# A PHENOMENOLOGICAL STUDY 

## By

## Meredith Wendel

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

Middle Tennessee State University
March 2022

Dissertation Committee:
Dr. Kevin Krahenbuhl, Chair

Dr. Ryan Korstange
Dr. Lando Carter

Dr. Angela Hooser
Dr. Heather Dillard

This is dedicated to my mom and dad who always told me I could do anything and then supported me the whole way.

## ACKNOWLEDGMENTS

I would like to express my deepest gratitude to Dr. Ryan Korstange. Your support and guidance throughout this process made all this possible. I truly appreciate the many hours you devoted to meeting with me, editing my writing, and challenging my thoughts and ideas in the best way. You pushed me to write more clearly and to think more deeply and I have learned so much from working with you.

I am grateful to my committee and professors in the ALSI program. A sincere thank you to my committee members, Dr. Carter, Dr. Dillard, Dr. Hooser, and Dr. Krahenbuhl for your thoughtful feedback and support. This was a journey of learning and growth for me which was made possible because of your wisdom and guidance.

Any successes in life takes a village and I am very fortunate to have two significant villages that have sprung from friendships forged in Nashville and in Miami who have encouraged me and helped me in many more ways than can be expressed here. I am forever grateful for our life-long friendship and for all the support I have received over the years on this endeavor and many others.

When I first considered entering this program, the first person I talked to was my dad, John Wendel. I knew it would be impossible without his emotional and physical support. Thank you for encouraging me and doing everything that was needed to make this a reality. For this, and for you, I am forever grateful.

I am most thankful every day for my daughters, Emilia and Caroline. You are my sun, and I am amazed by you both every day. Thank you for the constant encouragement and your understanding when I couldn't do something because of school. I love both of you more than you will ever know.


#### Abstract

When teachers collaborate, they amass collective expertise and develop pedagogical content knowledge. Teacher collaboration is often a school priority because of its positive impact on student achievement, teacher efficacy, and teacher satisfaction. Schools also have complex systems in place that impact the effectiveness of teacher collaboration. This study explores six teachers' perceptions of their collaboration with peers and how it is supported or weakened by the organization of school structures, the leadership system, and the evaluation system implemented at their school.

Three school sites were purposefully chosen for their expectation that teachers engage in collaboration and their different approaches to organizing time for teacher collaboration. One school allocated ninety minutes of daily non-instructional time plus ninety extra minutes one day per week for teacher collaboration. The second school follows the PLC guidelines set by Dufour and colleagues (2016) and allocates fifty minutes of daily non-instructional time and an additional sixty minutes per week specifically for content area PLCs to occur. The third school allots fifty-five minutes for non-instructional time and has no additional time set aside during the week. Two teachers at each school were interviewed using Seidman's (2013) guidelines for conducting phenomenological interviews.

The teachers revealed that the organizational structures and leadership of their schools had a greater impact than their yearly evaluations, which they saw as having little to no impact on their collaboration with other teachers. The teachers cited trust, particularly relational trust developed with their colleagues and the trust from their leadership, as a major support to the success of their collaboration. Time and the resistance towards collaboration from other teachers were seen as the biggest barriers to effectively collaborating with one's peers.


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## CHAPTER I: INTRODUCTION

"Those who can, do. Those who teach, understand" (Shulman, 1986, p.14). Teaching requires much more than deeply knowing the content of the subject you teach. It also demands more than the knowledge and application of pedagogical strategies and the ability to lesson plan. Teaching requires a complex set of knowledge, skills, and strategies that are learned in a multitude of ways. Teachers attend preparation programs in college or, in what has been the trend in recent years, attend post-college programs that prepare new teachers to teach in job embedded programs, the most well-known being Teach for America. The traditional model focuses more on providing the prospective teacher with a base of core knowledge rather than classroom experience while the other model forgoes building the intensive foundational knowledge base through class work for direct experience in teaching that is often missing from traditional programs.

While novice teachers learn how to teach in both these models, they each provide an imbalance in the teacher's learning. Mastering the art and craft of teaching takes much more than mastery of content knowledge or pedagogy; it takes building what Shulman calls pedagogical content knowledge, or PCK (Shulman, 1986). According to Shulman, a professional who has developed PCK "is capable not only of practicing and understanding his or her craft, but of communicating the reason for professional decisions and actions to others" (Shulman, 1986, p. 13).

Shulman (1986) contends that teacher preparation programs are teaching an imbalance of pedagogical knowledge over content knowledge and that puts the learning of the students they teach at a deficit. For teachers to be effective they need to have a
deep understanding of both their subject-matter, defined broadly as content knowledge, as well as a mastery of pedagogical strategies. For Shulman, there are several layers of content knowledge and pedagogy that teachers must learn. For example, content knowledge involves not only knowing the major topics of the subject but also having curricular knowledge and knowledge of the teaching and learning outcomes related to the subject (Solis, 2009). Likewise, pedagogical knowledge is more than simply learning a discreet set of teaching strategies. It also involves having knowledge of educational contexts and the purposes of education (Solis, 2009). Pedagogical content knowledge is the marriage of all these layers of content and pedagogical knowledge that allow the educator to transform students and facilitate learning. For this learning to occur, teachers must not only know the concepts and content but also must understand "the ways of representing and formulating subject matter that make it comprehensible to others" (Gess-Newsome \& Lederman, 2001, p.16). The required knowledge goes far beyond simply learning isolated teaching strategies and practices or being an expert in a certain subject.

In Focus (2018), Schmoker supports Shulman when he says that teaching is essentially knowing what to teach and how to teach it. This is Shulman's pedagogical content knowledge in its simplest form. Schmoker also tells us that everyone in any organization should know what to do and what not do. However, the ability to know what to do and what not to do is not something learned overnight and cannot be learned exclusively in a teacher preparation program no matter the model. Experiences in the classroom and interactions with colleagues provide a critical step in a teacher's education.

Further, interacting with students and teachers is an ongoing process that continues a teacher's professional development throughout his/her career. Job-embedded training will occur whether it is intentional or not. The role of the school and its leadership is to ensure that this informal training becomes more formal by intentionally and systematically creating a culture of organizational learning that nurtures growth in both content and pedagogy. Using effective collaboration practices is one way to help teachers develop their pedagogical content knowledge and correct the imbalance of too much isolated strategy instruction disconnected from content.

Of course, schools regularly provide professional development for their teachers. However, research has shown that the ubiquitous "one and done" professional development sessions do not actually help grow teacher knowledge or ability (DarlingHammond, Hyler, \& Gardner, 2017). Rather, Darling-Hammond and Richardson (2009) have crafted a new definition of effective professional development as one the rejects the old method of isolated workshops and embraces a focus on "content, context, and design" (p. 46). They contend that effective teacher professional development should be focused on student learning, integrated within a school's improvement reform, and designed for active sustained teacher learning (Darling-Hammond \& Richardson, 2009). Adopting a school model that prioritizes teacher collaboration is an approach that embraces all of Darling-Hammond and Richardson's recommendations. In a study by Goddard, Goddard, \& Tschannen-Moran (2007) schools with greater collaboration were shown to have significantly higher levels of student achievement. They also found that collaboration causes teachers to learn how to improve their instructional practice by
sharing their collective expertise (Goddard, Goddard, \& Tschannen-Moran, 2007). This is an example of Senge's organizational learning in practice (2006).

Teacher collaboration can be intentionally supported in a school with the creation of communities of practice. A community of practice is one in which its members learn together as an organization in order achieve the shared goal of improving student learning. By participating in a community of practice, teachers are focused on student achievement in direct relation to their own instructional practices and that of their colleagues. Through this intentional work, teachers are able to collaborate to achieve highly effective pedagogical content knowledge and, in turn, better student achievement.

Choosing to become or transform into a community of practice is not enough, however. Schools are comprised of interconnected systems. For fundamental change to occur, each system needs to be analyzed and altered. The way that the current systems are producing the current results must be determined before those systems can be changed to create effective collaborative communities of practice that will improve learning for all.

Communities of practice create different kinds of systems within a school such as distributive leadership that empowers teacher ownership over their own practice and professional development and organizational structures such as common planning time and protocols that value teacher voices. Simply inserting a new collaborative model into the old systems will not produce the outcomes needed. School leaders and organizers must adopt what Senge refers to as systems thinking (2006). When applied in a school setting, a systems-thinking approach will create the conditions needed to produce
exponential growth for teachers, students, and the school community as a whole by supporting and enhancing teacher collaboration.

This dissertation looks specifically at teacher collaboration, and the organizational structures that support or prevent effective collaboration. In the review of literature, I will show that the research supports teacher collaboration as a valid method of professional development and will increase a teacher's pedagogical content knowledge. This is widely known research, and the findings encourage a look deeper into why then, if it is demonstrably effective, that collaboration is not more widely embraced or effectively implemented for teachers. Because so many decisions that are made about the daily life of teachers and students in a school are not made by the teachers themselves, their perspective on how collaboration could be supported and fostered in school community is of great importance.

## Statement of Purpose

This phenomenological study is an exploration of organizational structures in middle schools that support or prevent effective collaboration. Because collaboration is a critical gateway for teachers to achieving high levels of pedagogical content knowledge, then it is important to know what school structures facilitate and detract from creating effective professional learning communities in a school. In an extensive longitudinal study in the Chicago Public School system conducted between 1990 and 2005 over one hundred elementary schools were studied to examine "the complex interplay of how schools are organized and interact with the local community to alter dramatically the odds for improving student achievement" (Bryk, 2010, p.24). A major finding of this study was the explicit connection between how schools are organized and its impact on student
achievement (Bryk, 2010). How a teacher perceives and experiences the organizational decisions often made by district or school administrative personnel is important because these decisions affect their access and ability to engage in effective collaboration with their peers.

This study will add to current research, as well as inform school leaders and teams on the structures needed for schools to enhance collaborative practices amongst teaching teams and, in turn, increase teacher collegiality and student achievement (Goddard, Goddard \& Tschannen-Moran, 2007; Johnson, Kraft, \& Papay, 2012). Effective teacher collaboration ensures equitable learning experiences for all students, so the implications of this study are many. The findings can be used by school and district leaders to learn how the decisions they make impact teacher collaboration and student learning. The findings could also impact the choices school leaders make regarding professional development. Many leaders still see teacher collaboration as distinct from professional development. Teacher perceptions in this regard will help leaders to imbed practices more effectively into daily school systems to support organizational learning. It will also help them to eliminate ineffective practices and structures that impede collaboration.

Additionally, the findings will help teachers. There has been extensive research done on collaboration and its impact on student and teacher learning, but little attention has been paid to actual teacher perceptions on the topic. Through their descriptions of their experiences a narrative will form about how teachers negotiate their learning in a system formed and lead by others.

The findings of this study could also be useful to teacher educators who are preparing new teachers for a career in education. The findings will inform educators of ways to
teach effective collaborative practices to pre-service teachers, as well as how future educators can create systems in their schools that will support their growth in attaining pedagogical content knowledge.

On a personal note, this study will increase my own body of knowledge around collaboration and how school structures have affected my own experiences with both successful and unsuccessful collaborations with colleagues. As a teacher-leader, this research will inform my understandings about how teachers perceive collaboration within the system they work. This will help me as a leader to provide and change systems so teachers have access to and can successfully implement collaborative practices that influence their instruction and, in turn, student achievement.

## Research Questions

Given the important role collaboration can play in helping teachers attain pedagogical content knowledge, it is important to understand the technical and structural systems that both support and prevent effective collaboration. Therefore, the purpose of this study is to explore what teachers in collaborative settings experience as supports and barriers in regard to school structures involving leadership, evaluation systems and the daily organizational systems of the school. This qualitative study will examine the phenomenon of collaboration by exploring the following central question:

1. How do a teacher's perceptions of a school's organizational, leadership, and evaluative systems support or prevent access to, and engagement in, effective collaboration with other teachers?

## CHAPTER II: LITERATURE REVIEW

To orient this study, first I will review the literature on teacher collaboration and its impact on student achievement, teacher efficacy, and teacher satisfaction. Next, I will describe the qualities of effective and ineffective teacher collaboration. This description will include a survey of two collaborative models each of which is a modification of a community of practice, a catch-all term referring to school-wide initiatives centered around creating effective collaborative cultures. This section is pertinent to any discussion of teacher collaboration because many school structures support the act of simply creating systems that compel teachers to collaborate without providing the support to make them effective. Finally, I will end this chapter with a review of organizational structures that create the environment in which teachers must function and perform in their daily work lives. This will include a brief discussion on the importance of building cultures of relational trust of which collaborative practices can be a conduit, as well as a review of the literature on leadership systems that support effective teacher collaboration.

Collaboration has become a school-wide method for reform and improvement because of its positive affect on student achievement, teacher efficacy, and job satisfaction. For schools to reform their practices to increase student achievement, they must ensure that teachers have "time for sustained collaborative reflection on school practice conditions and events" (Raywid, 1993, p. 30). Time is essential because it is "when communities of practice collectively engage in high-quality dialogue, decision making, action, and evaluation around a shared purpose, that schools increase their capacity to achieve unprecedented improvements in student learning" (Gajda and Koliba, 2008, p. 149). So much of the focus tends to be what is happening during instruction,
when what a teacher does outside the classroom is as important as what happens in the classroom (Louis, Marks, \& Kruse, 1996). Looking at non-instructional aspects of teaching addresses what is often ignored when structures, such as schedules, staffing, and the student-teacher ratio, are decided upon that do not allow a teacher enough opportunity and time to effectively do the work that ensures student learning. If teachers are to truly put student learning first, time must be created for them to collaborate, provide feedback, analyze student data, and create impactful lessons that address a multitude of student needs.

To understand the school structures that support collaborative practices and those that create barriers that limit or prevent collaboration, one must first establish that collaboration is worth doing. Collaboration, as it is used in education, includes a wide range of practices from teachers simply sharing out in a group to a highly structured process with a defined framework and set of goals. When a school decides to incorporate collaborative practices into its systems, decisions are made concerning how it will be implemented and integrated into the school's already existing systems. In the overall structure of a school, its organization, leadership, and evaluation system are interwoven in the day-to-day operation of a school, therefore making it hard to see these overlapping systems as separate entities. For the purpose of this literature review, I am going to treat each system separately because the main purpose of this study is to explore how teachers perceive these structures in supporting or deterring effective collaboration at their schools. Treating these systems separately will increase my ability to understand how these systems interact with one another and effect the teacher's ability to collaborate effectively.

## Collaboration

Collaboration, as a widely known and formally implemented practice in educational settings, has not been around for very long. Teaching has long been seen as an isolated practice in which the teacher is the lone leader and practitioner in their individual classroom. American education has been characterized by this individualist approach until around the late 1980s to early 1990s when collaboration as a school-wide strategy for reform began to emerge (Hargreaves \& O’Connor, 2017). During this time, teacher isolation and individualism persisted, but as research began to recognize that collaboration had a positive effect on collegial relations and student achievement, collaboration became more commonplace in schools (Hargreaves \& O’Connor, 2017). As the research literature has matured, it has become clear that collaboration has a significant impact on student achievement, teacher efficacy, and teacher satisfaction. Further, features that distinguish effective from ineffective collaboration have been identified. The next subsections of this review will survey the major studies pointing to these substantial benefits of teacher collaboration.

Impact on Student Achievement. With the rise of federally mandated standardized testing in the No Child Left Behind Era and its continuance through the Every Student Succeeds Act (ESSA), student achievement today is largely measured by how well students do on end of the year state achievement tests. Collaborative practices in schools encourage teachers to focus on issues concerning their students and improving their achievement by focusing on improving instructional practices. The purpose of a large-scale study conducted by Goddard, Goddard, and Tschannen-Moran in 2007 was to investigate whether teacher collaboration could positively predict higher levels of student
achievement. This empirical study used forty-seven elementary schools with 452 teachers and 2,536 fourth-grade students in an urban district in the midwestern United States. What the researchers determined was that the fourth-grade students statistically had higher achievement in reading and math when they attended schools with higher levels of teacher collaboration. They conclude, "teacher collaboration was a statistically significant predictor of variability among schools in both math and reading achievement" (Goddard, Goddard, \& Tchannen-Moran, 2007, p. 889). This conclusion explicitly connects teacher collaborative practices with improving student achievement. Other research confirms and expands these results and shows that schools with stronger collaborative practices for teachers overall have significantly higher levels of achievement (Ronfeldt, Farmer, McQueen, \& Grissom, 2015).

Higher levels of collaboration include both the amount of time dedicated to collaboration among teachers, as well as the content of the collaboration. A study by Flowers, Mertens and Mulhall (1999) found that both the amount of time dedicated to collaboration during the school week and the number of years teachers have been engaged in collaborative practice matters in improving student outcomes. In their study, which included 155 schools in Michigan, the schools were rated as either having teaming with high levels of common planning time, teaming with low levels or no common planning time and schools without teaming (Flowers, Mertens, \& Mulhall, 1999). Common planning time is when a school schedule is adjusted to allow teachers with the same students to have the same period free of students to allow them time in the school day to meet. To determine the impact of teaming and the use of common planning time, Flowers, Mertens, \& Mulhall (1999) conducted self-study surveys and phone interviews
and then compared the teacher reported data with two-years of achievement data from the Michigan state standardized test. They found that the schools that engaged in teacher teaming and provided common planning time had the greatest two-year gains in achievement (Flowers, Mertens, \& Mulhall, 1999). Their findings show that incorporating common planning time into the structure of the school day increases the amount of collaboration teachers can engage in and can lead to gains in achievement for students. Schools that had engaged in collaborative teaming for five or more years had the highest scores but even schools with only one to two years of teaming experience still had noticeable gains showing that time dedicated to collaboration can yield higher achievement scores and the longer the time teachers spend collaborating with their peers the higher the achievement.

Impact on Teacher Efficacy. The fact that teacher collaboration positively increases student achievement correlates with its impact on a teacher's effectiveness which increases a teacher's self-efficacy. Teacher efficacy is a teacher's belief that all students can learn and the confidence in his/her skill as a teacher to positively impact student learning (Rosenholtz, 1989).

Using Shulman's definition presented in the introduction, an effective teacher is one that is capable of practicing and understanding the complexity of teaching and learning and is equally adept at explaining and supporting professional choices to others (Shulman, 1986). When teachers collaborate, it allows them to amass collective expertise which has been shown to be an effective way to increase student learning (Berry, Daughtrey, \& Wieder, 2009). Sharing collective expertise increases a teacher's acquisition of both pedagogical knowledge and pedagogical content knowledge, which

Shulman contends is essential to be a proficient and skilled teacher (1986). Inversely, professional isolation can hinder teacher growth, particularly in new teachers, by offering little to no modeling of effective instruction (Rosenholtz, 1989). This will lead a teacher to depend almost solely on trial and error as a method of learning, which is inefficient and relies on the teacher's own ability to solve instructional issues and student misconceptions (Rosenholtz, 1989). Improvement via trial and error is a harder and slower process in building pedagogical content knowledge and thereby makes both teacher and student learning less effective. Reflecting on one's instructional impact and the sharing of collective expertise increases a teacher's effectiveness, which, in turn, increases their efficacy (Shachar \& Shmuelevitz, 1997).

One way for teachers to grow and improve in their practice, which will lead to higher self-efficacy, is through professional development. Often this professional development is initiated and provided by a district and/or school and most commonly comes in the form of a one-hour workshop provided by an outside expert. Research has shown, however, that this practice is not as effective as using ongoing teacher collaboration as a catalyst for teacher learning and efficacy (Garet, Porter, Desimore, Birman, \& Yoon, 2001; Darling-Hammond \& Richardson, 2009). In a study on effective professional development practices, Garet and colleagues (2001) found that sustained and intensive professional development opportunities were more likely to have an impact than shorter sessions. As a school-wide initiative, collaboration is sustained over the long term which increases a teacher's effectiveness. Garet and colleagues also found that professional development that was integrated into the daily life of the school was more likely to improve teacher effectiveness by increasing knowledge and skills (Garet et al.,
2001). Darling-Hammond and Richardson (2009) demonstrated that collaboration is an effective teacher learning strategy when it is the main source of professional development because it provides teachers with a way to continuously analyze their practice throughout the school year. In professional collaborations, a teacher's practice is more likely to be transformed because if it is sustained, coherent and intense, then teachers are not simply adding new strategies to old. It puts the teachers in control of their practice and its improvement to affect positive change in student achievement. Rosenholtz supports this idea when she says,

Losing the capacity to control the terms of work to determine what work to do and how the work is to be done or what its aim is to be, widens the gap between the knowledge of one's unique contributions and any performance-based selfesteem derived from it (1989, p. 423).

Teacher collaboration is an essential vehicle for building a teacher's capacity and efficacy which, in turn, will benefit the school, the teacher and the students.

