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An Exploration Of Shared Leadership Through Teacher Teams And Its Impact On A Safe And Collaborative Culture And Effective Teaching

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AN EXPLORATION OF SHARED LEADERSHIP THROUGH TEACHER TEAMS AND ITS IMPACT ON A SAFE AND COLLABORATIVE CULTURE AND EFFECTIVE TEACHING

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ABSTRACT

The purpose of this quantitative study was to explore the impact that teacher teams, specifically building-level leadership teams and professional learning communities, can have on a school's safe and collaborative culture and effective teaching practices. Waves of school reform have made their way through legislation and schools and, as a result, have increased demands placed upon building principals as leaders of their schools. This study utilized a survey adapted from Marzano's High Reliability Schools™ framework which was administered to all current Indiana secondary public-school teachers. Inferential analysis indicated that both building-level leadership teams and professional learning communities have a significant effect on a school's safe and collaborative culture and effective teaching. While a principal's participation in the Indiana Principal Leadership Institute (IPLI) was not found to have a significant effect, correlational analysis did determine that a safe and collaborative culture and effective teaching have the potential to effect each other due to a positive linear relationship being found between the two variables. Analysis of research questions resulted in important implications that focus on a principal's development of collaborative teams within their school structure, specifically building-level leadership teams and professional learning communities. The findings and implications of this study, combined with additional supportive research cited within this study, signal to the importance of a principal's responsibility to both develop and support collaborative teacher teams in the buildings they lead.

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CHAPTER 1

INTRODUCTION

Building administrators work in many roles with demands placed on them from a variety of different perspectives and pressures in K–12 education, and the role of the principal has changed drastically over time. The days are gone when a principal is seen as only the manager of the building—one who turns the lights on upon arrival and turns them off at the conclusion of the day. As reported by the Wallace Foundation (2013), movements, such as standards-based, high-stakes testing and school accountability, require the principal to take on the burden of increased leadership. This leadership burden should not conform to an authoritarian leadership style. Increased leadership demands have increased the number of problems needing to be solved. Zhao (2014) shared stories of the Chinese education system under what is primarily an authoritarian system and through those stories found, "When autonomy is granted, people become more motivated and because they are free to act, more creative in designing solutions to their problems" (p. 54). This study explored the impact of school administrators, who give autonomy and control to their school teams.

It should be noted that, although teachers have a direct impact on student achievement and growth, a building principal's impact is usually much more indirect (Robbins & Alvy, 2014). Robbins and Alvy (2014) cited a study conducted by Odden and Archibald (2009) that demonstrated student achievement that doubled and stated, "It should be no surprise that one

result of the multiplicity of activities was a collaborative, professional school culture . . . what is commonly called a 'professional learning community'" (p. 170). This certainly creates the necessity of building principals' ability to develop effective, shared leadership and collaborative teams within their buildings.

Lencioni (2012) discussed his four disciplines to organizational health, of which the first discipline is to build a cohesive leadership team, and through this, organizational priorities and purpose become "collective and shared [assisting in a] principal's ability to create" (p. 26) shared leadership and thus leading to a more positive and healthy school culture and organization. Other collaborative teams in schools, often referred to as professional learning communities (PLCs), further opportunities for collective inquiry and action to occur. A PLC is "composed of collaborative teams whose members work interdependently to achieve common goals" (DuFour et al., 2004, p. 3). Robbins and Alvy (2014) supported building principals sharing leadership with other staff members in schools, and the PLC has created a pathway to increased professional growth and teaching in the classroom.

Although leadership teams and other PLCs can assist in driving the success of a school, it is still important to consider the role the principal plays within the system of developed teams. Grissom et al. (2021) looked across the compilation of six different studies that quantified a principal's impact on their school and student achievement and found four leadership practices with statistically significant outcomes. Two of those leadership practices are outlined:

1. Building a productive school climate. Practices that encourage a school environment marked by trust, efficacy, teamwork, engagement with data, organizational learning, and continuous improvement.

2. Facilitating productive collaboration and professional learning communities. Strategies that promote teachers working together authentically with systems of support to improve their practice and enhance student learning. (Grissom et al., 2021, p. xv)

When looking at these two leadership practices, key themes emerge, such as a principal's capacity to *promote* collaboration, teamwork, and other organizational learning that leads to school improvement. These themes emphasize the importance of a principal continuing to grow their own leadership practice to continue to build their own personal leadership capacity to enhance school climate and culture, collaboration, and PLCs.

Statement of the Problem

The role of the principal has changed over the years to that of more of an instructional leader versus an organizational manager of K–12 school buildings. "Leading and inspiring the teaching and learning that occur" (Dana, 2009, p. 2) is what principals want to prioritize when they step into administration. However, the number of demands that reach building administrators daily often create roadblocks to providing support to their teachers. This results in principals who "have to be (or become) leaders of learning who can develop a team delivering effective instruction" (Wallace Foundation, 2013, p. 6).

Through a course of work dating back to the year 2000, the Wallace Foundation (2013) illustrated five key responsibilities of a building principal of which one responsibility is "cultivating leadership in others so that teachers and other adults assume their parts in realizing the school vision" (p. 6). Robbins (2020) also discussed the state of the current societal divide over the past few years and how, at least in perception, that divide continues to get wider. Robbins (2020) further stated,

> The way we engage with each other, discuss and debate important issues that we may disagree about, and challenge ourselves to find common ground with one another, especially when we have different beliefs and backgrounds, has *everything* to do with our ability to create a healthy team environment and do great work together. (p. xvii)

Cultivating leadership in others can materialize through the development of teams. Grieser et al. (2019) specifically discussed the development of high performing teams and a team's ability to accomplish goals together that cannot be accomplished alone as individuals. Seashore Louis et al. (2010) found three key findings of collective leadership effects on teachers and students in its report to the Wallace Foundation:

1. Collective leadership has a stronger influence on student achievement than individual leadership.
2. Higher performing schools award greater influence to teacher teams, parents, and students, in particular.
3. When principals and teachers share leadership, teachers' working relationships are stronger and student achievement is higher. (pp. 19, 37)

Collins (2001) also supported the notion that any healthy organization is not built around the presence of just one singular leader.

Gruenert and Whitaker (2015) stated, "Research confirms that a collaborative school culture correlates positively with student achievement" (p. 51). A collaborative school culture allows a principal to share leadership and as a result not bear the weight of attempting to influence each teacher in his or her building, but rather use collaborative teams, such as PLCs (Marzano et al., 2014). Marzano et al. (2014) went on to support that when principals adopt a shared leadership model that leads to the development and utilization of collaborative teams,

such as PLCs, the result is more efficient leadership that has an influence on both the organizational culture and classroom teaching. Due to the changing role of the principal, focusing more as an instructional leader versus managerial leader combined with research support of collaborative school culture, it would be pertinent for principals of today to implement a shared leadership model with a focus on collective inquiry through building-level teams. However, Seashore Louis et al. (2010) explained that principals are rarely able to prioritize this type of leadership effectively due to internal or external factors, or both.

Purpose of the Study

The purpose of this quantitative study is to determine if select independent variables show a difference in a safe and collaborative school culture in a secondary school building and if those select independent variables show a difference in effective teaching in the classroom of a secondary school building. As research points school leaders in the direction of utilizing leadership teams and PLCs to reach vision, mission, and goals, it is important to evaluate the effectiveness of these criteria for schools to run both effectively and efficiently. Survey data were collected and analyzed for this study to examine potential significant differences between the independent variables of building-level leadership teams and PLCs and their dependent variables of safe and collaborative school culture and effective teaching in every classroom.

The study also examined if principals were invested in their own professional leadership capacity, specifically IPLI; if so, does that investment show a difference in a school's safe and collaborative culture and effective teaching? Principals that participate in IPLI also utilize, through the leadership program, the same measurement tool that was utilized for this study. The study emphasizes the importance of principals focusing on their own professional leadership

capacity while developing shared leadership through effective leadership teams and professional learning communities within their school buildings.

Finally, the study examined the relationship among teacher responses in the areas of a safe and collaborative culture and effective teaching. If a linear relationship was found among those areas with teachers, further inferences could be potentially made for future school decision-making. The type of linear relationship present also allows for those inferences to be specific and detailed when looking at how school administrators structure their buildings.

Research Questions

The following research questions were developed for this study under the premise of studying the relationship between two or more variables in what has the potential to lead to a cause-and-effect analysis and summary for its readers (Ary et al., 2010). The research questions of this study embodied the ability of the criterion variables of building-level leadership teams, PLCs, and principals, who have participated in the IPLI, as being predictors that shared leadership is present in the school building and correlates to higher outcomes in a school's safe and collaborative school culture and effective teaching in the classroom.

Data were collected for the following research questions:

1. What is the state of teacher stress during the COVID-19 pandemic and a teacher's belief that they have available the necessary tools and resources to be an effective teacher during the COVID-19 pandemic?
2. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has a building-level leadership team?
3. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has established professional learning communities?

4. Among teachers, is there a significant difference in effective teaching when a school building has a building-level leadership team?
5. Among teachers, is there a significant difference in effective teaching when a school building has established professional learning communities?
6. Among teachers, is there a significant difference in a safe and collaborative culture when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?
7. Among teachers, is there a significant difference in effective teaching when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?
8. Among teachers, does a safe and collaborative culture relate to effective teaching?

Significance of the Study

The Wallace Foundation (2013) cited a 2010 survey that declared principal leadership to public school education as second in importance only to the classroom teacher. The Wallace Foundation (2013) stated five key responsibilities of school principals, one of which is "cultivating leadership in others so that teachers and other adults assume their parts in realizing the school vision" (p. 6). Cultivating leadership in others promotes the importance of a building principal's ability to develop effective teams within his or her school building. School reform has become prevalent in nature through legislation and policies, such as NCLB, high stakes testing and accountability, common core standards, and Race to the Top, among others. These examples of school reform, among others, have created a fast-paced school environment that is too big to hold together alone. As Drago-Severson and Blum-DeStefano (2018) stated:

> In other words, collaboration is consistently emerging as one of the best ways we can help each other navigate the challenges and opportunities of teaching, leading, and

> learning; take greater perspective on our work and ourselves; and grow the individuals and organizational capacity to do more—together. (p. 10)

The results of this study will benefit the field of education by exploring if there is a significant correlation among teachers between their building's safe and collaborative culture and effective teaching in the classroom. The study also explored if there was a significant relationship in a building's safe and collaborative culture or effective teaching in the classroom pending the presence of either a building-level leadership team, PLCs, or a principal, who actively engaged in increasing his or her own professional leadership capacity. Quantitative data were analyzed to determine if school buildings that operated with these teams and principals showed differences in instrument scores among teachers compared to those that do not operate with these teams. Quantitative data were also reviewed among building principals, who had participated in the IPLI, to explore if schools that have an IPLI principal differ in scores among teachers from those schools that have a principal, who has not participated in IPLI.

The results of this study highlight the importance of building principals and the desire to obtain shared leadership through effective team building within their schools. Results that illustrate higher scores in the survey instrument areas of a safe and collaborative environment and effective teaching indicate if principals should invest further in developing effective building-level leadership teams and PLCs. Results also indicate if principals should invest in their own professional leadership capacity as individuals.

Definitions

Building administration refers to either a principal or assistant principal serving in an Indiana public secondary school.

Collaboration refers to the act of a group of professionals working together with a common goal in efforts of continuous improvement (Dana, 2009).

Distributed leadership refers to organizational leadership that occurs within a school as a result of the building principal removing him/herself as the sole building leader and cultivating opportunities for leadership for other staff members (DeFlaminis et al., 2016).

Organizational culture refers to "the shared beliefs, assumptions, behaviors, and norms that exist within an organization. It is both the written and unwritten rules people live by" (Burningham, 2019, p. 9).

Professional learning community (PLC) refers to "an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve" (DuFour et al., 2010, p. 11).

School leadership team refers to "Stewards and monitors of quality implementation of the instructional strategies and programs that have been selected to achieve a high-leverage student achievement improvement goal" (McKeever, 2003, p. 4).

Secondary schools refer to those schools that are either traditional middle schools containing Grades 6–8, traditional high schools containing Grades 9–12, or junior/senior high schools containing Grades 7–12.

Shared leadership refers to teams within an organization that operate collectively with a common purpose for overall improvement of the organization (Lencioni, 2012).

Team refers to a group of people collectively working together to develop and reach shared organizational goals (McChrystal, 2015).

Summary and Organization of the Study

Building-level administration has become an increasingly challenging role that requires leaders to be both building managers as well as building leaders. Thus, building administrators should focus on the development of themselves as leaders and of leadership teams made up of staff members within their buildings. When a team is able to come together in collective action and inquiry that are effective, it creates positive results that are focused on a school's vision, mission, and goals (Gordon, 2007).

Chapter 1 of this study provided an introduction, statement of the problem, purpose of the study, research questions, and key definitions. Chapter 2 includes a review of literature related to shared leadership, effective teams, PLCs, organizational culture, the IPLI, and the High Reliability Schools™ framework. Chapter 3 provides information about the methodology and design of the study, purpose of the study, research questions, null hypotheses, population sample, limitations, delimitations, and methods of analysis. Chapter 4 presents the quantitative study findings as they relate to the study's research questions. Chapter 5 provides a summary of the findings, conclusions, and recommendations for further research.

CHAPTER 2

LITERATURE REVIEW

Shared Leadership

Individuals often come to mind when one thinks of leadership. One wants to know the name of the individual leading an organization, school, or country. However, Maxwell (2001) stated, “The idea that one person is always doing all the leading is false” (p. 218). Either through formal or informal roles, multiple individuals impact the leadership that occurs within an organization. Individuals each develop their own set of strengths and weaknesses, and individuals alone cannot accomplish an organization’s mission or goals. Berg (2018) specifically discussed this with the relationship between principals and teachers and the fact that “schools serve students better when the strengths of both are maximized” (p. 3). Knowing this, principals must not ignore the importance of creating structures that allow shared leadership to exist and flourish. Therefore, if shared leadership exists, there must be more than one individual, or in the context of schools, the school principal and/or assistant principal, responsible for leadership and the duties that come with it. The Wallace Foundation (2013) interviewed Linda Darling-Hammond in April 2012 regarding principals and teachers working together. Darling-Hammond responded in that interview reported by the Wallace Foundation when she stated, “Leaders who are effective often have a distributed leadership approach. The principal functions as a principal teacher who is really focusing on instruction along with and by the side of teachers” (Wallace

Foundation, 2013, p. 18). Distribution of instructional leadership also aligns with a principal's growing role as an instructional leader versus building manager.

Spillane (2006) discussed distributed leadership and commented that leadership is situated not only in formal roles and positions, but also in informal roles as well, particularly the roles occupied by teachers. Teachers influence learning and thus should have a voice in decision making that impacts both the classroom and the school. Teachers' voices must be heard as part of the school decision-making process. "They must be provided with opportunities to be leaders and share their expertise" (Quaglia et al., 2020, p. 146). Teachers are professionals in their field of expertise—teaching—and must be listened to in the school decision-making process, which means that administrators must take a backseat at times. The Wallace Foundation (2013) reported that teachers are more likely to rate their principals as effective when their principals develop and support leadership within the whole staff. Leaders of organizations can, at times, lead best by getting out of the way of their best people (Pearce et al., 2013).

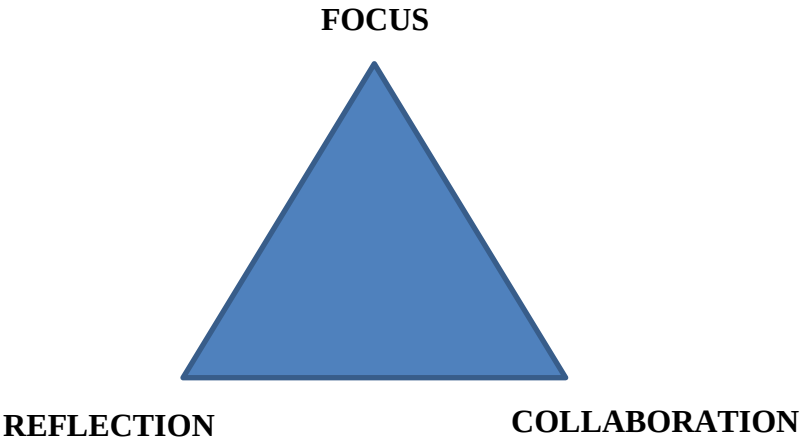
Developing responsibility into shared responsibility is not always easy and must have a structure that allows it to be present, grow, and be successful. So, although principals may eventually lead best by sharing leadership, before they can share leadership, they must play a primary role in creating the framework for shared leadership to be effective. McKeever (2003) cited Richard Elmore:

> Distributed leadership poses the challenge of how to distribute responsibility and authority for guidance and direction of instruction, and learning about instruction, so as to increase the likelihood that the decisions of individual teachers and principals about what to do, and what to learn how to do, aggregate into collective benefits for student learning. (p. 2)

Conzemius and O'Neill (2001) described three elements that provide a framework for shared responsibility, which is illustrated in Figure 1. Those elements are "focus–creates shared clarity of thought, direction, and purpose; reflection–helps people learn from what they have done in the past and identify better ways of accomplishing their goals; and collaboration–brings people together to share ideas and knowledge" (Conzemius & O'Neill, 2001, p. 11). Conzemius and O'Neill (2001) emphasized the framework as one of which each part of the triangle is necessary for the other to occur effectively, and that teamwork becomes an indirect result leading to shared leadership.

Figure 1

Framework for Shared Responsibility



Note. Adapted from *Building Shared Responsibility for Student Learning* by A. Conzemius & J. O'Neill, 2001, p. 11). Copyright 2001 by ASCD.

