. But, like everything else, I think, has been a mix of expressing interest, but also making sure you have certain … like, I think that, you know, it's really important to consider, like, the collaborative dynamic.

The other teachers and principals described a number of instances where the administrative role of the principals was used to bring teachers together to collaborate, and in many of those instances, the teachers would not have had the opportunity to collaborate during the school day and would have had to collaborate beyond the school day, making it possibly less likely that the collaboration would occur or would occur quite as frequently. This is particularly the case as many staff members have families or other obligations that put constraints on their ability to meet outside of school hours. As

Teacher B pointed out, “the last like four or five years, everybody’s had kids, everyone’s so busy.”

Theme 4: Sustaining Effective Collaboration Through Norms. While all the principals and teachers found that there were important components to creating and developing effective collaborative relationships, one important commonality that was discussed by many of the participants was the importance of “norms” or group behaviors that were consistent and supported effective collaboration. Some of the considerations for effective norms are discussed elsewhere in this chapter (such as the importance of listening and conflict resolution), but the establishment of norms in a general sense was described as very important by many of the participants. Principal C explained, “you have to have some norms within your collaborative groups” and then described some of the roles within groups. He explained that the roles may often change but stressed that it is important that collaboration members are “playing by some rules. And it sounds really corny, but if you … if you put the rules and norms in place, it’ll … it’ll expedite the meetings as far as time goes and everything else.” The time-saving nature of collaboration norms was reiterated by a number of the other participants. Teacher C discussed the importance of norms in accomplishing goals: “I don’t feel productive when that collaboration is like just shooting the breeze for forty-five minutes and then like nothing … nothing’s done.” She further elaborated on the reasons why she feels that collaboration time needs to be structured with norms and roles:

> [W]e have all these papers that we have to grade. We have all these things that we have to do. And so we really wanted it to be, like, an effective use of time … the

> Honors 9 collaboration does a really good job because we all kind of like fit a specific role. Like [name withheld] was sort of the idea machine … idea man. And [another name withheld] and I … I was like very much sort of the … the secretary, if that made sense. And I would like take collaborative notes. We would, like, have an agenda. Every collaboration, you know, we would set the agenda from the previous collaboration. So like on Tuesday's collaboration, we would say on Thursday, we want to make a prompt and start a rubric right during collaboration. So for the Honors collaboration, we did a lot of that together.

Three of the four teachers interviewed described the importance of norms and roles, but those teachers that spoke to their importance seemed to find different norms and roles within the different collaborations in which they took part.

Evaluation of Collaboration

Collaboration itself was not found to be formally evaluated, and the principals summarily described it as an on-going process. Administrators supported and provided the opportunity for the evaluation of the results of efforts to meet goals, but they seemed mostly focused on working with teachers to identify organizational needs (e.g., increasing student performance in specific areas or among certain student populations). Principal C described the way he developed strategies for collaboratively working with teachers to identify areas in need of improvement and creating goals (both general and specific). Principal C (discussing the document he created to help focus collaborative goal attainment) provided a specific example of how he facilitated the process of goal creation and evaluation (see Appendix C):

> So what this [document] was, was an option for a teacher-based teams for the 19-20 school year … So they had four options: quarterly plans for improvement: "developmental literacy skills," "mental [wellness] or well-being tips," "improved assessment strategies," or something they could pick. So basically, [I] just gave them autonomy.

In this example, collaboration teams were given generalized topics as areas of improvement to choose from that they felt, based on their own self-identified areas in need of improvement, and were to collaboratively create goals within their teams. This was found across all three school; administrators provide the structure, but teachers are given the autonomy and space to identify and solve problems. This was viewed positively by the teachers who appreciated the professional discretion to develop and manage their own goals that were aligned with the district, building, and departmental continuous improvement goals. Teacher B summed it up by explaining, "So they're telling us we've got to find that goal, but we … rather than forcing that go on us … we look at the data and we choose it amongst ourselves. So that's … that's cool."

All three principals described how the evaluation piece was not to be an end but rather a point in the process. Principal A explained, "I think it says a lot about what the district believes in terms of best instruction, best planning … um … you know, having access to that professional development. It's ongoing and should be a part of every single day [emphasis on the last three words]." When asked about evaluating collaboration for purposes of instructional efficacy, teacher learning and meeting the goals that are developed at the teacher level, Principal C explained,

> Well, when we try to sit in the meetings, we don't do that a ton. I don't … I just … I'm not a big micromanager. But, again, I have full faith... [the principal of my school where I teach] has full faith in your staff … You know, but … but overall, our staffs are really very talented. … And our thing is give them tools and give them a platform to operate and get outta their [the teachers'] way.

He did, however, explain that in regard to teacher evaluations, teachers often submit artifacts of their work into the same folder that their individual and departmental goals are kept, but he stressed that it "checks the box for professional responsibilities" and makes it so that teachers do not have to bring anything to teacher evaluation meetings rather than be used to formally evaluate collaboration.

This informal and on-going process of evaluation was confirmed by the teachers. Teacher B provided an example of how the process works that was commensurate with other responses from the teachers:

> And like I'm asked by … right now, it's [Principal B] … before it was [two former principals] … like, "Look at your data and then create goals for your department on how you gonna get better." Then they also say, "Now put the data aside. Look at how you see the climate in the school, like, culture and try to come up with a goal based on that, too." So, then I go to sit with my department at the very began the year and I say, "OK, we've got a... Let's all of us … look at this. What can we … Here's our data from last year. State tests, AP tests. Here's [what] our special ed students did. What … What do you guys think? What should be our focus this year as far as academics?" And then we create that

> ourselves. But it's … it's still what the administration wanted, does that make sense?

Research Question 2: Principal Thematic Assumptions

RQ2 was "What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?" generated a number of interesting thematic assumptions that were shared by all three of the principals and supported by the responses of the teachers that were interviewed (see Table 3).

Underlying Thematic Assumption 1: Collaboration is a Powerful Tool

All three of the principals and all four of the teachers agreed that collaboration was an effective tool for increasing the instructional capacity and learning of teachers, but there were many ways in which this was expressed by the participants, and they all described ways collaboration was instrumental in solving problems and helping to develop strong, supportive relationships among staff members. Principal C explained how collaboration utilizes the collective strengths of collaboration team members:

> I believe if I were doing my PhD, I would … I would be doing studies on collaboration and how beneficial it is. I think testing is B.S. I think … uh … so much of this is just worthless. The instructors are where it's at … Pretend on the screen, there's two more people. I'm definitely not as smart as me and the other three people on the screen … So, you and I are a lot smarter than I am … You and I are a lot smarter than you are, right?