Impact on Teacher Satisfaction. Teacher collaboration increases job satisfaction for teachers (Flowers, Mertens, \& Mulhall, 1999). Many studies have demonstrated that the workplace environment, including collaboration with peers, impacts teacher satisfaction more than student characteristics such as ethnicity and socioeconomic status (Johnston \& Tsai, 2018; Kraft et al., 2015; Johnson, Kraft \& Papay, 2012). Also, teachers stay longer in schools with a positive school culture, and this is also not dependent on student demographics (Johnson, Kraft \& Papay, 2012). Further, providing common planning time for collaboration improves the work climate of a school (Flowers, Mertens, \& Mulhall, 1999). This is because when teachers collaborate, they develop more positive attitudes towards their colleagues (Goddard, Goddard, \&

Tschannen-Moran, 2007). Teachers in schools with teacher teaming view their school as a "more positive, rewarding, and satisfying" workplace than non-teaming teachers or schools (Flowers, Mertens, \& Mulhall, 1999, p. 58). One of the reasons teachers can find more satisfaction in schools with teaming is because it leads to higher levels of trust (Tschannen-Moran, 2001). Educators identified trust and respectful relationships as the primary reason for success in high performing schools (Wilcox \& Angelis, 2012).

In addition, schools that provide support, such as opportunities for collaboration, are able to find, develop, and retain effective teachers (Johnston \& Tsai, 2018).

Collaboration, therefore, can be seen as a strategy that schools can use to increase teacher satisfaction and, thus, retain these effective teachers. The ability to both hire and retain effective teachers increases the shared expertise in a school and on a team, making it more likely that teachers will learn best practices from each other. For this to be a reality, however, the collaboration needs to be effective which is the next subsection of research which will be discussed.

Effective Vs. Ineffective Collaboration. Having reviewed the impacts that effective teacher collaboration has on students and teachers, we must now look at the requirements for effective collaboration. Creating impactful learning environments for teachers and students, requires intentionality in creating conditions that produce great teams. Senge defines great teams as those that "have trusted one another, who complemented one another's strengths and compensated for one another's limitations, who had common goals that were larger than individual goals, and who produced extraordinary results" (Senge, 2006, p. 4). This extends farther than mere collegiality. A
great team is one whose shared purpose pushes them to work deeper and intentionally toward both improved instruction and student learning.

For collaboration to be impactful it must also include a sense of shared responsibility over the instructional decisions being made and the results of the collective outcomes (Little, 1990). Teachers who collaborate regularly on improving their practice, curriculum, and supporting students create a culture of shared responsibility which impacts student achievement, teacher efficacy, and teacher satisfaction (Ronfeldt et al., 2015; Mertens, Flowers, Anfara, \& Caskey, 2010; Goddard, Goddard, \& TschannenMoran, 2007). DuFour contends that, "providing educators with structures and time to support collaboration will not improve schools unless that time is focused on the right work" (2011, p.61). Therefore, structured collaboration needs to include regularly scheduled time, allow teacher decision-making over action steps and accountability, and give teachers a shared sense of responsibility in the process.

Beyond setting up instances of collaboration among teachers, many schools sought to create professional communities. Professional communities, also known as learning communities or communities of practice, are defined by five elements of practice: shared values, a focus on student learning, collaboration, deprivatized practice, and reflective dialogue (Louis, Marks \& Kruse, 1996). These five elements are interconnected in that they each can be both a cause and effect of another element. For example, a team that engages in reflective dialogue will begin to create and adopt shared values and practices. As the team adopt shared values their collaboration will increase and lead to a deprivatization of their practices. The more team members deprivatize their practice, the more their collaboration will become student focused and include reflective
dialogue. The implication is that even when a team focuses on only one or two elements, they still attain and increase their skills in the other elements.

Although simply the existence of teaming has been shown to garner some improvements in achievement, effective collaboration has a significantly greater impact on both teacher and student outcomes than collaboration without a purpose or shared commitment (Flowers, Mertens \& Mulhall, 1999). Gadja and Koliba (2007) identified four essential components of effective collaboration on their Teacher Collaboration Assessment Rubric (TCAR), namely, dialogue, decision making, action, and evaluation. This rubric reinforces the importance of these four elements and can be used by team members to evaluate the quality of their collaboration by examining each of the traits.

The first component on the TCAR rubric reiterates that how teams engage in discourse matters. Dialogue among a team cannot be focused on routines, curriculum pacing, discipline, material allocation, or other task-oriented items (Gajda \& Koliba, 2008). Rather, effective collaborative teams will give and receive feedback on instructional practices and focus on student learning through dialogical conversations (Reeves, Pun \& Chung, 2017; Horn, Garner, Kane \& Brasel, 2017) which allows for more opportunities for reflection as teachers learn from and with each other. They will also engage with disagreements and work to solve them in their ongoing discussion around student achievement and engagement and the impact instruction is having on both (Gajda \& Koliba, 2008).

Of the four essential components of an effective team mentioned above, dialogue is the first visible indicator of the quality of the team's collaboration. Horn and colleagues (2017) explored how collaborative dialogue can contribute to improving
instructional practice. The participants in their study worked in one of two districts and were considered by colleagues to be a part of a well-functioning group. The researchers observed meetings of twenty-four teacher work groups at sixteen different schools over four years. They attended 111 meetings that lasted typically between 45 and 60 minutes and conducted structured interviews. The data focused on the conversations that occurred during collaborative sessions. The researchers were able to distinguish the characteristics between low depth and high depth collaborative work sessions. Low depth meetings lacked conversational routines and the teacher talk was monological, as opposed to dialogical. The focus in these meetings was predominantly on how to change future work and instruction and dealt mostly with pacing and logistics and the sharing of "tips and tricks" (Horn et al, 2017). In high depth meetings, teachers primarily focused on inquiry around problems of practice by analyzing student work, debriefing on lessons that did not work well, and discussing strategies for struggling students. Horn and colleagues (2017) offer six stages that high depth teams work through in their dialogical conversations:

1. Diagnosing issues
2. Clarifying meaning
3. Offering another perspective
4. Refining what it means to understand
5. Figuring out how to teach and address the misunderstandings
6. Refining the strategy.

Working through these stages during collaborative discussions connects student learning to the instruction teachers are giving and allows teachers to analyze their approach and its
direct results. This focus on student learning in connection with instructional strategies is what makes a team highly effective.

The second component of the Teacher Collaboration Assessment Rubric involves a team's ability to make decisions particularly around the quality of their individual and collective instructional practices (Gajda \& Koliba, 2008). Highly effective teams will regularly make decisions about instructional practices and the advancement of student learning. Gajda and Koliba contend that "the most important decisions that teachers should make if they are to increase student learning are those that deal with the quality and merit of their individual and collective pedagogical practices" (2008, p. 145). Teachers need to be given the ability to make these decisions on their own for change and growth to be authentic and significant.

Gajda and Koliba understand the word "action" on the TCAR rubric to refer to the decisions a team makes and then puts into action concerning student achievement, engagement, and instructional practice (2008). Improvements in instructional practices are the result of high-quality collaboration. These actions garner results in both student achievement and teacher efficacy.

The last component on the rubric is evaluation. In education, evaluation can refer to the formal assessment of a teacher conducted by the principal once or twice a year. It can also mean, as it does in the TCAR rubric, the informal process of assessing instructional practice and its impact on student achievement. Assessing their practice and making changes based on student data is an important aspect of a collaborative team. High quality teams will use multiple forms of qualitative and quantitative data to continually reflect on their instructional impact.

Through the development of the Teacher Collaboration Assessment Rubric, Gadja and Koliba (2007) contend that the quality of a team's dialogue, decision-making, action, and evaluation matter. Using the TCAR or another evaluation or reflection tool to improve the quality of a team's collaborative practice will impact teacher practice and student achievement and avoid what Hargreaves refers to as "contrived collegiality" (Datnow, 2011). This is also sometimes referred to as "collaboration lite" and is when teams claim congeniality, coordination, and other team business as collaboration (Dufour, 2003). The consequence of contrived collegiality is that teachers will think they are collaborating and when the results of their work do not result in better student outcomes, they will incorrectly assume that collaboration is not worth the time and effort. By changing the focus of teacher collaboration to student learning, a team will increase their collective expertise and improve student achievement.

Communities of practice need support and attention to become effective. Vescio, Ross, and Adams (2008) suggest that learning communities that have an intentional focus on student learning affect the most change on teacher learning and student achievement. The focus on student learning can be facilitated through the use of different protocols or with assistance of an instructional coach or teacher leaders. When structures are put in place that focus the collaboration on student work, the student's gains are higher than in other collaborations (Vescio, Ross, \& Adams, 2008). Their research does not suggest that one model or protocol is better than another, just that having a structure in addition to a high level of focus on student learning will illicit higher gains than those that do not (Vescio, Ross, \& Adams, 2008). In order to determine the organizational structures that produced the most effective collaboration, Levine and Marcus (2010) conducted a multi-
level case study at a high school recommended for its collaborative practices. The researchers collected data from seven teachers through collaborative meeting observations, interviews, and classroom observations. Their extensive results found that when meetings were structured and protocols were used to guide the discussion, more discussion about instructional practices was produced than occurred in the loosely structured discussions (Levine \& Marcus, 2010).

As mentioned earlier, the phrase 'communities of practice' is an umbrella term used to describe all groups of people who come together because of a "shared concern or passion for something they do and learn how to do it better as they interact regularly" (Wenger, 2009, p.57). This can apply to areas other than education such as business, government, and other organizations, social or formal (Wenger, 2009). When a school claims to be a community of practice or have teachers who engage in collaboration, it can look different from school to school, and teachers' experiences will vary. For some it means simply creating common planning time and giving teachers time to meet, but those meetings can vary greatly in content and procedure. Rosenholtz (1989) contends that these differences can result in schools becoming learning enriched or learning impoverished. Schools that do not foster and encourage deep collaboration focused on student learning are referred to by Rosenholtz (1989) as learning impoverished, a designation which is similar to DuFour's collaboration lite (2003) and to the phrase contrived collegiality coined by Hargreaves (Datnow, 2011). Learning impoverished schools contrast with learning enriched communities, which go further than just providing common planning time by offering goals, structures, and a shared purpose for collaboration (Rosenholtz, 1989). For learning enriched schools, collaboration is the
culture, and all decisions are made for and by collaborative groups to improve student learning. Learning enriched communities also embrace what Senge refers to as organizational learning. Senge states that, "when teams are truly learning, not only are they producing extraordinary results, but the individual members are growing more rapidly than could have occurred otherwise" (2006, p. 9).

Collaboration in education is more effective when it is structured around a shared purpose and has structures and processes in place to keep the focus on student learning and growth (Reeves, Pun, \& Chung, 2017). Protocols and other meeting structures can be determined by the model of collaboration put in place. Two common formal structures for communities of practice are Profession Learning Communities (PLC) and Critical Friend Groups (CFG), each of which will be surveyed here.

PLCs are collaborative groups of teachers who analyze their practice with the aim of improving student achievement. A PLC revolves around four key questions that guide the work of the team:

- What do we want students to learn?
- How will we know if they've learned it?
- What will we do if they haven't learned it?
- What will we do if they've demonstrated proficiency? (Dufour, Dufour, Eaker, Many, \& Mattos, 2016)

A PLC will have a results orientation with the sole purpose of ensuring "that all students learn at high levels" (DuFour et al., 2016, p. 11) and shifts the focus from teaching to learning (Anfara, Caskey \& Carpenter, 2012).

The Critical Friend's Groups, or CFG, are "groups of teachers who gather regularly to consider ways to improve student learning through collaboration and inquiry" (Anfara, Caskey, \& Carpenter, 2012, p. 53). The aim of a CFG is to create a school-based professional community that increases its teacher's capacity to improve student learning. This is primarily done through collegial conversations about teaching and learning that are guided by the use of protocols. CFGs emphasize the triangle of learning between teachers, students, and the curriculum and believe that true reform must occur at the classroom level if learning is to improve (Curry, 2008). Like most communities of practice, CFG is seen as alternative form of professional development. "CFGs depart from this sort of "drive-by" staff development by asking school insiders to construct their own learning through a cycle of inquiry, reflection, and action" (Curry, 2008, p. 736). During a Critical Friends Group meeting, a teacher will bring an artifact or artifacts from their classroom practice and the group will engage in a structured conversation about the purpose and effectiveness of the assignment or product. Like the PLC model, Critical Friends Groups use structure and formal collegial conversations to look critically at their instructional practice.

As they are both communities of practice, these organizational models have shared purposes focused on student learning and outcomes. Both seek to analyze student data and explore it in relation to instructional practice. The major difference between the two is the processes used to analyze and discuss learning data. Whereas PLCs focus their inquiry around the four essential questions mentioned above, the critical Friends Group relies on the use of structured protocols to guide the teachers in activities such as looking at student work, as well as to promote equitable and reflective dialogue among its
members (Anfara, Caskey, \& Carpenter, 2012). Both organizational models are often used as a main source of professional development for teachers within a school.

The empirical literature that was reviewed shows that collaboration is needed to create a culture of organizational learning and should be a part of all schools because of its positive impact on student achievement, teacher efficacy, and teacher satisfaction. It has also shown that for collaboration to be impactful, it must be effective. For teacher collaboration to be effective and impact student learning, teachers must assume a shared responsibility for student learning. Teachers who effectively collaborate will engage in reflective dialogue, make decisions about the quality of instruction, take action for improvement of student learning, and evaluate the impact of their instruction on student achievement. The next section will focus on the systems existing in schools that can be used as catalysts for organizational learning and will promote or prevent collaboration from being effective or occurring at all.

## Organizational Structures

We have already seen the impact that effective collaboration can have on both teachers and students. For collaboration to be effective, it requires time for collaboration, as well as staffing configurations and leadership models that allow teachers to engage in the practices reviewed above. Because teachers are employed in schools, administrative decisions about how their work is to be structured shape elements of the effectiveness of collaboration. This section looks at the ways that organizational structures form teacher collaboration.

Bryk and colleagues (2010) recognize the overlapping systems formed in schools as the needs of so many people and parts must be addressed and accounted for. They explain that:

Schools are complex organizations consisting of multiple interacting subsystems. Each subsystem involves a mix of human and social factors that shape the actual activities that occur and the meaning that individuals attribute to these events. These social interactions are bounded by various rules, roles, and prevailing practices that, in combination with technical resources, constitute schools as formal organizations. In a simple sense, almost everything interacts with everything else. (p. 45)

The many systems and subsystems within a school are often formed by different and often competing goals. As these systems interact, it is often difficult to unravel why certain practices are supported or emphasized and which structures were built to support which goals and initiatives. Any school reform must include an analysis of the systems and subsystems that are operating within a school and their impact on the main goal of student learning.

School improvement initiatives often focus on addressing two overarching systems within a school: technical and cultural (Muhammad, 2018). The technical aspects of the school involve the procedures and routines that involve the day-to-day operation of a school such as its use of time, curriculum, staffing, accountability systems for both teachers and students, and leadership structures. The other aspect of a school is its culture. A school's culture is defined by how its people behave within its system (Muhammad, 2018). The technical and cultural aspects of a school are intertwined and often dependent upon one another. Intentionally creating technical structures and systems at the institutional level allows access to collaboration and create the conditions
for effective collaboration which will positively impact a school's culture as well as achievement. As Bryk and colleagues point out,
it is hard to envision improved student learning emerging in a school with poor leadership, weak parent-school ties, little professional commitment or adult learning, and/or underdeveloped instructional resources. Similarly, it is hard to imagine a coherent program of local school development across these various areas without a process that engages a major portion of the adults in the school community in strategic action. (2010, p. 67)

For schools to improve, there must a strategic plan that engages all the stakeholders in the community.

In their longitudinal study of the reform movements in the Chicago Public Schools from 1990-2005, Bryk and colleagues (2010), highlight two specific schools in a poverty-stricken area of Chicago. One school, The Hancock, beats the odds and becomes a thriving model school and the other, The Alexander, just a few blocks away, becomes stagnant and enjoys none of the growth the other reaps. One of the main differences between the two schools is the leadership in which one, The Hancock, organizes for structural and cultural change. The Hancock makes technical changes of the basic structures in the scheduling and staffing to employ methods of collaboration and, in return, changes the culture of the school, as well (Bryk et al., 2010). This improves student achievement as well as staff satisfaction and retention (Bryk et al., 2010). A big difference in the two schools was in the leadership style (Bryk et al., 2010). At the Hancock the leadership drove a sustained focus on instruction and professional capacity building and changed the structural components of the school to support this focus. As a result, the Hancock School achieved at higher levels and created a sustainable community of practice, whereas the Alexander School continued to flounder (Bryk et al., 2010).

Without these systems, access to collaboration is difficult and will not occur in a meaningful way or be effective. At the Alexander School, for example, many of the same initiatives as the Hancock School were introduced, but almost none were sustained long enough to have an impact (Bryk, 2010).

Instead of trying to 'reform' a school or system, we should be creating the conditions for teams of teachers to continuously achieve (and receive recognition for) short-term wins in specific instructional areas (e.g., where assessment data indicate that students are struggling). (Schmoker, 2004, p. 3)

Dufour contends that a collaborative culture must narrowly define collaboration as "the systematic process in which we work together to analyze and impact professional practice in order to improve our individual and collective results" (Dufour, 2003, p. 2). He also points out the significance of the word systemic. The idea of systemic processes connects to Senge's systems thinking model which will be discussed further in the next section. Effective collaboration requires that a systemic structure is constructed to support it by making any technical changes needed so teachers are not left to discover collaboration; it must be ingrained into the fabric and systems in which the school operates.

Brown, Anfara, \& Roney (2004) identify three intertwined levels that indicate a healthy organizational climate: technical, managerial, and institutional. In schools, the technical aspects emphasize goals for academic excellence that are both challenging yet achievable and teachers that are committed to both their students and their colleagues through mutual respect and a shared belief that through hard work all students can achieve (Brown, Anfara, \& Roney, 2004). The second aspect of a healthy organization is managerial and focuses on collegial leadership and resource support. In schools with a
healthy climate, the principal and leadership of the school is supportive and sets the tone for the high expectations of all in the school (Brown, Anfara, \& Roney, 2004). They also ensure that sufficient resources are available and supplied to classrooms to ensure success and a collegial atmosphere. The third level of an organization identified by Brown, Anfara, and Roney (2004) is institutional. At this level a healthy school will be able to manage its environment to ensure the reliability of its programs, while also protecting teachers from unreasonable outside demands and issues (Brown, Anfara, \& Roney, 2004). Organizing a school around collaboration can address each of these three levels and create a healthy school climate. Focusing on creating positive work conditions predicts higher rates of student growth, as well (Johnson, Kraft, \& Papay, 2012).

Effective teacher collaboration creates trust among teachers and, inversely, relational trust is necessary for positive organizational change to occur, and the organization of the school directly impacts student achievement (Bryk et al., 2010). Collaboration creates relationships, which are necessary for organizational change to occur. Organizational change employs a systems-thinking approach to move the team to become a learning organization. "The team that became great didn't start off great - it learned how to produce extraordinary results" (Senge, 2006, p. 4). As teams work together, they build systems that become more efficient and effective over time and produce what is known as organizational learning. Organizational learning is when all the people in an organization share the same purpose and make decisions to act together in the pursuit of the shared goal (Senge, 2006). "A change model based on organizational learning assumes that learning takes place in groups and cannot be reduced to a random accumulation of individual knowledge and that learning occurs within a
framework of systematic collection and focus on information" (Louis, 2006, p. 480). In addition, simply bringing a group of teachers together to discuss data will not necessarily create organizational learning. Louis and Lee contend that, "group learning includes not only processes but also cultural norms such as collaboration, reflection, and willingness to try new things/take collective risks" (2016, p. 537). These cultural norms are an important step in teams being able to effectively act in order to improve. Relational trust also "acts as both a lubricant for organizational change and a moral resource for sustaining the hard work required for social improvement" (Bryk et al., 2010, p. 27). Therefore, schools must organize and reform in a way that not only allows for collaboration but, also, encourages it. Schools that embrace collaboration build organizational learning.

The next subsections will look at three aspects of a school's organization that directly impact teacher work: school structures, leadership configurations and evaluation methods. Administrative decisions around how to structure aspects of a school, such as creating schedules, class size, staffing placements, and mandates around time directly impact the type of work a teacher is able to do. The ability of teachers to assume leadership roles and contribute to the decisions being made, can directly impact the priorities of a school and the focus on student learning at the classroom level. Teacher evaluation systems are important because what they hold teachers accountable for influences a teacher's priorities. If the goals of the evaluation embrace collaborative practices as a means for improving student learning, then teachers will be more likely to engage in the collaborative process. Each of the following subsections will detail the impact each of these systems has on the effectiveness of teacher collaboration in practice.

School Structures and Organizations. Before the idea of creating communities of practice was introduced into schools, teachers spent the majority of their time working in isolation. With isolation being the norm for many years, dominate organizational systems used in schools were built around the idea that teachers would plan and prepare alone in their classrooms. This mindset impacts scheduling, leadership structures, evaluation systems, and how space inside school buildings is configured. Schools generally only had one place set aside for teachers to meet and that was the proverbial teacher's lounge. Everything about the old system was set up to support and encourage teacher isolation.