In the context of schools, a school superintendent or building principal alone cannot accomplish the school's mission or goals. It is in this that shared leadership comes into play. "It allows all members of the school community to play a role in determining the direction of the school and in understanding the impetus for change" (Lummis, 2001, p. 4). Lummis (2001)

further clarified this point through school context and how not just school administrators have the ability to analyze information and data and, in turn, act on decision making that impacts the school. Supovitz and Tognatta (2013) presented a study that examined team decision making, and as part of the study, asked team members to indicate whether topics discussed required a decision. The study found that 75% of the time, topics being discussed also required a decision to be made following those discussions (Supovitz & Tognatta, 2013), thus illustrating the frequency with which decision making can occur, emphasizing its importance.

Although decision-making advances beyond just school administrators, it is up to school principals to build the capacity of shared leadership within the building through an environment that promotes collaboration and interdependence (Printy & Marks, 2006). The Wallace Foundation (2009) reported findings that "when principals and teachers share leadership, teachers' working relationships are stronger and student achievement is higher" (p. 37). Building principals must understand the importance of developing teacher leaders within their staff. Ultimately, leadership extends from the development of collective commitment to an organization's vision, mission, and goals (Parsley, 2012).

Although shared leadership is becoming the new trend for how to approach organizational leadership, this does not exempt the leader from responsibility. School administrators must be careful not to hide behind shared leadership. Fitzsimons (2016) summarized his study of an organization working through the transition to shared leadership and the moments in which teams will still want the organizational leader to be the one that makes most decisions and emphasize to the organization's teams that the leader has not resigned from accepting administrative responsibility. Grissom et al. (2021) found that "replacing a principal at the 25th percentile in effectiveness with one at the 75th percentile can increase annual student

learning in math and reading by almost three months, annually" (p. 4). Therefore, it is important for building administrators to know and understand the effect they have on student achievement when reflecting on their effectiveness as a building leader. Whitaker (2012) summarized a study on effective versus ineffective school principals stating:

> On-site visits and interviews with teachers and principals revealed some key differences between the very effective and less effective principals. One critical difference was that effective principals viewed themselves as responsible for all aspects of their school. Though these principals regularly involved staff, parents, and others in decision making, they believed they were responsible for making their school the best it could be. Regardless of whether situations arose within the school or because of outside factors such as budget cuts or school board decisions, the more effective principals saw themselves as the ultimate problem solvers. (p. 21)

Shared leadership ultimately progresses beyond the school administrators which, in turn, means the development of effective teams within the school setting. Lummis (2001) discussed the transition for teachers specifically and becoming members of teams within the school structure. These teams can take the shape of leadership teams, grade-level teams, action research teams, or other PLCs.

Effective Teams

Knowing that the strengths of staff members joining collectively maximize an organization's results, it becomes necessary to understand the development of collective efficacy. Teams can be powerful beyond measure when running smoothly with a leader at the helm. However, "if you are the leader and you look back and no one is following, you're not leading. It takes a leader and a team" (Horton, 2017, p. 15). A leader should want to be

challenged by his or her people. Growth becomes stagnant when leaders are not challenged. McCord (2017) illustrated this through her concept of "People have power; Don't take it away" (p. xiv) and how creating teams that do not challenge their leader will not promote new strategies and ideas that will have a future positive impact on the organization. Teamwork has become increasingly utilized as a workplace strategy. Hackman (2002) cited a 1998 survey in which 95% of respondents recorded that the development and maintenance of teamwork were extremely important to organizational performance (Devine, et al., 1999).

"The most meaningful and important things an organization accomplishes are not done individually, but within the context of teams" (Grieser et al., 2019, p. 106). When effective, teams have the ability and potential to drive schools to student success. Research completed by Drago-Severson and Blum-DeStefano (2018) contained the following statements by a principal and a teacher: "Principal—teams run my school. They are the pulse and the core of leadership; Teacher—our teams drive our work, but we drive our teams—all of us. We really couldn't do what we do without each other" (p. 72).

When discussing teams, this research will be looking through leadership teams that have the opportunity to discuss and analyze information and then collectively make decisions that have the potential to hold a school-wide impact. Such teams could be school-wide leadership teams, PLCs, grade-level teams, school improvement teams, or any other formed group of school staff that have the ability to impact decision making in the school. Lencioni (2012) defined a team as "one that plays together simultaneously, in an interactive, mutually dependent, and often interchangeable way [and furthermore a leadership team as] a small group of people who are collectively responsible for achieving a common objective for their organization" (p. 21). The word *team* is often poorly defined or used when thinking of teams as leadership teams. When

one thinks of Lencioni's definition of a leadership team, one thinks of vision, mission, purpose, strategic planning, and the future. Barna (2001) discussed the difference between a "work group" (p. 23) and a "committee" (p. 23) and how the makeup of these types of teams differ from true leadership teams in that they often come together for a specific task and then separate versus a true leadership team that stays intact and works continuously at organizational improvement regardless of task completion. Barna (2001) specifically detailed a leadership team as follows:

> It is a small group of leaders who possess complementary gifts and skills. They are committed to one another's growth and success and hold themselves mutually accountable. Together, they lead a larger group of people toward a common vision, specific performance goals, and a plan of action. (p. 24)

Building a team is an essential part of the process of future success or failure that a team encounters. First, looking at the size of the team can be critical. Collins' (2001) described the importance of the leader's ability to identify the *who* that would be part of an executive team that becomes responsible for future organization success, especially knowing the potential always exists that the main leader may not always remain with the organization. A team too small or too large can have adverse effects on team success. Lencioni identified the right size team to be somewhere in the range of three to twelve people, but ultimately discourages any teams to look beyond nine people. Teams that become too large can ultimately hinder communication, as the larger the group, the fewer opportunities individuals have to ask questions and respond to teammates. Burningham (2019) confirmed Lencioni's emphasis on teams too large by identifying a common problem of leadership teams:

> First, they are too big to be effective. It's as if organizations have somehow gotten the idea that a good way to recognize individuals and make them feel important is to add

> them to the leadership team. While the desire to help others feel valued is noble, making a leadership team too big sacrifices its ability to work well. (p. 95)

In general, Hackman (2002) supported that the larger a team, the more success they will have, as it allows for a higher level of diversity to occur within the team. However, McKeever (2003) discussed team size as it specifically related to schools, including a difference in size for each level of school. Elementary schools typically have on average five or six team members, middle school leadership teams contain eight to 12 team members, and last, high schools hold on average 10 to 15 team members.

Next, a team leader must select the actual team members. Leaders must remember that the goal of operating as a team and utilizing shared leadership is to bring together a multitude of different strengths to complement individual weaknesses. Therefore, selecting the actual team members is extremely important. It can be easy for a leader to look for common traits in others that they see in themselves, but it is important to look for diversification. Grieser et al. (2019) identified diversifying a team as a vital key, as it "ensures team members think and operate differently from one another" (p. 122).

Marzano et al. (2016) also supported the diversification of collaborative teams to prevent teachers with the same viewpoints and strategies from consistently gathering which, in turn, can decrease a school's effectiveness on the path to school improvement. Robbins (2020) cited a 2018 study that found that organizations more racially and ethnically diverse achieved at a rate of 33% higher than average. Although many ways beyond race and ethnicity can create diversity within a team, this finding certainly illustrates the importance of team makeup and its diversification.

Selecting the right team members can be one of the not only most difficult jobs for a leader but also most important jobs. Selecting the right people is important to an organization's culture, and making the wrong selection could set back an organization's progress toward vision, mission, and goals by years. Harris (2018) developed a strategy for ensuring a higher likelihood of selecting the right team members and referred to it through the acronym, WHOM, which stands for work ethic, heart, optimism, and maturity. Using a framework, such as WHOM, allows a leader to dig beneath the weeds when going through the team selection process. Table 1 outlines the questions that draw connections to a person's work ethic, heart, optimism, and maturity to assess a potential candidate's fit when building teams.

Table 1

Work Ethic, Heart, Optimism, and Maturity

Work Ethic	Heart	Optimism	Maturity
How do you judge a successful day?	What are your reasons for doing your best every day?	Describe the most stressful work situation you have encountered and how you handled it?	Describe a situation where you had an argument with a co-worker.
Tell me about a time when you overcame a significant challenge to finish a project on schedule.	What's one thing you're really proud of and why?	What are the biggest failures of your career so far?	Talk about a time when one of your ideas was challenged by a colleague? What happened?
How do your teammates rate you in terms of getting things done?	What are some of your hobbies and interests outside of work?	Tell me about a time when your superior came to you with a problem he or she wanted you to fix, but you did not know how or what to do.	Describe a situation where you were right but still had to follow instructions.
Describe a situation when you had to work as a member of a team to complete a task.	What are some of your hobbies and interests outside of work?	Tell me about a time when your superior came to you with a problem he or she wanted you to fix, but you did not know how or what to do.	Describe a situation where you were right but still had to follow instructions.
Tell me about a time your workday ended before you were able to finish your tasks.	If we were to hire you, what do you see yourself doing here in three years?	Why do you think you will be successful in this position?	Tell me about the most difficult decision you had to make recently.
	How have you helped others outside of work?	Give me an example where you helped a teammate achieve a goal where there was nothing in it for you.	How do you calm yourself down when you feel anxious or upset?

Table 1 (continued)

Work Ethic	Heart	Optimism	Maturity
How do you remind yourself to complete projects and tasks?	Give me an example of something that you have focused on that took great courage and hard work to overcome.	Discuss a problem in your current role which you have yet to solve.	Tell me about a recent time a colleague disappointed you, yet you still had to work together to complete a task.
When you have a lot of work to do, how do you get it all done? Give an example.	What excites you most about this opportunity?	Describe a situation where you had to collaborate with difficult colleagues.	Describe to me your biggest weakness and biggest strength.
Describe a situation when personal issues pulled you away from work and how you handled it?	What's the most fun you've ever had at work?	What do you do to de-stress?	Tell me about a colleague you really got along with and why you think you did.

Note. Adapted from *Leader Board: The DNA of High-Performance* Teams by Omar L. Harris, 2018, p. 48.

Ultimately, it is a difficult but important job when leaders build their teams. Collins (2001) outlined three of the biggest mistakes leaders make when building their teams:

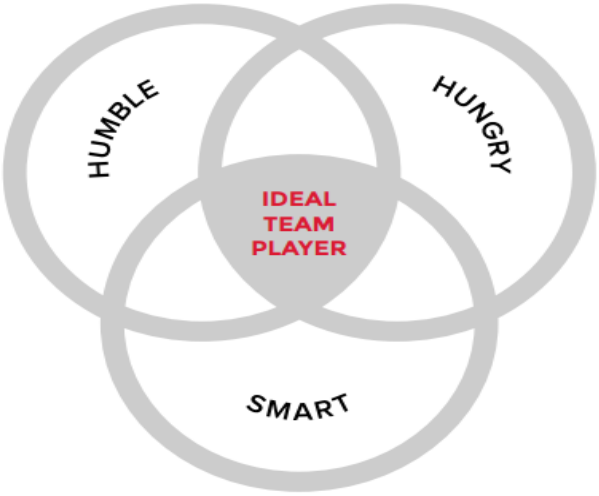
1. They assume "the more the better" and therefore put too many people on the team.
2. They assume that people who are similar to one another will get along better, and therefore compose a team that is too homogeneous.
3. They assume that everyone knows how to work in a group, and therefore pay too little attention to the interpersonal skills of prospective members. (p. 115)

Nobody likes being on teams with members they do not like. Everyone can likely think back to teams they have been a part of that were enjoyable and those that were not enjoyable. The teams that were not enjoyable were likely due in part to other members on the team, who were often identified as poor team players. Lencioni (2016) used his three virtues of the ideal team player to help identify whom a leader would select to be a part of their team. Those three virtues are humility, hunger, and people smarts.

It would seem to make sense that in shared or team leadership, humility would be a factor in the ideal teammate, as sharing success and placing the purpose and team over self is a notable attribute. It is likely everyone can think of being on a team when they felt they did all the work and others minimally contributed. Thus, having hunger as an individual attribute helps to create shared commitment in responsibility within a team. Last, some have also likely been a part of a team where the actions of others were not the best for team success, so those individuals that are smart about group interactions could lead to a more successful team environment. Although the three virtues of humility, hunger, and people smarts are important individually, Lencioni (2016) emphasized the importance of all three being present in individuals to maximize team success and how his Ideal Team Player Model could be used to assist in selecting team members as reflected in Figure 2.

Figure 2

Ideal Team Player



Note. Adapted from *The Ideal Team Player* by Patrick Lencioni, 2016, p. 166.

It is also important to keep in mind the goal and purpose of a leadership team. Teams can be developed for a variety of intentions, and those intentions should factor into the decision of who is selected to be a member of the team or not. McKeever (2003) developed the following criteria that could be used to assist in selecting the right staff members for a school leadership team:

- Respect for and influence of the teacher among his or her colleagues
- Teacher's knowledge and leadership capacity
- Unique or specialized perspective that the teacher would bring to the team
- Grade-level or content area expertise of the teacher
- Teacher's specialized training (e.g., special education, reading, English language development)

- Teacher's relationships with key members of the staff
- Teacher's sense of the history, traditions, and context of the school
- Teacher's aspiration to become an administrator
- Teacher's ability to lend balance to the makeup of the team. (p. 52)

Teams often have the responsibility to carry out actions. These responsibilities can be derived from either delegated or distributed responsibilities. DeFlaminis et al. (2016) discussed the difference between delegated and distributed responsibilities and the impact that difference has on shared leadership. Table 2 outlines delegated versus distributed leadership within school teams.

Table 2

Delegated Leadership and Distributed Leadership on School Teams

Delegated Leadership	Distributed Leadership
• School administrators determine the purpose or ends of team activities.	• DL teams identify and renegotiate team goals and purposes collaboratively.
• Administrators' voices "carry more weight" than those of other team members.	• All team members' voices are valued equally (though some individuals may be sought out for expertise on particular topics).
• Administrators evaluate and provide feedback to teams on their effectiveness.	• Administrators and other team members reflect collaboratively on team effectiveness and mechanisms for improvement.
• Teams have circumscribed spheres of influence: they are expected to function within predetermined boundaries or limits.	• Teams are expected to have influence where necessary to carry out their work, even if it means focusing or widening the scope of the team's authority or responsibilities.
• Team processes and outcomes are highly controlled from the outset.	• Team processes and outcomes are emergent and continually renegotiated.

Note. Adapted from *Distributed Leadership in Schools: A Practical Guide for Learning and Improvement* by J. DeFlaminis, M. Abdul-Jabbar, and E. Yoak, 2016, p. 158, published by Taylor & Francis.

In teams that exhibit distributed leadership, "Teachers play strong roles in leading conversations, particularly around instruction. Administrators respected teacher voice and abided by shared decision-making structures, creating the space for teacher leaders to influence the leadership practices of the school" (DeFlaminis et al., 2016, p. 156). Opening these doors for teachers to impact the school is a primary goal of shared leadership.

The development and operations of and through teams have a positive impact on organizational performance and success, and teams do not always work if not effectively led. Although resources through teamwork are compiled with the goal of a more effective and efficient product, teams run this risk of underperforming or negatively performing. Coutu (2009) summarized an interview with J. Richard Hackman, in which Hackman outlined the detriment that coordination and motivation have on team performance. Teams often fall short of expectations due to what Lencioni (2002) referred to as the five dysfunctions of a team. Table 3 outlines the dysfunctions and provides detailed examples of the negative characteristics and actions exhibited by teams when one or more of the dysfunctions occur.

Table 3

Five Dysfunctions of a Team

Trust	Conflict	Commitment	Accountability	Results
Hesitate to ask for or offer help	Back-channel politics and personal attacks	Creates ambiguity among the team	Creates resentment	Fails to grow
Hold grudges	Boring meetings	Excessive analysis and unnecessary delay	Encourages mediocrity	Encourages team members to focus on individual goals
Dread meetings	Ignore controversial topics	Encourages second guessing	Misses deadlines	Easily distracted
Conceal weaknesses and mistakes			Team leader bears sole source of discipline	Loses achievement oriented employees

Note. Adapted from *The Five Dysfunctions of a Team* by Patrick Lencioni, 2002, p. 197–218.

One of the five dysfunctions—conflict—often rises to the top within teams. Lencioni (2002) outlined the importance that engaging, positive, and healthy debate can have for team productivity, but how often teams avoid conflict. The key regarding conflict may lie in whether it is positive or negative. Regier (2017) stated, "Negative conflict, manifested as workplace drama, costs the U.S. economy more than $350 billion per year in the currency of broken relationships, dysfunctional teams, morale, and engagement problems, and failure to thrive" (p. 3). This negative conflict ultimately results in loss of collaborative productivity as it becomes a major dysfunction to any team. Regier (2017) pointed to empathy as a major key to overcoming negative conflict. The more one can connect with and understand other team member's points of view, the more likely conflict is to turn from negative to positive.

The transition to working in teams or collectively versus individuals brings the necessity for peer collaboration. Mourshed et al. (2010) reported their conclusions from their 2007 study across 20 school systems showing significant student growth and how collaborative practices were one of three important takeaways evidenced by these school systems. Hattie's (2017) visible learning research supported collective efforts by teachers by "collective teacher efficacy [being ranked] the number one influence" (p. 26) with an effect size of $d = 1.57$ on student achievement. Hattie and Zierer (2018) further explained the importance of collective teacher efficacy stating that "in schools where teachers work together to find ways to address the learning, motivation, and behavior problems, students are the major beneficiaries" (p. 27).