He went on to explain how important it was to get "feet under the table and get more people involved in" due to the collective power of collaboration. And while all three principals shared similar opinions, the two principals of the traditional high schools worked to align the schedules of the teachers to purposefully make the most out of collaboration opportunities and maximize the effectiveness of collaborative relationships. According to Principal B:

> [W]hen we build a master schedule, that's something that we try to take into consideration … "What people work well together?" These people are going to work well together. Well, "Who might need a push and who would be the right person to maybe provide that push?" … all the things have ripple effects.

The idea of "getting the right people together" was a common way that the principals sought to get the most out of their teachers and develop the collaborative relationships that they wanted among their staff members. The lengths that the principals went to in order to facilitate these types of collaborative relationships was indicative of their belief in the power of collaboration as a means of increasing the instructional efficacy and learning of teachers in their buildings.

Underlying Thematic Assumption 2: Buy-In is Important

Another common theme shared by the principals was the importance of getting teachers and teacher-leaders invested in the process of creating goals and getting results. As Principal C explained, "I always suggest you go to start collaboration by bouncing [ideas] off the leaders because if you got their buy-in, then you've got...then you've got everybody. Right?" Principal A provided a look at her process which was similar to the

other two principals who also stressed the importance of teacher buy-in regarding the goals of the organization. She explained:

> I think when we think "collaboration", not just about the work in the planning room, but it's also "Where do we want this ship to go?" But, "Where are our opportunities to look inward and get better with what we have. So that's kinda what we do. And, I always want to give my teachers space and autonomy and empower them to come up with the big ideas and to think about ways of doing things better.

Teachers also seemed to understand the importance of buy-in for collaboration to be successful. Teacher B provided a roadmap for a process that seemed to be found across the district:

> I know if I was a principal or I was giving advice to a panel of principals, I would say like what I've been saying is a double-edged sword or a catch 22. I would tell principals you've got to allow autonomy and not be completely scripted, so the teachers don't feel like they're doing something that's forced on them, but they're doing something of their choosing. But at the same time, it does have to be sound … like, "Look at your data and then create goals for your department on how you gonna get better." Then they also say, "Now put the data aside. Look at how you see the climate in the school, like, culture and try to come up with a goal based on that, too." So, then I go to sit with my department at the very began the year and I say, "OK, we've got a … Let's all of us look at this. What can we … Here's our data from last year. State tests, AP tests. Here's our special ed students did. What

> … What do you guys think? What should be our focus this year as far as academics?" And then we create that ourselves. But it's … it's still what the administration wanted, does that make sense?

This response reflected what the other three teachers reported as well: When teachers feel as if they are a part of the process and have control over the focus, they will be motivated more to accomplish the goals and will work to improve instruction. Directives coming from a top-down approach are more likely to meet resistance than teacher-created goals that stem from agreed upon areas of necessary or needed improvement. Teacher A2 offered an insight into the reason why teacher buy-in was so important:

> I think the more people that are onboard with something, like, projects for us too … like, we have to be able to sell it and be into it to, you know? If someone's … If everybody's not … Sometimes we have, like, people on the team who are not feeling the projects, and coincidentally, their…their group of kids have, like, the crappiest projects. You know, like, it's like they can feel your … your vibes.

The emotional and personal investment that comes when people feel as if they are a part of something they believe in and stand behind because they had a hand in developing it really seemed to be a consistent theme found in all of the participant interviews. Teacher B added:

> We just get a lot of buy-in in collaboration because I think our administration and then a couple of people that help me kind of lead these teams, like, have the right personality that none of us are like … or some crap. It's never about just "our"

> way. So … because in my opinion, only times things go...have gone bad for us is when you get people in there, who're like trying to force "You gotta teach this way … You've got to do that," instead of...instead of what we do now which is, "Hey, we've got to reach this goal. How're we gonna come and do it?"

Collaboration was reported to be much more effective when the collaborators shared a common vision and had some part in the development of the goals and means of reaching that vision.

Underlying Thematic Assumption 3: Teacher Empowerment Produces Results

All of the principals relied heavily on their respective teaching staffs for professional development and praised the abilities of their teachers in providing support to one another in their professional development and learning. Providing the teachers with the opportunity to contribute to the organization, particularly with the "buy-in" of the teachers, gave teachers a way to share and address specific organizational and personal needs among those closest to them. This provided more motivation to participate because the teachers had formed relationships with one another, but it also provided motivation and a means to tackle challenges and grow. Principal B described how utilizing the collective abilities of the teacher among the staff for collaborative professional development is one of the most powerful instructional leadership tools he has at his disposal:

> [W]hat I found has been MOST successful in creating those experiences is that they are...that all of them, for the most part, are teacher-driven. So, you know, when we do those professional development days, very rarely, maybe...maybe 20

> percent of the time, are those sessions that we do run by us. I think we...we work really hard to seek out teachers who have particular strengths or teachers who are willing to share.

The teachers themselves all expressed admiration for the contributions of their peers as well as pride in their own accomplishments and contributions to their collaboration teams and the school as a whole. The pride they felt within themselves and their peers really resonated with me as I interviewed the participants, and I could tell from their responses and body language when discussing the pride and empowerment that contributing to collaborative efforts was a powerful motivator.

Underlying Thematic Assumption 4: Conflict is Inevitable and Essential

Dealing with conflict within a collaborative environment was reported as inevitable by all of the participants in the study, and many of the participants described how the conflicts generally involved details rather than larger issues. All of the participants also reported that relationships with others was a key component to successful navigation and resolution of conflict. Principal B offered this example of how a discussion of conflict might begin:

> "I know that there's some conflict here. Let's...Let's sit down and think, because we have to work through this because this is not working right now" … [Y]ou can have those conversations, if you've built that relationship. And if you don't have a relationship with a teacher and you go in and try to have a conversation, it is not going to go well.

Principal A described her policy which seemed to be shared by the other two principals as well when teachers are in conflict during collaboration:

> And I try not to micromanage. Right? That's not my role. But if [the teachers] you bring it [a conflict that is not getting resolved] to me, we're going to have some conversations … like … they … after the building … the year of building relationships thing, they know me. I don't dance around things. I like to sit down. I like to put things out on the table. I like having honest and transparent conversations, preferably face-to-face. And that's with anything. That's with a student...that's with a parent...that's…that's with staff relations. And I want it to be a seeking to understand. Not only just what the problem is, where are the mis– miscommunications, misunderstandings. But then what are what are we really trying to get to? Like, "What's the end game?"