As research began supporting the effectiveness of collaboration (Flowers, Mertens, \& Mulhall, 1999; Goddard, Goddard, \& Tschannen-Moran, 2007), schools began making structural changes to accommodate collaborative practice. Within a school, as its own system and as part of a larger system consisting of other schools, decisions that are made about structures impact its identity as either a collaborative school or one where learning is isolated to individual teachers. School reform efforts to allow access to collaboration began to include structural changes such as adjusting its size, reconfiguring staffing, providing scheduled planning time, and empowering teachers by changing the school governance or leadership configuration (Louis, Marks, \& Kruse, 1996). "Another point of clarity is that interdisciplinary teaming structures including team size, amount of common planning time, and length of time together as a team affect not only team-level practices, but they also influence classroom instruction" (Flowers, Mertens, \& Mulhall, 2000, p. 58). These decisions are important and should not be made
separate from collaboration practices. They directly impact the level of teacher participation and effectiveness in collaboration.

Some of the technical (structural) decisions and changes a school makes to accommodate teacher collaboration are to create smaller learning communities, simplify staffing configurations, adjust the schedule to create meeting time, and empower teachers to take action as a team. Creating small learning communities, often within larger organizations and schools, allows teachers to be connected to a smaller quantity of students and, therefore, other teachers, making collaboration more accessible. Larger schools can be detrimental in forming strong learning communities (Louis, Marks, \& Kruse, 1996). A focus on smaller teams that share the same students also makes scheduling common planning time easier. The complexity of the staff, also, impacts its ability to collaborate effectively. When the staff consists of highly specialized teachers, as are most often found in high schools, organizational learning becomes more difficult (Louis, Marks, \& Kruse, 1996). Simplifying the staffing configurations and hiring with collaboration in mind will increase the ability of the school staff to engage in effective collaborative practices.

Another way schools can change their structure to accommodate collaboration is to introduce common planning time into their school schedules. Common planning time aligns teacher schedules so all teachers of a certain cohort of students, often by grade level, are given the same planning times during the school day to allow them to meet. Warren and Muth (1995) found that teachers having common planning time significantly impacted the student's perception of the school climate. They also observed that students with teachers who engaged in common planning time were overall more satisfied with
the school climate, were more committed to their schoolwork, and had a more positive outlook about their teachers.

On their own, structural or technical changes like these will not necessarily ensure effective collaboration without other cultural changes, as well. The traditional structures of isolation need to be reformed for organizational learning to take root. These structural changes have a direct impact on teacher behavior and will also help empower teachers to take ownership over their practice and their influence on student achievement. This, in turn, creates a culture of teacher leaders who will drive change and improvement.

Leadership. In order to develop and sustain professional communities of learning, strong leadership must be present (Louis, Marks, \& Kruse, 1996). The success on any school improvement or reform effort is dependent on the leadership of the school (Szczesiul \& Huizenga, 2014). Even high performing, highly collaborative schools need an influential leader who will provide strong direction and a solid foundation in the early stages of any improvement efforts (Szczesiul \& Huizenga, 2014). Leaders are the drivers of reform and can make the needed structural changes that will support cultural change and growth through collaboration. To create effective, inclusive schools that collaborate to learn and improve, a distributive leadership model is indispensable (Waldron \& McClesky, 2010).

Given that effective and sustained collaboration relies on strong leadership, it is important to review the research on effective practices of school principals. Grissom, Egalite, and Lindsay (2021) contend that there are four practices that effective principals employ. First, effective principals’ interactions are instructionally focused. This means they can leverage teacher evaluations, provide feedback and coaching, and use data to
guide their instructional decisions (Grissom, Egalite, \& Lindsay, 2021). Secondly, to be effective, principals must also build a productive school climate by empowering teachers and supporting and valuing students. The third practice is to facilitate collaboration. As stated previously, collaboration directly impacts improved student achievement, teacher satisfaction, and teacher effectiveness. Principals must intentionally create and foster high functioning professional learning communities. Szczesiul and Huizenga (2014) suggest that principals should establish a vision, purpose, and set of goals specifically for teacher collaboration. The last area that effective principals exhibit is the ability to strategically manage school resources. Managing resources includes staffing decisions, both the hiring of quality teachers and placing them in roles that cater to their strengths. Effective hiring and placement will reduce teacher turnover and help maintain a positive and consistent school culture. The other important resource an effective principal will manage well is time, both the school's and their own.

The two main leadership models that schools will choose is either a hierarchical, top-down structure or a distributed leadership model which is also known as shared leadership. In a hierarchical system, the principal is the lynch pin around what everything else in the school revolves. All decision-making falls on the principal including the cultivation of the vision and the allocation of resources (Kennedy, Deuel, Nelson, \& Slavit, 2011). This idea of the solitary, visionary leader "has proven unsustainable because schools are too complex for one person to lead independently and because exceptional leaders who have been able to singly alter school performance are the exception rather than the rule" (Kennedy et al., 2011, p. 22).

In effectively collaborative school cultures, a distributed leadership model is more successful in cultivating strong support for the work of the school. In this model, leadership and decision-making is shared by others, in addition to the principal, and is distributed amongst many teachers, coaches, and administration, allowing for a distribution of expertise and shared vision. "Leadership is more effective when it is stretched over knowledgeable individuals in an organization" (Kennedy et al., 2011, p. 24). This reiterates the idea that to achieve organizational learning, distributive leadership is essential.

The biggest difference between hierarchical and distributive leadership is the sharing of decision-making throughout the school (Kennedy et al., 2011). This shared leadership style empowers teams to decide what is important and to make decisions about how to improve. A distributive leadership model will support and sustain professional learning communities more than traditional, hierarchical models which "can limit the diffusion of expertise across a school while current accountability and standards-based reforms support a school context that leads to micro-managing teacher time and prepackaged school improvement programs rather than ongoing and reflective teacher inquiry" (DeMatthews, 2014, p. 178).

Moving to shared leadership is not something a school can just do without building expertise and capacity first (Kennedy et al., 2011). The role of the principal is equally important in distributive leadership models as it is in traditional, top-down ones. The principal must create a safe culture and organizational stability, as well as driving change toward improvement by developing leaders throughout the school (DeMatthews, 2014). By establishing shared leadership throughout the school, the principal will create
trust amongst the teachers and buy-in to support reforms aimed at increasing student achievement (Waldron \& McClesky, 2010). The role of the principal is still to lead, but to do so by building capacity, maintaining coherence, facilitating change initiatives that increase student achievement, and empowering others to share in the decision making around important issues (Waldron \& McClesky, 2010).

Teacher Evaluation Systems. Whether intentional or not, evaluations of teacher performance influence instructional priorities. If an evaluation focuses solely on the individual instructional strategies a teacher employs, as opposed to the collective practices one uses to improve, collaboration will not be a primary focus for the teacher. For this reason, an exploration of evaluation systems is necessary to determine how they can be seen as a support or a barrier to effective collaboration.

One of a principal's main roles is to conduct teacher evaluations. Schools adopt different evaluation and accountability systems depending on state or district mandates. Teachers are evaluated by school leaders using a variety of measures to determine their level of effectiveness. This most often includes observing a teacher in action, analyzing student learning data, and looking at student survey results (Coggshall, Rasmussen, Colton, Milton, \& Jacques, 2012).

The use of teacher evaluation can increase teacher effectiveness in three ways: by establishing a common understanding of effective practice, generating evidence-based feedback, and assessing learning and collaboration (Coggshall et al., 2012). Collaboration itself will also help to establish common standards of effective practice amongst teachers and generate feedback on instruction and planning. Because collaboration is an effective way to develop teacher expertise, many evaluation rubrics
consist of teaching standards that include teachers engaging in professional learning which includes teacher collaboration (Coggshall et al., 2012). Unfortunately, Coggshall and colleagues contend that, despite evidence that collaboration improves teacher expertise, evaluation systems rarely include professional learning or collaboration as indicators despite their presence in the teaching standards. In addition, "even when such responsibilities are included as performance expectations, the collection and analysis of evidence of teachers' continuous learning is rarely as rigorous as it is for other domains of practice" (Coggshall et al., 2012, p. 14).

Jones, Bettini, \& Brownell (2019) point out that the purpose for initiating both evaluation and collaborative systems is to improve teacher effectiveness, but both have developed separately and parallel from one another. Both have the same end goal but work on very different assumptions. Forming collaborative school cultures is working under the premise that student learning is positively influenced by systems that promote and foster collegial working relationships among teachers. Conversely, high stakes evaluation systems have been developed to assess individual teacher performance which assumes that teachers operate solely in their own classrooms and are solely responsible for and capable of producing student learning (Jones, Bettini, \& Brownell, 2019). A school functioning under one or the other of these belief systems will develop different organizational systems. One will foster interactions and relationships among teachers and the other will focus on changing or dismissing individual teachers. Jones, Bettini, and Brownell (2019) conclude that the two can be aligned through further research into effective evaluations of collaboration and teamwork as are found in other fields, particularly medicine and the military. Evaluations in these fields often focus on holistic
situational knowledge, team planning processes, and shared mental models. Indicators like these that have been shown to improve teacher performance should then be incorporated into school evaluation systems.

This section detailed the research around evaluation systems and collaborative practices in schools. Both have been found effective in increasing teacher capacity, but one focuses on the interactions of teams of teachers and the other prioritizes the teacher as an individual influence on student learning. Specifically, the research shows that evaluation tools should promote collaboration in schools by prioritizing the work of the team over the individual. The research also reveals that in most schools, the emphasis on the individual is more prevalent and could be perceived as a barrier to effective teacher collaboration. To promote and sustain collaborative practices in schools, teacher evaluation indicators must align and promote teacher collaboration.

## Chapter III: Methodology

This chapter details the methods and procedures that will be used to conduct this phenomenological study on teachers' perceptions of the necessary supports for and barriers to collaboration in school organization, leadership, and evaluation systems. The sections in this chapter will explain and justify the decisions made around selecting the participants, data collection instruments, and data collection procedures. Details of the data analysis procedure and methods are included, as well as a discussion on the validity and trustworthiness of the study.

## Overview of Research Design

Phenomenological research involves examining and describing the lived experiences of a person in the context of the world in which they live and work (Hatch, 2002). This phenomenological study will explore how decisions made in the organizational, leadership, and evaluative structures in middle schools impact a teacher's perception of his/her ability to effectively collaborate with colleagues. Often decisions about how schools and, in turn, the teachers who work in those schools, will function, be lead, and will be evaluated are made at the district or school administrative level. These decisions, meant to improve student learning, are made outside of a teacher's domain, and are experienced differently by individual teachers. This study considers the perceptions of six middle school teachers who teach in schools that claim they are schools that prioritize teacher collaboration.

The middle school level was selected because this tier offers more options in its ability to design structures that enhance collaborative practices among teachers.

Elementary schools embrace a block schedule that allows students to remain most of the day with one single teacher. Therefore, at the elementary tier, few teachers instruct the same students making collaboration around shared students difficult. The high school tier has less flexibility with its structures and teacher staffing because teachers are often experts in their subject-area alone and their schedules are determined by this factor. High schools also offer a larger range of specialized courses which means many teachers have multiple lesson preparations per day and will, therefore, share students with many more teachers than at the elementary or middle level. The middle school is the perfect middle ground between these tiers because they have many design options available to them. Middle school teachers are usually certified in either grades $\mathrm{K}-8$ or grades 7-12. This overlap in certification means that more options are available as to which grade level or subject teachers can teach. There are also less specialized courses offered in middle schools than in high schools and, therefore, teachers are more likely to teach a course that other teachers also teach. This offers more opportunities for collaboration, as well as alternative staffing structures.

Each of the teachers interviewed work at sites that prioritize collegial collaboration at the district or administrative level. Given that time is often cited as a factor in the ability of teachers to effectively engage in collaboration (Raywid, 1993; McLaughlin \& Talbert, 2006; Louis et al., 1996; Johnston \& Tsai, 2018; Saunders, Goldenberg, \& Gallimore, 2009), three sites were chosen based on structures set in place to give teachers access to collaboration. Two teachers at each site were interviewed around the school structures in place and collaboration practices engaged in by teachers. At each of these sites, artifacts that exhibit evidence of collaborative practices were
collected voluntarily from three of the teachers. These included meeting agendas, student data tracking sheets, and teacher schedules. Teachers were given the choice to share or not share artifacts and documents with the researcher. The sequence of the study was as follows.

1. Schools and teachers were identified using district level information about collaboration and school organizational structures.
2. Sixty to seventy-five minute, semi-structured interviews were held through Zoom to allow flexibility and availability, as well as address safety concerns during the COVID-19 pandemic.
3. Data from interviews were coded and analyzed.

This study was designed to answer the following research question:

- How do a teacher's perceptions of a school's organizational, leadership, and evaluation systems support or prevent access to, and engagement in, effective collaboration with other teachers?


## Orientation

Creswell defines phenomenological research as "a strategy of inquiry in which the researcher identifies the essence of human experiences about a phenomenon" (2009, p.13). In the context of this study, the interviews will reveal the participants' different perspectives of collaborative practices framed by the organizational, leadership, and evaluative structures of his/her school. A school is a complex web of systems and structures that often overlap. By pulling out certain aspects of the web and isolating them through the interview process, the researcher can identify ways in which one thing might
be creating another thing to occur. The participant's perception is vital in this process as it impacts their level of implementation and/or engagement in the systems decided upon by someone else. Therefore, the interpretative framework of this study is social constructivist in nature because the study focuses on the "specific contexts in which people live and work in order to understand the historical and cultural settings of the participants" (Creswell, 2009, p. 24). Through the interviews, the participants' perspectives create the meaning of how they are able or not able to engage in effective collaboration in the context of their specific school structures. This will give insight into how external and internal decisions determine or shape collaborative practices among certain teachers.

My approach to this phenomenology takes a critical stance. In education, decisions about schools and how they are run are often made at the district level or by school leadership. These decisions affect the everyday systems in which teachers work and in which students learn. Although the teachers are often not a part of the decision making, they are often held accountable for outcomes that are directly influenced by these decisions. This includes access to and/or the ability to engage in collaboration with colleagues, which, as shown in chapter two, if effective, can be a determining factor in student achievement. Teachers who are focused on the main goal of student learning work within the system that is already established and at times, works against their own success at achieving this goal.

## Subjectivity Statement

As an educator, I have worked for over ten years in each of two urban, publicschool systems in two different states. I began my career in a public school system in the

Northeast and have worked the last sixteen years in a public school system in the Southeast region. My experiences with teacher collaboration in these two different settings is what led me to pursue this topic of study.

In the schools in the Northeast, there were structures in place that encouraged, promoted, and taught the skills of effective collaboration. In this setting, I thrived as a teacher growing and improving at my craft each year because of the collegial culture created by the expectations around collaboration which permeated both schools in which I worked within this system. I attribute this to both the focus and coaching around collaboration as well as the distributed leadership model that allowed me to become a teacher-leader. I found great satisfaction in my career and felt empowered to do more because of my daily collaboration with other teachers.

One of the schools in which I worked in the Northeast as a $7^{\text {th }}$ and $8^{\text {th }}$ grade ELA teacher was embarking on a five-year whole-school reform initiative. The principal restructured the school schedule to allow for common planning time and created a leadership team of grade-level leaders. Each teacher had two planning periods every day: one for individual planning and one for interdisciplinary team collaboration. A collaboration coach from a consulting center that provided coaching and guidance to schools in the New England area, was brought in to work with both the interdisciplinary grade-level teams and with the leadership team weekly for the first two years of the reform initiative. Content level coaches were also brought in to help strengthen core instruction. During these collaborations, protocols were introduced, and the teachers critically analyzed student work and teacher-made assignments, and created writing
rubrics. The leadership team evaluated systems within the school and looked at the structures of the whole school and its impact on teaching and learning.

After participating in this rich, growth-oriented culture for the full five years of the reform initiative, I moved to an Expeditionary Learning/Outward Bound model school. This school was part of the same public school system and was in one of the poorest neighborhoods in the city. This school was only four years old when I joined the staff as an $8^{\text {th }}$ grade Humanities teacher. The collaboration coach that I had worked with at the previous school also worked with this school. This school was a unique experience because it was a new school that was able to create and build its structures and procedures from the beginning. No "reform" initiative was needed because nothing had yet to be established. This allowed the school to create its own structures around what it valued most, which was deep collaboration at both the teacher-level and the student-level. At this school, I was given even more time to collaborate and hone my craft. Each teacher had two planning periods, as was the standard in entire school system, but because of the block scheduling each period was sixty minutes instead of forty-five minutes. Also, the school schedule was arranged so each teacher had back-to-back planning periods on Monday, Tuesday, Thursday, and Friday. This allowed the teams to be flexible with their collaboration within a two-hour block. The school schedule was also altered so that the school day was one hour longer every day except Wednesday. Because of the extended school day on the other days of the week, Wednesdays were deemed a half day for students and teachers engaged in whole-school collaboration and professional development for three and a half hours every Wednesday afternoon. This additional time was very effective in growing both the expertise of the staff, as well as
building a culture of collegiality and growth. The school was able to create and implement effective practices, such as $8^{\text {th }}$ grade graduation portfolios, whole-school writing rubrics, deep and on-going analysis of student data and the development of many interdisciplinary learning expedition units.

When I moved to a different region of the country, I found a very different school culture. In the urban school system in the Southeast collaboration was encouraged and, in some instances required, but without any structures and supports in place to make it meaningful. Having now worked in this same district for the past fifteen years, in several different schools, it has been a struggle both as a teacher and as a literacy coach to find the high level of collaboration and efficacy I experienced in the first eleven years of my career before I moved. In all cases these attempts at collaboration have fallen flat and not seemingly improved teacher instruction or satisfaction. Schools in this district have little to no flexibility in organizational structures, staffing, evaluation practices, or leadership configuration. I have first-hand experience of the district's desire to have teacher collaboration and have attended various professional development workshops within the district to make collaboration happen. As a literacy coach in one school for seven years, I implemented many of the collaborative practices I had experienced in the Northeast that led to professional growth. Although this was encouraged and embraced, no structures were altered to make it succeed. Teachers in this district have one planning period daily and collaboration with colleagues occurs around once a week within the school structure. In my experience, the only successful collaboration that I have observed is when teachers devoted time to collaborating outside the school day without compensation.

These varied experiences with collaboration have led me to want to explore what factors impacted the two different systems of collaboration. Both systems had goals and expectations for collaboration, but my experiences, and the results, were vastly different. Participant Selection

Hatch points out that participants are the ultimate gatekeepers to the data the researcher is seeking (2002, p. 51). In order to capitalize on the knowledge of the teachers as to their contexts, this study interviewed teachers in three different schools in different districts to discover how teachers experience collaboration within different structures and organizations. This section will discuss the procedures for participant selection and the ethical considerations that were taken during this study.

## Procedures for Selection

The school sites were first identified for their expectation that teachers collaborate. This was ascertained through the state's priorities as communicated on their Department of Education website and/or the school's posted mission and vision statements and school priorities. Once the sites were chosen, emails were sent to all content area teachers with more than three years of experience. Two teachers from each school replied to my email and six teachers were interviewed. Two of the participants work in a school that has a more traditional structure by providing only one daily planning period lasting fifty-five minutes for non-instructional work. Two other teachers work in a school that provides ninety minutes of daily planning time during the school day and additional non-instructional work time in the form of one early release day per week with the expectation that collaboration occur during this time. A final two teachers work in a school that incorporates the PLC model of collaboration using the framework
put forth by Dufour and colleagues (2016). They teach in an environment where professional learning communities are not only embedded in the culture but are considered a primary focus of the culture. The school structure at this school provides teachers with fifty-five minutes of non-instructional planning time per day and a late start period on Mondays dedicated to the work of the PLC.

## Research Sites and Participants

Patton refers to maximum variation sampling as one that "aims at capturing and describing the central themes or principal outcomes that cut across a great deal of participant or program variation" (1990, p. 172). Because the purpose of the study is to explore the organizational structures that a teacher perceives to support or prevent effective collaboration, the selection of the schools where the teachers in the study work is of utmost importance. All three selected schools have the expectation of collaboration in some way but differ in some basic organizational structures, the primary one being time. One of the biggest resources that varies from school to school is the choices the school makes about how to allocate time. School 1 expects teachers to collaborate with their grade level colleagues, their content level team, and their vertical team partners and has structured its schedule to allow enough time and flexibility for this to happen. At this school, teachers have ninety minutes of daily planning time and an additional ninety minutes once per week specifically used for collaboration practices. The second school chosen for this study uses a model that creates a culture of collaboration in the form Professional Learning Communities. Collaboration at School 2 is embedded in the culture and has been for many years. The last site, School 3, is what Patton refers to as a typical case (1990). This site has the expectation of collaboration but without any special
accommodations of time or schedule. School 3 allows fifty-five minutes of daily planning with the expectation that teachers meet once per week for collaboration.