Although the benefits of collaboration and collective efforts are well documented, it is important to understand the struggles that come along with collaboration. Simon (2021) laid out some of these struggles while stating anyone *can* collaborate, but not everyone does it *effectively*:

- Collaboration is easy—just because a team gets together doesn't mean collaboration will occur effectively.
- Collaboration is binary—teams will always perform at different levels from one another, for better or worse.
- Collaboration is static—team performance changes over time due to many factors including changes in team members, interpersonal relationships, or personal factors.
- Collaboration means video calls—the COVID-19 pandemic has changed many things, including how we collaborate; however, just as collaboration is not static neither are the impacts from the COVID-19 pandemic.
- Synchronous and asynchronous communication are equivalent—technology allows communication and collaboration to occur at times in more efficient ways such as Google Docs; however, it is not a replacement of in person communication.
- Collaboration happens immediately—effective collaboration takes time to implement and will not occur overnight or during one meeting. (Simon, 2021, pp. 161–171)

Robbins (2020) discussed the challenges that come with working collaboratively as a team, as he outlined five reasons why collaboration can be more challenging than expected. First, one grows up learning in a system that promotes individual work and performance, so one does not often think about what someone else may bring to the table. Second, one is often caught up in what Robbins (2020) referred to as "Us vs Them [and that actually] we're all part of the same larger team" (p. xxii). Third, one often overanalyzes the logistical steps that must occur within a team and loses sight of the purpose, culture, and mindset of the team. Dweck's (2016) research supported focusing on mindset, as one has pieces of both a fixed and growth mindset and knows that mindsets can change; one must keep this in focus to remain in more of a growth versus fixed

mindset for the benefit of team production. Robbin's (2020) fourth challenge to collaborative teamwork brought in the constraint of time and space, as these are certainly limited, thus causing a source of limitation to collaboration. Last, it can be a challenge to get beyond focusing on oneself as an individual. Rather, one must remember that if the team succeeds, so does the individual, but if the team does not succeed, neither does the individual (Robbins, 2020). Although the benefits of teamwork and collaboration are well documented, it can be easy to forget the challenges that come along with it. Awareness of these challenges is what moves teams past the challenges and into further growth, achievement, and success.

Professional Learning Community

"The basic structure of the PLC is composed of collaborative teams whose members work interdependently to achieve common goals" (DuFour et al., 2004, p. 3). Knowing that the people that make up the team of the PLC are the focal point of the PLC further emphasizes the need not only to create but also to develop effective teams. The structure of the PLC can cause many schools to shift their educational approach from that of more traditional ways (DuFour et al., 2004). The biggest shift occurs through the transition of thinking as an individual teaching in a classroom to working collaboratively in teams. "People who engage in collaborative team learning are able to learn from one another and thus create momentum to fuel continued improvement" (DuFour et al., 2004, p. 3). Further, Muhammad (2018) discussed his observations of highly effective school leaders, who were all stewards of the PLC structure, and developed and nurtured collaborative teams of teachers in their schools.

These teams also shift their thinking of purpose from teaching to learning (DuFour et al., 2004), which is done through what DuFour et al. (2010) referred to as being "action oriented" (p. 12). Ritchhart (2015) also emphasized the need to shift the focus to learning in a way that both

teachers and students make learning their primary focus in what then becomes a "learning-oriented" (p. 45) classroom. It can be easy for teachers to settle into a routine that can extend beyond a day-to-day basis and even become a year-to-year set of routines that never change. PLCs challenge this through what DuFour et al. (2004) referred to as "collective inquiry" (p. 4).

A highly effective PLC never stops its process of inquiry, which as a result, continues to challenge a status quo environment and rather look for continuous improvement that is eventually assessed through practice and then reflected upon (DuFour et al., 2004). It is becoming common as well for PLCs to combine with the process of action research. Dana (2009) applied her action research inquiry model to PLCs classified as "small groups of faculty who meet regularly to study more effective learning and teaching practices" (p. 22). Roberts (2020) emphasized action research as one of the major components that teachers must embrace to become a high-performing PLC. DuFour et al. (2010) outlined this action research in the PLC process as "learning by doing" (p. 12) and structured the process around four critical questions:

1. What is it we want our students to learn?
2. How will we know if each student has learned it?
3. How will we respond when some students do not learn it?
4. How can we extend and enrich the learning for students who have demonstrated proficiency? (p. 119)

When addressing these questions, past approaches in education have often left this up to the individual teacher and their classroom: "A PLC will, instead, create a school-wide system of interventions that provides all students with additional time and support when they experience difficulty in their learning" (DuFour et al, 2004, p. 7). The shift in approach moves this challenge of finding those interventions from the individual teacher to collaborative teams working as

PLCs. Collaborative teams then result in a more collective and shared structure of action and decision making. Collective efficacy also increases because of teacher collaboration (Grissom et al., 2021), which is important considering Hattie's (2017) research showed collective efficacy to be the number one impact on student learning, which is important. The responsibility of sharing knowledge then becomes distributed among the PLC team members in what becomes leadership practice. Within this leadership practice, one then "must consider how knowledge and expertise are distributed among those who co-perform a leadership routine" (Spillane, 2006, p. 92).

When done correctly, the PLC process brings benefits to multiple stakeholders, including teachers and students, administrators, and the school. The PLC process benefits teachers through a systematic process of professional development. Marzano et al. (2016) described this system of professional development as one with benefits to teachers that will last over time compared to a more traditional professional development that occurs during a singular moment in time and ends with no systematic structure of continued occurrence. Marzano et al. (2016) cited a 2009 MetLife survey that centered on collaboration and concluded that "ninety percent of teachers surveyed agreed that other teachers contribute to their success in the classroom" (p. 9). Dana and Yendol-Hoppey (2016, p. 4) cited a research report on PLCs completed by the Southwest Regional Educational Laboratory in 2007 that showed "PLCs have the power to change school culture, teacher impact, and student achievement" (Southwest Regional Educational Laboratory, 2007)).

PLCs are assumed to be present in various formations; therefore, it is important to know that when research shows positive impacts of PLCs, it is from PLCs carried out with fidelity and not just groups of workers aimlessly moving forward with no structural format or process. Many schools can claim they are operating within PLCs, but to find the real impact, they must be fundamentally implemented, and they must receive a true commitment. Schools that do not fully

commit find themselves doing what Roberts (2020) referred to as "PLC Lite," stating, "The organization has begun to make changes, but has not fully committed to becoming a professional learning community" (p. 9). Teachers must also be taught and understand foundational teaching skills under the structure of a PLC. Mourshed et al. (2010) emphasized this in their statement from an educator in one of the studied school systems:

> We could not have implemented professional learning communities as effectively in the 1980s. We did not have the skill levels in school for it and it may have backfired. However, our teachers and leaders are highly skilled now, and therefore we have shifted to peer collaboration more . . . and it works. (p. 78)

Ultimately, PLCs should be viewed as a tool for principals to utilize when looking at how to share leadership and influence their instructional leadership in their building. Building principals are a vital component to effective and efficient PLC teams, as principals who prioritize, support, monitor, and provide dedicated time for PLCs have higher performing PLCs (Grissom et al., 2021). Marzano et al. (2014) emphasized prior work by DuFour and Marzano (2011). Without a PLC structure, the principal has the sole responsibility of influencing every single teacher in the building versus the principal influencing teams, who then influence teachers.

Organizational Culture

"The culture of any organization is an important factor—if not the most important factor—in progress toward fulfilling its purpose" (Eaker et al., 2020, p. 59). Organizational culture matters, and if it did not matter, there would be no lists, such as Fortune's 100 Best Companies to Work For, of which Cisco Systems topped the list for the year 2021 (Fortune, 2021). Buckingham and Goodall (2019) discussed the Fortune magazine's list, and when reading summaries regarding those that rank high on Fortune's list, one common word continued to show

itself, and that was *culture.* Buckingham and Goodall (2019) went on to lay out three characteristics and examples of each that describes organizational culture:

1. It tells you who you are at work
    a. Patagonia–If you work at Patagonia you'd rather be surfing, so you work in California and when hired read the CEO's autobiography *Let My People Go Surfing.*
    b. Goldman Sachs–If you work at Goldman Sachs you'd rather be winning, so you dress like a winner every day on the job.
2. How we choose to explain success
    a. Tesla–Elon Musk and the creation of a culture of cool.
    b. Toyota–Polite, yet win-at-all costs culture
3. Watchword for where we want our company to go
    a. Leaders are now expected to develop within their company a specific kind of culture, such as a:
        i. Culture of performance
        ii. Culture of feedback
        iii. Culture of innovation. (p. 13)

So, how does one ultimately define organizational culture? Burningham (2019) defined organizational culture, "Culture is the shared beliefs, assumptions, behaviors, and norms that exist within an organization. It is both the written and unwritten rules people live by" (p. 9). These shared beliefs, assumptions, behaviors, and norms do not restart with every new leader that walks through the door but rather develop within the organization over time. This is particularly important considering principal turnover is occurring at a higher rate than in the past.

Data show principals staying at a school in 2016 for four years versus 6.2 years in 1988, a 35% differential between 1988 and 2016 (Grissom et al., 2021). Schein (2009) emphasized the importance of leaders recognizing this, because before a new culture can be initiated, the present culture must first be understood. Gruenert and Whitaker (2019) related this to school leadership, principals, and their ability to understand that culture is not something you can change quickly. Recognizing there is a culture already present is important in a school leader's future impact and success.

Once a building leader is aware that there is already a culture present, it is natural to turn to the next—how does one change the current culture? How does one build a new culture? Playing with school culture can be risky, especially when there is a desire to build shared leadership and collaboration. Again, knowing a culture is already present means one must also understand the entitlements and advantages that the current culture is providing before shaping a new culture. Stockman and Gray (2018) discussed the need to "cultivate an understanding of privilege" (p. 71) before looking to drive desired change. Exploring the privileges of the current culture takes down the blinders that human biases too often provide and, as a result, often hinder continual growth and improvement. Sibony (2019) even stated the powerful response to a counterpoint that is too often said, "This would never work in our culture" (p. 259). Leaders must avoid setting the stage for interactions to occur in which this becomes the response from their followers. Deal and Peterson (2016) summarized this important understanding of current school culture, "To be effective, school leaders need to read and understand their school and community culture: its past, its present, its beliefs about the future" (p. 224).

Once the bias, privilege, and entitlements of the current culture are analyzed, one can begin to look at how to transform that culture. As the school culture relates to shared leadership

and collaboration, it is important to understand the role of communication and trust. Muhammad (2018) supported growing school culture through leaders, who take the time to communicate clarity and understanding for their followers, versus initiating change due to the factor that as the leader I simply have the capacity to create change due to having control of the organization or team. A lack of clarity from either the leader or the organization's leadership team can result in detrimental setbacks in an organization's success (Lencioni, 2012). When leaders can support the *why* for change and provide clarity, an organization will come together more collectively. Staff members or teams must behave or act in efforts of a desired purpose or goal, and the need to inspire these behaviors or actions must start with *why,* whether it comes from the organization as a whole or the organization's leader (Sinek, 2009).

Lencioni (2012) supported the necessity for clarity in organizational health and culture, stating, "Every policy, every program, every activity should be designed to remind employees what is really most important" (p. 16) or why are we making these changes? Further, Marzano et al. (2018) emphasized clarity among teams for teams to focus on the "right work" (p. 57) to maintain both effectiveness and efficiency.

Muhammad (2018) also stressed the importance that trust plays in healthy school culture and the necessity for staff members to believe in their building leader. Any team that has a strong culture also has a pillar of trust among its teams (Regier, 2020). Again, understanding there is a culture already present, a new building leader should recognize that school staff may already lack trust due to past experiences. Muhammad (2018) outlined strategies for school leaders to use to build trust:

1. Stay well versed in the evolving knowledge base of education
2. Lead teachers in the learning process

3. Familiarize him or herself with the history of the school and community
4. Continue to improve his or her skills and credentials. (p. 108)

Gruenert and Whitaker (2019) emphasized the importance that trust plays in developing collaborative school culture. Ultimately, mistakes are inevitable, whether individual or building-wide mistakes, and a team's ability to talk through those mistakes requires trust and leads to what Gruenert and Whitaker (2019) referred to as "social capital" (p. 64).

Conclusively, studies show that "things improved in schools where customs, values, and beliefs reinforced a strong educational mission, a sense of community, social trust among staff members, and a shared commitment to school improvement" (Deal & Peterson, 2016, p. 10). These customs, values, and beliefs are rooted in organizational culture. Duhigg (2017) outlined and summarized differences between observed cases of teams and that in strong teams "it wasn't team cohesion—rather, it was the culture each team established" (p. 49).

Indiana Principal Leadership Institute

One always hears about the professional development needs and desires from teachers in the classroom, which is certainly important. Due to professional development often being prioritized toward teachers, this often creates a lack of focus on those that are leading those teachers—their principals. The Wallace Foundation (2009) detailed four areas of focus on school leadership, "State and district education leadership policies must work in harmony, district leaders need to support strong principal leadership, top-notch principals are a must for school improvement, and better training results in better principals" (p. 2).

Further, the Wallace Foundation (2009) detailed that "states and districts can boost school leadership by providing principals with current, useful data and effective training in how to use it to identify weaknesses in teaching or learning" (p. 9). Using evidence-based discipline,

both states and districts should partner together to support building-level principals with professional growth opportunities. Mitgang (2012) reported that while in-depth studies are not complete on principal training, early results of research indicate that benefits to students are being seen when served under a better equipped building-level principal. Principals must also be aware of the necessity to grow their personal leadership capacity consistently when looking at their responsibility of leading and influencing leadership teams within their building. Harris (2018) emphasized the continual need for leaders to develop their own leadership skills beyond those they are leading to develop high-performance teams. The state of Indiana, in collaboration with a design team and Indiana State University, has developed principal training through the creation of the Indiana Principal Leadership Institute [IPLI].

The IPLI was officially signed into law in 2013 under Senate Bill 402 (IPLI, 2020). IPLI was designed to support principals and their schools. The mission of IPLI "is to provide building-level principals with the skills and tools needed to increase their personal leadership capacities, as well as to increase the learning capacities of their schools" (IPLI, 2020, p. 4).

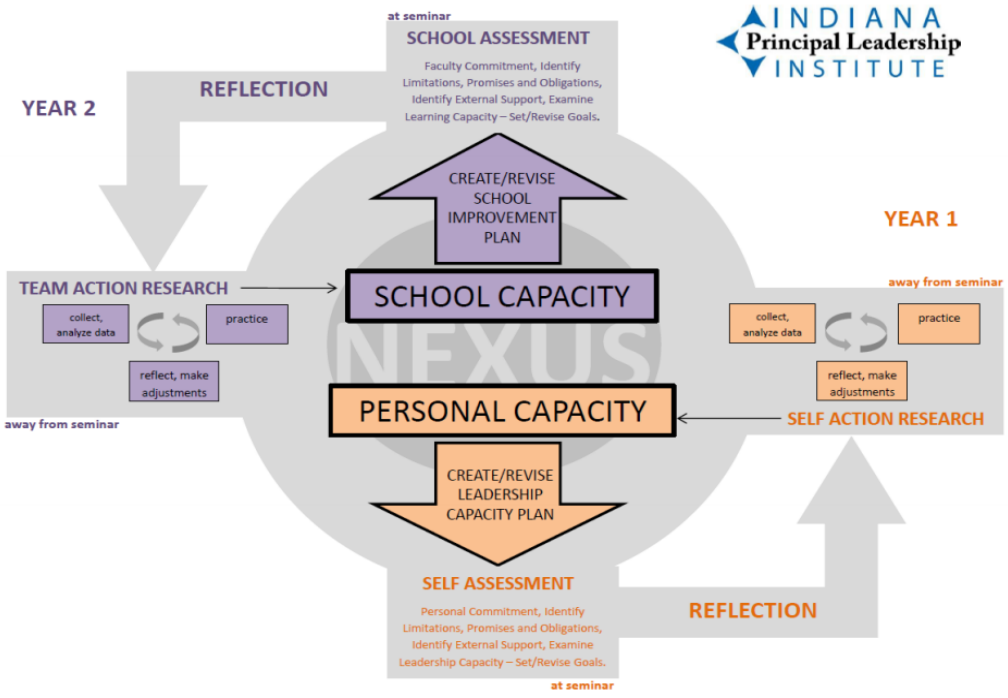
Principals accepted into the IPLI program commit to a two-year cycle of professional development opportunities (IPLI, 2020). Year 1 focuses on the principal as an individual and their personal leadership growth, while Year 2 focuses on school leadership and school growth. Although many might argue the benefits of Year 1 focusing on the principal versus the school, it is important to remember that self-care is important to remain effective, which is supported by Boogren's (2020) work which focused on self-care for educators: "To positively impact students, educators must be excited and engaged themselves. To feel that excitement and engagement in their work, educators must take care of themselves" (p. 4). Kanold (2017) related this to the necessity, due to the regular and consistent impact school leaders have on students, to be the

finest, and to be at one's finest, one must take care of one's self. In Year 2, principals select two teacher leaders to be included in the professional development process of IPLI, thus sharing leadership growth opportunities.

Principals accepted into the program are led by selected and trained mentors throughout the two years (IPLI, 2020). This emphasis on mentorship meets the needs of all principals in the program, and especially newly hired principals. Mitgang (2012) noted that in the beginning years of working as a principal, high-caliber mentorship assisted in continual development of a building-level principal's leadership ability. Figure 3 illustrates the two-year cycle for principals in IPLI (2020).

Figure 3

IPLI Two Year Conceptual Model



Note. Adapted from *Indiana Principal Leadership Institute at Indiana State University Handbook* by IPLI, 2020, p. 7.

Combined with high-quality mentoring and a focus on both the principal and the school, IPLI uses action research in partnership with Marzano Research's High Reliability Schools™ (HRS) framework (IPLI, 2020). Principals in Year 1 of IPLI develop their own action research project regarding their own personal growth using HRS data, then in Year 2, in partnership with selected teacher leaders, principals develop another action research project centered around school growth and improvement.