Principal C reported a very similar stance on dealing with teachers in conflict with one another:

> "Gosh, guys, you got to understand. If you'd find some common ground on a broader brush, broader scale, you'd all be better off as teachers." But if you get … you get guarded … "This is MY stuff." "This is OUR unit." And I'm trying to get them to look at these are OUR kids, not "my" kids, "your" kids, and "your" kids. These are OUR kids. [all-caps added for emphasis]

The principal and teacher participants all seemed to agree that often the conflicts arose as a result of small details or differences of opinion that were not related to the overall goals or focus of the collaboration. The "difficult" conversations were

instrumental in allowing those involved a chance to have their voice heard while also allowing for the opportunity to refocus on the overall goals. This generally seemed to allow those involved to move past the "sticking points" and re-engage in productive collaboration while also allowing for a more objective and productive discussion. Teacher A2 described how important it was to resolve conflict but in such a way that it does not interfere with the collaboration:

> And we also try to like always "close the loop" if like, you know, there's tension or something or people are disagreeing on things, we always try to make sure that those individuals can close the loop at a later … later time. And that's never something that we've said explicitly, it's just kind of the way that our team has operated. And everyone's been pretty respectful about that.

Teacher A1 described that relationship-building is an essential component to effective negotiation and resolution of conflict. She described how team-building provides the foundation for maintaining relationships when conflict arises:

> We definitely have … we definitely don't see eye-to-eye on everything, but we know each other well enough and we all respect each other enough that we can we can have honest conversations with each other, even if they're uncomfortable and we can still come back together.

While the conflict between professionals is likely to arise from time to time, honest conversations to discover the points of conflict as well as respectful professional and personal relationships were found to enable conflict to produce results rather than end effective collaboration.

Research Question 3: Methods of Control and Motivation

Finally, the third RQ was, "What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?" The administrators shared very similar views on control, and these aligned very much with McGregor's (1960/2006) Theory Y management. McGregor (1960/2006) explained that while managers cannot provide intrinsic motivations, they can create an environment that allow employees the ability to achieve intrinsic motivation; all three principals stressed the importance of relying on the inherent talents, abilities, and problem-solving skills of the teachers in their schools to meet the collaboratively generated goals. The practices the principals utilized in order to motivate and control their staffs were consistent across the board (See Table 5), and the underlying thematic assumptions discussed under the RQ2 section above informed the specific practices employed by the principals (See Table 3). In general, the methods of control and methods of motivation were inextricably linked and worked together as the principals used motivation and empowerment as methods of control.

Theme 1: Motivation and Empowerment to Control

In particular, the "importance of buy-in" and "teacher empowerment produces results" underlying thematic assumptions related most to the methods of control and motivation used by the principals in the study. As Principal C explained, "give it to the teachers, and they'll run with it, and then you're not painting them in a box and making them resentful, you're letting them work together to create something that's meaningful." Principal B explained that "my philosophy on that is 'We provide the conditions for staff

to be successful. We hire good people, and we let them go to work.'" Principal A expressed it this way: "I always want to give my teachers space and autonomy and empower them to come up with the big ideas and to think about ways of doing things better," and she furthered explained that "my role is 'How can we continuously get better without me completely driving that ship, but giving space for teachers to see opportunities?'"

In terms of managing the collaboration and controlling the focus and results, Principal B provided a comprehensive view that was consistent with the responses of the other principals and supported by the teacher responses:

> Well, I'll tell you what. To me, I mean, it is … it is the absolute key. I mean, we have...we have so much capacity and creativity... in our staff, that it would be criminal not to develop ways to share. You know? So, you know, for me it's … I can't imagine being in a building where that was not part of our daily practice and what we do. I mean I … now we're very careful … I will say that we're very careful not to micromanage that time as far as collaboration is concerned.

Theme 2: Positional Authority as a Method of Control

This reluctance to actively control and focus the collaboration was consistent across the board, and the principals relied on motivation and goal alignment rather than authority to direct the efforts of teachers within their schools. In all cases, the principals did discuss the means by which they utilized their positional authority to empower teachers and create opportunities for teachers to collaborate to meet organizational goals. The principals did, however, explain that there were situations in which they had

intervened and exercised their positional authority to maintain a focus on the larger organizational goals, but the teachers reported that in general they supported those types of interventions in certain situations such as when conflict arose.

Staff Hiring. Principals reported that actively hiring individuals that would be a good fit for their organization and organizational needs provided them some control. This allowed the principals to staff their schools with teachers who possessed needed skills that could potentially be used as professional capital, but it also allowed them the opportunity to find staff members who would work well with others.

Teacher C described how important hiring is to help develop and maintain collaborative environments after explaining that the principal also provided teachers the opportunity to be a part of the hiring process:

> I think we have like a lot of really smart, motivated and, like, focused people on, like, about, like, English and developing that curriculum. And so I think that you have to, like, definitely consider the dynamics when … when you have 21 people that have to come together. Right? To make decisions and to do things. And I think … I think fit is like a really, really big thing. You know, you can't have like ten big personalities and have like another huge person … you don't … like, I think it all comes down to … to that fit and how people are willing to work together and collaborate, for sure. And so when we were interviewing, it was like, "OK, well, let's look at this person. Let's look at this person. You know, how will it … how will they fit in?" You know, and all of those things. So that was definitely a big conversation.

Teacher A2 explained how the hiring process at the academy is useful for assessing potential candidates. The principal and staff meet with the candidates and actively collaborate with the candidates in order to assess the ability of candidates to collaborate and contribute to teacher collaboration teams:

> So, what we do is we do like an initial interview, you know? Maybe just [Principal A] and one other person. And then from there they sort of narrow down like the final two or three candidates, and we actually bring them in for a planning session with us … as the team. So, the person we hired … the planning session, we did with her, we ended up doing that as our first project in the fall.

While the hiring of new staff was a way for the principals to use administrative control to facilitate collaboration, a number of the teachers provided specific references to times in which they, the teachers, were part of the interview teams. This suggests that many of the principals, while exercising their administrative control, felt that gathering the input from teachers was essential in the process and relied on the input to inform their hiring practices.

Scheduling. In their administrative role, all of the principals utilized scheduling as a way to facilitate effective collaboration and develop collaborative relationships to meet organizational needs. Principals in the traditional high schools reported creating common departmental collaboration time, but they also reported pairing class schedules to enable individual teachers to observe other, more experienced teachers. In the academy, the principal scheduled cross-curricular collaboration and grade level collaboration in order to facilitate active collaboration.