School Sites. To examine collaboration in different structural settings, it was imperative that the participants work in schools that approach teacher collaboration differently. Therefore, three school sites were purposefully chosen because of the different ways they organize their time and staffing of teams to structure teacher collaborative practices. A summary of the schools chosen for this study appear in Table 1.

Table 1

| Overview of School Sites |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| School | Grades | Student <br> population | \% Minority | \% Free or reduced <br> lunch |
| 1 | $6-8$ | 683 | $89 \%$ | $79 \%$ |
| 2 | $6-8$ | 812 | $23 \%$ | $30 \%$ |
| 3 | $6-8$ | 650 | $6 \%$ | $28 \%$ |

Note. School enrollment and demographic data are pulled from the National Center of Educational Statistics, and are current as of the semester participants were interviewed

School 1 is a public middle school in a medium-sized city (Geverdt, 2019) on the mid-Atlantic coast of the United States. The school is one of seven middle schools in the city and serves 683 students in grades 6-8. Eighty-nine percent of the students identify as minorities and seventy-nine percent receive free or reduced lunch (National Center for Educational Statistics). School 1 has the expectation that teachers collaborate, and, for that reason, extra planning time is embedded into the schedule. Each teacher has ninety minutes for planning each day, which is non-instructional time used for lesson planning,
grading papers, communicating with parents, and/or collaborating with colleagues. In addition, on one day a week the school has early release where the students go home ninety minutes early and the teachers meet to collaborate.

School 2 is a public middle school in a small city (Geverdt, 2019) located in the Northwest region of the United States. It is the only middle school in its district and serves 812 students in grades 6-8. Thirty percent of the students receive free or reduced lunch and there is twenty-three percent minority enrollment (National Center for Educational Statistics). This school uses the Professional Learning Communities model put forth by Dufour and colleagues (2016) which emphasizes teacher collaboration and provides a detailed structure for teachers to analyze data and form action plans based on those data. At School 2, teachers have a daily planning period of 50 minutes, and every Monday is a late start day where teachers have PLC meetings for the first hour of the day.

School 3 is a public middle school located in a small city (Geverdt, 2019) in the Midwest. It is the only middle school in its district, and it serves approximately 650 students in grades 6-8. Six percent of the student population identifies as a minority and twenty-eight percent of the students receive free or reduced lunch (National Center for Educational Statistics). School 3 expects teachers to collaborate, allowing them fifty-five minutes of daily planning, one day of which is devoted to collaboration amongst each grade level team. School 3 utilizes the middle school teaming model which organizes students onto small teams of teachers that can attend to a student's unique needs during adolescence. Therefore, each grade level has two teams of teachers that share the same students. Teacher 3A points out that another benefit of the teaming model is that it increases the number of teachers in a school and, therefore, lowers class sizes.

Collaboration at this school is centered around the grade level team, which means each small team has a different schedule than the other small team on the same grade level, so common planning time for content level teams does not exist.

In summary, all three schools expect teachers to engage in collaboration with their peers, but each have created different schedules and staffing configurations to make this occur. The next section describes the participants from each school featured in this interview study.

Participants. To develop an understanding of how teachers experience collaboration with their peers within the systems in which they work, participants were selected from the three middle schools described above. Each participant works in a school that expects collaboration from their teachers and have organized different teaming structures and time allotments in which the teachers engage with their peers. The schools devote different amounts of common planning time each week for teacher collaboration. Once the schools were identified, all teachers in the school with more than three years' experience and that taught in the content areas of math, science, English language arts, and social studies were contacted and invited through email to participate in the study. Two teachers from each school responded and agreed to participate in one semi-structured interview lasting no more than ninety minutes. Each interview, in actuality, lasted approximately sixty minutes.

The teachers in this study voluntarily agreed to be interviewed and expressed a positive attitude towards collaboration. The ages of the participants range from forty-five to sixty years old, and all have been in their respective schools for over five years. A summary of the participants backgrounds is provided in Table 2.

## Table 2

| Overview of Participants |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teacher | Age | Gender | Race | $1^{\text {st }}$ or $2^{\text {nd }}$ career choice | School Role |
| 1A | 60 | M | Black | $2^{\text {nd }}-$ military | Content area lead <br> teacher |
| 1B | 45 | F | Black | $2^{\text {nd }}-$ stay at home |  |
| mom/military | Content area lead <br> teacher/Grade level <br> team leader |  |  |  |  |
| 2A | 46 | F | White | $2^{\text {nd }}-$ substitute teacher | Content area lead <br> teacher |
| 2B | 53 | F | White | 1 st | Team member |
| 3A | 44 | F | White | $2^{\text {nd }}-$ marketing | Team member |
| 3B | 56 | F | White | $2^{\text {nd }}-$ business | Team member |

The participants from School 1 are both eighth grade teachers. Teacher 1A is a black male who came to teaching after spending twenty years in the military. He has taught at his current school for the last twenty-one years and is the instructional lead teacher for his content. This teacher brings an historic perspective to the study having been at the school before it was organized into learning communities, working through the transition from isolation to collaborative teams to the current time, in which collaboration is the norm. Teacher 1B is a black female and has taught at School 1 for the past 5 years and is an instructional leader at the school. In addition to teaching five periods of her content, she is also the grade level team lead and the instructional leader for her content for the whole school. Being a teacher-leader in the school requires her to attend leadership team meetings with the administration and to lead vertical departmental meetings.

The teachers at School 2 both teach more than one subject. Teacher 2A is a white female who teaches three periods of her main subject and three periods in a support area. She is the departmental lead for her content area for the whole school. She spent many years as a substitute teacher which led her to eventually become a full-time teacher. Teacher 2B is a white female and the only teacher interviewed that went to college straight from high school with the intention of becoming a teacher. She teaches two academic content areas and has been teaching for twenty-five years.

The teachers interviewed at School 3 both worked in business for many years before deciding to pursue a career in education. Both expressed dissatisfaction with their first careers and sought out teaching. Teacher 3B said, "teaching just seemed, something that sounds so corny, but like a vocation." Both teachers teach the same content area but at different grade levels and on different teams. Teacher 3A is a white female who has worked at her school for the past seven years. It is the only school she has worked in during her career. Teacher 3B is a white female who has been in her current position for ten years.

## Data Collection Procedures

This section will detail the instruments used to collect the data, as well as the procedures that were used. It will describe the interview protocols and provide the interview questions and their connection to Seidman's three levels of questioning (2019). It will also include a chronological sequence of how the data was collected.

Seidman states that, "a phenomenological approach to interviewing focuses on the lived experiences of participants and the meaning they make of that experience (2019, p. 16). All the participants in the study live within a system that claims to be collaborative.

Their experiences within this system and with the structures in place in their various settings give a valuable teacher perspective.

Using a semi-structured interview approach, the researcher conducted one interview lasting approximately sixty minutes with each teacher. For in-depth, phenomenological interviews Seidman recommends conducting three interviews each with its own purpose (Seidman, 2019). The first should focus on the participant's life history in context to the topic being explored. The second interview will detail the lived experience of the participant within the framework of the phenomenon and the last interview will be a reflection on the meaning of the lived experience. Although this is the ideal, Seidman does concede that three interviews are often not possible, and that the researcher may choose to do one or two longer interviews using the same structure of topics. He also points out that "relatively little research has been done on the effects of following one procedure over others..." (Seidman, 2019, p. 25). Therefore, the interviews followed Seidman's guidelines within the structure of one longer interview. The researcher first asked questions focused on the life history of the participant, then moved into a set of questions detailing the participants experience with collaboration in the systems in which they work, and finally, the researcher asked questions asking the participants to reflect on the meaning of the experiences they shared.

The interviews took place using the video-conference technology Zoom. This allowed the researcher to interview teachers in a variety of middle schools across the United States. A face-to-face interview, even digitally, is preferable to a phone interview because the interviewer is able to observe the participants' facial expressions and body
language. The interviews were recorded and transcribed to aid in the data analysis process. They will be permanently deleted at the conclusion of the study.

When teams of teachers collaborate, there are often artifacts that reveal the substance of the collaboration. These can include documents of the meetings themselves, such as agendas and minutes, as well as outcomes of the collaboration such as the protocols used to guide the discussions and collaboratively created resources such as unit plans and/or common assessments. Not all schools will use the same protocols or systems during collaboration, but the items available to the researcher can help evaluate the level of effectiveness of the collaboration when looked at in conjunction with teachers' perceptions. Participants were asked to voluntarily contribute documents that they felt would help clarify the information revealed in the interviews. Only three of the teachers sent documents at the conclusion of the interview and these varied between the teachers. The documents shared were planning documents, district pacing and curriculum guides, and meeting agendas.

Normore and Brooks (2015) offer caution to researchers using school artifacts. Often the documents provided to the researcher were created to communicate certain aspects of the school to a public audience. Therefore, they remind the researcher to "ascertain the degree to which such documents represent an idealized or espoused perspective on the work rather than an actual or critical perspective (Brooks \& Normore, 2015, p. 182). With this in mind, the artifacts collected were used as the secondary source of information to give clarity to the experience the teachers related to during the interviews. The interviews are the primary source of data that has been collected and analyzed. Seidman contends that if the researcher's goal "is to understand the meaning
people involved in education, or any social institution make of their experience, then interviewing provides a necessary, if not always completely sufficient, avenue of inquiry" (2019, p. 10).

## Ethical Considerations

This study was designed to minimize any known risk to the participants and was approved by the Internal Review Board (see Appendix A). Hatch (2002) contends that when teachers are asked to participate in research, they must be told of the intentions of the research and understand that participation is voluntary. Participation was voluntary, and participants signed a consent form prior to participation in the study. To protect the participants privacy, the names of the participants and the schools in which they work have been changed. All electronic interview materials and artifacts are password protected and all paper copies are being kept in a locked cabinet in the researcher's home. The interview recordings were deleted after the finalization of the transcripts.

## Connection to Guiding Questions

The development of the interview questions was carefully constructed to both move through Seidman's three stages of an interview and to connect to the research question driving this research. Table 3 illustrates the connection between Seidman's series and the interview questions.

Table 3

Interview Questions
Seidman's series of
Interview Questions
interviews

Stage One: Focused Life History

- How did you get into teaching?
- How did you come to work at your current school?
- What do you look for in a school when you are looking for a position?
- How do you feel about collaboration?
- Can you describe what good collaboration looks like to you?
- Can you describe a time collaboration did not go well for you?

Stage Two: Details of the Lived Experience

- How do teachers collaborate at your school?
- What are the expectations at your school for collaboration?
- How do you feel about these expectations?
- How does your school support your collaboration with your colleagues?
- What encourages you to collaborate with your colleagues?
- What discourages you from collaborating with your colleagues?
- How do you decide when and where to meet to collaborate with your colleagues?
- How did you learn to collaborate with other teachers?
- How does your collaboration impact your classroom instruction?
- How are decisions made in the school regarding teacher collaboration practices?
- How could leadership improve your school's system of collaboration?
- In what ways does your yearly evaluation impact or not impact your collaboration with colleagues?
- How is the leadership of the school involved or not involved with collaboration?
- What does the professional development look like at your school?
Stage Three: Reflections on the Meaning
- Thinking back on your responses today, how important is collaboration to you, or to your success, as a teacher?
- Reflecting on the experiences you shared today, how has your perception of collaboration changed over time?
- Thinking back over this year, how has your collaboration with colleagues impacted your experience teaching during Covid-19?


## Data Analysis Procedures

This section will explain how the data analysis was conducted.

Data Analysis. At the conclusion of the interviews, the researcher used inductive analysis to interpret the data. This method is preferred because it prevents the researcher from starting the analysis with a pre-conceived hypothesis about what the data may reveal (Bhattacharya, 2017). Seidman (2019) relays two methods of analyzing interview data: profiles and themes. The purpose of this study aligns more with the method of coding themes. Bhattacharya points out that the themes do not emerge from the data on their own. The researcher uses her own analytical thinking to begin to see patterns and connections between the codes (2017). Through this process, the researcher noted the process taken to reduce the excerpts into manageable themes (Seidman, 2019).

The data was analyzed using various coding methods. Because the research question being explored involves layers of systems and perceptions, a comprehensive understanding of the data required the use of several methods of coding. Data was recoded to extrapolate the findings in each of the systems (school organization, leadership, and evaluations) being examined. Saldana states, "Depending on the nature and goals of your study, you may find that one coding method alone will suffice, or that two or more are needed to capture the complex processes or phenomena in your data" (2016, p. 69). The first method of coding used what Saldana refers to as attribute coding which was employed to discern participant and site information. This process also helped create a picture of the structures in place at each school around collaboration. Next, the data was coded using a form of structural coding (Saldana, 2016) to extrapolate the teachers' perceptions on the four major areas of inquiry: collaboration, organizational systems, leadership systems, and evaluation systems. Subcoding (Saldana, 2016), also
known as embedded or secondary coding, was then used to categorize the information and analyze each system with more precision.

Trustworthiness and Rigor. Shenton introduces four ways that qualitative research can be trustworthy. The researcher can show credibility through "the adoption of research methods well established both in qualitative investigation in general and in information science in particular" (2004, p. 64). As an interview study, the researcher will be able to uncover the ways the participants make sense and understand the context of being in a school as part of a collaborative team. Researchers use interviews to pull out perceptions and ideas that cannot always be discerned through observations or artifacts (Hatch, 2002).

In addition to establishing credibility, Shenton also asserts that transferability also increased the trustworthiness of a study (2004). Whereas the small number of participants with purposeful sampling is often considered to limit the transferability of a qualitative study, using the work of Bassey (1981), Lincoln \& Guba (1985), and Firestone (1993), Shenton contends that sufficient contextual information about the research site supplied by the researcher, allows readers to relate to the positions put forth in the study (2004). In the case of this study, the phenomenon of collaboration being examined is one found in many contexts throughout the field of education and, therefore, lends itself to some degree of transferability. In this case in particular, the variety of research sites ensures a greater degree of transferability because there are multiple contexts in which to connect.

Shenton relates the idea of objectivity in a quantitative study to that of confirmability in a qualitative study (2004). He defines confirmability as the ability of
the researcher to take steps to "help ensure as far as possible that the work's findings are the result of the experiences and ideas of the informants, rather that the characteristics and preferences of the researcher" (Shenton, 2004, p. 72). In this study, the researcher, through the subjectivity statement, identified possible biases and addressed them with the soundness of the research design. In addition, through the taping of the interviews and explicit description of the data collection and analysis, the researcher will create what Shenton refers to as an "audit trail" (Shenton, 2004, p. 72). A detailed methodology and an audit trail also ensure dependability, Shenton's final way to show trustworthiness. This allows the researchers work to become a prototype model and other researchers to repeat the work in the future (Shenton, 2004).

## Conclusion

This chapter describes my rationale for the qualitative methods used to procure data. For this phenomenological research study, qualitative data was obtained from semistructured interviews with six teachers who engage in collaboration at schools with differing organizational systems. At the conclusion of the interviews, the data was transcribed and analyzed using attribute, structural, and secondary coding methods (Saldana, 2019). My subjectivity statement identified possible biases and lent credibility to the data. The next chapter will detail the findings that emerged while coding and analyzing the interview transcripts.

## Chapter IV: Findings

This dissertation examines how teachers perceive collaboration with their peers and how their collaboration is impacted by the systems and structures that frame their work. Exploring the school organizational systems, leadership systems, and evaluation systems that intersect with collaborative practice provides a vantage point for determining what teachers perceive to be the supports and barriers to their effective collaboration. This chapter provides a summary of the main findings of qualitative research illustrating teachers' perceptions of collaborative practice. This chapter begins with a summary of the participants' perceptions about their current collaborative practices. The findings of how the teachers' collaboration with their peers is impacted by the organization of the school particularly regarding its use of time, staffing, and professional development will be shared next. The final sections summarize the teachers' perceptions of their school's leadership and evaluation systems and its impact on their collaboration. This section shares the findings of the coding process and explains how the participants in this study perceive and experience collaboration as it intertwines with their school's organization, leadership, and evaluation processes.

## Teacher Perceptions of Collaboration

Teacher collaboration increases student achievement (Goddard, et al., 2007) while also increasing a teacher's self-efficacy (Rosenholtz, 1989). How teachers perceive collaboration and the experiences they have with it, impacts their willingness and their perceptions of its benefits to themselves and to their students.

Through the process of coding, themes emerged around how the teachers in this study both perceive and experience collaboration in their work life. The codes were then
separated into two groups. The codes were determined by the researcher to be positive, or generic, toward collaboration or to be negative or critical about aspects of collaboration. Each group was then coded again for themes. The positive themes that emerged included the importance of collaboration, the attributes of a "good" teacher team, reasons they collaborate, the outcomes of their collaboration, and the actions they partake in during collaboration with their peers. Each theme was then coded again for subcodes. Any data that was deemed to be a support or a barrier to teacher collaboration was then placed in either the organization, leadership, or evaluation category for later analysis.

The teachers were explicitly asked how they feel about collaboration and each one responded positively. Each teacher views collaboration as important and vital to their success as a teacher. Some even went on to describe collaboration as integral, essential, and powerful.

Three attributes of good collaborative teams identified by the teachers were: leadership support, team actions, and teacher attributes. The teachers see support from the principal and the setting of clear expectations for collaboration as important conditions for positive teaming. More on this topic will be addressed in the leadership section of this chapter (p. 88-95). Overall, the teachers felt that good teams establish and work toward the same goals. Accountability to one another on the team was also seen as important. They also saw a teacher's individual attributes and actions as essential for forging a successful collaboration. Attributes like vulnerability which the teachers describe as leaving one's ego behind, expressing a willingness to listen to feedback, and change and compromise when it is for the benefit of the team and the students are
understood to be particularly essential for effective collaboration. Also, participants pointed out that to become a cohesive team, teachers need to be able to listen to others above all and to see the value in each other's strengths and ideas.

The teachers interviewed in this study collaborate for two reasons, because of past positive experiences with collaboration and/or because of certain beliefs that they have about collaboration. The teachers all described times when they participated in positive collaboration with others, and they now attribute those successes and the positive emotions they associate with those successes to their present situations and to their beliefs that collaboration should be an important and integral part of their work. Many, also, attribute their past success with data analysis and the work teams engage in to use data to improve student learning to their positive collaborations. The positive increases in assessment scores they receive from formative and summative assessments resulting from their continuous collaboration with other teachers has made them believe that collaboration can improve their practice. For example, teacher 2A described a past collaborative team as having changed her life. At a previous school she was afforded the time and structure to collaborate over data with her content team and over specific student needs with her grade level team. She felt supported and, also, was bolstered by the student data that showed her the effectiveness of these collaborations. She went on to say that it was an "amazing year." These past positive experiences also helped the teachers to critique and articulate ways in which certain teams or collaborative experiences could be better.

The teachers expressed a belief that collaborating with other teachers to analyze student data, create action plans for the data, and discuss student needs enabled them to
do what they perceive as best for kids. They believe it on both a conceptual level and on a functional level. Successful teacher collaboration is seen as a way for teachers to model for students the importance of collaborating with peers. The teachers also see it as a way to better meet the needs of the students because different personalities affect students in different ways. This type of collaboration is also understood to prevent students from falling through the proverbial cracks. In addition, the participants believe that collaboration offers a significant benefit to themselves as part of a bigger school community. The teachers interviewed expressed a core belief that collaboration, when done well, is the foundation for a strong school culture and can make a school successful. To represent this belief, Teacher 2B said, "you learn everything from other teachers." She explains that what teachers learn in college does not often help with the reality of teaching in an actual classroom. Teachers learn best from each other as they share experiences and work together to solve real problems with real students.

The participants understand that collaboration is essential to effective instruction. Teachers identified positive outcomes for their instruction, their own growth at being a more successful teacher, and the fostering of connections to other teachers and to students. In addition, they felt that collaboration allows teachers to both learn techniques from more successful teachers and, also, to introduce effective strategies to other teachers. Further, it enables them to embrace the role of both mentor and mentee. Participants also identified the collaborative development of what they see as cohesive and strong units and lessons as an essential positive outcome of collaboration. Collaborating with others also teaches them how to grow and improve as a collaborative partner. They attribute collaboration to helping them become more open to receiving
feedback by forcing them to reflect on their own teaching and practices. Over time, the teachers report becoming less "cocky" (Teacher 1B) and able to realize that there could be ideas or strategies that are as good or better than their own. Working closely with others had made them more open to compromise.

Teachers report using three main actions during collaboration: creation, discussion, and analysis. The teachers collaborated to create units, lesson plans, and classroom activities. Teacher 2B reported that she and her content level partner decide together how they will set up a unit and then plan their lessons within the units. She goes on to say that sometimes her partner
is really good at something and she has a great idea and she'll put it out there and it may not be what I was thinking, but I can see the value in it. And so, I'll say, okay, well, here's what I was thinking and then we'll compromise to something that's between the two of us. We've come up with some amazingly strong units because we both contribute what we have and we're willing to change when we need to.