Reflection on one's own professional practice is a necessary component of personal and professional growth. Educators that are reflective in their practice understand that successful practice comes from learning through action, and it is experience after experience that leads to future professional growth (York-Barr et al., 2006). There are several ways to practice this reflection, both informally and systematically, and it does not require formal research to be a reflective learner to improve professional practice. IPLI uses Dana's (2009) action research model to promote leadership inquiry. In the sense of shared leadership and collaboration, she illustrated the importance that administrator inquiry plays in its potential to promote a shared decision-making environment. Dana (2009) went even further, specifically stating, "By engaging in the process of collaborative inquiry with a group of teachers within your own building, you are forced out of isolation and surround yourself with other professionals conversing about practice in systemic and meaningful ways" (p. 12).

Dana (2009) also connected the importance of continued learning to leadership teams that are likely driving decisions and any change in the building. Action research can even become part of a school's collaborative PLC process and serve as the systematic lynchpin of how PLCs choose to behave and operate. Action research ultimately leads to further sharing of practices to others and brings new knowledge, reinforces values, and challenges current practices that

become powerful for future growth, not only to one's self but others as well (McNiff, 2017). Through the sharing of action research, it ultimately "helps bridge the divide between research and application" (Mertler, 2014, p. 245).

High Reliability Schools™ Framework

The IPLI (2020) utilized multiple surveys for both building principals and their schools. Among those surveys were those that are part of the HRS framework. The framework of HRS operates on the basis that any business organization, including schools, even though they are often not thought of as business organizations, must take a systematic approach to their operations to reduce and repair failures that will, as a result, maximize success, namely, student achievement (Marzano et al., 2014). Marzano et al. (2014) cited data from Hattie (2009, 2012) that illustrated the top 50 factors that influence student achievement and emphasized that a majority of them are within a school's control one way or another. Table 4 provides Hattie's updated list of the top 50 factors, of which 44 of the influencing factors are either teacher, curricular, instructional strategy, or school/classroom controlled (Hattie, 2017).

Table 4

Hattie's Visible Learning Top 50 Factors

Rank	Influence	Domain/Control	Rank	Influence	Domain/Control
1	Collective teacher efficacy	School	26	Evaluation and reflection	Teaching
2	Self-reported grades	Student	27	Reciprocal teaching	Teaching
3	Teacher estimates of achievement	Teacher	28	Rehearsal and memorization	Teaching
4	Cognitive task analysis	Teaching	29	Comprehensive instructional programs for teachers	Curricula
5	Response to intervention	Teaching	30	Help seeking	Teaching
6	Piagetian programs	Student	31	Phonics instruction	Curricula
7	Jigsaw method	Teaching	32	Feedback	Teaching
8	Conceptual change programs	Curricula	33	Deep motivation and approach	Student
9	Prior ability	Student	34	Field independence	Student
10	Strategy to integrate with prior knowledge	Teaching	35	Acceleration programs	Classroom
11	Self-efficacy	Student	36	Learning goals vs. no goals	Teaching
12	Teacher credibility	Teacher	37	Problem-solving teaching	Teaching
13	micro-teaching/video review of lessons	Teacher	38	Outlining and transforming	Teaching
14	Transfer strategies	Teaching	39	Concept mapping	Teaching
15	Classroom discussion	Teaching	40	Vocabulary programs	Curricula
16	Scaffolding	Teaching	41	Creativity programs	Curricula
17	Deliberate practice	Teaching	42	Behavioral intervention programs	Classroom
18	Summarization	Teaching	43	Setting standards for self-judgement	Teaching
19	Effort	Teaching	44	Teachers not labeling students	Teacher

Table 4 (continued)

Rank	Influence	Domain/Control	Rank	Influence	Domain/Control
20	Interventions for students with learning needs	Teaching	45	Relations of high school to university achievement	Student
21	Mnemonics	Teaching	46	Meta-cognitive strategies	Teaching
22	Planning and prediction	Teaching	47	Spaced vs. mass practice	Teaching
23	Repeated reading programs	Curricula	48	Direct instruction	Teaching
24	Teacher clarity	Teacher	49	Mathematics programs	Curricula
25	Elaboration and organization	Teaching	50	Appropriately challenging goals	Teaching

Note. Adapted from *256 influences and effect sizes (Cohen's d) related to student achievement* by J. Hattie, 2017.

Given that a majority (44 out of the 50) of the influences are school controlled in some manner, the HRS framework provides a structure that can address low performing areas for school improvement. This framework involves five hierarchical levels illustrated in Table 5 adapted from Marzano et al. (2014).

Table 5

High Reliability Schools™ Levels

Level	Hierarchy
Level 5	Competency-Based Education
Level 4	Standards-Referenced Reporting
Level 3	Guaranteed and Viable Curriculum
Level 2	Effective Teaching in Every Classroom
Level 1	Safe and Collaborative Culture

Note. Adapted from *A Handbook for High Reliability Schools: The Next Step in School Reform* by R. Marzano, J. Simms, & P. Warrick, 2014, p. 4, Marzano Resources.

Most schools operate in the Levels of one through three, rarely achieving Level 4 or Level 5 status (Marzano et al., 2014). When thinking of this system as hierarchical, it is important to understand the necessity of Level 1 being achieved first, as "providing a safe and orderly environment for both student and adult learning" is a "fundamental prerequisite to any effective school" (Marzano et al., 2018, p. 2).

When level one of the HRS model is achieved by schools, they can begin to move to and concentrate on Level 2—effective teaching in every classroom. Marzano et al. (2018, p. 75) cited the following conclusion from Wright et al. (1997):

> The most important factor affecting student learning is the teacher. In addition, the results show wide variation in effectiveness among teachers. The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any single factor (p. 63).

When leaders and schools focus on effective teaching in every classroom, they can also focus on this through their collaborative teams. Collaboration allows a team of people to focus on instructional improvement rather than just one individual (Eaker et al., 2020) leading to team activities, such as instructional rounds. Strategies, such as instructional rounds, lead to teams focusing on instructional improvement as a collective group versus what City et al. (2009) referred to as "isolated pockets of good teaching" (p. 5). Level 2, effective teaching, also connects with two of the four questions of the PLC process: How do we respond when students do not know the material, and how do we respond when they already know the material?

Moving past Level 2, leaders and schools can begin to focus on Level 3 of the HRS model—guaranteed and viable curriculum. Guaranteed and viable curriculum addresses the first key question in the work of PLCs: What do we want students to learn? DuFour et al. (2010) defined guaranteed and viable curriculum as "student access to the same essential learning regardless of who is teaching the class [and] can be taught in the time allotted" (p. 63).
It is important for teams to work together to develop a guaranteed and viable curriculum, because as Erkens (2016) stated, "There will always be too much to teach without enough time to accomplish the task" (p. 60). A guaranteed and viable curriculum ultimately connects with Level 2, effective teaching in every classroom, because "given that a great deal of the collaborative team's work centers on monitoring instruction, it is imperative that the team's members have a clear understanding of what they will teach" (Marzano et al., 2016, p. 33).

Summary

A literature review was conducted, beginning with the basis of shared leadership. The Wallace Foundation (2013) reported on the importance of developing leadership in others beyond just administrators. Further, the Wallace Foundation called specifically upon secondary

school principals to share leadership, due to a principal's instructional leadership limitation of secondary schools being content-specific driven and lacking expertise in all content areas.

Shared leadership can often be found in the presence of building-level teams; therefore, the literature review also addressed what makes teams effective, specifically leadership teams. Lencioni (2020) outlined the importance of the responsibility that a leader has when it comes to building and cultivating their organization's leadership team and how the development of an organization's team is often a responsibility that is not given the time and effort that is necessary. A specific team structure, PLCs, within schools was also addressed in terms of the impact they have as part of a school building's team structure. Muhammad (2018) discussed the necessity of leaders placing teachers into collaborative teams, PLCs, and that "we are much more effective together than we are separately" (p. 132), and it is this that serves as the lynchpin of the PLC process. The literature review also discussed challenges to teams and collaboration, as not all developed teams are effective teams, and as Duckworth (2016) found in her research around *grit*, "Our potential is one thing. What we do with it is quite another" (p. 14).

The literature review of shared leadership and teams consistently circled around the importance of organizational culture. A school's culture, whether good or bad, positive or negative, happy or unhappy, or whatever adjectives are chosen to describe how a school operates, has a distinct impact on its ability to be productive. If principals are going to develop productivity by distributing leadership and building teams, they must first be aware of their building's culture. Deal and Peterson (2016) discuss the importance of distributed leadership being rooted in school culture versus only outlined in structure that may not receive the continued emphasis needed to be effective.

Last, through this literature review, the theme developed that even through shared leadership and team building, a building administrator's own leadership ultimately impacts their school success. Barkley et al. (2001) discussed the importance of administrators putting drive and effort in their own professional growth, considering its extended impact on both teachers and students. Even when connecting to culture, Regier (2017) stated, "Over time, a culture will begin to mirror the personality of its leader(s)" (p. 27). As a result, the literature review also looked at personal principal leadership development to understand the importance of a principal's leadership capacity. Although this study focused on Indiana schools, principals, and teachers, the IPLI was reviewed as part of the literature review, and as a result, the HRS framework as this framework is used by IPLI to assist in driving leadership development and improvement, as well as school improvement.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

A review of literature that illustrated the importance of shared leadership as seen through teams, such as leadership teams and PLCs, emphasized the question of what kind of difference can be seen in schools that operate through shared leadership with teams versus schools where shared leadership with teams was absent. Shared leadership through teams, as the literature review detailed, has an impact on organizational culture and collaboration that may or may not occur. A study conducted by Leana (2011) highlighted the importance of collaboration in public schools summarizing teaching into what undeniably should be considered a collaborative system versus a collection of individuals working solely on their own.

Purpose of the Study

The purpose of this quantitative study was to determine if select independent variables showed a difference in a safe and collaborative school culture in a secondary school building and if those select independent variables showed a difference in effective teaching in the classroom of a secondary school building. As research points school leaders in the direction of utilizing leadership teams and PLCs to reach vision, mission, and goals, it is important to evaluate the effectiveness of these criteria for schools to run both effectively and efficiently. Survey data were collected and analyzed for this study to examine potential significant differences between

the independent variables of building-level leadership teams and PLCs and their dependent variables of safe and collaborative school culture and effective teaching in every classroom.

The study also examined if principals were invested in their own professional leadership capacity, specifically through IPLI, could that show a difference in a school's safe and collaborative culture and effective teaching? Principals that participate in IPLI also utilize, through the leadership program, the same measurement tool that was utilized for this study. The study emphasized the importance of a principal focusing on his or her own professional leadership capacity while developing shared leadership through effective leadership teams and professional learning communities within their school buildings.

Finally, the study examined the relationship among teacher responses in the areas of a safe and collaborative culture and effective teaching. If a linear relationship is found among those areas with teachers, further inferences can potentially be made for future school decision-making. The type of linear relationship presented also allowed for those inferences to be specific and detailed when looking at how school administrators choose to structure their buildings.

Research Design

English and Furman (2007) discussed the six guiding principles to educational research, derived from the National Research Council report of which Scientific Principle 3 specifically stated, "Research methods—the design for collecting data and the measurement and analysis of variables in the design—should be selected in light of the research question, and should directly address it" (p. 48). Therefore, careful consideration was taken when deciding to take a quantitative approach for this study's research method. A quantitative approach was beneficial to this study, as it looked for relationships between two or more variables (Ary et al., 2010).

This study looked to see if there were statistically significant differences among the independent and dependent variables. The dependent variables were a school's safe and collaborative environment and effective teaching as measured by the HRS framework, Level 1 and Level 2 surveys. The independent variables were the presence of PLCs, a building-level leadership team, or a principal's participation in IPLI. An independent-measures research design was used for many of the research questions, as the design involved making a "comparison between two groups" (Gravetter & Wallnau, 2017, p. 301). Further, correlational research was also conducted to determine the relationship between teachers and their safe and collaborative survey data and effective teaching survey data to predict if schools that achieve higher reliability in a safe and collaborative culture related to a higher reliability in effective teaching.

Research Questions

1. What is the state of teacher stress during the COVID-19 pandemic and a teacher's belief that they have the necessary tools and resources available to be an effective teacher during the COVID-19 pandemic?
2. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has a building-level leadership team?
3. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has established professional learning communities?
4. Among teachers, is there a significant difference in effective teaching when a school building has a building-level leadership team?
5. Among teachers, is there a significant difference in effective teaching when a school building has established professional learning communities?

6. Among teachers, is there a significant difference in a safe and collaborative culture when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?
7. Among teachers, is there a significant difference in effective teaching when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?
8. Among teachers, does a safe and collaborative culture relate to effective teaching?

Null Hypotheses

$H_0$2. Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has a building-level leadership team.

$H_0$3. Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has established professional learning communities.

$H_0$4. Among teachers, there is not a significant difference in effective teaching when a school building has a building-level leadership team.

$H_0$5. Among teachers, there is not a significant difference in effective teaching when a school building has established professional learning communities.

$H_0$6. Among teachers, there is not a significant difference in a safe and collaborative culture when a principal has participated in the Indiana Principal Leadership Institute (IPLI).

$H_0$7. Among teachers, there is not a significant difference in effective teaching when a principal has participated in the Indiana Principal Leadership Institute (IPLI).

$H_0$8. Among teachers, a safe and collaborative culture does not relate to effective teaching.

Limitations

This study utilized surveying; however, low response rates from teachers could impact the study if some teachers chose not to participate. The potential for dishonest responses may also affect the results of the study. Teachers in their buildings for their first year were likely not be able to provide accurate assessments of their buildings as it pertained to answering the survey questions. The study also looked at principals, who have participated in IPLI as a personal leadership growth organization, so it was important to understand that, although a principal may not be participating in IPLI, that did not necessarily mean they were not utilizing other programs or strategies to enhance their own personal leadership capacity. Last, it was important to also take into consideration the COVID-19 pandemic and how the resulting stress and workload presented potential limitations, as the study was conducted either while the pandemic was ongoing or in early post-pandemic stages.

Delimitations

This study was delimited to schools that contained secondary school settings as defined by a secondary school in key definitions of Chapter 1. The study also included only public schools from Indiana and did not include schools from other states or private schools from Indiana.

Survey Design

During the review of literature, a survey instrument designed by Marzano Research through the HRS framework was chosen to gather data. Marzano et al. (2014) cited studies that supported “actions that schools can take to dramatically increase their effectiveness” (p. 2). Marzano Research then developed the HRS hierarchy that included these actions to provide framework for schools to focus on the work right for them. Each hierarchy level, as laid out as

part of the literature review in Chapter 2 of this study, contained surveys for data collection and analyses in those areas. The survey instrument was specifically chosen due to direct links from research including, but not limited to, the areas of shared decision making, teacher input, PLC, collaborative teams, and school improvement. This connection to the research from Chapter 2, along with the HRS tools being research-based with ongoing review and development, provided validity to the survey due to the survey's "relationship to the construct it is intended to measure" (Ary et al., 2010, p. 226). Internal reliability was measured utilizing Cronbach's alpha due to the survey instrument utilizing a Likert scale of 1 to 5 with 1=*strongly disagree*, 2=*disagree*, 3=*neither disagree nor agree*, 4= *agree*, and 5=*strongly agree* (Ary et al., 2010). Cronbach's alpha was conducted for both subscales of the instrument—safe and collaborative culture and effective teaching. Average scores for teacher responses were formed for both a safe and collaborative culture and effective teaching and needed to have a coefficient alpha of .7 or higher.

Specifically for this study, statements from HRS Levels 1 and 2 surveys were utilized to develop the instrument for this specific study. Permission to use or adapt these surveys is provided in Appendix A. The survey was administered to only Indiana public secondary school teachers. The survey for teachers began with a section gathering information for descriptive statistics along with data for Research Question 1. The survey asked how many years of teaching experience they had at their current building, teaching content area, building's grade-level setting, enrollment size of the building, presence of a building-level leadership team, presence of established PLCs, if their principal had participated in IPLI, and current levels of stress and teacher efficacy during the COVID-19 pandemic.

The next section of the survey for teachers was the Level 1 HRS leading indicator survey, a safe and collaborative culture. The HRS Level 1 survey indicated whether teachers "feel that the school is safe and maximizes collaboration for the enhancement of student learning" (Marzano et al., 2014, p. 15). As it relates to the Chapter 2 literature review, the Level 1 survey focused on areas, such as, but not limited to, collaborative teams, decision making, and PLCs. The HRS Level 2 survey addressed "factors that relate to developing and maintaining effective instruction in every classroom" (Marzano et al., 2014, p. 37). The HRS Level 1 and Level 2 surveys were adapted for increased instrument reliability to the following question sub-sections, as they related to the study's independent and dependent variables. The full survey is presented in Appendix B.

Level 1 Survey Sub-Sections

1. Teachers have formal roles in the decision-making process regarding school initiatives.
2. Teacher teams and collaborative groups regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.
3. Teachers and staff have formal ways to provide input regarding the optimal functioning of the school.
4. The success of the whole school, as well as individuals within the school, is appropriately acknowledged.

Level 2 Survey Sub-Sections

1. Support is provided to teachers to continually enhance their pedagogical skills through reflection and professional growth plans.
2. Predominant instructional practices throughout the school are known and monitored.

3. Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.
4. Teachers have opportunities to observe and discuss effective teaching.