Difficult Conversations. When dealing with conflict, the importance of having strong relationships with the teaching staff is incredibly important in maintaining productive yet difficult discussions about performance and collaborative practices. After sharing an anecdote about a teacher who was in conflict with her collaboration team that felt the teacher always needed to be in control and was not allowing others to have a voice, Principal A had to have a difficult conversation with the teacher about the need to not try and control the actions of others on the team. Principal A explained, "I don't think I could have had that conversation with this teacher had I not built that relationship---that I wasn't an agent of change and just coming in and doing." This type of intervention and subsequent "difficult" conversations that would result was reported by the other two principals as well, and they also reported the necessity of having built strong relationships that were based on trust in order to make those "difficult" conversations productive.

The teachers described that in most cases administrative intervention was not necessary to handle conflict that arose, and teachers preferred to handle issues such as conflict amongst themselves. Teacher C provided an example of positional authority control to handle situation in which conflict had arisen and explained that "only one time we got that bad to where I actually asked the administration to come in." Teacher C described how the administrators "came in and they sat in and they listened. And, you know, they did a little bit of mediation," but he added that it was "the only extreme case" and that "we almost always are able to just talk it out, our differences, in collaboration."

While there were aspects shared between the methods of control used by the administrators, one of the most interesting aspects of the research findings was how much

the teachers appreciated the use of "tough conversations" or "difficult" conversations as a means of settling conflict. One of the teachers described using the same tactic within his own collaboration teams and departments in his role as the head of the department, but all of the teachers described specific situations in which they had been a part of difficult conversations (that did not directly involve administrators) as a way to move forward in collaborations.

Summary

The principals in this study were successful instructional leaders who rarely used their positional authority to control the teachers in the schools; instead, they used their positional authority to create an environment which empowered the teachers to meet organizational, departmental, and individual goals. They also focused on building strong relationships with and among staff members that helped them identify and utilize the particular talents, skills, and knowledge of the staff members for the benefit of others.

Principal B provided a strong summary of how both his administrative and instructional leadership roles are inextricable from one another that was similar to the overall views of the other two principals in this study:

> Like, one of my goals when I took a position was 'I want to be the best instructional leader that I can be.' And this individual [referring to another administrator that was not named] said, "No, you just need to be the best LEADER [emphasis added] that you can be. You need to have...you need to drive the vision. You need to drive the culture. You need to form those relationships. The instructional piece … that … that … some of that stuff needs to get filtered

> down to your assistants and to your leadership team." So, I hon … quite honestly, [Interviewer], I certainly...I'm responsible for everything that happens in this place. And I'd like to think that I have my finger on the pulse instructionally, but you are not going to find me out there telling teachers how to teach…And, you know, that...to me...is...that's a professional responsibility. I'm confident that our teachers are working together to find those methods and find those things that they do to bring the best experience to kids. So … So my priority, really, is … I drive the vision. I provide the safe environment. I am responsible for the culture of the building. And that's … that's … that's my job.

In the next chapter, Chapter 5, I will continue analyzing the findings through an interpretation of the findings. I will also explain the limitations of the study and offer my recommendations for future research. Chapter 5 will conclude with a discussion of the implications of my study as well as recommendations for administrators who seek to use collaboration as an instructional tool for increasing the instructional efficacy and learning of teachers.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to understand how suburban high school principals successfully utilize collaboration and collaborative relationships for increasing teacher instructional efficacy and learning. The results of this multiple case study extended the limited knowledge of the methods used by administrators to create, sustain, and evaluate collaborative relationships as well as the underlying assumptions about collaborative relationships held by administrators. The first research question was: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity? I found that building relationships with and among teachers was the fundamental component in successfully using collaborative relationships for this purpose, but I also found that the administrative role of principals was important in creating and sustaining an environment that was conducive to effective collaboration. The second research question was: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?" I found that principals believed that collaboration is a powerful tool for increasing teacher professional development, teacher "buy-in" is very important to successful collaboration to achieve goals, empowered teachers produce positive results, and conflict can be beneficial if strong relationships exist and difficult conversations are not avoided. The third research question was: "What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional

capacity of teachers?" The principals were hesitant to use formal authority as a means of control and motivation and preferred to work with multiple levels of the school organization to create generalized goals that are tailored to fit group and individual needs, empowering teachers by creating a supportive environment for teachers to collaborate to meet those goals, and worked to build understanding and refocus on goals when dealing with conflicts.

In this chapter, I discuss my analysis and evaluation of techniques used by principals to create, sustain, and evaluate successful collaborative relationships. I also discuss and analyze the common thematic assumptions held by the principals regarding collaboration as an instructional tool for increasing the instructional efficacy and learning of teachers. Furthermore, I provide an evaluation of the methods of control and motivation used by the principals in this study within the context of those methods deemed effective in current research studies.

Interpretation of the Findings

To interpret the findings of this study which sought to understand how principals of high-achieving, suburban high schools use collaborative relationships to increase teacher instructional capacity, the results of the three RQs were analyzed in conjunction with their alignment with the conceptual framework and current research that was discussed in the literature review in Chapter 2.

Research Question 1

RQ1 was "How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?" The

results of this question provided a large amount of evidence that the administrators did utilize practices similar to those described in McGregor's (1960/2006) Theory Y, the Tyler rationale (1949/2013), the six principles of andragogy (Knowles et al., 1973/2005), and findings from current research.

Developing Collaborative Relationships

All three principals expressed the importance of building strong relationships with and among their respective teaching staffs, and the teachers agreed that the strong relationships were beneficial to their collaborative relationships. The strong relationships provided the principals with the ability to understand the unique qualities and abilities of their staff members in order to align the needs and motivations of the teachers through collaborative work to develop and reach goals at the organizational and individual levels. The trust and understanding among those in the relationships (principals and teachers) provided the opportunity to have "difficult conversations" when necessary, but they also created a shared enterprise among the teachers and administrators that motivated them and allowed them to utilize the diverse skills and knowledge to solve problems and achieve results. Similar research has described the importance of trust and relationship building for the development of a positive learning environment (Taylor Backor & Gordon, 2015). Professors, teacher leaders, and principals have also described how effective collaboration, teacher engagement, and teacher leadership could be fostered by creating a safe environment where teachers feel safe and their voice heard (DeMatthews, 2015).