Teacher 1A shared a positive collaborative experience when he and his content partner stayed after school on a Friday to prepare a lab. It was the first time they were teaching this lab and together it took them five hours to set up and prepare for Monday morning. He says, "It only worked because both of us were like on the same page. That made a huge difference." Without the collaboration he would not have taught the complete lab or have done it as well because they were helping each other to understand and perfect the lab. He went on to say that each successive year, this lab was less time consuming to prepare and improved in quality as they continued to smooth out the process. Teacher 3B shared a time when the district provided her content level team with five planning days to create curriculum maps for their content that involved mapping out
the standards for the year and creating the tasks, assignments, and assessments for each unit. She said that they have tweaked the maps over the years and that process was invaluable.

Teachers also used their collaboration time to discuss many aspects of their practice. Discussions were primarily centered around the sharing of ideas, resources, and strategies around giving each other feedback, especially after peer observations. These discussions were often led by the instructional lead teacher or the grade level team leader. Teacher 2A reiterated that she and her teaching partner, while analyzing weekly student test data, discuss the common misunderstandings the students revealed through the assessments and talked over how to organize small groups to fill in the gaps for the students who did not understand key content.

The third thing that occurs during the participants' collaborations is the analysis of processes, curriculum, and student data. Through analyzing student assessment data, they specifically discuss what is working and not working for both teachers and students and what the data tells them regarding certain subgroups. This data analysis happens both through a formal process like that of a PLC or by informally looking at and discussing a specific student whose grades, scores, or behavior has decreased recently.

The teachers who participated in this study view collaboration to have a positive impact on their teaching and their student's learning. They see the benefits from their experiences engaging in collaboration and this has instilled in them a belief that collaboration is a worthy and valuable process.

## Organizing Collaborative Structures

Schools and their administrators have choices when it comes to organizing the day-to-day functioning of the school community. The district and school leaders decide upon the priorities of a school then decide the staffing configurations and the time allotted to the different priorities. This section provides a detailed overview of the organizational systems employed by individual schools that expect and enable collaboration and how these choices impact teacher collaboration. This section describes the teaming structure and time allotted to collaboration at each school. Teacher perception of the supports and barriers of their school's organization on their engagement in collaboration with their peers is then presented.

The schools in this study use different names or acronyms for similar configurations of collaborative and planning meetings and, often, for the teams themselves or even for participants in the collaborative process. For example, most schools expect all teachers at each grade level to meet and collaborate about shared students' needs. At School 1 these meetings are called "house meetings" and at School 3 they are simply referred to as "team meetings." At school 2, teachers on the same grade level do not meet at all.

In an effort to create common nomenclature, grade level meetings that include teachers on one grade level from multiple content areas will be referred to as a Grade Level Team (GLT). Groups of teachers from the same grade level and the same content who collaborate are called the Content Level Team (CLT) and teams of teachers in the same content from multiple grade levels are referred to as Vertical Teams (VT). Some of the participants are leaders of their content level team or grade level team. These teacher
leaders represent their teams on Instructional Leadership Teams (ILT) that meet with the school's administration. Some schools meet with district leadership and/or teachers from other schools in the district and are called District Teams (DT). In addition, the term coteacher will only be used to describe teachers teaching together in the same room, often a general education teacher and an EL or special education teacher. Teammate or teaching partner will be used to describe teachers that collaborate with one another and/or share students but do not share a classroom space. These definitions are summarized in Table 4.

Table 4

| Definitions of Terms Describing Collaboration |  |  |
| :--- | :--- | :--- |
| Term | Abbreviation | Description |
| Grade Level Team | GLT | One grade level, multiple content areas |
| Content Level Teams | CLT | One grade level, one content area. |
| Vertical Teams | VT | Multiple grade levels, one content area |
| District Teams | DT | Multiple grade levels across multiple |
|  |  | schools |
| Instructional Leadership | ILT | Representatives from multiple grade |
| Team |  | levels and content areas and |
|  |  | administrators |
| Co-Teacher |  | Teachers teaching together in the same |
|  |  | room |
| Teammate/Teaching |  | Teachers that collaborate and/or share |
| partner |  | students but not a classroom space |

A brief overview of the ways teachers collaborate at each school will provide a starting point for a detailed analysis of the structure of collaboration. Table 5 provides a breakdown of the amount of non-instructional time allotted to teachers at each school and
the number of minutes engaged in required collaboration with other teachers. Although some of this time is reserved for required collaboration meetings, teachers often use additional non-instructional time to continuing collaborating. Non-instructional time is also used to communicate with parents, grade papers, and other required administrative tasks.

Table 5
Allotted Non-instructional Time

| School | Length of <br> daily <br> planning <br> period | Additional <br> weekly <br> collaboration <br> time | Total minutes per <br> week of non- <br> instructional time <br> provided | Total minutes per <br> week for <br> designated <br> collaboration |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 90 min. | 90 min. | 540 min. | 180 min. |
| 2 | 50 min. | 60 min. | 310 min. | 110 min. |
| 3 | 55 min. | 0 min. | 275 min. | 55 min. |

School 1 is organized into grade level teams. Individual teachers collaborate with their content level team, their grade level team, and their vertical team. Teachers at school 1 are allotted ninety minutes of planning time daily, as well as an additional ninety minutes per week in which the students are released early from school. School 2 is organized into CLTs and are allocated fifty minutes of planning time. Because of the PLC focus at the school, students have a late start once a week so teachers can meet to analyze data with their content level teams. They plan with their content level peers during their planning time and do not meet as a grade level team at all. Vertical planning is limited to fifteen minutes of the PLC time on the late start days. At School 3 there are two teams of teachers at each grade level. Teachers are allocated fifty-five minutes of
planning daily but only have common planning time with their grade level team with whom them meet weekly to discuss student needs. Because they are on different daily schedules, teachers are unable to meet during the school day with their content level teams to plan. Vertical teaming within the school happens two times per year for thirty minutes and teacher representatives from each grade level and content attend district team meetings with the assistant superintendent of the district and the high school content teachers twice a year. While each of these schools view teacher collaboration as a priority, each school is staffed, organized, and distribute their time in very different ways.

School 1. School 1 teachers collaborate in three different ways. Each CLT collaborates weekly. The administration of the school mandates the day of these meetings, and the teachers meet in one of their classrooms. Teacher 1A shared that he and his teaching partner actually meet every day during planning. He stated,

I think successful collaboration should be ongoing. It should happen all the time...If we're passing in the hallway, we could be talking about stuff...in my mind, as a minimum, collaboration happens once a week, but successful collaboration should happen all the time.

Both teachers at School 1 use their collaborative time with their CLT for lesson planning. Teachers have the autonomy to set the agenda for these meetings although the agenda "is driven by the pacing guide" (Teacher 1A). Their city school district provides a website that includes a pacing guide and resources for teachers to use to align with the state standards and the curriculum. Both Teacher 1A and 1B use this resource to guide their collaboration, instruction, and assessments. Although the district provides assessments for each unit, the teachers use the CLT time to plan formative assessments including daily exit tickets.

The second type of meeting at School 1 is the Vertical Team meetings that include content teachers from grades six, seven, and eight and take place once a month after school and allow for vertical alignment of the curriculum. Teacher 1A stated that at the end of each quarter the teachers will look at and compare the data from the district summative assessments to each other's scores and to the district scores. Teacher 1B said, "...we analyze data together. We find out our strength. We found out our weaknesses, and we develop a plan of action together." In addition, the teachers share resources and discuss integrating technology into their lessons.

The third type of meeting at School 1are grade level team meetings. The GLT lead, who is a teacher leader on the grade level, organizes and facilitates these meetings. It is unclear from the data how often these meetings occur, but this collaboration is more student-centered and less focused on the curriculum. According to teacher 1B, this time is used to look at processes and how to increase the efficiency of the team processes to impact student behavior. The teacher shared an example that if she were having an issue with a student, she will ask the other teachers if they are seeing the same issue and then, as a team, they will figure out a strategy to deal with the problem. Teacher 1A states that this time is used to "address issues." Because these meetings consist of teachers from multiple content areas, these are not focused on assessment data but can focus on a student's struggle with behavior or academics.

School 2. At School 2 the focus of the collaboration is the weekly Content Level Team meetings that occur every Monday. These meetings follow the prescribed structure of Dufour and colleagues' Professional Learning Communities (2016). During this time, teachers use a process to analyze data and to adjust instruction according to the data. The
teachers meet in their CLTs for the first 45 minutes and discuss the items on the state test from the previous year that relate to the current unit. They also bring current data from formative or summative classroom assessments that was agreed upon prior to the meeting. Using all these data points, they discuss the instructional strategies that were used in each classroom, common misunderstandings that the data reveals students have, and plan small group instruction to fill the gaps for the students who did not show a proficient understanding of the material. Teacher 2B indicated that they are also supposed to address the needs of students who were proficient or exceeded expectations and need extension but that, as a school, she feels they "haven't gotten to a point where we're real fluent with that because of the way it's set up." The PLC model asks teachers to bring a new set of data to examine each week, so they are using current data to determine students' levels of understanding and to create action plans accordingly. Teachers are required to fill out a form weekly with each of the student's name, score, and action plan each week. Teacher 2B referred to the fact that their weekly CLT time is limited to fifty-five minutes each week and amount of time it takes to analyze the data and make plans does not allow them to always address both the gaps and the extension activities needed. She goes on to say that theoretically it is understood how to create plans for both intervention and extension but that it is hard logistically because of the 50minute limitation of the intervention period itself.

The final fifteen minutes of the weekly late start time is a VT meeting through Zoom for teachers in all three grade levels. This meeting is led by the content lead teacher. During this time, teachers share celebrations they found when analyzing the
current week's data and share instructional strategies that the data has shown to be successful.

In addition to these collaborative events, it is expected by the administration that CLTs meet weekly. Teacher 2B meets with her teammate most days of the week to plan units, calibrate scoring and to look at data. During the 2020-2021 school year, because of COVID-19, the teachers created units for distance learning, hybrid learning, and inperson learning, so they are meeting more frequently during this current year to convert those plans into cohesive in-person units and lessons. Because of an unusual teaching load due to her multiple certifications, Teacher 2A and her teaching partner plan digitally by creating a weekly Google slide deck that they add to throughout the week.

School 2 does not have common planning time for an entire grade level. The school ensures common planning time for the two teachers who comprise the CLT, but for this to occur each of different content areas have their planning at a different time. For example, all the ELA teachers may have $2^{\text {nd }}$ period for planning and all the math teachers have period 3 for planning. Therefore, the teachers on one grade level have different planning periods throughout the day and cannot meet as a GLT. Teacher 2B states, "we collaborate about instruction. We collaborate about data. We don't collaborate about kids."

School 3. At School 3 the two teachers both teach the same content but are on two different grade levels and there are some differences in their experiences with collaboration. Both teachers meet once a week during their planning period with their small team that consists of a math, science, social studies, and ELA teacher. Each grade level has two GLTs that share the same students and share common planning time.

During their GLT meetings teachers collaborate primarily over student concerns, providing students any assistance or services they may need for both in-school struggles with grades, behavior, or resources and out-of-school issues such as homelessness and lack of resources. Some of these meetings are also dedicated to aligning tests so students do not have too many on one day, coordinating field trips or assemblies, and checking in on interdisciplinary units that the team may be teaching. Each small team is responsible for creating their own rules, homework policies, and requirements for VIP student status which is a behavioral incentive. They also use this time to have conferences with struggling students and parent conferences or phone calls.

At School 3 both teachers report that no time is set aside to collaborate with their Content Level teaching partner on the other team, although it was indicated that the other team is across the hall, so they see each other briefly between classes. Any collaboration between the CLT teachers is dependent on their own initiative and time. Teacher 3A reports "butting heads" with her co-teacher because she feels she is more secondary focused, and she sees the other teacher as more elementary focused. They check in with one another in the hall but do not seem to meet outside of school. Teacher 3B, however, values collaboration with her co-teacher and reports meeting with her when their lunch schedules align. She says their collaboration
usually happens organically. A couple of weeks will go past, and we'll send each other an email or a text saying, 'hey, when do you want to get together?' and we will meet during that lunch period or whatever it may be.

Teacher 3B also indicated that last year because of the hybrid in-person and remote learning schedules, she was able to meet during school hours often with her co-teacher
who was new to her grade level at the time. Teacher 3B was able to go over the curriculum with the new partner slowly throughout the year and she said,

It made me look at a curriculum with fresh eyes and this year we have changed things around a little bit. We have added a ...small unit right before standardized testing happens that she has done before, that helps with that standardized testing, but we've tweaked it so that it fits within, with our enduring understanding of our whole thematic units, literature units.

Because of the work the previous year, they both find the collaboration fruitful and have continued whenever they can. There is no schoolwide expectation that CLTs collaborate, only GLTs, which are built into the schedule.

There is some disagreement in the number of yearly VT meetings that occur at School 3. Teacher 3A maintains that, in addition to the weekly GLT meetings, VT meetings occur once a month, whereas Teacher 3B contends that the VT meeting times have been changed this year to occur only twice a year, once in the fall and once in the spring, for thirty minutes. She contends that these vertical team meetings used to be more often, but they took place after school and therefore, it was hard to get a full team to show up. She also stated that, in her department, these meetings often turned into gripe sessions with teachers complaining all the time. She expressed that she wished instead that it consisted of purposeful planning and filling in student gaps, so you feel like "you're actually making some progress."

Another type of meeting both teachers at School 3 mentioned are for DTs. DT meetings are a form of vertical planning for representatives in the Math and English departments at the middle and high school level. They are led by the Assistant Superintendent who sets the agenda for the meeting and Teacher 3A states that they focus
on data, specifically Star data for English and Khan Academy data for math. There is a discrepancy between the two teachers as to how often these occur. One says they are held two times a year and the other contends that they occur five time a year.

School administrators organize teacher teams based on the school's priorities and available non-instructional time. The schools in this study primarily organize their teams into grade level teams, content level teams, and/or vertical teams. School 1 has enough weekly non-instructional time embedded into their schedule that teachers meet in all three. School 2 prioritizes content level teams and because of time constraints is unable to meet in grade level or vertical teams. The priorities at School 3 favor GLTs and the teachers are unable to meet with their CLT to collaboratively unit or lesson plan or to look at student data. The next section will demonstrate how these organizational decisions positively and negatively impact the participants.

## Organizational Supports and Barriers to Collaboration

The organizational structures in schools include the amount of time provided for collaboration, the staffing configurations such as the hiring, the length of time teachers spend on the same team, purposeful teaming and common planning time, and the access to professional development in the form of collaboration (Louis, Marks, \& Kruse, 1996). The data involving these organizational structures were isolated and then coded. The codes were then determined to be seen as a support or a barrier to the teacher's ability to engage in meaningful collaboration. The data was then analyzed again, and themes were extrapolated to help gain an understanding of how teachers perceive their school's organization in connection to their peer collaboration.

Time. Time, particularly non-instructional time carved out during the school day, was seen as a support for the teachers at School 1 who were allotted the most amount of time and as a barrier to the teachers at School 2 and School 3 where it was seen as preventing them from attending to all the needs of their students. Non-instructional time is used for both collaboration with peers and other tasks such as grading papers, lesson preparation, parent contact, and other administrative duties. The more non-instructional time allocated, the more teachers can not only collaborate more fully with their colleagues, but they, also, can attend to other teaching obligations. This can prevent them from feeling obligated to work outside school hours, which for some is not always possible. Teachers with limited non-instructional time must choose whether to collaborate or take care of other tasks. Often this means eliminating doing something altogether, completing tasks partially or insufficiently, or working on their own time.

Teachers at schools with adequate planning time are able to both collaborate and complete individual duties whereas teachers at schools with limited planning time during the day only collaborate once a week to protect time for other tasks. School 1 has the most generous schedule by providing teachers with 540 minutes of planning time during the week. The teachers at this school collaborate in GLTs, CLTs, and have regular VT time. The teachers at school 1 reported both attending to student needs as a GLT, lesson planning collaboratively on most days, and analyzing formative and summative data. Teacher 1B struggles with time, even with the generous planning schedule, because she is a teacher and instructional leader at the school. As a leader, she has added responsibilities including setting agendas, preparing and leading the team meetings, and attending additional school leadership team meetings. Overall, however, both teachers at

School 1 feel that the time allotted during the week for collaboration is adequate to collaborate meaningfully, and to finish other teaching tasks such as meeting with students and parents, preparing for class and grading papers. Teacher 1 A , also, likes having the structured time set aside each week with the expectation that he and his content partner collaborate around the curriculum because he feels that it helps maximize his time so it is not wasted when he could be doing other things. He states,

It cuts out out of school time that you have to spend. If you're effective in your planning, you should be able to get everything you need to get done, for the most part, in that hour and a half (Teacher 1A).

The teachers at the other two sites reported not having enough time to do all that they felt was necessary to attend to all the needs of the students. Out of 310 minutes of planning time during the week at School 2, 110 minutes is set aside for mandatory collaboration time for teachers. Sixty minutes is used for PLCs and fifty minutes per week is required collaborative planning time for CLTs, although teacher 2B reports collaborating almost daily with her CLT partner which is not required but what she finds necessary to be successful. School 2 prioritizes the data analysis of the PLC model and has organized the teacher teams around that model. The PLC focus is seen as a definite strength by both teachers with Teacher 2B reporting, "the PLC process, the action research result of using our data to make decisions...it's beyond reproach." Using all of this time exclusively for data analysis has impacted their schedule, however, and has eliminated common planning time for each grade level team. Both teachers at School 2 spoke at length about their dissatisfaction with the inability to carve out time for GLTs to meet around specific student needs. Teacher 2B states,

We don't collaborate about kids and that makes me a little bit sick to my stomach every time I think about it, because we take our fifth graders out of the elementary school, pulling them into six 50 -minute classes and we almost never talk to their other teachers about them.

Limited class time also impacts the teachers' ability to attend to both students who need reteaching and/or intervention and those that need enrichment. "Theoretically, I understand how we're supposed to do it. Logistically, in a fifty-minute period, it's hard enough to get intervention to begin with right, let alone to intervene in a couple of different directions (Teacher 2B)."

School 3 has a similar barrier with time. With only 275 minutes of planning time per week, and only 55 minutes of that set aside for mandatory GLT collaboration time, the schedule prioritizes grade level planning. This allows each of the two grade level teams to meet weekly to attend to student needs but eliminates the ability of CLTs to meet to collaborate on lesson planning, curriculum, and data analysis. Teacher 3B shares,

Time constraints, just finding substitutes, paying for substitutes ... so that you can collaborate freely with an entire department when your schedules are different, is harder and harder, especially now pandemic wise, trying to find subs to get a full-on department grade level collaboration.

Although the teachers at School 3 are intentionally placed on teams to create smaller learning communities, this schedule has limited their collaboration time significantly. Teacher 3B sees an issue with this because they are unable to look deeply at student data or to plan units and lessons together unless they use their own time outside of the school day to do so.

Teachers in School 1 expressed satisfaction in the amount of time given for collaboration. They are able to meet with three different configurations of teams in order
to collaborate for many purposes. Teachers in Schools 2 and 3 expressed dissatisfaction with the amount of time given to collaborate. They reported that certain collaborative teams were unable to meet and, therefore, they felt inadequate in meeting the needs of their students. They also have an awareness of what is missing and how, with more time, their practice could improve with increased amounts of collaboration. In response to a question about reflecting on a good example of collaboration, Teacher 2A shared an example from a previous school she worked in. She says,
they did it right ... we had a two-hour early release ... the first hour was content groups. And so, then we shared data and teacher strategies and the next hour we ... could talk about the specific student's needs, like who needs a jacket or whose mom is sick ... it was incredible ... it was such an amazing year of teaching, changed my life but the school where I'm at now, I feel like it's not big enough. They won't cluster because it wouldn't work with the scheduling.

Collaborating to meet the various needs of students requires adequate noninstructional time be set aside and schedules configured to include common planning time. At School 1 teachers feel they are able to engage in collaboration with various teams of teachers to accomplish this successfully. At Schools 2 and 3, the teachers feel an inadequate amount of time is allotted to non-instructional tasks and the scheduling at each school leaves teachers unable to meet in certain teaming configurations. Therefore, teachers can either discuss individual students or student assessment data, not both.

Staffing. When a school simplifies their staffing structure by hiring specifically to create a collaborative team, the ability of the school to engage in effective collaborative practices will increase (Louis, Marks, \& Kruse, 1996). This means both
hiring enough teachers to create teams but also to be purposeful in hiring teachers who are a good fit for existing teams and have a positive disposition towards collaboration.

Staffing a school to intentionally form teams of teachers creates smaller learning communities. This is most often done by creating teams of four teachers who teach the core subject areas to the same cohort of students. It is also sometimes done by creating two-teacher teams that each teach two subjects such as science and math or English Language Arts and social studies. In School 3, this teaming structure is seen as a support to the teachers because it has decreased their class sizes which has allowed the teachers to foster student connections. Each team of teachers has a smaller cohort of students that they share and interact with daily. This allows them to connect with their students more deeply by providing them with common planning time to focus on student concerns. Teachers use this time to find the students the resources they may need and increases the teacher's ability to identify and fill gaps in student learning.