Data Collection Process

Sample data of teachers for this study were obtained through the Indiana Department of Education (IDOE) as a public information request. The sample consisted of teachers that currently served in secondary public schools in Indiana. Upon approval from the Institutional Review Board at Indiana State University, teachers were sent an email, which can be found in Appendix C, requesting their participation in the study. All teachers of Indiana public schools were invited to participate. An informed consent letter, which can be found in Appendix C, was presented to participants prior to their ability to obtain access to the survey. Informed consent was a forced question, which was the first question of the survey using Qualtrics. Participants were able to withdraw from the study at any time during completion of the survey if they changed their mind and chose not to participate.

Method of Analysis

Descriptive statistics and inferential testing were used to gather and analyze information for this study. Descriptive statistics included years of experience for teachers, content area taught, building's grade level setting, enrollment size, presence or absence of PLCs, building-level leadership team, and whether a teacher's administrator had participated in IPLI. These descriptive statistics were used to organize and summarize the data to "interpret . . . data and communicate . . . findings" (Ary et al., 2010, p. 101) through the data analysis. Data collection was accomplished through an electronic survey instrument, Qualtrics. Data were exported from Qualtrics to IBM SPSS Version 28 for data analysis.

Following a presentation of the descriptive statistics, the first research question explored the state of teacher stress and efficacy during the COVID-19 pandemic. The remaining research questions were tested through analysis of the null hypotheses using inferential statistics, as Ary et al. (2010) stated, "tests of significance [will allow for the researcher to make] reasonable decisions about populations" (p. 162). Research Questions 2 through 7 were tested using an independent-measures design or an independent *t* test. Gravetter and Wallnau (2017) affirmed, "The goal of an independent-measures research study is to evaluate the mean difference between two populations (or between two treatment conditions)" (p. 303). Research Questions 2 through 7 contained two treatment conditions.

Research Question 2 examined if there was a significant difference among teachers in a safe and collaborative culture between school buildings that either had or did not have building-level leadership teams. A safe and collaborative culture served as the dependent variable, with the independent variable being the presence or absence of a building-level leadership team. Research Question 3 examined if there was a significant difference among teachers in a safe and collaborative culture between school buildings that either had or did not have established PLCs. A safe and collaborative culture served as the dependent variable, with the independent variable being the presence or absence of established PLCs. Research Question 4 examined if there was a significant difference among teachers in effective teaching between school buildings that either had or did not have a building-level leadership team. Effective teaching served as the dependent variable, with the independent variable being the presence or absence of a building-level leadership team. Research Question 5 examined if there was a significant difference among teachers in effective teaching between school buildings that either had or did not have established PLCs. Effective teaching served as the dependent variable, with the independent

variable being the presence or absence of established PLCs. Research Question 6 examined if there was a significant difference among teachers in a safe and collaborative culture between school buildings that either had or did not have a principal, who had participated in the IPLI. The dependent variable was a safe and collaborative culture, with the independent variable being an administrator, who either had or had not participated in IPLI. Research Question 7 examined if there was a significant difference among teachers in effective teaching between school buildings that either had or did not have a principal, who has participated in the IPLI. Effective teaching served as the dependent variable, with the independent variable being an administrator, who either had or had not participated in IPLI. Last, Research Question 8 was tested using a Pearson correlation, as this could be used to "measure the degree and the direction of the linear relationship" (Gravetter & Wallnau, 2017, p. 490) between a safe and collaborative culture and effective teaching.

Summary

Chapter 3 contained the purpose of the study, as well as outlined the quantitative design that took place for this study. As Chapter 3 explained, a quantitative approach was taken to address the research questions. Null hypotheses were developed, and independent measures design was conducted to explore whether significant differences exist between dependent and independent variables. A Pearson correlation was conducted to explore the relationship between a safe and collaborative culture and effective teaching. Data analysis and results will assist in guiding schools in decision making for increased and continued school improvement.

CHAPTER 4

ANALYSIS OF DATA

The purpose of this quantitative study was to analyze how building-level leadership teams, PLCs, and a principal's participation in a leadership development program impact a safe and collaborative school culture, and effective teaching, from a teacher's perspective in a secondary school setting as defined in key definitions in Chapter 1. As outlined in Chapter 3's research design and methodology, approval was obtained to use Marzano's High Reliability Schools™ surveys for a safe and collaborative culture and effective teaching. The surveys were adapted to include questions more directly related to the study's research questions. Ary et al. (2010) discussed acceptable reliability for an instrument to range from "modest reliability" (p. 249) of .50 to the "highest reliability" (p. 249) of a minimum of .90. Chapter 3 outlined a minimum reliability of .70 for this study. Cronbach's alpha was found for both the safe and collaborative culture and effective teaching sections of the survey instrument. The Cronbach's alpha for these two sections of the instrument survey were both .93, which met not only the study's minimum requirement of .70, but also the minimum of .90 set by Ary et al. (2010) when looking at the "highest reliability" (p. 249).

The survey instrument used for this study included a set of questions aimed to gather some descriptive statistics of the sample, as well as a section on a safe and collaborative culture and effective teaching, which served as the study's dependent variables. The study used a 5-point

Likert scale: 1=*strongly disagree*, 2=*disagree,* 3=*neither disagree nor agree,* 4=*agree*, and 5=*strongly agree*. Each teacher's responses were averaged to come up with an overall score for each teacher in both areas of safe and collaborative culture and effective teaching. The survey also asked teachers to answer if their current building had an established building-level leadership team, established PLCs, and if their principal had participated in the IPLI. These variables served as independent variables to the study. This chapter presents the data and is outlined as follows: statement of research questions, descriptive statistics, inferential analysis, and a summary of the study's findings.

Research Questions

1. What is the state of teacher stress during the COVID-19 pandemic and a teacher's belief that they have the necessary tools and resources available to be an effective teacher during the COVID-19 pandemic?
2. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has a building-level leadership team?
3. Among teachers, is there a significant difference in a safe and collaborative culture when a school building has established professional learning communities?
4. Among teachers, is there a significant difference in effective teaching when a school building has a building-level leadership team?
5. Among teachers, is there a significant difference in effective teaching when a school building has established professional learning communities?
6. Among teachers, is there a significant difference in a safe and collaborative culture when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?

7. Among teachers, is there a significant difference in effective teaching when a principal has participated in the Indiana Principal Leadership Institute (IPLI)?
8. Among teachers, does a safe and collaborative culture relate to effective teaching?

Descriptive Statistics

Participants of this study were secondary public-school teachers. A public records request was submitted to the IDOE to obtain the most updated list of Indiana secondary public-school teachers. The survey was sent electronically to this list of teachers utilizing the data software program, Qualtrics, and then entered into SPSS 28 for statistical analysis. The survey was open for three weeks for participants to respond with a total of 996 survey responses. Partial responses in the survey sections of a safe and collaborative culture and effective teaching were deleted to complete more accurate statistical analysis resulting in a total of 723 (n = 723) participant responses being utilized for the study.

Descriptive statistics "enable researchers to organize, summarize, and describe observations (Ary et al., 2010, p. 101), so participants in this study completed a series of initial questions to provide a detailed description of the sample acquired for this study. Of the 723 respondents in this study, 178 (24.6%) had 0–4 years of teaching experience at their current building, 166 (23.0%) had 5–9 years, 378 (52.3%) had 10 years or more, and one (0.1%) did not respond. When asked what their building's grade level setting was, 177 (24.5%) responded with Grades 6–8, 411 (56.8%) responded with Grades 9–12, 55 (7.6%) responded with Grades 7–12, and 80 (11.1%) responded with other. When asked the enrollment size of their building, 140 (19.4%) responded with 499 or fewer students, 247 (34.2%) responded with 500–999 students, and 336 (46.5%) responded with 1,000 students or more. Of the teachers that responded, 110 (15.2%) taught mathematics, 125 (17.3%) taught English, 81 (11.2%) taught social studies, 102

(14.1%) taught science, 111 (15.4%) taught special education, 183 (25.3%) taught related arts, world languages, or CTE, and 11 (1.5%) chose not to respond.

The following three questions were used to obtain information to use as the independent variables of the inferential analysis. First, participants were asked if their building had an established building-level leadership team that was composed of both teachers and administrators. Of those that responded, 563 (77.9%) responded yes, and 160 (22.1%) responded no. Next, participants were asked if their building had established PLCs. Of those that responded, 543 (75.1%) responded yes, and 180 (24.9%) responded no. Lastly, participants were asked if their current principal had participated in the IPLI. Of those that responded, 140 (19.4%) responded yes, 21 (2.9%) responded no, and 568 (77.7%) chose to not respond or responded with do not know. Table 6 reflects the descriptive statistics for the responses to the safe and collaborative culture statements in the survey.

Table 6

Responses to Safe and Collaborative Culture

Safe and Collaborative Culture Statement	*M*	*SD*
It is clear which types of decisions will be made with direct teacher input.	2.82	1.11
Techniques and systems are in place to collect data from teachers on a regular basis.	3.07	1.20
Notes and reports exist documenting how teacher input was used to make specific decisions.	2.59	1.10
Electronic tools (i.e., online survey tools) are used to collect teachers' opinions regarding specific decisions.	3.26	1.21
Groups of teachers are targeted to provide input regarding specific decisions.	3.39	1.05
A professional learning community (PLC) is in place in our school.	3.71	1.26
Our school's PLC collaborative teams have written goals.	3.27	1.27
School leaders regularly examine PLC collaborative teams' progress toward their goals.	3.08	1.23
Our school's PLC collaborative teams analyze student achievement and growth.	3.37	1.19
School leaders collect and review minutes and notes from PLC collaborative team meetings to ensure that teams are focusing on student achievement.	3.03	1.17
Data collection systems are in place to collect opinion data from teachers and staff regarding the optimal functioning of our school.	2.86	1.21
Opinion data collected from teachers and staff are archived.	2.77	0.97
Reports of opinion data from teachers and staff are regularly generated.	2.49	1.06
The manner in which opinion data from teachers and staff are used is transparent.	2.53	1.12

Table 7 presents the descriptive statistics for the responses to the effective teaching statements in the survey.

Table 7

Responses to Effective Teaching

Effective Teaching Statement	*M*	*SD*
I have written statements about my instructional growth goals.	3.52	1.14
I keep track of my progress on my instructional growth goals.	3.44	1.11
School leaders meet with me to discuss my instructional growth goals.	3.31	1.22
I can describe my progress on my instructional growth goals.	3.54	1.09
Data from walkthroughs at our school are aggregated to show our school's predominant instructional practices.	2.82	1.17
School leaders can describe our school's predominant instructional practices.	3.42	1.10
I can describe our school's predominant instructional practices.	3.21	1.14
School leaders give me forthright feedback about my instructional practices.	3.62	1.06
Teacher-led professional development that is relevant to my instructional growth goals is available to me.	3.08	1.25
School leaders collect data about how effective professional development is in improving teacher practice.	2.84	1.17
Teachers can describe available professional development supports achievement of my instructional growth goals.	2.93	1.12
I have opportunities to engage in instructional rounds.	2.75	1.17
I have regular times to meet with other teachers to discuss effective instructional practices.	3.24	1.25
We regularly discuss instructional practices at faculty and department meetings.	3.18	1.21
School leaders have information available about teachers' participation in opportunities to observe and discuss effective teaching.	2.95	1.12

Research Question 1

Chapter 3 outlined the study's limitations, one of which was the COVID-19 pandemic. This limitation was determined to be strong enough that the first research question was developed to provide some descriptive statistics on how it impacted participants of the study. This research question provided the state of a teacher's stress during the pandemic and their beliefs that they had the tools and resources necessary to be an effective teacher during the pandemic. The first question asked participants how personal stress had changed during the COVID-19 pandemic of which one (0.1%) responded strongly decreased, 11 (1.5%) responded somewhat decreased, 56 (7.7%) responded neither increased nor decreased, 269 (37.2%) responded somewhat increased, and 386 (53.4%) responded strongly increased. When asked if teachers had the necessary tools and resources to be effective during the COVID-19 pandemic, 62 (8.6%) responded definitely not, 155 (21.4%) responded probably not, 374 (51.7%) responded probably yes, and 132 (18.3%) responded definitely yes.

Inferential Analysis

Research Question 2

The null hypothesis for Research Question 2 stated: Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has a building-level leadership team. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of a safe and collaborative culture. Prior to analysis, the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 4 and 5 illustrate the assumption of normality.

Figure 4

Assumption of Normality for Yes to Building-Level Leadership Team

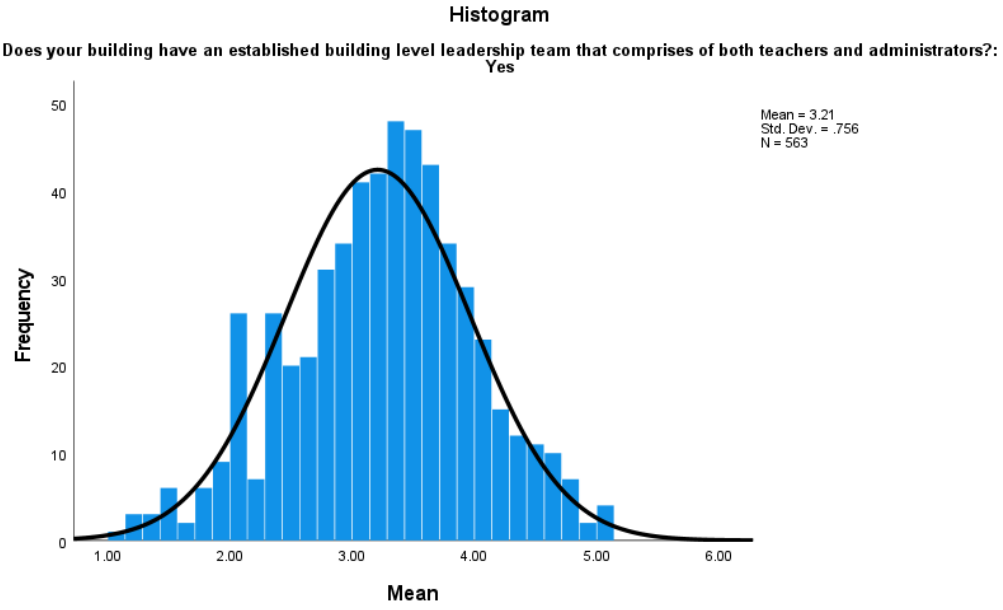
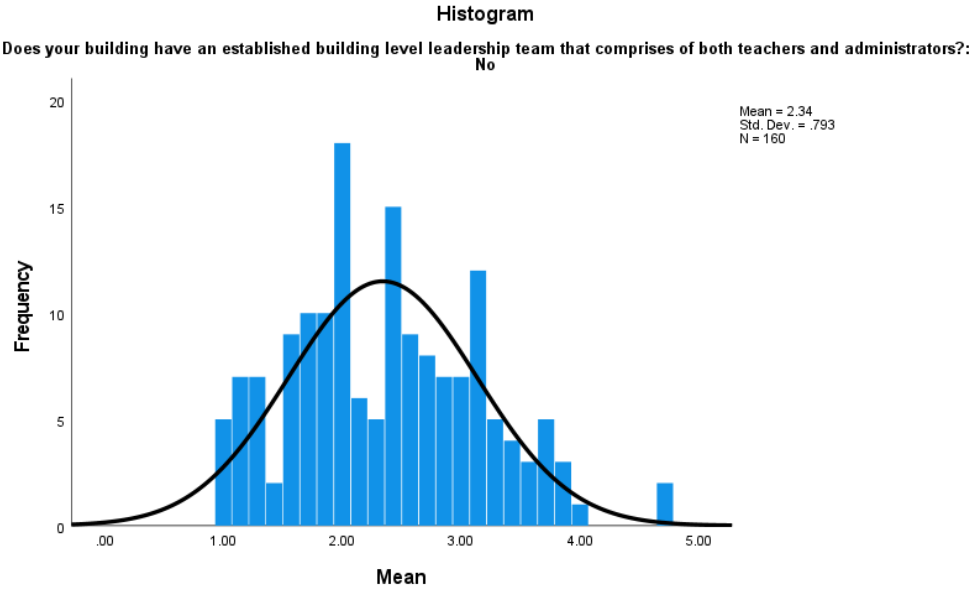


Figure 5

Assumption of Normality for No to Building-Level Leadership Team



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = 1.48$, $p = .225$.

Teacher responses of yes to a building-level leadership team ($M = 3.21$, $SD = .76$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to a building-level leadership team ($M = 2.34$, $SD = .79$). Test results showed that among teachers, those that had a building-level leadership team ($M = 3.21$, $SD = .76$), scored statistically significantly higher on a safe and collaborative culture than those that did not have a building-level leadership team ($M = 2.34$, $SD = .79$), $t(721) = 12.68$, $p < .001$, $d = .76$. Due to this test result, the null hypothesis to Research Question 2 was rejected.

Research Question 3

The null hypothesis for Research Question 3 stated: Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has established PLCs. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of a safe and collaborative culture. Prior to analysis the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 6 and 7 illustrate the assumption of normality.