Maintaining Collaborative Relationships

The principals in this study reported that teacher empowerment was an important component of both developing and maintaining effective collaborative relationships. This was supported by a 10-year study of 70 teachers within five schools from three communities, which demonstrated that shared leadership and decision-making enabled productive interactions that resulted in teaching practices and learning for the participants (Carpenter, 2018). Empowering the teachers and allowing them to identify needs, develop goals, and creatively find solutions was fundamental to the methods of all three principals and was consistent with the assertions of McGregor (1960/2006), Tyler (1949/2013), and Knowles et al. (1973/2005), who argued that adult learners are creative, resourceful, and motivated to problem solve. This finding is also consistent with current research that found that teacher empowerment was both a motivator for teachers and an effective method of meeting organizational goals (DeMatthews, 2015; Kuh, 2016). The shared enterprise of identifying areas in need of improvement, establishing goals, and collaborative work to achieve those goals was supported by Liu's (2016) study which demonstrated how cooperative work involved in PBLs provided group participants the opportunity to utilize their unique skills and abilities to help solve problems. Cooperative work helped motivate them through the self-respect and self-esteem they achieved as their individual contributions gained them the respect of their peers. The principal and teacher participants all reported how the shared enterprise of problem-solving and collaboration was an important component in reaching organizational and individual goals and also provides a rich environment for teacher professional growth and learning,

which supports McGregor's (1960/2006). Owen's (2014) case study of PBL practices in three schools also supported these findings. In his study, schools where distributed leadership and shared responsibility for collaborative work was evidenced were found to have supportive collegial relationships and transformative learning practices that evidenced teacher professional growth (Owen, 2014), and the responses from the principal and teacher participants in this study confirmed this.

The principals in this study also reported how their administrative role helped them develop and maintain productive collaborative relationships. Other research has also indicated that school principals can facilitate learning opportunities for teachers by utilizing their administrative role (i.e., designing schedules with common planning and collaboration times), though this focused on principal-created goals (Kraft & Gilmour, 2016). This study, however, reported the principal participants believed that principal-created goals (rather than the collaborative effort of creating goals found in this study) and expectations played a major role in the development of a culture of high expectations. The focus on principal-created goals in this study was not supported by many of the other studies or the current study (DeMatthews, 2015; Goldring et al., 2015; Kuh, 2016; Owen, 2014). In line with the findings of my study, research has indicated that that learning opportunities can involve designing schedules with common planning times, creating opportunities for teachers to collaborate and observe one another, and setting the goals and expectations within the school, which play a major role in the development of a culture of high expectations (Buttram & Farley-Ripple, 2016; Kraft & Gilmour, 2016). Setting high expectations alone for collaboration can result in a

dysfunctional educational environment if teacher professional development and supportive resources are not provided for capacity-building (Buttram & Farley-Ripple, 2016; Fullan, 2014; Hargreaves & Fullan, 2012; McGregor, 1960/2006). All of these principals in the current study described how they held high expectations for their respective staffs but made sure to use the professional capital of their teaching staff to increase teacher learning and administrative roles to allocate time and other resources to dedicate to collaboration.

Evaluation

The principals in this study all preferred to use the relationships they developed with their staff members as an evaluation tool rather than formal value-added measures from formal teacher evaluations to inform their evaluations of the effectiveness of collaborations and to make their human capital decisions (e.g., scheduling, leadership roles, professional development). This finding was supported by a number of studies that found that principals preferred to use observation data to focus on long-term teacher growth supported by professional development aligned with teacher needs rather than state or district-created traditional evaluation instruments (Goldring et al., 2015; Taylor Backor & Gordon, 2015). Principal A reported using observation in the actual hiring practice of potential teachers who were asked to work collaboratively with teachers at the school to design a learning experience, and all three of the principals described how the relationships that they had with their staff informed their understanding of the needs of their respective schools and was used to inform their hiring of new teachers. In particular, both Teacher A1 and Teacher A2 felt the hiring process at the academy, which included

the observation of and participation in collaboration with other teachers, to be extremely useful in finding teachers who would collaborate effectively. This was also supported by research suggesting that observational data are used by principals to help inform their hiring practices (Goldring et al., 2015).

None of the participants in this study reported using any formal evaluation as a means to determine specifically if targets were met, but they did informally evaluate efforts to meet goals and instead focused on using these informal evaluations to make decisions on how to achieve the goals and viewed evaluations as opportunities to foster on-going and continuous growth. The effectiveness of this strategy is supported by both the conceptual framework and current literature. The third component of andragogy according to Knowles et al. (1973/2005), which also relates to McGregor's (1960/2006) Theory Y, is that adult learners require the ability to have a level of involvement and responsibility for their learning. The principals in this study reported (and this was confirmed by the teacher participants) that they largely relied on the professionalism of the teachers to self-evaluate and problem solve to reach goals. This gave the teachers the responsibility of understanding and assessing their own abilities, skills, and learning while providing them with a high level of involvement and responsibility in their development and learning. This finding was also supported by Prelli (2016) and Goddard et al. (2015), who suggested that schools that already display strong efficacy should instead focus on empowering teachers and creating leadership teams that capitalize on the expertise and best practices of teachers and teams to continue to grow. Principals also need to have knowledge about effective instructional practices and assessments, work

with teachers to find ways to improve instructional practices, and support the collective efforts of teachers to improve school formal structures (Goddard et al., 2015), which aligns with the ways principals and teachers interviewed for this study work cooperatively to develop goals and support teacher professional growth.

Research Questions 2 and 3

The findings that resulted from RQs 2 and 3 were in close alignment with one another and were both supported by the conceptual framework and current literature. McGregor (1960/2006) believed that the underlying assumptions about employee motivations drove the decision-making of managers, and the results of this study were aligned with his view. The major assumptions of the principals also were in line with Theory Y underlying assumptions which led to managers aligning the motivation and goals of the employees with the overall organizational goals as a method of control and motivation that was in opposition to the authoritarian, top-down style management decisions described under Theory X. Both of these were found to be true in this study as demonstrated by the underlying assumptions about the benefits of collaboration and how a shared enterprise based on an alignment of organizational and individual goals formed the basis of the instructional and administrative leadership of the principals in this study.