Overwhelmingly, the teachers in the study perceived some teachers being resistant during collaboration meetings as a major barrier to successful collaboration. The teachers repeated the idea that for a team to have success, they must be on the same page by sharing the same goals and all work together for improved student learning. This idea bridges both an organizational level and leadership purview as the administration is often responsible for the hiring and retention of teachers and staff.

In the coding of data about perception of teachers being resistant, three themes emerged: attributes of teachers who appear resistant, the actions of teachers who resist collaboration, and the consequences of having teachers perceived by others as resistant on the team. The teachers in the study perceive resistance as teachers who do not listen
to other teachers or who pretend to listen and then do their own thing which is often in contrast to the team's decisions or shared values. These 'resistant teachers' are described as being inflexible and having a different work ethic than the rest of the team. Teachers perceived as resistant often refuse to share their data, strategies, or lessons with the other teachers and the participants expressed being discouraged by these behaviors. Good collaboration requires that teachers let themselves be vulnerable and not let their egos get in the way. Some teachers find it hard to be vulnerable in front of peers and, therefore, can be perceived as resistant to collaboration.

The participants expressed frustration when, during collaboration, teachers act in ways that discourage other people and sometimes derail successful collaboration amongst the team. There is also a frustration when teachers often do not come to collaborative meetings, especially those that they view as occurring outside their work contract. If they do attend, they refuse to share or they partake in mindless talking or griping that does not allow the team to move forward and make progress. When the team looks at data, teachers are perceived as resistant if they maintain a lack of openness and vulnerability which prevents them from seeing the gaps in their data or make progress with helping students who need it. They are not willing to be flexible and often derail situations where they disagree with the others on the team unless the administration steps in.

The consequences of having teachers who are perceived as resistant on a team are many. Meetings can feel like gripe sessions and teachers who value collaboration see it as time wasted. Collaborative teachers are discouraged by this because these teachers perceive competition where there is none and then undermine the process.

Professional Development. Just as time and staffing are allotted towards a school's priorities, so, too, is their professional development. Collaboration around assessment and instruction is an effective method of professional development (DarlingHammond \& Richardson, 2009). One question asked during the interview dealt with professional development, and it was asked to see how the participants defined professional development and what they valued or did not value about it. I was also interested to see if any of the professional development was focused on collaboration and how to collaborate as it is an expectation at all three schools. The question asked: What does professional development look like at your school? All teachers referred to professional development as one and done workshops or meetings led by either an administrator or an outside speaker. None of the teachers considered their own collaboration as professional development, although the research cited in the literature review shows that long term collaboration is a more effective professional development strategy than isolated speakers or topics (Darling-Hammond, Hyler, \& Gardner, 2017; Darling-Hammond \& Richardson, 2009).

Three of the teachers did refer to recent degrees they had obtained and shared some of what they learned and how it applied or enhanced their collaboration. That information was gleaned during their answers to other questions, however, not to the one question asking specifically about professional development. Two teachers mentioned seeking out and attending workshops in the summer or outside of school hours that they attended independently and another two of the teachers talked about professional development points that states require to renew a teaching license. The State Educational Department over one of the schools has recently redefined what "counts" as professional
development and no longer allows teachers to claim hours spent in interdisciplinary work such as vertical planning meetings toward their professional development points.

Teachers had no input or choice in the professional development topic or speaker for their school-wide professional development. This led to an overall dissatisfaction with either the topics or the speakers. Even when they considered the presenters to be "good" or "great," if they did not feel it was relevant, they expressed dissatisfaction. Two teachers indicated that they were frustrated because they ended up seeing the same speaker on the same topic multiple times or attending workshops that didn't apply to them.

A lot of times they're trying to get us to do one thing and my response to a lot of that PD is either outright rebellion because I'm not bought in...It's either not what we need or it's, there are too many holes in the problem. (Teacher 2B)

After an experience attending a workshop that was on a topic, she already felt proficient in, Teacher 1B reported that she and another colleague brought the fact that teachers were attending irrelevant workshops to their principal. She states, "Teachers are more receptive of professional development when they can relate to what's being offered...So, I told him maybe we need to figure out, ask, send out a needs assessment."

The positive responses regarding school-wide professional development were regarding situations where teachers were collaborating with teachers they often do not work with in different grades and subjects or when they are involved deeper collaboration strategies such as observing each other's classrooms and providing feedback.

## Impact of Leadership Systems on Collaboration

The leadership system of a school is the driving force behind effective teacher collaboration. School leaders create and sustain an organization that supports teacher collaboration. Teacher collaboration efforts require a strong leader, clear expectations and processes, and empowered teachers. The two leadership models schools adopt are either a distributive leadership model in which the decision-making is distributed amongst administration and teachers while they work toward a shared vision or a hierarchical model where administrators make the decisions and mandate them to the rest of the school. This section will describe the leadership models at each of the three school sites and share the teacher's perceptions of how leaders support or discourage collaboration with their peers.

School 1 employs a form of distributive model of leadership. The district leadership oversees 34 schools including School 1. In their role, they primarily support school academics by providing extensive curriculum resources, content coaching support and professional development. Teacher 1A points out that the state standards and district curriculum objectives push collaboration as much as administration expectations.

School 1 is led by a principal and two assistant principals each of whom are attached to a certain content area. There is an ILT that is comprised of teachers from each grade level and each content area has an administrator that attends CLT meetings and VT meetings. Teachers on the ILT also observe classes, liaise with the district instructional coach, and make sure that the mandatory collaboration meetings are occurring. Teacher 1B, who is on the ILT, also commented that sometimes an administrator "pushes off" a responsibility onto the instructional leaders. The
administration sets the time and day of mandatory collaboration meetings but is flexible with teams that need to adjust the day or time because of scheduling conflicts. The VT meetings are the most structured with the district and school administration driving the agenda.

The administration at School 1 encourages work towards the state standardized tests and has organized content level collaboration as a way to increase proficiency on these. Although the administration determines the type of collaborative meetings and when they occur, they do give autonomy to the CLT and GLT to set their own agendas. Both Teacher 1A and 1B describe the leadership style as "hands off" but also add that if a team is not performing as well as the others, then an administrator will step in and take more of an active role. The administrators attend the CLT meetings of their assigned content area but give autonomy to teams conditionally. Teacher 1B says that the administrator was sitting in on her CLT meetings until they "trusted" that they were doing it well. Teacher 1A prefers administrators who are not standing over him and says that "not every teacher needs the same level of oversight." He feels that his longevity on staff has earned him a "measure of respect" and because the administration trusts him, they do not come to many of his meetings.

The administration also conducts classroom walk-through observations at School 1. The leaders attend the meetings and then do the observations so there is a level of oversight. Teacher 1A feels that it is important that the administrators have a level of competency regarding their assigned content area. He goes on to say that all administrators know best instructional practices but if they do not understand the content,
too, they are unable to evaluate its effectiveness. These observations align with Shulman's concept of PCK which will be revisited in chapter five.

Overall, at School 1, the school administration has set the expectations for collaboration and has organized the school's time and structure accordingly. They allow a measure of teacher input and some decision-making through the ILT in addition to allowing some autonomy to those teachers and teams who earn it by demonstrating a level trustworthiness and proficiency.

School 2 has a tight hierarchical model of leadership with the district leadership dictating the processes of teacher collaboration. The district leadership oversees seven schools and mandates the PLC logistics and processes that occur in the CLT meetings at each school. The teachers are expected to follow the district PLC template at their CLT meetings by bringing data, analyzing data, and acting on data. Teacher 2B states, "it's pretty regimented what we are supposed to do." After each meeting, the teachers are required to fill out an extensive form detailing the student data and the plans of action.

At School 2, the district mandates how much time is spent on collaboration, which configuration of teachers meet to collaborate, and what protocols are followed during collaboration. The district administration oversees these decisions and there is no room for change or teacher input in the process. One example of this is when Teacher 2B asked the school administration to allow some GLT time during the late start day to talk about the socio-emotional learning needs of students instead of following the prescribed PLC process. The administration asked the district for permission to allow this to happen and the district stood firm in refusing to alter the prescribed PLC process. Similarly, teacher 2A has also been trying to add a PLC for teachers and parents of EL students.

She learned about this model through a district recommended summer professional development conference. She first approached the school administration who said they would talk to the district leaders. After repeatedly not getting an answer, she contacted the district leaders and has not received a response. Although both teachers at School 2 agree that the PLC model from the district is strong, they also stress that the superintendent makes all the decisions and that leaves the teachers feeling micromanaged because there is no teacher decision-making at all - even at ILT meetings. Teacher 2A states, "We are told. We are told what to do by the administrator who, I believe, is told by the superintendent." The hierarchical approach, however, can be effective in dealing quickly with challenges such as the COVID-19 crisis. The district's response to virtual learning during COVID-19 was "excellent and fast" (Teacher 2B).

At School 2, administration is comprised of a principal and two assistant principals. The principal is approachable, personable, and not intimidating. Teacher 2B feels this can be frustrating at times, however, because she believes that teachers need to feel their leader is strong and in charge. There is an ILT at School 2 that consists of administrators and teacher representatives of each content area. The teachers on the ILT run the structured PLC time for their CLT. At one time the school had both a CLT and GLT but that went away because of a lack of district support and funding. Using common planning time for the CLT to meet and collaborate on lesson plans, instead of meeting as a GLT, was a decision made by the ILT, but the decision-making process was handled badly. Rather than a discussion to find consensus, the teachers were asked to choose which was more important to them: meeting with their content partner or grade level teachers. The majority picked CLT, the in school collaborative times were devoted
to CLT meetings, and the GLTs were dissolved. Now, teachers at School 2 have two meetings with their CLT each week. One occurs during the late start day and follows the PLC structure mandated by the district. The other CLT meeting is once a week during their common planning time and is devoted to collaborative unit and lesson planning.

Leadership works differently for each of these CLT meetings. On the late start days, the content lead teacher facilitates the PLC process mandated by the district and the administrator assigned to that content area attends. Teacher 2B says that the administrator usually comes to the last ten or so minutes of the meeting so the team can ask any questions they may have. An administrator attends all of the CLT meetings with another content area because they were considered dysfunctional for a while. The main level of accountability at these meetings are the forms that are filled out during the PLC process that lists every student needing intervention and is submitted to the administrator at the close of the meeting. Administrators rarely attend the CLT meetings that meet during the planning period and Teacher 2B wonders if meeting during this time is enforced across the building. She and her teaching partner meet almost daily during this time because they find value in the process, but the principal hardly ever comes because he knows they create exemplary lessons.

For School 2, the district leadership has implemented and supported the use of the PLC process in CLTs to analyze and act upon current student data. This is a wellestablished process that ensures all students learn at high levels (DuFour et al., 2016). To implement the PLC process, the district has adopted a top-down approach to leadership that has left aspects of teacher collaboration unattended. By allotting a small amount of the teacher's time to collaboration and mandating it solely be used for PLCs, teachers are
unable to use this collaborative time to solve or manage problems of practice that fall outside of the purview of the PLC process.

School 3 has a distributive leadership model and allows teachers an opportunity to take on a leadership role by participating in the following teams: a bi-annual District Team meeting, a weekly ILT, or a Student Assistant Program (SAP). The DT occurs twice per year and is led by the Assistant Superintendent who also creates the agenda for the meeting. This meeting brings together teacher representatives from grade levels 6-12 to work on aligning the curriculum. Another is the ILT which meets weekly with representatives from each grade level and the administration to work on school and teacher needs. Lastly, there is a Student Assistant Program (SAP) where representatives from each grade level meet weekly to coordinate resources for students who need it. Teachers on each team volunteer to attend these meetings and assume the role of team leader or student assistant program coordinator for that grade. Some grade levels have one person for each role all year and on other grade levels the teachers rotate by quarter or semester. An administrator leads both the ILT and SAP meetings and sets the agenda for each meeting.

The administration at School 3 consists of the principal and one assistant principal who each oversee two content areas. As was explained in the organization section, the school does not schedule common planning time scheduled for CLT meetings. If teachers meet with their CLT, it is on their own time and by their own initiative. The administration does provide short amounts of time during some in-service days. When the CLT meets during in-service days, the administration gives each CLT an outline of what to cover, primarily bigger topics like creating goals or how to include more writing
in their classrooms. After being asked how the leadership could improve her school's system of collaboration, Teacher 3B responded that the CLT is "restricted to whatever inservice time we have and they brought that on the agenda, but then following through with that...to making sure...that we as teachers are using that time effectively." School administration does not have systems in place to create accountability that teachers attend these meetings or use the time effectively to accomplish the goals set by the administration. The lack of accountability extends to curriculum guides that the teachers are required to turn in at the beginning of a term outlining their unit and plans. Though teachers turn these curriculum guides in, the administrators do not ensure that what is on the guide is happening in the classrooms.

At School 3, there are weekly GLT meetings and the team lead for the grade level creates the agenda for these meetings. An administrator will attend these meetings if there is a difficult topic to discuss or to check in to hear how the team is collaborating and what they are working on. If the administrator observes that the team is deep into their work, he or she will leave and let them continue uninterrupted. Some teachers perceive an administrator's presence as an intrusion whereas others see it as showing concern for the team.

Although the principal at School 3 is the final decision maker for the school, she does solicit input from teachers, often through surveys. For example, the administration determines the final professional development schedule, but teachers can make suggestions. Also, the staff is often asked to make decisions about issues that impact their practice. This year the teachers voted to forgo evaluations this year because of the upheaval caused by the pandemic.

The teachers at School 3 have a lot of autonomy and not much accountability. Teacher 3A says that they are "encouraged" to collaborate as well as share and give feedback to other teachers. However, the participants point out that there is no system that discovers whether this collaboration is actually done or not. Teacher 3B concedes that the lack of accountability could come from a lack of time on the administrator's part because they have so many other responsibilities that finding time for collaboration is hard.

In summary, the leadership system at each of the three schools in this study are organized and led in different ways. School 1 uses a distributive model of leadership where teachers are empowered to make decisions concerning their classrooms and grade levels. Teachers at School 1 are also able to take on leadership roles which allow them to take part in making decisions that affect the whole school. School 2's hierarchical model is driven by the district administration's PLC model which is mandated and for which school administrators and teachers are held accountable for doing. Teachers are not empowered to make decisions beyond their classrooms and the school administrators need permission from the district leaders to make decisions affecting their school. School 3 also uses a form of distributive leadership and offers teachers leadership positions and input into school-wide decisions. The next section will discuss how the participants view the impact of their yearly evaluation, which is conducted by school leaders, on their collaborative practices with other teachers.

## Impact of Evaluation Systems on Collaboration

End of the year evaluations are used to assess a teacher's level of proficiency on key indicators of performance decided on by the state or district. Each state has its own
evaluation standards and criteria, and districts can create their own evaluation systems within the state guidelines. In each of the states where the participants work, collaboration is a key indicator, it is embedded within a key indicator, or is not explicitly stated at all on their end of the year evaluations. School 1 has an indicator about collaboration embedded in a professionalism standard whereas in School 2 collaboration is one of five focus areas. There, however, they only pick one cell to focus on each year. Teacher 3B spoke at some length about the dysfunction of the evaluation system in her district stating that "we do not have a consistent method of evaluating and that causes deep resentment." However, Teacher 3A, who teaches at that same school, asserted that collaboration was one of the sections on their evaluation and felt that it "encourages us to not only participate in collaboration but try to lead some component of it". This teacher also stated that she has not been evaluated in three years because of the disruptions from COVID-19 and where she is in the evaluation cycle.

When asked "in what ways does your yearly evaluation impact or not impact your collaboration with your colleagues" all participants concluded that yearly evaluation does not impact their approach to collaboration at all. Many were surprised by the question and had to think about the system itself and recall what they were evaluated on. One striking thing was that most struggled to articulate how their yearly evaluations worked. Many used phrases like "I think" or "I guess" when describing the process. As teachers reflected on the question, they were able to make connections to collaboration and recall if it was included or a part of the evaluation rubric. For example, Teacher 1B noted, "As...the instructional leader, I would say that collaboration is, is necessary in order for you to reach your goals because of you sharing ideas, and, you know, doing stuff like
that." But she also points out that her annual evaluation does not impact her as a teacher. Teacher 1A asserted that his evaluation does not impact his collaboration because he sees himself as a mentor now that he is at the end of his career. His teaching partner is a firstyear teacher, and Teacher 1A sees his role more to teach her how to collaborate to be more effective and not necessarily to score higher points on his evaluation. Teacher 1B asserted that "we have a school wide goal of, you know, meeting... keeping our accreditation and getting a certain pass rate. So, I think it more so affects the admins (sic.) goal, not mine so much because mine is my own." She sees collaboration as a way to improve student achievement and meet the school-wide goals set by the administration more than to improve her own instructional goals that are reflected in her yearly evaluation.

The participants in this study, do not see a connection between their collaboration, which they all perceive as having a positive effect on themselves and their students, and their yearly evaluation. All the schools in the study conduct yearly evaluations to assess the proficiency of the teachers. Although some of the evaluation criteria include or embed collaboration indicators, the teachers do not see it as impactful to the quantity or quality of their collaborative practices.

## Chapter V: Results

There are many interdependent systems in schools that directly impact a teacher's work (Bryk, 2010). This study seeks to examine how three of these systems impact a teacher's ability to effectively collaborate with their peers. When teachers collaborate with one another, what they do is influenced by three primary factors: how they are supported by their leaders, how they are assessed for their effectiveness, and how the environment is organized to create the parameters of their work. The leadership, evaluation, and organizational systems in a school determine a teacher's success with collaboration. Research has demonstrated the value of collaboration which supports investing in the structures that empower teachers to collaborate effectively with one another. Teacher collaboration has been shown to positively impact student achievement, teacher efficacy, and teacher satisfaction (Ronfeldt et al., 2015; Goddard, Goddard, \& Tschannen-Moran, 2007). Further, through collaboration, teachers amass collective expertise that contributes to their development of pedagogical content knowledge (Shulman, 1986).

This study seeks to answer the research question: How do a teacher's perceptions of a school's organizational, leadership, and evaluative systems support or prevent access to, and engagement in, effective collaboration with other teachers? By interrogating six teachers' perspectives within three independent school systems, several ways that school organization, leadership, and evaluation support or discourage collaboration amongst teachers became clear. The following sections include the discussion of themes on the research question, the limitations of the chapter, the implications for practice, the significance of the study, and recommendations for future research.

## Discussion of Findings

Systems in schools connect people and resources and set processes to ensure success. "A system can be defined as a functionally related assemblage of interacting, interrelated, or interdependent elements forming a complex whole" (Shaked \& Schechter, 2017, p. 9). Schools are complex webs of systems interacting with one another daily (Bryk, 2010). The purpose of this study is to examine how teachers perceive the supports and barriers of teacher collaboration in relation to the organizational structures, leadership, and evaluation systems that exist in their school. The six teachers in the study were interviewed using Seidman's three tier format. Instead of three separate interviews for each tier, the researcher conducted one 60-minute interview that followed Seidman's format. The first questions focused on the participant's history with collaboration, then moved into questions about their current experience with collaboration at their school, and then concluded with three questions asking the teachers to reflect on their responses. The data was then coded and analyzed.

Some important themes emerged from the data about how the participants experience collaboration within the three systems examined in this study. One theme that emerged was that of trust, both relational trust and a sense of autonomy were perceived by the teachers to be necessary to their effective collaboration. In schools, relational trust is built through the social exchanges that take place in school. In schools, relational trust is exhibited through mutual esteem for each other's competence, integrity, and respect and is built through a variety of formal and informal social exchanges. Trust results in allowing teachers autonomy in addition to accountability for student learning. Two themes were perceived as barriers to successful collaboration, namely time and teacher
resistance to the systems of collaboration instilled at the school. Teachers require time to purposefully collaborate to ensure student learning and to collaborate with different teams to meet the needs of their students. Teacher resistance is often related to a lack of relational trust.

## Trust

Research has already demonstrated the importance of trust for teacher effectiveness. Trust amongst teachers and leaders takes time to build but is an integral part of successful collaboration (Tschannen-Moran, 2001). Higher levels of trust impact teachers' commitment and satisfaction which induces teachers to remain on the same team in the same school for longer periods of time (Tschannen-Moran, 2001). Research also demonstrates that teams that work together for five or more years, have higher student achievement (Flowers, Mertens, \& Mulhall, 1999) and are able to sustain the hard work required to improve student learning (Bryk et al., 2010). This study underscores the necessity of trust for effective collaboration in two ways, which were expressed in two subthemes. The first subtheme was in reference to developing relational trust with teammates over time and the second subtheme was the trust between teachers and leaders that the teachers believe exists because of the autonomy they receive from their school's leadership.