Figure 6

Assumption of Normality for Yes to Professional Learning Communities

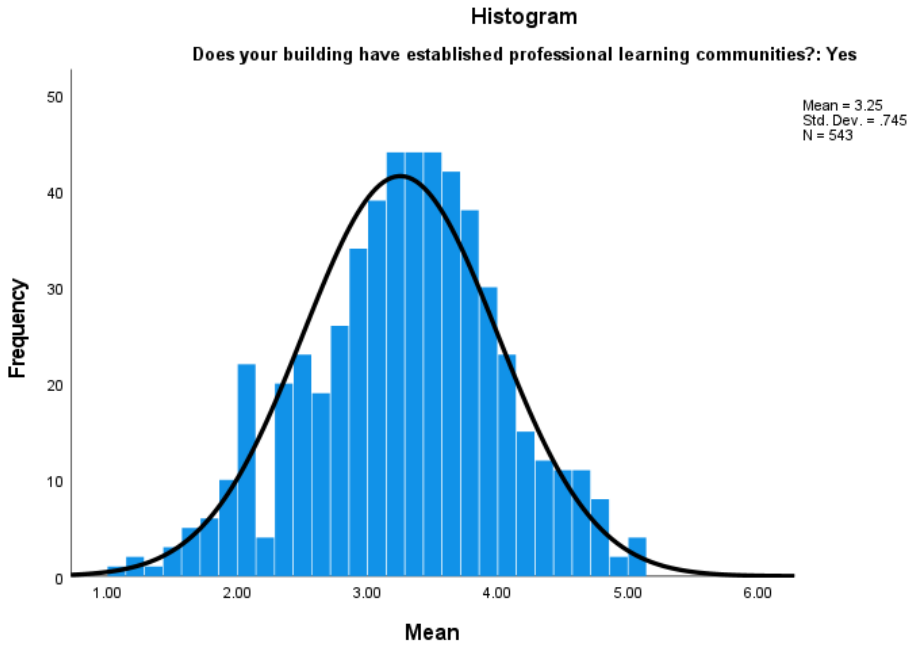
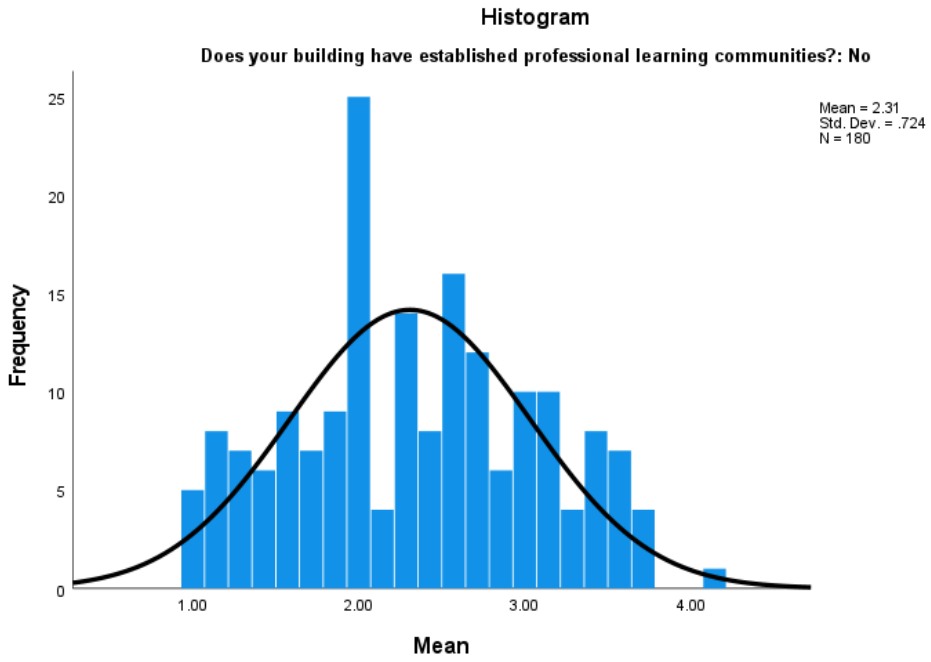


Figure 7

Assumption of Normality for No to Professional Learning Communities



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = .084$, $p = .772$.

Teacher responses of yes to established PLCs ($M = 3.25$, $SD = .75$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to established PLCs ($M = 2.31$, $SD = .72$). Test results showed that among teachers, those that had established PLCs ($M = 3.25$, $SD = .75$), scored statistically significantly higher on a safe and collaborative culture than those that did not have established PLCs ($M = 2.31$, $SD = .72$), $t(721) = 14.83$, $p < .001$, $d = .74$. Due to this test result, the null hypothesis for Research Question 3 was rejected.

Research Question 4

The null hypothesis for Research Question 4 stated: Among teachers, there is not a significant difference in effective teaching when a school building has a building-level leadership team. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of effective teaching. Prior to analysis, the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 8 and 9 illustrate the assumption of normality.

Figure 8

Assumption of Normality for Yes to Building-Level Leadership Team

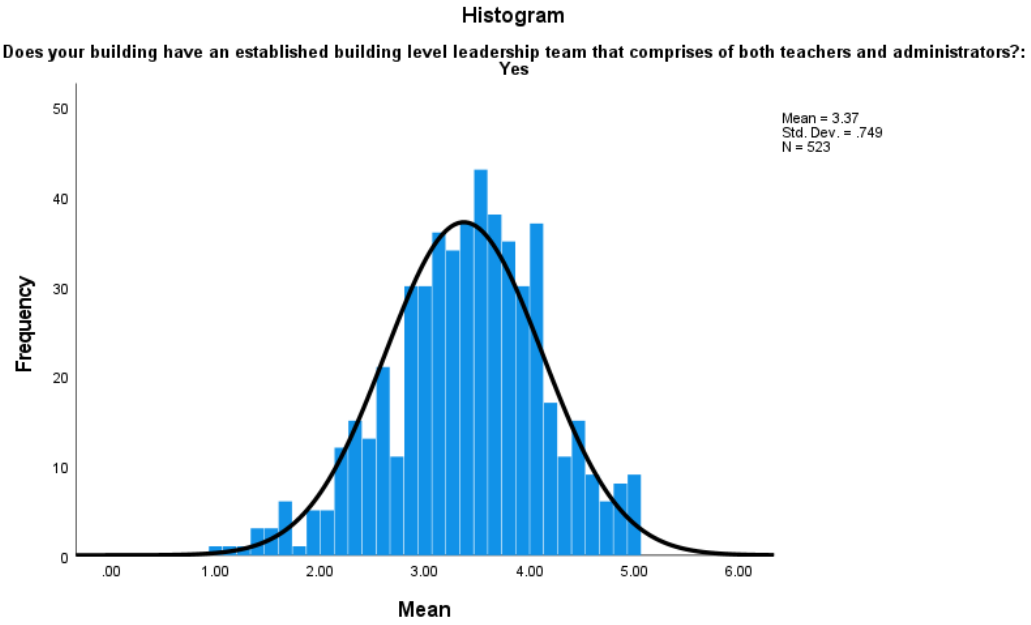
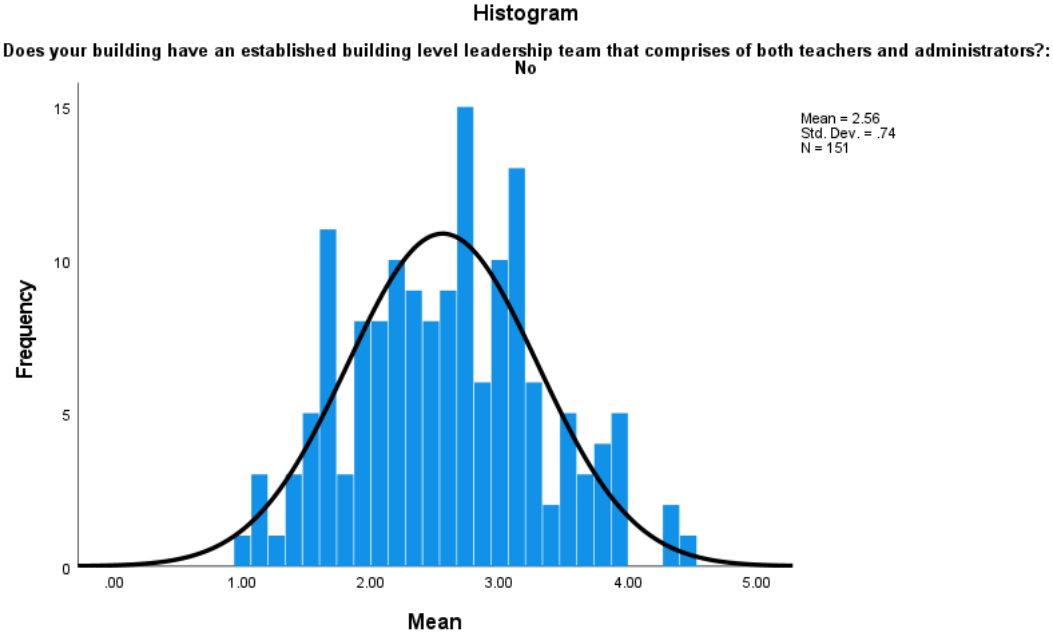


Figure 9

Assumption of Normality for Yes to Building-Level Leadership Team



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = .088$, $p = .767$.

Teacher responses of yes to building-level leadership teams ($M = 3.37$, $SD = .75$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to building-level leadership teams ($M = 2.56$, $SD = .74$). Test results showed that among teachers, those that had a building-level leadership team ($M = 3.37$, $SD = .75$), scored statistically significantly higher on effective teaching than those that did not have a building-level leadership team ($M = 2.56$, $SD = .74$), $t(672) = 11.80$, $p < .001$, $d = .75$. Due to this test result, the null hypothesis to Research Question 4 was rejected.

Research Question 5

The null hypothesis for Research Question 5 stated: Among teachers, there is not a significant difference in effective teaching when a school building has established PLCs. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of effective teaching. Prior to analysis, the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 10 and 11 illustrate the assumption of normality.

Figure 10

Assumption of Normality for Yes to Professional Learning Communities

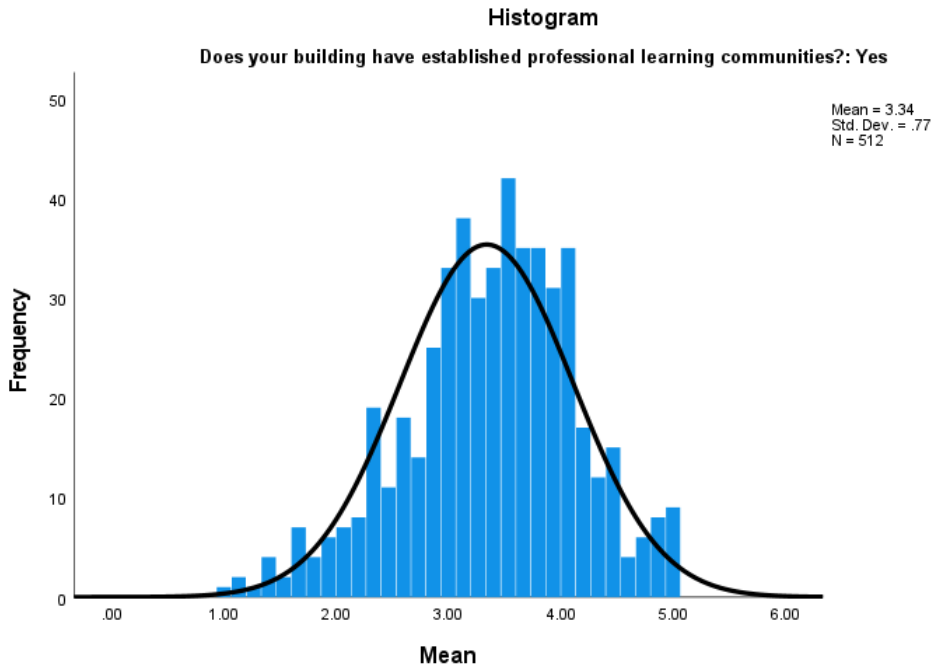
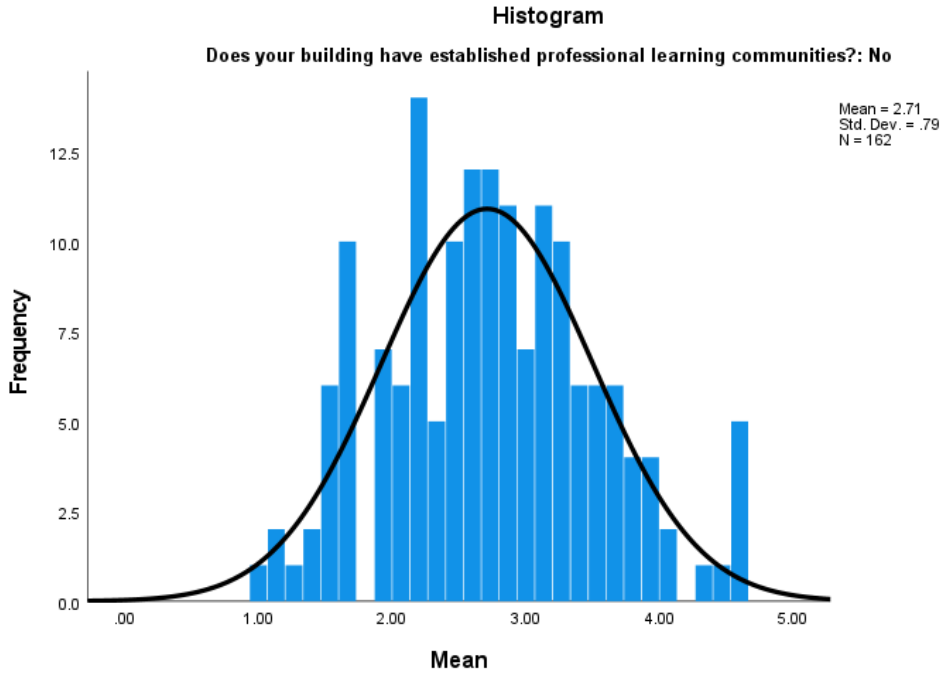


Figure 11

Assumption of Normality for Yes to Professional Learning Communities



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = .312$, $p = .577$.

Teacher responses of yes to established PLCs ($M = 3.34$, $SD = .77$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to established PLCs ($M = 2.71$, $SD = .79$). Test results showed that among teachers, those that had established PLCs ($M = 3.34$, $SD = .77$), scored statistically significantly higher on effective teaching than those that did not have established PLCs ($M = 2.71$, $SD = .79$), $t(672) = 9.02$, $p < .001$, $d = .78$. Due to this test result, the null hypothesis to Research Question 5 was rejected.

Research Question 6

The null hypothesis for Research Question 6 stated: Among teachers, there is not a significant difference in a safe and collaborative culture when a principal has participated in the IPLI. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of a safe and collaborative culture. Prior to analysis, the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 12 and 13 illustrate the assumption of normality.

Figure 12

Assumption of Normality for Yes to Principal Participation in IPLI

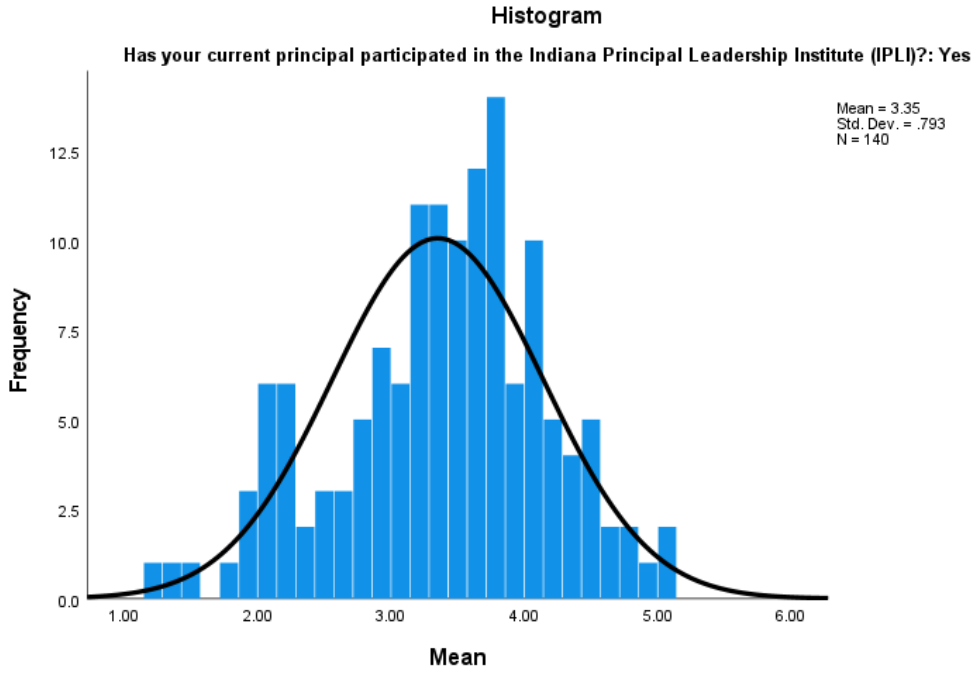
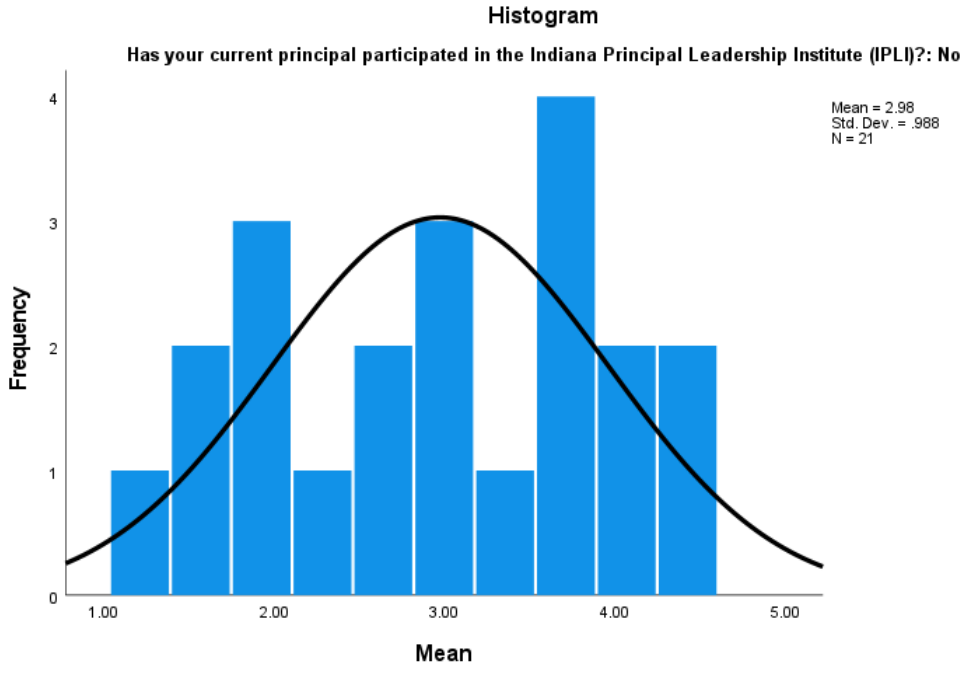


Figure 13

Assumption of Normality for No to Principal Participation in IPLI



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = 3.41$, $p = .067$.