For example, one of the most interesting findings of this study was the value that teacher participants put on the "tough conversations" that administrators would occasionally have in order to resolve conflicts. The principals all felt that they were necessary and helped the process of continual growth and learning, and all of the teacher participants were grateful for the open and honest nature of the "tough conversations"

and appreciated the growth that would occur. The teachers reported that they felt "tough conversations" were instrumental to successfully resolve conflict within their own departmental and collaboration teams. This finding was also supported by the conceptual framework in that McGregor (1960/2006) pointed out that an employee would understand when a manager operating under Theory Y leadership intervenes because of the commitment to goals and the openness of the information. This concurred research that found that principals and teacher leaders who utilize divergent positions and negotiate conflict effectively can facilitate teacher professional growth and learning by moving PLCs beyond contrived collegiality and into open, honest, and productive conversations that conflict can create (Owen, 2014). Administrators who have effective communication skills can be more successful in helping stakeholders understand school goals, supporting collegial relationships, and meeting other instructional aspects, but it is also important to communicate without threat (Taylor Backor & Gordon, 2015). One participant in Taylor Backor and Gordon's (2015) study explained the importance of administrators who are able to ask questions effectively, paraphrase ideas of others, describe, and discuss ideas with others, and this was how the principals in my study described how they handled conflict (which was supported by the responses of the teacher participants). The principals and teachers in this study described a number of different scenarios in which conflict arose, but one of the common attributes that the principals reported was most of the conflicts seemed larger than they actually were because the actual conflicts were generally rooted in a few minor details that had derailed the collaboration. Once these details were pulled out into the open and the conflicting

parties voices were heard, the principals and teachers would work together to negotiate or navigate around the sources of contention. The teachers agreed, but three of the teachers reported that it was often necessary to stop when conflict halted effective collaboration, but they explained that the points of conflict would be revisited at a later time. This process allowed everyone involved a chance to refocus on the greater goals and arrive at a workable solution.

This finding supported Underlying Thematic Assumption 4 that conflict is inevitable and essential, but also supports the power of collaboration as a powerful tool for increasing teacher efficacy and learning (Underlying Thematic Assumption 1). Many studies and researchers have concluded that collaboration is an effective tool for teacher professional development and learning (Buttram & Farley-Ripple, 2016; Goddard et al., 2015; Gray & Lewis, 2013; Kuh, 2016; Meredith et al., 2017; Nicholson et al., 2016). The principals and teachers interviewed for this study overwhelmingly agreed with this finding and provided many instances in which collaborative efforts were instrumental in meeting organizational and personal goals.

This finding also helped explain why all of the principals and three of the four teachers explained what was found to be Underlying Thematic Assumption 2 which was the "importance of buy-in" of the teachers in regards to overall organizational goals as well as individual and departmental goals. The importance of buy-in was supported by research that found that schools where top-down leadership poorly communicated goals and focused on teacher accountability reported greater teacher frustration and low teacher investment than did schools that implemented shared decision-making and leadership

(Carpenter, 2018). Those schools that did have shared leadership and teacher empowerment were shown to have productive and intellectual interactions that resulted in greater participation, teachers taking more responsibility for goal attainment, and more incidences of innovative teaching and learning (Carpenter, 2018).

Limitations of the Study

There were a number of limitations to my study. The generalizability of the study was limited by a number of factors. First, the scope of the cases studied, a single suburban school district in Ohio, does not allow the findings to be generalized. Also, the number of cases studied is far too small to be generalizable, and more research involving many more participants and schools would need to be conducted for this to occur. Furthermore, most schools do not have similar demographics or similar collaboration time built into their existing schedules for the results to be generalizable.

Another limitation to the study is that there was a potential for researcher bias because I was the only researcher conducting this multiple-case study (Merriam & Tisdell, 2016; Yin, 2014). To decrease the likelihood that this would affect the results of this study, I journaled my own values and biases and made sure to disclose my own role as a teacher within the district and experiences with collaboration (Merriam & Tisdell, 2016; Patton, 2002; Yin, 2014). I also triangulated my data using multiple participants and utilized member checking to ensure that the interviews contained data that was supported by multiple sources to increase the accuracy and construct validity (Stake, 1995; Yin, 2014).

Recommendations

The results of this study suggest a need for further research in two areas. One area in need of further research is the impact of the frequency and amount of time necessary for teachers to effectively collaborate. Collaboration time and frequency varies from school to school, and while this particular district prioritizes collaboration and makes it a part of almost every school day, most schools do not provide the time and resources to support daily collaboration opportunities. The generalizability of this study is limited due to the differences in collaboration schedules among schools; therefore, studying how variances in time, frequency, space, and resources dedicated to teacher collaboration affects the quality of teacher collaboration could be used to help determine the necessary conditions for effective collaboration to occur.

A second area in need of further research is how principals successfully utilize collaborative relationship for teacher learning and professional development in schools that are located in either rural or inner-city areas. The generalizability of this study was limited by the scope of the cases studied, and principals that successfully use collaborative relationships in schools whose student populations represent diverse economic, ethnic, and racial demographics also will need to be studied to see how those differences may affect the efficacy of collaboration to support teacher efficacy and learning in order to increase student growth and development.

Implications

Implications for Positive Social Change

This study has contributed to existing research and may have several implications for social change on the organizational, individual, and societal levels by providing a better understanding of how administrators and teacher-leaders can support the development of high-quality instruction by teachers for the purposes of student learning and development through the use of collaborative relationships. First, the findings of this study can be used to address needed additions to principal instructional leadership development programs (Gray & Lewis, 2013; Ioannidou-Koutselini & Patsalidou, 2015) by providing information that can be used to develop training that focuses on how to successfully develop, maintain, and evaluate a successful collaborative environment for the purposes of increasing teacher learning and professional development.

The findings could also be used to help develop ways to address one of the main reasons for high teacher-turnover rates that disproportionately affect high-need student populations: unsupportive work environments (Allen et al., 2018; Hargreaves & Fullan, 2012; Lee, 2019). On an individual level, these findings could be used to help support the social, emotional, and professional growth and development of individual teachers, but the findings of this study could also benefit school organizations and society as a whole. Providing a strong, supportive, collaborative environment for new and struggling teachers could decrease teacher turnover and allow those teachers the time necessary to develop into high-quality, experienced teachers that can provide students with the greatest needs better access to high-quality educators in supportive school cultures.

Finally, these findings can be used to develop strategies to help administrators and teacher leaders understand and utilize conflict and "tough conversations" to facilitate understanding that increases teacher learning and growth. Conflict, if not addressed correctly in a manner that opens dialogue lines of communication to further understanding and teacher learning, can limit collaborative relationships and their ability to benefit teacher professional development and indirectly hamper student growth. Also, employing productive strategies that negate the negatives associated with conflict and instead can create a more positive school culture that empowers individuals will likely lead to a better use of the professional capital of teachers.

Theoretical Implications

This multiple-case study confirms a connection between the organizational management theories as proposed by McGregor (1960/2006) in the context of the school organization. Perhaps this study could have implications for using more organizational development theories in the field of education. It stands to reason that the hierarchical nature of many schools and the organizational goals is similar to other organizations, so it is likely that the theories that underlie other disciplines may also have merit for educational research.