Relational Trust. Relational trust is built when teachers use non-instructional time in school to both collaborate and complete other required teaching tasks together. This increases the social interactions needed to create relational trust and reduces a teacher's vulnerability making them more amenable to embrace new ideas and tasks. Relational trust is built over time through social exchanges that lead to a manifestation of
shared expectations, commitments, and goals (Edwards-Groves, Grootenboer, \& Ronnerman, 2016). There are organizational elements to building relational trust, like the structured use of weekly non-instructional time, and staffing and teaming choices also affect trust development.

Other research confirms that remaining with a team over many years improves student outcomes (Flowers, Mertens, \& Mulhall, 1999). Further, consistent teaming over time builds relational trust amongst the teachers and administrators which increases a teacher's professional learning through collaboration (Knight, 2009). Relational trust is necessary for an organization to improve and grow and directly impacts student achievement (Bryk et al., 2010). Effective teams share the same goals regarding student learning, complement each other's strengths, and acknowledge each other's weaknesses (Senge, 2006). Principals and other school leaders are essential in cultivating a culture of respect through creating safe environments that allow teachers to be vulnerable.

Principals create this environment through empathetic listening conjoined with a strong school vision (Bryk, 2010). Organizing teachers into collaborative teams and then giving them time over the years to develop relational trust is another important aspect that emerged through the interviews. Teacher 2A says, "And then again, it just takes, it [a relationship] takes a while to trust...your teammates that they have, I don't know, success or the best interest of the students in mind." This participant struggled with her teaching partner when she first came to School 2 because they seemed different in their priorities and their approaches to teaching. Teacher 2 A shares,

I love to collaborate, and I've been in my position ... for four years now and I've been in the same team and it's funny. Like the first year I felt like it was such a struggle of ideas and ideology and all of that. And now it's like we finish each
other's sentences, you know. Once you get in that groove, it's really nice. Really nice.

Over time Teacher 2A and her collaborators developed relational trust, and this increased the level of effectiveness in their planning and instruction. Building relational trust also increases teacher satisfaction which creates stable professional learning communities and correlates with reduced teacher turnover. Teacher satisfaction and low turnover has been shown to increase student achievement. Teachers recognize that relational trust is essential to effective, long-term collaborations.

The development of relational trust results from the intersection of the three organizational structures considered in this dissertation: time, staffing, and professional development. The teachers need significant non-instructional time to collaborate, as well as intentional staffing placements to create teams that balance each other's strengths. Strong leaders are needed to create cultures that induce relational trust to develop. Teachers also need to be able to continue to collaborate with the same partner over time as this is necessary to develop trusting relationships, leading to higher teacher satisfaction, efficacy, and student achievement (Flowers, Mertens, \& Mulhall, 1999; Berry, Daughtrey, \& Wieder, 2009). Longevity in the partnership allows teachers to develop relational trust and allows them to amass collective expertise over time and streamline processes.

For example, when speaking about her collaboration with her content partner, Teacher 2B says,

We amplify each other's good ideas and that's, of course, the kids benefit from that. And the fact that we are both able to reflect and go, 'wow, that really didn't work, let's fix it.' I mean it benefits the kids because it strengthens our instruction.

Similarly, Teacher 3B worked with her former teaching partner for ten years. After the partner left last year, she was happy to be put with a new partner she was able to start building a relationship with right away. Because of the teaming structure at School 3, however, collaborating is on their own time. Without structured time for collaboration, trust takes longer to establish.

Relational trust is also negatively impacted by high teacher turnover. Teacher 3B pointed out that the high turnover at the English department of the high school in her district "has made it very difficult for that sort of larger collaboration to get together because, you know, you're constantly meeting new people and then they're changing up their curriculum. So, there's a lot missing there." High teacher turnover undermines relational trust. Having structures in place that support collaboration, increase teacher satisfaction, and make teachers want to stay because they feel supported through the relational trust they have built through collaboration. Teacher 3A talks about the low teacher turnover at her school. She states,

I know sometimes when new teachers come in, they like it a lot because it seems more supportive than like schools they've been at. And, as I said, our district never really has problems filling positions because the teachers do feel supported by one another.

In this quote, she is particularly speaking towards the staffing model utilized at School 3, which creates small learning communities by hiring extra teachers to create two fourperson teams on every grade level. The way the administration staffs the school allows for collaboration amongst the two GLTs at each grade level. The teachers perceive purposefully hiring for a teaming model as a support because the smaller learning communities create relational trust. Teachers feel supported by the other teachers.

Relational trust is created by the purposeful organization of the school to create small teams of teachers who collaborate about the students they share. Relational trust is a key support to teachers effectively engaging in collaboration with their peers.

Autonomy. Autonomy allows a teacher to make self-directed decisions based on the shared goals of a school. Tomlinson describes autonomy as the "freedom to make informed, uncoerced decisions (2019, p. 1). School leaders were perceived by the teachers in this study to trust some teachers and some teams more than others. Although autonomy is not synonymous with trust, it is an attribute that builds trust among the teachers and staff at a school and also a result of developing trust. The teachers perceived the autonomy to collaborate with limited principal interference as a mark of trust. The principals in all three schools attended some collaboration meetings more than others. Teacher 1A shared that his administrators
give us the freedom to do whatever we need to do. So, I don't have any instructing. I said, I've been here 21 years, so, you know, my work ethic has gotten me to a point where I think my leadership knows that I'm...going to do what I'm supposed to do. So, they've given me the autonomy to like, to do what I need to do, and I like that because I don't need anybody at this point, like staying over top of me to make sure that I'm doing what I was supposed to do.

Teacher 1A perceives that he has earned the principal's trust because of the autonomy that has been given to plan their lessons without oversight. The teachers are allowed to create the agenda for their planning time and are trusted that they are following the pacing guide. The teachers perceive that the administrators trust them to complete what is necessary for the students. Teacher 1A goes on to say that when it comes to administrator oversight, he likes that his administrator is hands-off for him but knows that
this [hands-off approach] would not work for every teacher. So, I understand that different teachers, different levels, or degrees of teaching experience will allow
for different levels of engagement and involvement from an administrative oversight standpoint. So, I'm glad that my admin (sic.) doesn't do a one size fits all model.

Teacher 2B has had a similar experience and she says,
Sometimes our principal will sit in on our team planning but, he doesn't sit in on ours very often, but he has said that (her partner) and my instruction and lesson design is, at risk of sounding big headed, exemplary often. And so, he, I think, he probably has bigger fish to fry.

These teachers feel that the leaders are giving them autonomy because they trust them to do their job and do it well. The teachers perceive this autonomy as positive reinforcement and see the principal's continued presence in certain meetings as a sign that the team is dysfunctional or not producing the results expected.

Giving teachers autonomy over their practice and the perceived trust that accompanies it is one way to support teachers in continued collaboration. However, it can be problematic by creating discord for teachers who are perceived as 'not doing it right' or teams that are seen as 'dysfunctional.' Healthy cultures work toward shared goals. Having autonomy and a leader's trust should not mean that teachers do not receive the same opportunities to grow through feedback and collaboration with administrators. All teachers should have some level of autonomy and quality coaching and collaboration with a school leader in order to grow. "Ignoring teacher autonomy often ensures that teachers don't implement new practices" (Knight, 2009). This is the inverse of what school leaders are likely trying to accomplish by attending some collaborative meetings more than others. Instead of persuading teachers to embrace the collaborative culture, the teachers perceive it as a punishment. Further, treating some teachers differently could create a divisive culture instead of one engaged in organizational learning (Senge, 2006).

The cultural health of a school, as described in the literature review, is dependent on the leader, but it also can be elevated by the organizational systems put in place. The intentional staffing and hiring of teachers who embrace and have experience with collaboration, in tandem with quality professional development and the time to have meaningful dialogue around student data will create a culture of trust.

## Time

From the analysis of data, it is evident that a lack of non-instructional time directed to meeting the wholistic needs of students is a barrier to engaging in successful collaboration. School 2 and School 3 provide teachers with limited time for collaboration. In these schools, the teachers only share common planning time with the grade level team or the content level planning, not both. Limited planning time means that important aspects of collaborative practice are not occurring. For example, at School 2 where teachers only meet in CLTs, Teacher 2A has approached the administration about some of the issues she feels are not being addressed. She says,

I keep bringing up that we need a little more focus and emphasis on kids actual like social-emotional needs and that as a school our culture is really bad... Our whole community is really changing, and the culture is not catching up with it. And I think we need a lot more focus and training and some days spent on that rather than all the data.

Teacher 2 A is expressing the stress she feels from her inability to attend to both her students social-emotional needs and academic needs in the collaborative environment due to limited time. This lack is impacting her classroom culture, and, potentially, impact student achievement.

Teachers spend most of their day in a classroom and in the hallways with students. They see both the academic and social-emotional side of their students and can
know the needs of both. The inability to meet all these needs leads to a sense of dissatisfaction amongst teachers because student outcomes are not improving. Although teachers need to address a multitude of student needs, expecting teachers to use limited allocations of time to collaborate in multiple teaming configurations about multiple aspects of student needs is also ineffective. Giving teachers too much to collaborate about without the appropriate time allocation will lead to ineffectual collaboration creating low teacher efficacy and satisfaction.

In this regard, school 2's use of the PLC model for looking at student data and creating action plans is exemplary. Note specifically that they attribute all their mandated collaboration time and resources to one aspect of collaboration, student data analysis. If they were to begin splitting that time, as Teacher 2A requests, the effectiveness of that component of their collaboration would decrease. Without increasing the amount of time reserved for collaboration, the question then becomes should a school focus on all aspects of student academic and social needs at a shallow level or should it choose one aspect and do it well and with quality, forsaking the other altogether. These are hard choices for schools to make and at times, they are made unintentionally, or in the case of School 2, intentionally chosen by the district leadership leading to teacher frustration and dissatisfaction.

## Resistance to Collaboration

As discussed in Chapter 4, teachers who were perceived as resistant to collaboration were understood to pose a significant barrier to collaboration according to the teachers in this study.

However, it is important to recognize that the perception that someone is 'resistant' to collaboration can change over time. Teacher 1A talks about the transition to a collaborative culture at School 1. He states,

Learning communities came into being probably somewhere around 15 years ago. It changed everything, in my opinion, because it caused collaboration where at first, you know, there was some initial hesitation about people working together and sharing because everybody kind of like hoarded their stuff. They saw it as a competition ... So initially when ... the learning committees and communities ... came into being, there was some friction because people were reluctant to share. Uh, but after a couple of years that smoothed itself out.

The shift from a culture of isolation to one of collaboration only occurs, however, with consistent expectations from school leaders and quality professional development. If teacher resistance to collaboration is going to change, the systems in the school that support quality collaboration practices need to be aligned.

School leaders should look to a misalignment of these systems if collaborative teams continue to face teacher resistance. If a teacher's experience with peer collaboration is lacking, then they could continue to be resistant. If enough non instructional time is not provided for collaboration, teachers could perceive it as something not valued in the school. It can also lead to frustration if there is not enough to complete the analysis of data, leading teachers to view it as an ineffective process that has no direct value to their students or instructional practices. Inversely, adequate time allotted to the processes of teacher collaboration will demonstrate it as a school priority, and any positive gains in student data could improve the teacher's attitude towards the process. Quality professional development is also needed. The professional development could be in the form of coaching, providing protocols to guide collaborative practices, or teacher mentor programs. It is not effective coaching if the principal only
attends certain teams while they collaboratively plan. All teachers should receive coaching to create a cohesion throughout the school. This cohesion will also create relational trust, which, mentioned in a previous section, increases teacher satisfaction and efficacy.

Leaders need to be intentional in creating teams that complement each other's strengths. Creating teams starts with intentional hiring and staffing decisions, which in turn, improve teacher satisfaction, reduce teacher turnover, and increase student learning. Purposeful hiring of teachers looks for strengths that complement the existing team rather than simply hiring for subject matter expertise. In addition, teachers who embrace collaborative practices should be sought out. Teams need to be together for multiple years in order to develop the fluency that Teacher 2B discussed in Chapter 4 because collaboration takes skill, and that skill is developed over time. Longevity of staff and teams will increase and sustain effective collaboration over time which will positively impact student achievement. Intentionally creating teams that work well together will help ensure that morale and satisfaction is high, so teacher turnover is low. Hiring and staffing practices should be adjusted to more proactively and intentionally include collaboration.

Negative collaborative experiences could lack structural support such as adequate time, quality professional development, or appropriate teaming configurations. Effective collaboration could also be undermined if it is seen as an 'extra' thing to do because it is not aligned with the criteria in teachers' annual evaluations. School leadership should also examine their own actions and attitudes in relation to collaboration. Inadequate support, perceived competition between or amongst teams, and lack of relational trust can
undermine a leader's implementation of a school priority such as collaboration (Knight, 2009). The undermining of the implementation of collaboration can create the perception of teacher resistance which lowers teacher morale and makes it harder to create a collaborative culture throughout a school.

## Limitations

The study and this dissertation research face several limitations. Several limitations relate to the research design and participant sampling. One of the limitations is that all the participants surveyed find value in collaboration. Interviewing more teachers at each school to receive a well-rounded perspective that would, possibly, include teachers who did not value, and even were resistant to collaboration, would provide a broader view of teacher perspectives on collaboration. In addition, administrators were not included in this study. This was an intentional decision, aimed to create a sense of safety for teachers who participated to speak unencumbered. But inclusion of administrators would have provided more context for understanding the intentions behind their decisions that relate to collaboration.

One limitation of this dissertation is the researcher's inability to know the fidelity and quality of the collaborative practices at each school. Whether teachers in this study engaged in meaningful or successful collaboration using external criteria or a rubric such as the Teacher Collaboration Assessment Rubric (Gadja \& Koliba, 2007) was not evaluated in this research. The teachers shared their perspectives of how collaboration works for them, and their perspective does not represent what happens on other teams or in other areas of the schools. For example, at School 3, the interview subjects were not consistent about the topics and agenda for their GLTs. Teacher 3A states that they
collaborate about student needs but did not mention of specific data used to assess the level of need or amount of need required. At School 1, the teachers spoke of looking at and analyzing data but did not reference to protocols or processes they use to ensure that their discussions are meaningful. A teacher's perception that their collaborative practice is effective because the team gets along well does not mean that the work the team is doing is good or enough to impact student achievement in meaningful ways. The data analysis being done by School 2 during their PLCs can be assumed to be of quality because they are using a research-based method of collaboration. Both teachers at School 2 acknowledge that the work they are doing each week around data is top notch. They also make clear, however, that the structures that support that time and collaboration deny them time to attend collaboratively to student needs beyond the assessments they analyze each week.

Another limitation of this study is the impact the COVID-19 pandemic has had on schools, some of which is known and some of which is still to be discovered. These interviews were conducted in October 2021, the year after the major interruptions to schools took place. The schools in the study were all back to in person instruction at the time of the interviews, but there had been many disruptions to "normal" the previous year which consisted of some form of virtual learning or hybrid learning (a combination of in person and virtual). COVID-19 impacted present practices and processes and the teachers in this study would qualify some of their responses by explaining it was a practice done before COVID-19 that either has not been reestablished yet, has changed, or is being partially done. The changes that occurred because of the COVID-19 pandemic were not all negative, however. Teacher 2A shared that COVID-19 helps "in
some way to think outside the box and find ways to collaborate more easily. It makes the time issue more flexible." Remote learning created different schedules that eliminated time for transitions and other daily routines. The change in scheduling created more time to collaborate, which was needed to make curriculum adaptations to remote learning platforms. The positive outcomes from COVID-19 corresponds with Teacher 3B's ability to meet with her content partner every day during COVID-19 because time was used very differently with remote learning, as was shared in Chapter 4. The pandemic impacted the systems explored in this study and, therefore, the teacher's perspectives have also been influenced by their experience teaching during COVID-19.

## Implications for Practice

Collaboration works best when it is an integrated part of the school culture. Systems within a school should work in concert with one another to make a priority, such as collaboration, effective and impactful. An analysis of the data from six teacher interviews revealed that school leaders do not often align their expectations with their practices. Ultimately, this misalignment is a factor in explaining why collaboration is not having the intended impact on student achievement, teacher satisfaction, or teacher efficacy.

The intersection of the three systems examined in this study organization, leadership, and evaluation revealed some interesting insights. The systems themselves are interwoven within the schools, all guiding, assessing, and leading teachers in their daily work. This was expected. The fact that they seem to be so distinct from one another was not expected. When looking at the phenomenon of collaboration at the three school sites, it was evident that the three systems were not synchronized toward the goal
of effective teacher collaboration; a goal which all three schools claim to prioritize. Each school had some of the necessary organizational structures put in place, the most common being the creation of common planning time. Simply having common planning time, however, did not ensure quality collaboration. Adequate time is essential but how that time is used and how the teachers are supported are equally important for success. In addition, there must be an explicit connection between the expectations for how teachers collaborate, the support provided by a school's leadership, and a teacher's yearly evaluation.

Aligning the three systems to focus on collaboration includes ensuring that the professional development a teacher engages in also supports this priority. The data shows a misalignment between the organizational structures of the schools and the professional development teachers were given. Although the research (DarlingHammond \& Richardson, 2009; Darling-Hammond et al., 2017) supports that long-term collaborative practices, are in themselves, the optimal professional development to improve student achievement, leaders at the schools where this research occurred continue to use 'one and done' professional development. The problem is that this does not align with collaborative practice and teachers at each of the research sites were dissatisfied with these professional development sessions. These professional development sessions are a misuse of scarce time and financial resources that should be focused on the main priority of collaboration. Further, teachers should drive professional development selection and implementation. As teachers collaborate, the collective expertise they build increases their professional learning and, also, guides them in identifying areas of need and the knowledge and resources they require. Teachers at all
three schools have little to no input in the professional development which is done parallel to their ongoing collaboration.

The goal of professional development from a systems-thinking perspective, is to increase teacher effectiveness improving their ability to teach specific students' specific content. This is the essence of Shulman's pedagogical content knowledge (PCK), which has already been demonstrated to be built effectively through collaboration. School leaders could increase their teacher's attainment of PCK by redirecting professional development efforts to teacher collaboration. This is done when school leaders cease to be gatekeepers of collaborative time and instead adopt the role of instructional partner and collaborator. When teachers can effectively collaborate, they build collective expertise and can then request professional resources or consultations that directly align with their student's needs.

The evaluation system was separate from the other two systems in all three schools and, was shown to have no impact on the daily work of the teachers. Even those teachers who had collaboration embedded into their assessment rubric, did not see it as impactful to their collaboration with their peers. Rather, having collaboration evaluated neither supported it nor detracted from it. This aligns with Jones, Bettini, and Brownell's (2019) assertion that even though the purpose for developing collaborative and evaluative systems is to improve teacher quality, both systems are developed separately and parallel from one another. Even though evaluation systems differ from state to state, as does the weight the evaluation has in holding the teacher accountable, the six teachers who teach in three different states did not see a connection between their annual evaluation and their impetus to collaboration. For some states, the evaluations are high stakes and impact
teacher scores, standing, and/or salary. It is possible that in all three states where the schools exist, the evaluation systems are low stakes and, therefore, not something the teachers worry about to a great extent. They do what they believe is best for students and do what administrators ask of them.

For school reform efforts to increase student learning, they must look at the alignment of a school's leadership, evaluation system, and its organizational structure to prioritize teacher collaboration. Teachers cannot be expected to prioritize collaboration with their peers if the systems in which they work in does not prioritize collaboration. When these systems are aligned, teachers have adequate common planning time to meet with grade level partners and content level partners to analyze both student need data and student assessment data. Leadership systems use a distributive model that empowers teachers to make decisions that impact student learning at both the school and classroom level and processes are adopted that ensure collaboration time is used effectively by focusing on student learning and growth. Lastly, yearly evaluations are aligned to equally value a teacher's work outside the classroom as well as during instruction.

Schools that focus on collaboration as a means for improving teacher quality and increasing student achievement need to be intentional in aligning the systems that support quality collaboration among teachers. This not only involves creating structural support such as extended non-instructional time, purposeful hiring, and placement of teachers on teams, and quality professional development around collaboration processes and protocols, but, also, aligning the evaluation processes of observation and feedback to include teacher collaboration. Leaders should attend collaboration meetings and observe
classroom instruction and provide teachers with feedback on both situations, as well as the connection between both.

## Significance

The result of this research is significant in several ways. This research confirms some existing research and diverges from others. This study reinforces work from Senge's systems thinking model and organizational learning (2006). One of the important outcomes of teacher collaboration is the collective expertise that teachers amass. This is the organizational learning that Senge employs in The Fifth Discipline (2006). Through sharing collective expertise, teachers can acquire pedagogical content knowledge. Teacher 1A referred implicitly to PCK when he asserted that only an administrator who is also an expert in his content can understand effectiveness of his pedagogical choices.