Teacher responses of yes to principal participation in IPLI ($M = 3.35$, $SD = .79$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to principal participation in IPLI ($M = 2.97$, $SD = .99$). Test results showed that among teachers, those that had a principal, who had participated in IPLI ($M = 3.35$, $SD = .79$), did not score statistically significantly higher on a safe and collaborative culture than those that did not have a principal, who had participated in IPLI ($M = 2.97$, $SD = .99$), $t(159) = 1.95$, $p = .053$, $r^2 = .02$. Due to this test result, the null hypothesis to Research Question 6 was retained.

Research Question 7

The null hypothesis for Research Question 7 stated: Among teachers, there is not a significant difference in effective teaching when a principal has participated in the IPLI. This null hypothesis was analyzed using an independent measures *t* test on composite scores from participants in the survey section of effective teaching. Prior to analysis, the three assumptions of independence, normality, and homogeneity of variance were all tested and met. The assumption of independence was met through random sampling. The assumption of normality was met through examination of histograms. Figures 14 and 15 illustrate the assumption of normality.

Figure 14

Assumption of Normality for Yes to Principal Participation in IPLI

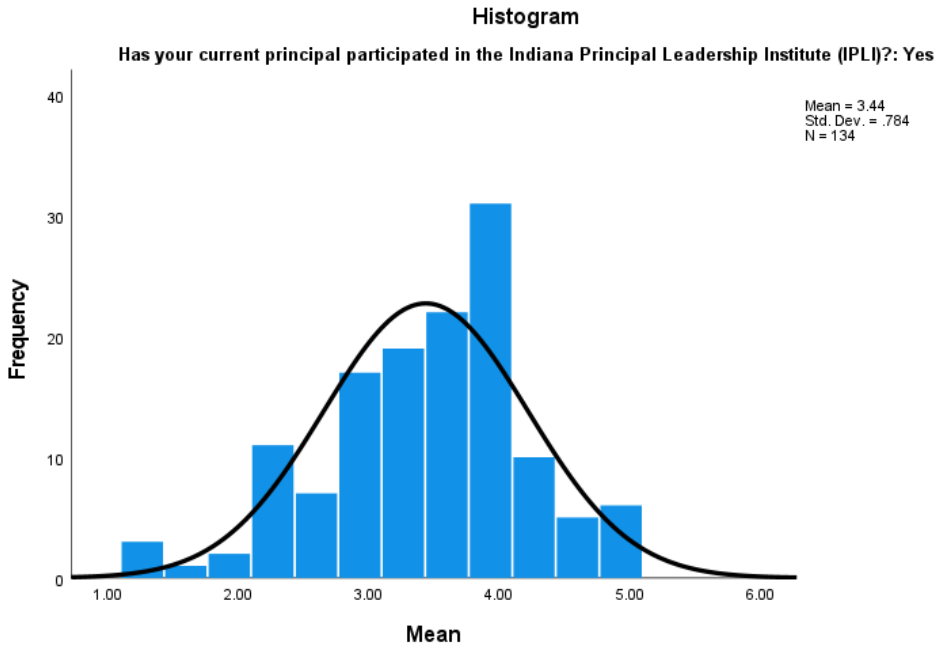
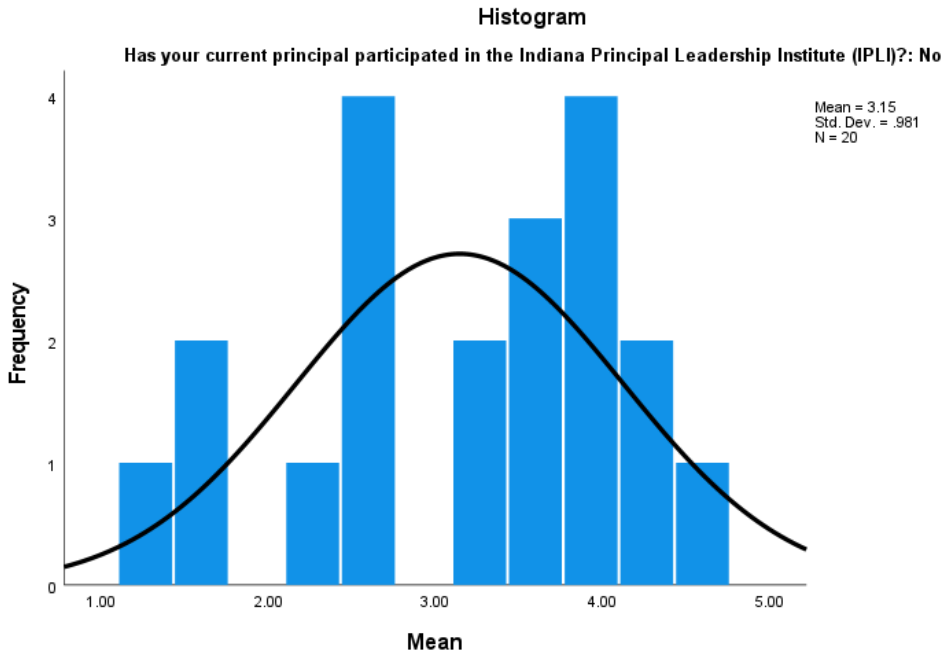


Figure 15

Assumption of Normality for No to Principal Participation in IPLI



The assumption of homogeneity of variance was met utilizing Levene's test for equality of variances, as the significance value was greater than .05, $F = 3.16$, $p = .077$.

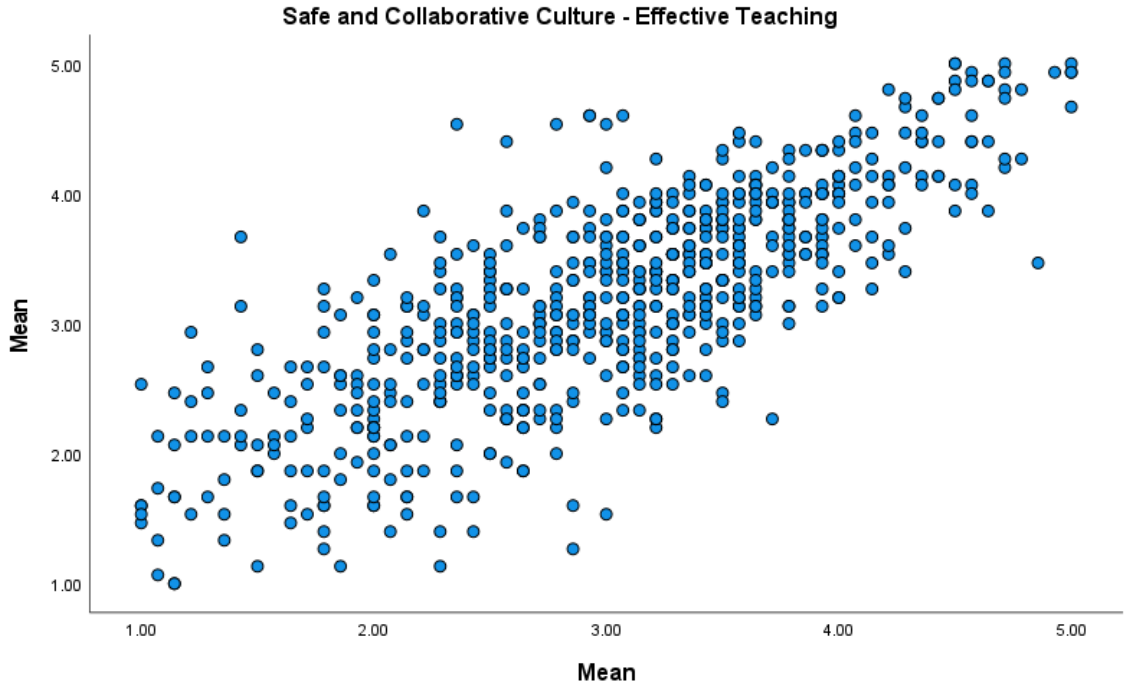
Teacher responses of yes to principal participation in IPLI ($M = 3.44$, $SD = .78$) were tested using a non-directional independent measures *t* test with an alpha set at .05 to determine if statistically significant differences existed when compared to teachers' responses of no to principal participation in IPLI ($M = 3.15$, $SD = .98$). Test results showed that among teachers, those that had a principal who had participated in IPLI ($M = 3.44$, $SD = .78$), did not score statistically significantly higher on effective teaching than those that did not have a principal who had participated in IPLI ($M = 3.15$, $SD = .98$), $t(152) = 1.50$, $p = .136$, $r^2 = .01$. Due to this test result, the null hypothesis to Research Question 7 was retained.

Research Question 8

The null hypothesis for Research Question 8 stated: Among teachers, a safe and collaborative culture does not relate to effective teaching. This null hypothesis was analyzed using a Pearson correlation among averaged scores from teachers in a safe and collaborative culture and effective teaching from the survey. Prior to analysis, data were checked for outliers and for a linear relationship by examining a scatterplot. Figure 16 illustrates the scatterplot with no outliers present and a positive linear relationship.

Figure 16

Safe and Collaborative Culture and Effective Teaching Scatterplot



Teacher responses on a safe and collaborative culture (M = 3.01, SD = .85) were tested using a non-directional two-tailed Pearson correlation with an alpha set at .05 to determine if a statistically significant relationship existed when compared to teachers' responses on effective teaching (M = 3.19, SD = .82). Test results showed that among teachers, there was a statistically significant positive relationship between a safe and collaborative culture and effective teaching, r = .79, p<.001, r^2 = .62. Due to this test result, the null hypothesis to Research Question 8 was rejected.

Summary of Findings

This chapter utilized quantitative data and applied descriptive statistics and inferential statistics to explore research questions and to determine significant differences and correlations

between two variables. The first research question centered on the COVID-19 pandemic and its limitation on this study with a purpose to providing the current state of teacher stress and efficacy during the COVID-19 pandemic. Descriptive statistics were used to summarize the change in stress on teachers since the pandemic, as well as whether teachers felt they had the necessary tools and resources to be an effective teacher. Although 90.6% of respondents' stress level either strongly or somewhat increased, 70% of respondents also felt they either definitely or probably had the necessary tools and resources to still be an effective teacher.

Following statistical tests, it was found that the dependent variable of a building-level leadership team caused a statistically significant difference among teacher scores in both a safe and collaborative culture and effective teaching. The presence of a building-level leadership team as evidenced by the statistical tests resulted in higher scores in both a safe and collaborative culture and effective teaching as measured by the survey used for this study. It was also determined that the independent variable of established PLCs caused a statistically significant difference among teacher scores in both a safe and collaborative culture and effective teaching. The presence of established PLCs as evidenced by the statistical tests resulted in higher scores in both a safe and collaborative culture and effective teaching as measured by the survey used for this study. Interpretation of effect sizes is discussed in Chapter 5. Next, it was determined that the dependent variable of a principal participating in IPLI did not cause a statistically significant difference among teachers on a safe and collaborative culture or effective teaching. Last, as evidenced by the statistical tests, a safe and collaborative culture has a positive linear relationship with effective teaching. The results from Chapter 4 are used for discussion in Chapter 5's implications and recommendations.

CHAPTER 5

SUMMARY OF FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter is organized into sections that include a summary of the findings of the study, implications of the study, limitations, recommendations for future research as a result of the study, and a conclusion. The summary of findings reviews the purpose of the study and a summary of the findings from the completed research. The implications section provides a more detailed summary of the results from each research question, as well as implications to the field of education as it relates to research findings. Limitations to the study following data analysis are discussed along with their potential impact to the study. Recommendations for future research as a result of the study are summarized for potential future research in the field of education as it may relate or extend to the findings of this specific study, followed by a short conclusion.

Summary of Findings

This study explored the impact of school-based teams, specifically building-level leadership teams and PLCs, and the impact those teams had on a safe and collaborative school culture and effective teaching in the classroom. Eaker et al. (2020) discussed the importance of a safe and collaborative school culture and stated, “If students, teachers, and parents do not believe their school is safe, supportive, and collaborative, they will spend their time, energy, and attention trying to get these basic needs met as opposed to focusing on student learning” (p. 11).

The High Reliability Schools™ Level 1 survey, safe and collaborative culture, captures a stakeholder's perception as to where a school stands in this area and was adapted and used in this study with the participants.

This study found a statistically significant difference in scores between buildings with a leadership team and buildings that did not have a leadership team on a safe and collaborative culture from a teacher's perspective. This study also found a statistically significant difference in scores between buildings with established PLCs and buildings that did not have established PLCs on a safe and collaborative culture from a teacher's perspective. Eaker et al. (2020) also discussed the importance of effective teaching in the classroom stating effective teaching "is one of the hierarchy's most influential, yet alterable variables" (p. 12). The High Reliability Schools™ Level 2 survey, effective teaching, captures a stakeholder's perception as to where a school stands in this area and was adapted and used in this study with the participants. This study found a statistically significant difference in scores between buildings with a leadership team and buildings that did not have a leadership team on effective teaching from a teacher's perspective. This study also found a statistically significant difference in scores between buildings with established PLCs and buildings that did not have established PLCs on effective teaching from a teacher's perspective.

The Program founded by Eric Kapitulik supports organizations in furthering their team and leadership development, and within their program, discuss the need for leaders to be developed (Kapitulik & Macdonald, 2019). Although many leadership development programs exist, this study chose to explore the impact of the IPLI on a safe and collaborative culture and effective teaching due to its use of the High Reliability Schools™ framework, extending connections within this study. This study found no statistically significant difference in scores

between teachers with principals who participated in IPLI, and teachers with principals who did not participate in IPLI, on either a safe and collaborative culture or effective teaching. Eaker et al. (2020) discussed the High Reliability Schools™ model and how the model operates as a hierarchy, with each level of the model needing to be tackled prior to the next level. This study explored if a correlation truly does exist among teachers between a safe and collaborative culture and effective teaching, which the study found a positive linear correlation between the two variables.

Implications

Research Question 1

The study listed the COVID-19 pandemic as a limitation to this study. The researcher determined it was a strong enough limitation considering the impact it likely had on teacher responses and response rates that a research question to gather data on the state of the pandemic on teachers was important to the study in order to more specifically measure the impact of the limitation to this study. Barnum (2021) reported results from a research study conducted in late January and early February of 2021 by the research firm, RAND, that 75% or more of teachers reported stress related to their job, which compared to only 40% of adults in other areas of employment. Further, Barnum reported that 23% of teachers considered leaving their current job at the end of the 2020–2021 school year. Although the summer of 2021 brought hope of a return to normalcy, the pandemic continued through the fall of 2021 still causing pockets of remote learning, quarantining due to contact tracing, and teachers having to continue to juggle more demands as a result. Even at the time of writing of this study's results, the pandemic is in some of its highest peaks of surge in COVID-19 due to the Omicron variant of the virus.

This study's first research question asked: What is the state of teacher stress during the COVID-19 pandemic and a teacher's belief that they have the necessary tools and resources available to be an effective teacher during the COVID-19 pandemic? This study captured the state of the pandemic at the time the study's survey was open, which was for three weeks across the second half of December 2021 and early January 2022. The first question asked teachers if their personal stress levels changed during the COVID-19 pandemic. Only one (0.1%) teacher responded that their personal stress strongly decreased and only 11 (1.5%) teachers responded that their personal stress somewhat decreased. Some (n = 56, 7.7%) of the teachers reported that their personal stress had neither increased nor decreased, and 269 (37.2%) teachers indicated that their personal stress had somewhat increased. More than half of the surveyed teachers (n = 386, 53.4%) reported that their personal stress level had strongly increased. Combining the last two responses 90.6% of teachers reported an increase in personal stress on some level during the COVID-19 pandemic.

These response rates describe that the COVID-19 pandemic was still having effects on teachers in the classroom, and as a result teachers need continued support to navigate teaching during the pandemic. Teach for Cambodia (2021) presented five principles supporting teachers during the pandemic as a result of a case study done in the countries of Bangladesh, Cambodia, and the Philippines. "Enhancing teacher support through non-training means" (Teach for Cambodia, 2021, p. 3) is one of those principles, which highlights the social and emotional needs that teachers need during this time of increased stress. Another principle from this case study illustrated the need to recognize the "new normal" (Teach for Cambodia, 2021, p. 7) that we find ourselves in with the pandemic. The case study stated, "If teachers can be formally recognized for these auxiliary crisis-response efforts, they will feel more encouraged, confident, and

effective in their work" (Teach for Cambodia, 2021, p. 7). School administrators must recognize these two principles during these stressful times and ensure that teachers receive social and emotional support, recognition, and appreciation for the increased demands that are being experienced during the pandemic. As this study indicated, a majority of teachers experienced an increase of personal stress, and given the impact that classroom teachers have on students and their academic achievement, we must take care of the well-being of our teachers now more than ever. School administrators must continue to find ways to combat the levels of stress that teachers are facing.