Conclusion

The benefits of teacher collaboration cannot be understated, and it is imperative that schools develop school cultures that support collaboration and employ effective strategies to empower teacher professional development and learning to help ensure that all students have access to high-quality teachers who provide high-quality education to

students. The instructional and administrative leadership of school administrators is essential in developing school environments that utilize the professional capital of teachers effectively. If the potential benefits of collaboration are to be achieved, there needs to be a profound shift in the way school instructional leadership is viewed and practiced within schools. Rather than putting more responsibility on the shoulders of principals to be the instructional leaders of their schools, the position of the principal needs to be reimagined into a facilitative role that uses their authority to delegate responsibility for instructional leadership to collaboration teams and individual teacher leaders. The role of the principal should be one in which teachers and administrators work collaboratively to develop the professional capital of teachers through the creation of supportive school environments where there is a shared responsibility in the growth and learning of all the individuals within the school organization.

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Appendix A: Interview Protocol with Semi-Structured Interview Questions

The following four-section case study protocol is based on Yin's (2014) protocol:

A: Overview of the Multiple-Case Study

1) The goal of this multiple-case study is to understand how and why principals, as instructional leaders, use collaborative relationships to increase instructional capacity.
2) Research Questions:
   i) RQ1—Qualitative: How do principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity?
   ii) RQ2—Qualitative: What are the underlying thematic assumptions about teacher leadership and collaboration held by principals as they develop, maintain, and evaluate collaborative relationships to increase the instructional capacity of teachers within a high-achieving, suburban high school?
   iii) RQ3—Qualitative: What are the methods of control and motivation used by principals to develop or maintain collaborative relationships to increase the instructional capacity of teachers?
3) Conceptual Framework: A synthesis of the organizational development theories of McGregor, the adult learning theory of Knowles, and the Tyler rationale will serve as the conceptual framework and basis for the research questions.
4) Role of the Protocol: The protocol for this study is designed to decrease bias and ensure that ethical procedures are followed to increase the reliability and validity of the study.

B: Data Collection Procedures

1) Thank participant for participation
2) Present credentials
3) Provide participants with the semi-structured questions
4) Ask permission to record the interview and then begin recording when permission is received
5) Conduct the interview
6) Thank the participant for his/her time, participation, and willingness to openly share.
7) Turn off recording device
8) Provide the participant with contact information and IRB documents.
9) Write up a facsimile of the interview with commentary.

C: Data Collection Questions

1) Demographic questions for administrators:
   a. Please state you name, age, and current job title or position.
   b. How long have you been a principal at your current assignment (school)?
   c. Please briefly describe the administrative positions you have held at this location and others as well as the length of time in those positions.
2) Demographic questions for teachers:

   a. Please state your name, age, and current job title or position including the subject area(s) you teach.
   b. How long have you been a teacher at your current assignment (school and/or district)?
   c. If you have worked as a teacher at other schools or districts, please briefly describe the job title or position as well as the length of time of employment.
3) Please describe the collaborative relationships within your school that are designed for increasing the instructional capacity of teachers?
4) In the instructional leadership capacity, what are the instructional goals (or vision) you have for collaboration within your schools?
   a. How do you create the instructional goals for collaborative relationships?
   b. How do state and federal mandates affect the creation of instructional goals for collaborative relationships within your school?
   c. What role does collaboration with teachers and teacher-leaders have in the creation of the instructional goals for collaborative relationships?
5) Please describe your thoughts on collaborative relationships as a means of increasing teacher instructional capacity?
6) How do you manage resources and time to facilitate collaborative relationships for the purposes of increasing the instructional capacity of your school?
7) Within your school, how do you create and/or develop collaborative relationships with and among the teachers in your school?
8) How effective is collaboration for the purposes of increasing the instructional capacity of teachers?
9) How do you evaluate the efficacy of the collaborative relationships you have created or sustained for the purposes of increasing the instructional capacity of teachers within your school?
10) What are the challenges and obstacles you face as an instructional leader in regards to creating and sustaining collaborative relationships for the purposes of increasing the instructional capacity of your teachers?
   a. What are the methods you use to overcome or meet the challenges?
   b. What has been the most effective methods(s)? The least effective method(s)?
11) Is there anything else you would like to add about using collaborative relationships to increase the instructional capacity of teachers?

D: Guide for the Case Study Report

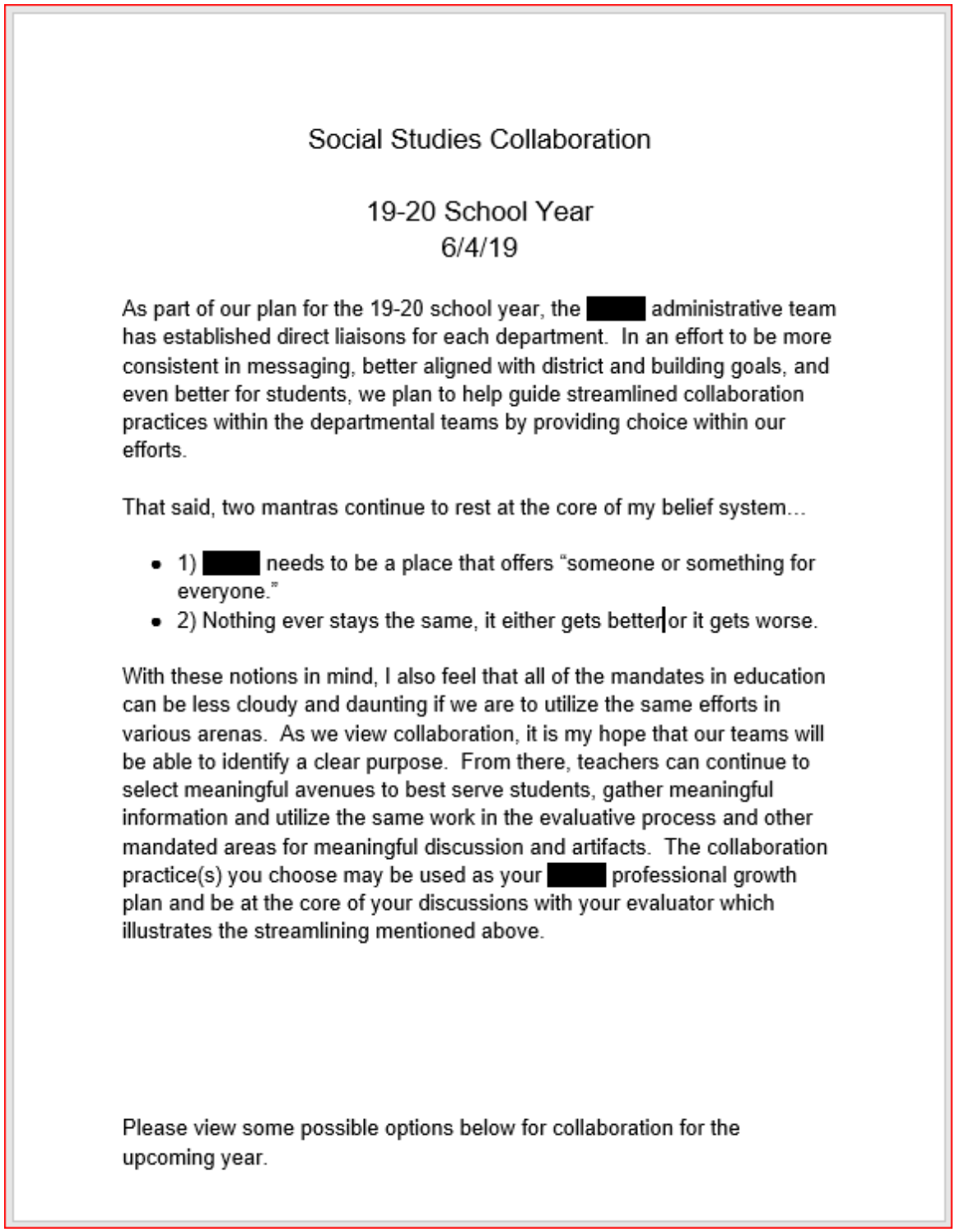
1) Available documents (with annotations)
2) Write-up for my preliminary thoughts and experiences during the interview