One of the major themes that emerged from this research was relational trust. One of the reasons the teachers in this study value collaboration is because of the relational trust they have built with their teams over time. This reinforces the extensive research done around relational trust from Tschannen-Moran (2001) and Bryk (2010). Schools that have long-term collaboration build relational trust which is essential in building teacher capacity and creating communities focused on student learning (Bryk, 2010). The teachers with long-time partnerships who participated in this study discussed building trust over time even with partners that were originally seen as not an ideal fit.

This research diverges is some ways from other research. In Senge's Schools That Learn (2012), the three nested systems of the classroom, the school and the community are examined. The research in my study looks at the specific systems of a
school's organizational system, its leadership system, and its evaluation system. By focusing on school-based systems, my research is able to look at the systems that directly impact a teacher's daily practice in and out of the classroom.

In addition to examining a subset of systems not often explored together, their alignment is at the heart of the results of this study. Any level of school reform must include implementing teacher collaboration because of its positive impact on improving student achievement. For this to occur, the three systems of organization, leadership, and evaluation must be aligned to prioritize teacher collaboration. If the systems are out of alignment, then some student needs will not be addressed, and teachers could become frustrated and dissatisfied. Teacher dissatisfaction occurs when teachers feel they are not supported in working toward a school's priorities or in doing what is best for their students. Dissatisfaction can also be because of a disconnection between what they are evaluated on and the school expectations.

This research is also significant in that it looks explicitly at what teachers do outside the classroom that impacts their attainment of PCK and their success inside the classroom. The teacher perspective shows the realities of theoretical ideas. Theories based on research are worth doing but do not always work as intended within the systems already in place. Seeking out teacher perspectives and feedback is essential because of the way they bridge students and administrators. The perspective of teachers is critical because they are the ones implementing what leaders decide upon and see the impact of these decisions on their student's learning.

## Recommendations for Future Research

Future research into effective teacher collaboration should include the perspective of administrators and other school leaders. The administrators were purposefully not included in this research for two reasons. The first is the possibility the administrators, in an attempt to show their school in the most positive light, would restrict their responses to what appears in school documents and district policies. The second reason administrators were not included is because they might unintentionally intimidate the teachers who would then not be as forthcoming with their perceptions for fear of retribution. However, examination of the leadership system of a school is incomplete in some ways without the direct input from the leaders themselves. A more comprehensive case study of each school could illuminate more about the way the three systems interact or do not interact with one another to support or detract from effective collaboration.

Another recommendation would be to include survey data that would include more teacher representation at each school without having to conduct lengthy interviews. This would give a more comprehensive look at the logistics of how each system works at each school. Survey data, in conjunction with the deeper insights revealed in the teacher interviews, would allow for more in-depth analysis of how each of the three systems impact teacher collaboration at their school. This would add to the current research about current collaborative supports and barriers as experienced by teachers in the field.

The last recommendation for further research is to focus more specifically on the impact of evaluations on teaching practice and, specifically, on teacher collaboration. In the current environment of teacher accountability, evaluations have assumed a new role in many schools. There is limited research available on evaluation systems and their
impact on teachers, in general. Evaluations, especially ones considered 'high stakes,' have the potential to impact teacher attitudes, satisfaction, self-efficacy, and student achievement. The available research indicates that evaluations are often constructed parallel to other school reform efforts. Exploring the possibility of conflicting priorities for teachers deserves further research.

## Conclusion

Collaboration has been an essential part of my growth as an educator and school leader. Having seen the impact that teacher collaboration can have on school culture, teacher growth, and student achievement, I sought to find the possible supports and barriers certain systems have in developing successful teacher collaboration programs in middle schools. I was specifically interested in the experiences of teachers like myself, who worked in schools that prioritized collaboration. For that reason, I interviewed six teachers in three different schools in three different states using Seidman's method for qualitative interviews. Each school site was chosen for its approach to organizing the school schedule and the school teaming structures for collaboration to occur.

The findings of this study revealed that a major support for teacher collaboration is the relational trust that develops when teams of teachers collaborate with one another for long periods of time and that teachers who perceive autonomy feel trusted by their administrators. Relational trust with both other teachers and their administrator was one reason the teachers had positive attitudes towards collaboration as a practice. The analysis of the interview data revealed the teachers were impacted by two significant barriers. One was time and the other was resistance to collaboration by other teachers on their team. Time was seen as a barrier because if not enough time was devoted to
collaboration teachers were unable to collaborate about both a students' academic needs and social-emotional needs. The teachers in the study felt it was hard to work with teachers who did not value collaboration or did not know how to collaborate at the same level and were, therefore, perceived as resistant. Aligning the leadership, evaluation, and organizational systems of a school to focus on teacher collaboration would support the building of relational trust and give the teachers a sense of autonomy. Alignment would also help support teachers who do not understand the how or why of collaboration and, therefore, are resistant during meeting with their peers. For schools to effectively increase a teacher's pedagogical content knowledge and student achievement, they must attend to what happens outside of the classroom as much as they do inside.

## References

Anfara Jr, V. A., Caskey, M. M., \& Carpenter, J. (2012). Organizational models for teacher learning. Middle School Journal, 43(5), 52-62.

Bassey, M. (1981). Pedagogic research: On the relative merits of search for generalisation and study of single events. Oxford review of education, 7(1), 73-94.

Berry, B., Daughtrey, A., \& Wieder, A. (2009). Collaboration: Closing the Effective Teaching Gap. Center for teaching quality.

Bhattacharya, K. (2017). Fundamentals of qualitative research: A practical guide. New York, NY: Taylor \& Francis.

Brooks, J. S., \& Normore, A. H. (2015). Qualitative research and educational leadership: Essential dynamics to consider when designing and conducting studies. International Journal of Educational Management, 29(7), 798-806.

Brown, K. M., Anfara Jr, V. A., \& Roney, K. (2004). Student achievement in high performing, suburban middle schools and low performing, urban middle schools: Plausible explanations for the differences. Education and Urban Society, 36(4), 428-456.

Bryk, A. S. (2010). Organizing schools for improvement: Research on Chicago school improvement indicates that improving elementary schools requires coherent, orchestrated action across five essential supports. Phi Delta Kappan, 91(7), 23-30.

Bryk, A, Sebring, P.B., Allensworth, E., Luppescu, S. \& Easton, J. (2010). Organizing schools for improvement: Lessons from Chicago. Chicago, IL: University of Chicago Press.

Coggshall, J. G., Rasmussen, C., Colton, A., Milton, J., \& Jacques, C. (2012). Generating teaching effectiveness: The role of job-embedded professional learning in teacher evaluation. Research \& Policy Brief. National Comprehensive Center for Teacher Quality.

Creswell, J. (2009). Research design, $3^{r d}$ ed. Thousand Oaks, CA: Sage Publications. Curry, M. (2008). Critical friends' groups: The possibilities and limitations embedded in teacher professional communities aimed at instructional improvement and school reform. Teachers College Record, 110(4), 733-774.

Darling-Hammond, L., \& Richardson, N. (2009). Research review/teacher learning: What matters. Educational Leadership, 66(5), 46-53.

Darling-Hammond, L., Hyler, M. E., \& Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute.

Datnow, A. (2011). Collaboration and contrived collegiality: Revisiting Hargreaves in the age of accountability. Journal of Educational Change, 12(2), 147-158.

DeMatthews, D. (2014). Principal and teacher collaboration: An exploration of distributed leadership in professional learning communities. International Journal of Educational Leadership and Management, Vol. 2(2), 176-206.

DuFour, R. (2004). What is a professional learning community? Educational Leadership, 61(8), 6-11.

DuFour, R. (2011). Work together: But only if you want to. Phi Delta Kappan, 92(5), 5761.

DuFour, R. (2003). Leading Edge: Collaboration lite puts student achievement on a starvation diet. Journal of Staff Development, 24(3), 63-64.

Dufour, R., Dufour, R., Eaker, R., Many, T., \& Mattos, M. (2016). Learning by doing. Bloomington, IN: Solution Tree Press.

Edwards-Groves, C., Grootenboer, P., \& Ronnerman, K. (2016). Facilitating a culture of relational trust in school-based action research: Recognising the role of middle leaders. Educational Action Research, 24(3), 369-386.

Firestone, W. A. (1993). Alternative arguments for generalizing from data as applied to qualitative research. Educational researcher, 22(4), 16-23.

Flowers, N., Mertens, S. B., \& Mulhall, P. F. (1999). The impact of teaming: Five research-based outcomes. Middle School Journal, 31(2), 57-60.

Gajda, R., \& Koliba, C. (2007). Evaluating the imperative of intraorganizational collaboration: A school improvement perspective. American Journal of Evaluation, 28(1), 26-44.

Gajda, R., \& Koliba, C. J. (2008). Evaluating and improving the quality of teacher collaboration: A field-tested framework for secondary school leaders. NASSP Bulletin, 92(2), 133-153.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., \& Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. American Educational Research Journal, 38(4), 915-945.

Geverdt, D. (2019). Education Demographic and Geographic Estimates Program (EDGE): Locale boundaries file documentation, 2017 (NCES 2018-115). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [February 26, 2022] from http://nces.ed.gov/pubsearch

Goddard, Y., Goddard, R., \& Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. Teacher College Record, 109(1), 877896.

Grissom, J. A., Egalite, A. J., \& Lindsay, C. A. (2021). What great principals really do. Educational Leadership, 78(7), 21-25.

Hargreaves, A., \& O'Connor, M. T. (2017). Cultures of professional collaboration: Their origins and opponents. Journal of Professional Capital and Community, 2(2), 7485.

Hatch, J.A. (2002). Doing qualitative research in educational settings. Albany: State University of New York Press.

Hord, S., \& Sommers, W. (2008). Leading professional learning communities. Thousand Oaks, CA: Corwin Press.

Horn, I. S., Garner, B., Kane, B. D., \& Brasel, J. (2017). A taxonomy of instructional learning opportunities in teachers' workgroup conversations. Journal of Teacher Education, 68(1), 41-54.

Johnson, S. M., Kraft, M. A., \& Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. Teachers College Record, 114(10), 1-39.

Johnston, W. R., \& Tsai, T. (2018). The prevalence of collaboration among American teachers: National findings from the American Teacher Panel. RAND.

Jones, N. D., Bettini, E., \& Brownell, M. (2019). Competing strands of educational reform policy: Can collaborative school reform and teacher evaluation reform be reconciled? The Elementary School Journal, 119(3), 468-486.

Kennedy, A., Deuel, A., Nelson, T. H., \& Slavit, D. (2011). Requiring collaboration or distributing leadership? Phi Delta Kappan, 92(8), 20-24.

Knight, J. (2009). What can we do about teacher resistance? Phi Delta Kappan, 90(7), 508-513.

Kraft, M. A., Papay, J. P., Johnson, S. M., Charner-Laird, M., Ng, M., \& Reinhorn, S. (2015). Educating amid uncertainty: The organizational supports teachers need to serve students in high-poverty, urban schools. Educational Administration Quarterly, 51(5), 753-790.

Lederman, N. G., \& Gess-Newsome, J. (1992). Do subject matter knowledge, pedagogical knowledge, and pedagogical content knowledge constitute the ideal gas law of science teaching? Journal of Science Teacher Education, 3(1), 16-20.

Lincoln, Y. S., \& Guba, E. G. (1985). Establishing trustworthiness. Naturalistic Inquiry, 289(331), 289-327.

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. Teachers college record, 91(4), 509-536.

Louis, K. S. (2006). Changing the culture of schools: Professional community, organizational learning, and trust. Journal of School Leadership, 16(5), 477-489.

Louis, K. S., \& Lee, M. (2016). Teachers' capacity for organizational learning: The effects of school culture and context. School Effectiveness and School Improvement, 27(4), 534-556.

Louis, K. S., Marks, H. M., \& Kruse, S. (1996). Teachers' professional community in restructuring schools. American Educational Research Journal, 33(4), 757-798.

McLaughlin, M. W., \& Talbert, J. E. (2006). Building school-based teacher learning communities: Professional strategies to improve student achievement. (Vol. 45). New York, NY: Teachers College Press.

Mertens, S. B., Flowers, N., Anfara Jr., V. A., \& Caskey, M. M. (2010). Common planning time. Middle School Journal, 41(5), 50-57.

Muhammad, A. (2018). Transforming school culture: How to overcome staff division. Bloomington, IN: Solution Tree Press.

National Center for Education Statistics (NCES) home page, part of the U.S. Department of Education. National Center for Education Statistics (NCES) Retrieved February 27, 2022, from https://nces.ed.gov/

Patton, Michael. (2015) Qualitative research and evaluation methods. Los Angeles, CA: Sage Publishing.

Raywid, M. A. (1993). Finding time for collaboration. Educational Leadership, 51(1), 30-34.

Reeves, P. M., Pun, W. H., \& Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. Teaching and Teacher Education, 67, 227-236.

Ronfeldt, M., Farmer, S. O., McQueen, K., \& Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. American Educational Research Journal, 52(3), 475-514.

Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. The Elementary School Journal, 89(4), 421-439.

Saldana, J. (2016) The coding manual for qualitative researchers. Los Angeles, CA: Sage Publications.

Saunders, W. M., Goldenberg, C. N., \& Gallimore, R. (2009). Increasing achievement by focusing grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title I schools. American Educational Research Journal, 46(4), 1006-1033.

Schmoker, M. (2018). Focus: Elevating the essentials to radically improve student learning. Alexandria, VA: Association for Supervision and Curriculum Development.

Seidman, I. (2019). Interviewing as qualitative research. New York, NY: Teacher's College Press.

Senge, P. (2006). The fifth discipline. New York, NY: Crown Publishing Group.
Senge, P. (2012). Schools that learn. New York, NY: Crown Publishing Group.
Shachar, H., \& Shmuelevitz, H. (1997). Implementing cooperative learning, teacher collaboration and teachers' sense of efficacy in heterogeneous junior high schools. Contemporary Educational Psychology, 22(1), 53-72.

Shaked, H., Schechter, C., Ganon-Shilon, S., \& Goldratt, M. (2017). Systems thinking for school leaders. Dordrecht: Springer.

Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education of Information, 22, 63-75.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4-14.

Solis, A. (2009). Pedagogical content knowledge: What matters most in the professional learning of content teachers in classrooms with diverse student populations. IDRA Newsletter, August 2009.

Szczesiul, S., \& Huizenga, J. (2014). The burden of leadership: Exploring the principal's role in teacher collaboration. Improving Schools, 17(2), 176-191.

Tomlinson, C. (2019). The autonomous teacher. Educational Leadership, 77(1), 92-93.
Tschannen-Moran, M. (2001). Collaboration and the need for trust. Journal of Educational Administration, 39(4), 308-331.

Vescio, V., Ross, D., \& Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education, 24(1), 80-91.

Waldron, N. L., \& McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. Journal of Educational and Psychological Consultation, 20(1), 58-74.

Warren, L. L., \& Muth, K. D. (1995). The impact of common planning time on middle grades students and teachers. Research in Middle Level Education, 18(3), 41-58.

Wenger, E. (2009). Communities of practice. Communities, 22(5), 57-80.
Wilcox, K. C., \& Angelis, J. I. (2012). From "muddle school" to middle school: Building capacity to collaborate for higher-performing middle schools: High-performing middle level schools build capacity to support collaboration and student success. Middle School Journal, 43(4), 40-48.

## Appendix A: IRB Approval Letter

## IRB

INSTITUTIONAL REVIEW BOARD
Office of Research Compliance,

## MIDDLE TENNESSEE <br> STATE UNIVERSITY

010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129
FWA: 00005331/IRB Regn. 0003571

## IRBN001 - EXPEDITED PROTOCOL APPROVAL NOTICE

Monday, September 13, 2021

| Protocol Title | Teacher Perceptions of the Supports and Barriers for Professional <br> Collaboration: A Phenomenonological Study <br> $\mathbf{2 2 - 2 0 0 7} \mathbf{7 v}$ |
| :--- | :--- |
| Protocol ID |  |
| Principal Investigator | Meredith Wendel (Student) <br> Co-Investigators <br> Investigator Email(s) |
| NONE  <br> Department mat7h@mtmail.mtsu.edu; kevin.krahenbuhl@mtsu.edu <br> Funding  | ALSI |

Dear Investigator(s),
The above identified research proposal has been reviewed by the MTSU IRB through the EXPEDITED mechanism under 45 CFR 46.110 and 21 CFR 56.110 within the category (7) Research on individual or group characteristics or behavior. A summary of the IRB action is tabulated below:

| IRB Action | APPROVED for ONE YEAR |  |
| :--- | :--- | :--- |
| Date of Expiration | $9 / 30 / 2022 \quad$ Date of Approval: 9/13/21 | Recent Amendment: NONE |
| Sample Size | TEN (10) | Target Population: <br> Primary Classification: General Adults (18 or older) <br> Specific Classification: School Teachers |
| Participant Pool | Non-interventional or Data Analysis |  |
| Type of Interaction | Virtual/Remote/Online interaction <br> In person or physical interaction - Mandatory COVID-19 Management |  |
| Exceptions | 1. Audio/video recording are permitted. <br> 2. Allowed to obtain verbal consent via Zoom. |  |
| Restrictions | 1. Mandatory ACTIVE Informed Consent. <br> 2. Other than the exceptions above, identifiable data/artifacts, such as, <br> audio/video data, photographs, handwriting samples, personal address, driving <br> records, social security number, and etc., MUST NOT be collected. Recorded <br> identifiable information must be deidentified as described in the protocol. <br> 3. Mandatory Final report (refer last page). <br> 4. The protocol details must not be included in the compensation receipt. |  |
| Approved Templates | IRB Templates: Zoom interview informed consent <br> Non-MTSU Templates: Email recruitment transcript |  |
| Research Inducement | \$25 Amazon gift card not funded by MTSU; gift receipt documentation not required |  |
| Comments | NONE |  |

## Appendix B: Recruitment Email

Dear (insert name of teacher):
I am a current doctoral candidate in the department of Assessment, Learning, and School Improvement at Middle Tennessee State University. I am conducting an interview study on teacher collaboration for my doctoral dissertation. The title of this study is: Teacher Perception of the Supports and Barriers for Professional Collaboration.

I have been an educator for twenty-seven years and am particularly interested in why teacher collaboration is successful in some settings and not others. This study is an exploration of how teachers perceive the systems in their school, such as its organization, leadership, and evaluation practices, as a support or barrier to effective teacher collaboration. You were identified as a potential participant because you work in a school that requires you to collaborate with your peers during the school day.

The risks for participation in this study are low as it will be held over Zoom, your name and information will be changed and protected for the analysis portion of the study and your time commitment will be minimal. This study will benefit the field of education because it will offer a deeper understanding of how teachers experience collaboration and how their behavior or actions within a collaborative setting are influenced by the systems in which they work. Many of the studies done that connect teacher collaboration to a school's organizational systems are often quantitative and look at the bigger picture of the whole school. This study seeks to narrow the focus to examine how teacher's perceptions of what they see as supports and barriers to collaboration impacts their engagement in the process. This study could also benefit you because it will allow you to reflect on your own experiences with collaboration. This will give you an opportunity to process these experiences and, potentially, to formulate a more effective mechanism for collaborating effectively going forward.

Participation in this study involves:

- Meeting with the researcher over Zoom
- Answering interview questions about teacher collaboration and the systems in your school lasting approximately 90 minutes.
- Receiving a $\$ 25$ Amazon gift card within one week of the interview.

Participation in this study is voluntary. Please reply to this email, or contact me at 615-4267818, for more information about this study.

Sincerely,
Meredith Wendel
Principal Investigator
Assessment, Learning and School Improvement
Middle Tennessee State University
(615) 426-7818

Mat7h@mtmail.mtsu.edu
Kevin Krahenbuhl
Faculty Advisor
Middle Tennessee State University
(615) 494-7838

Kevin.Krahenbuhl@mtsu.edu

## Appendix C: Interview Questions

- How did you get into teaching?
- How did you come to work at your current school?
- What do you look for in a school when you are looking for a position?
- How do you feel about collaboration?
- Can you describe what good collaboration looks like to you?
- Can you describe a time collaboration did not go well for you?
- How do teachers collaborate at your school?
- What are the expectations at your school for collaboration?
- How do you feel about these expectations?
- How does your school support your collaboration with your colleagues?
- What encourages you to collaborate with your colleagues?
- What discourages you from collaborating with your colleagues?
- How do you decide when and where to meet to collaborate with your colleagues?
- How did you learn to collaborate with other teachers?
- How does your collaboration impact your classroom instruction?
- How are decisions made in the school regarding teacher collaboration practices?
- How could leadership improve your school's system of collaboration?
- In what ways does your yearly evaluation impact or not impact your collaboration with colleagues?
- How is the leadership of the school involved or not involved with collaboration?
- How do you improve your practice?
- What is an example of how you have improved as a teacher over the last year?
- What made this improvement happen?
- What does the professional development look like at your school?
- Thinking back on your responses today, how important is collaboration to you (or to your success) as a teacher?
- Reflecting on the experiences you shared today, how has your perception of collaboration changed over time?
- Thinking back over this year, how has your collaboration with colleagues impacted your experience teaching during Covid-19?