Appendix B: Script Prior to Interview

Script prior to interview:
I'd like to thank you once again for being a participant in my study. As I have mentioned before, my study seeks to understand how successful principals develop, maintain, and evaluate collaborative relationships as an instructional tool to increase teacher instructional capacity. This study also seeks to understand how successful principals view teacher leadership and collaboration as well as they foster collaboration for these purposes. The goal of this research is to understand how successful principals develop and maintain collaborative relationships in order to increase the instructional capacity of teachers within their schools, and this information may be useful to inform principal preparation programs and the development of collaborative relationships. Our interview today will last approximately 30-45 minutes during which I will ask you about your views, experiences, methods, and goals in regards to collaboration as a means of increasing the instructional capacity of teachers.

[review aspects of consent form]
Earlier you completed a consent form indicating that I have your permission (or not) to audio record our conversation. Are you still ok with me recording (or not) our conversation today? ___Yes ___No
If yes: *Thank you! Please let me know if at any point you want me to turn off the recorder or keep something you said off the record.*
If no: *Thank you for letting me know. I will only take notes of our conversation.*
Before we begin the interview, do you have any questions? [Discuss questions]
If any questions (or other questions) arise at any point in this study, may ask them at any time. I would be more than happy to answer your questions. Here is a copy of the interview questions that I will be following [give copy of the semi-structured interview questions] *before we begin.*
[conduct the semi-structured interview]
Thank you for taking the time to provide me with this interview and for your willingness to openly share.
[turn off the recording device]
If you have any questions or would like to add anything at a later time, please contact me at [provide the participant with contact information and IRB documents].
[write up a facsimile of the interview with commentary]

Appendix C: Screenshot of a Collaborative Goal Statement Provided by Participant



Social Studies Collaboration

19-20 School Year
6/4/19

As part of our plan for the 19-20 school year, the [redacted] administrative team has established direct liaisons for each department. In an effort to be more consistent in messaging, better aligned with district and building goals, and even better for students, we plan to help guide streamlined collaboration practices within the departmental teams by providing choice within our efforts.

That said, two mantras continue to rest at the core of my belief system…

- 1) [redacted] needs to be a place that offers "someone or something for everyone."
- 2) Nothing ever stays the same, it either gets better or it gets worse.

With these notions in mind, I also feel that all of the mandates in education can be less cloudy and daunting if we are to utilize the same efforts in various arenas. As we view collaboration, it is my hope that our teams will be able to identify a clear purpose. From there, teachers can continue to select meaningful avenues to best serve students, gather meaningful information and utilize the same work in the evaluative process and other mandated areas for meaningful discussion and artifacts. The collaboration practice(s) you choose may be used as your [redacted] professional growth plan and be at the core of your discussions with your evaluator which illustrates the streamlining mentioned above.

Please view some possible options below for collaboration for the upcoming year.

1) **Create Quarterly Plans for improvement** - Hone in on four ideas (1 topic per quarter) using your year long plan to examine areas of low performance. As a team develop enhanced lesson plans, assessment strategies and intervention strategies for growth. You may rest your focus on past practice, specific standards, testing data or any desired area to improve your course. Anything we can do to get better will be good for our students.

2) **Develop Literacy Skills** - Create a literacy skill-builder such as an argumentative writing initiative. Social Studies is an ideal platform to foster the growth of students by teaching them the art of stating claims, and offering evidence as supports, through writing and speaking. Reading would also be enhanced as students could draw from various excerpts to form opinions throughout the process. Using history/social studies as a vehicle to enhance literacy would be especially valuable to students. I have always believed that literacy skills are among the most important life skills we will use. I like the idea of a DBQ focus here.

3) **Implement Daily Mental Wellness/Well-Being Tips** - As we are all aware, many students struggle with the grind of balancing school and life. Last year, we created a student panel for the "Think Tank" and the group was highly touted across the district for the messages they conveyed. Perhaps the best part of their presentation, "If my teachers only knew", centered on mental health awareness. Our students clearly stated two things on this topic.
   a) Many students are overwhelmed and stressed.
   b) Students appreciate when they sense teachers truly understand these struggles and when they go the extra mile to help us find solutions and cope with it.

   This type of collaborative effort could be a huge statement to our students that we recognize and care about the students in and out of class.

4) **Improved Assessment Strategies** - Do you have any desire to more closely examine how you're assessing your students? If so, you and your collaborative team could dive into topics such as standards based grading or other methods for more meaningful assessment of

student learning. This could be a great experience for adults. I understand that a few of you are already working in this arena.

5) **YOU PICK** - The four options above are simply ideas for school improvement and are the tip of the iceberg when it comes to the possibilities surrounding collaboration. The staff at [redacted], and in social studies, is beyond solid. What do you want/need to do in your collaboration practices to better serve students?

To keep a record of the collaboration, digital files will be created for documentation. Some collaborative teams already have them. Here, implemented teaching strategies, artifacts, bullet pointed agendas / minutes, and assessments etc. can be stored as artifacts for [redacted] and other professional responsibilities.