Teachers were also asked if they felt they had necessary tools and resources to be an effective teacher during the COVID-19 pandemic. Sixty-two (8.6%) teachers reported definitely not, and 155 (21.4%) reported probably do not. Three hundred seventy-four (51.7%) teachers responded probably yes, and 132 (18.3%) responded definitely yes. Together the last two responses reported that well over half, 70.0%, of teachers believed that overall, they had the necessary tools and resources to continue to be an effective teacher despite the COVID-19 pandemic.

These response rates indicated that a majority of teachers believed they had the tools and resources either because they already had them or they were provided them as the pandemic hit the educational field. The case study from Teach for Cambodia (2021) indicated Principle 2 for teachers to be support in skills training. The study found, "There seems to be a relationship between the number of training sessions received by teachers and their perception of effectiveness" (Teach for Cambodia, 2021, p. 5). School administrators must continue to support teachers in training so the majority (70%) of teachers, as this study indicated, continue to maintain or obtain the tools and resources necessary to remain effective in the classroom,

especially as the pandemic and its surge of cases are forcing some schools to begin reverting to virtual instruction as quarantine levels for students and staff are on the rise. “Teachers are more willing to try new things when the administration is effective at finding the necessary resources to turn a new idea for teaching into reality” (Buffman et al., 2008, p. 64).

Teacher attrition and retention was already a prioritized issue prior to the COVID-19 pandemic, and the pandemic has only further exasperated the issue. Diliberti et al. (2021) conducted a study highlighting stress on teachers during the pandemic and found that many teachers were leaving the teaching profession due to the increased levels of stress, doubling the percentage leaving for the reason of pay, in what was already a high stress profession. However, the study also found that many of the teachers leaving the profession also responded that they would be willing to return to the profession if the conditions were right for them. School and district leaders must continue to discuss these conditions with input from teachers to continue to fight this increased stress. School culture, available resources, teacher recognition and appreciation, and self-care are all areas in which school administrators should be focusing during these times to decrease stress for the nation’s teachers.

Research Questions 2 and 4

Research Question 2 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has a building-level leadership team. Test results showed that among teachers, those that had a building-level leadership team ($M = 3.21$, $SD = .76$), scored statistically significantly higher on a safe and collaborative culture than those that did not have a building-level leadership team ($M = 2.34$, $SD = .79$), $t(721) = 12.68$, $p < .001$, $d = .76$.

Research Question 4 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in effective teaching when a school building has a building-level leadership team. Test results showed that among teachers, those that had a building-level leadership team ($M = 3.37$, $SD = .75$), scored statistically significantly higher on effective teaching than those that did not have a building-level leadership team ($M = 2.56$, $SD = .74$), $t(672) = 11.80$, $p < .001$, $d = .75$.

Although these inferential tests illustrate that teachers believed that if their school had a building-level leadership team, they would have a better safe and collaborative environment and more effective teaching in the classroom; it is also important to note effect sizes of both tests. The *t* test on the null hypothesis for Research Question 2 had an effect size of .76, and the *t* test on the null hypothesis for Research Question 4 had an effect size of .75 with both tests using Cohen's *d* to describe the effect size. Ary et al. (2010) described the following interpretations for Cohen's *d* effect size: "an effect size of .20 is small, an effect size of .50 is medium, and an effect size of .80 is large" (p. 137). The effect sizes for both Research Questions 2 and 4 were just under the .80 interpretation for large. This indicated that not only does a building-level leadership team have a statistically significant effect on a teacher's beliefs in regards to the variables of a safe and collaborative culture and effective teaching, but it has a significant effect on those two variables themselves.

The statistical results provide affirmation to the benefits a secondary school has to developing a building-level leadership team that is composed of both teachers and administrators. Chapter 1 of this study described through the statement of the problem the number of demands on schools and the necessity as a result to instill shared leadership in schools. Building-level leadership teams are one pathway for school administrators to travel, and

the results of this study prove the benefit that those teams can have on a school's safe and collaborative environment and effective teaching. Waters (2015) found that developing and implementing leadership teams was a key similarity among middle schools that illustrated success on state standardized tests. Fraley (2007) conducted a study correlating six factors to student achievement based on ISTEP (standardized test used in Indiana at that time) and found collaborative leadership to be a significant factor to student achievement.

Developing shared leadership through leadership teams is ultimately up to administrators to engage and implement within their buildings, as Buffman et al. (2008) laid out:

> If school or district improvement initiatives rely solely on the charisma or energy of an extraordinary principal or superintendent, initiatives will come and go as leaders come and go. Sustained and substantive school improvement will require leaders who are committed to empowering others to dispersing leadership, and to creating systems and cultures that enable ordinary people to accomplish extraordinary things. (p. 3)

However, it is important to remember that not all teams and collaborations are successful. The researcher outlined, in the literature review of this study, characteristics and key components of effective teams. Simply choosing members and putting them in the same room will not achieve school success or improvement. The school leader must continually be developing their team into better leaders, because these leaders will be leading others in the building, and they must be equipped and taught how to do so. Kapitulik and MacDonald (2019) outlined the role of a leader to be to mentor, coach, and command. "Mentoring is about building a culture and teaching our teammates what it means to be 'one of us.' Coaching . . . is teaching how we do things. Commanding is the act of giving direct orders" (Kapitulik & MacDonald, 2019, p. 134). School leaders must be able to mentor teams within their building culture, teach teams the skills

needed to share leadership, and at times give orders (command) that are in the team's best interest. A principal failing to commit to their leadership teams in this manner can result in a high likelihood that they will eventually end up working with individuals versus an actual team. (Roos, 2022) summed this greatly by saying "effective team members work interdependently and truly depend on one another" (p. 51), but this does not happen on its own and principals must commit to leading their teams in their own learning by mentoring, coaching, and at times commanding together.

A safe and collaborative culture within the High Reliability Schools™ framework allows for teachers to have formal input and to share the decision-making process within their schools. The way that a high performing safe and collaborative culture achieves this is through developing teacher teams that collaborate on a consistent basis regarding school initiatives. Effective teaching within the High Reliability Schools™ framework allows for teachers to have their own instructional goals, observe other teachers' teaching, time to meet with other teachers to discuss their professional practice, and among other things, the opportunity to participate in job-integrated professional development, such as instructional rounds. In other words, school administrators need to find a way to put teachers in the driver's seat of their instructional practice. This can be difficult to do alone as a school administrator leading a building, as it can require structures to be developed and in place for these initiatives to occur. Thus, a building-level leadership team allows for teacher leadership to be a part of that discussion and development.

Buffum et al. (2008) outlined the need for developing structures that support shared or distributed leadership and further discussed the need to utilize leadership that is already present in teachers, rather than looking to always create new leadership. Shared leadership also promotes

questioning when it comes to current and planned building initiatives. A school administrator making decisions alone lacks a culture of questioning and as a result lacks a culture of potential and possibility. Berger (2014) outlined through his research with successful organizational leaders the importance of always asking questions as it related to increased future success. What better way to be asking the right questions than to share that opportunity? Ultimately, school administrators must take advantage of the teacher leadership that is already present in their buildings and craft a building-level leadership to be a vehicle to an improved safe and collaborative culture and effective teaching in the classroom.

Research Questions 3 and 5

Research Question 3 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in a safe and collaborative culture when a school building has established professional learning communities. Test results showed that among teachers, those that have established PLCs ($M = 3.25$, $SD = .75$), scored statistically significantly higher on a safe and collaborative culture than those that did not have established PLCs ($M = 2.31$, $SD = .72$), $t(721) = 14.83$, $p < .001$, $d = .74$.

Research Question 5 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in effective teaching when a school building has established professional learning communities. Test results showed that among teachers, those that had established PLCs ($M = 3.34$, $SD = .77$), scored statistically significantly higher on effective teaching than those that did not have established PLCs ($M = 2.71$, $SD = .79$), $t(672) = 9.02$, $p < .001$, $d = .78$.

Once again, although test results indicated a statistically significant difference for both research questions it was important to evaluate the effect size. The *t* test on the null hypothesis

for Research Question 3 had an effect size of .74 utilizing, and the *t* test on the null hypothesis for Research Question 6 had an effect size of .78 both with both tests using Cohen's *d* to describe the effect size. The effect sizes for both Research Questions 3 and 5 were just under the .80 interpretation for large. This indicated that not only do established PLCs cause a statistically significant difference on the variables of a safe and collaborative culture and effective teaching, but it had a significant effect on those two variables.

These results provide support to the development and implementation of PLCs in a secondary school setting. Again, referring to the statement of the problem of this study and the necessity for a principal to develop shared leadership, PLCs can benefit secondary schools by impacting their safe and collaborative culture and effective teaching in the classroom as teams exhibiting shared leadership. Pettet (2013) explored professional development experiences from teacher perspectives and found 85.7% of teachers believed that PLCs provide some of the most effective professional development. Therefore, not only does research find PLCs impactful on variables, such as a safe and collaborative culture and effective teaching, but teachers themselves believe they are an effective practice.

It is also important to consider the word *established* when discussing PLCs. Many schools *claim* to operate as a PLC, but are they operating as an effective and *established* PLC? As was referred in Chapter 2 of this study, Roberts (2020) discussed the issue of schools operating as *PLC Lite* and are schools that have identified the key characteristics of a highly effective PLC but lack the drive to carry out the actual important work that a PLC does. Although a principal is certainly sharing leadership by putting these teams together, this simply will not be enough, and the principal and these teams must ultimately give full commitment to that process to become an *established* PLC. It is here where a connection can be made with the

building-level leadership team as well, as these team leaders can ensure full commitment is being made to the PLC process by operating as a PLC themselves through consistent conversation about school initiatives and improvement.

Teachers have also been through their rounds of school reforms. Going back to points of reference, such as the Coleman Report (1966), A Nation at Risk (1983), No Child Left Behind (2002), and Every Student Succeeds Act (2015), among others, have all brought their versions of school reform meant to *fix* the American education system, and they have come and gone. Bottom line, the results suggest that teachers are tired of reform, and as a result are hesitant to usher in new and additional reform strategies, such as PLCs. This can lead to a fixed mindset for teachers or also to what Sibony (2019) described as *why rock the boat*? bias. Sibony (2019) explained this bias by stating, "The problem is widespread; organizations don't always do what their leaders decide" (p. 77). Just because a school leader decides to implement PLCs does not mean it happens with fidelity. School principals are tasked with communicating the benefits of PLCs to teachers, but they are also tasked with involving teachers in the process. Distributing leadership and sharing the development of the PLC structure in their building provides teachers a more safe and collaborative culture and a higher probability of breaking down fixed mindsets or negative bias.

A key indicator to a safe and collaborative culture with the High Reliability Schools™ framework is the component of teacher teams meeting consistently to collaboratively discuss, analyze, and reflect on curriculum, instruction, and assessment within the school's practices. When they are nurtured and become established, PLCs do not become something that a school simply *does* but rather becomes part of the school's systemic culture. DuFour and Fullan (2013) summarized this and stated, "In a systemic PLC, there should not be distinction between the

system and the individual. Members of a PLC *are* the system individuals seek to create" (DuFour & Fullan, 2013, p. 18). Thus, this relies on school administrators' ability to develop and integrate teacher leaders in their building by sharing their own leadership with them. The PLC process removes the past traditional teacher isolation. Breaking down the barrier of understanding that together one knows more and can do more means they have to operate as teams. Developing these collaborative teams as PLCs benefits schools through "the opportunity the structure creates for shared leadership" (DuFour & Marzano, 2011, p. 56). Components of effective teaching within the High Reliability Schools™ framework revolves around the central idea of teachers meeting to discuss predominant and effective teaching strategies. This again requires collaboration as teachers must meet for this component to occur. DuFour and Marzano (2011) summarized, "When effective instruction is added to the mix, the effect on student achievement increases even more" (p. 141).

This study illustrates the benefits of secondary schools that have established PLCs when compared to those secondary schools that do not have PLCs. Quaglia et al. (2020) stated that a teacher's "expertise should be an integral part of deciding the best course of action for schools" (p. 143). However, just as one building principal does not contain all the knowledge to be the sole driving force within a school, neither do individual teachers and must instead come together as collaborative teams sharing leadership. PLCs can be that driving force when teachers come together to make them a systemic part of the building culture. School administrators will find that investing in the PLC model creates positive structure to their buildings that results in the opportunity for shared leadership to occur (DuFour & Marzano, 2011).

Research Questions 6 and 7

Research Question 6 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in a safe and collaborative culture when a principal has participated in the IPLI. Test results showed that among teachers those that had a principal, who had participated in IPLI (M = 3.35, SD = .79), did not score statistically significantly higher on a safe and collaborative culture than those that did not have a principal, who had participated in IPLI (M = 2.97, SD = .99), $t(159) = 1.95$, $p = .053$, $r^2 = .02$.

Research Question 7 tested the following null hypothesis utilizing an independent measures *t* test: Among teachers, there is not a significant difference in effective teaching when a principal has participated in the IPLI. Test results showed that among teachers, those that had a principal who had participated in IPLI (M = 3.44, SD = .78), did not score statistically significantly higher on effective teaching than those that did not have a principal who had participated in IPLI (M = 3.15, SD = .98), $t(152) = 1.50$, $p = .136$, $r^2 = .01$.

R^2 values were calculated for these two tests due to the information interpreted from those values. In Research Question 6 the r^2 value was .02, indicating that only 2% of the variance in a safe and collaborative culture was due to a principal's participation in IPLI. Although this did not indicate that participation in IPLI was not important it did indicate that there were other variables that were more important. In Research Question 7 the r^2 value was .01 indicating that only 1% of the variance in effective teaching was due to a principal's participation in IPLI, also indicating that other variables were more important, similar to Research Question 6.

It is important to note a few details within the statistics of these two research questions. First, in Research Question 6, the *p* value was .053, which put it very close to the alpha of .05. Statistically, it was not at a value in favor of rejecting the null hypothesis, but close enough that

consideration could still be taken toward the benefits of IPLI and growing a principal's leadership capacity. Muhammad and Cruz (2019) stated, "Human beings are complex, so leaders need a skill set as diverse as human beings themselves in order to cultivate better practice" (p. 4).

Leaders must have the skills to lead teams and when leaders invest in their own professional practice and leadership capacity those skills have the potential to grow in effectiveness. Participation in the IPLI was chosen to be a part of this study due to its connection of utilizing the High Reliability Schools™ framework as part of its program. Considering this study found building-level leadership teams and PLCs to have significant effects on a school's safe and collaborative culture and effective teaching, it could still be beneficial for IPLI participation, as a principal would become better trained in those areas. The R^2 values could point to other variables, such as leadership teams and PLCs, as more impactful to a safe and collaborative culture and effective teaching, and a principal still must be highly skilled to effectively assist in implementing those as part of their building's structure.

Next, it is important to make note of the *n* of the study within Research Questions 6 and 7. Response rates were lower regarding teachers marking in the survey if their principal had or had not participated in IPLI. The *n* for marking yes was 140, and the *n* for marking no was only 21. This could have had an impact on the test analysis and could potentially benefit from further research in the future.

At the end of the day, leaders are tasked with difficult challenges as they navigate status quo and change with their teams. Black and Gregersen (2002) laid out their research indicating that 80% of companies list leading change as a high priority for their company's future, but at the same time recorded that 85% of companies did not feel that their top leaders were skilled enough

in leading strategic change. Black and Gregersen (2002) cited Niccolo Machiavelli on the challenges of leading:

> There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders by all those who could profit by the new order. This lukewarmness arises from the incredulity of mankind who do not truly believe in anything new until they have had actual experience with it. (p. 3)

Leadership is difficult and challenging and as a result requires ongoing training to navigate the waters that leadership sails. The National Association of Secondary School Principals and the Learning Policy Institute collaborated on research done on principal turnover and found five key reasons as to why principals leave their jobs, one of which is inadequate preparation and professional development (Levin et al., 2019). The IPLI provides a two-year professional development program that also integrates mentoring and networking to principals, which Levin et al. (2019) discussed as a desired component to the principalship. Levin et al. (2019) stated, “Many principals expressed deep gratitude for their mentors and colleagues who guided and supported them through new experiences and difficult times. They shared these relationships are essential to their professional growth and longevity in their principalship” (p. 11). Ultimately, principals must combat the challenges of the principalship and how to lead their buildings by continually growing their own leadership capacity. Fullan (2016) also connects this to collaboration and the importance of principals focusing on collaboration and to do this they must themselves become “the lead learner” (p. 132) of their building.

Research Question 8

Research Question 8 tested the following null hypothesis utilizing a Pearson correlation test: Among teachers, a safe and collaborative culture does not relate to effective teaching. Test results showed that among teachers, there was a statistically significant positive relationship between a safe and collaborative culture and effective teaching, $r = .79$, $p < .001$, $r^2 = .62$. Ary et al. (2010) described a Pearson correlation's strength to be stronger as it approaches either +1.00 or -1.00. This test resulted in a result of $r = .79$, so it can be described as a strong positive correlation. However, Gravetter and Wallnau (2017) discussed the purpose of a correlation is that it "describes a relationship between two variables," but it "does not explain why the two variables are related" (p. 497). Therefore, to "find a correlation between two variables not because there is an intrinsic relationship between these variables but because they are both related to a third variable" (Ary et al., 2010, p. 135) must be considered. This dictated the benefits of calculating the *coefficient of determination*, which described the variance of one variable to another (Ary et al., 2010). The coefficient of determination, r^2, for this test analysis equaled .62, therefore 62% of the variance in effective teaching was associated with the variance associate with a safe and collaborative culture. When thinking of relation to a third variable, it was difficult to deny. Due to this research, a potential connection and relation to that third variable (collaborative teams) to the statistically significant test results of the effect that building-level leadership teams and PLCs have on a safe and collaborative culture and effective teaching. This provided further affirmation to school leaders engaged in developing and integrating collaborative teams, such as these, into their school-building structure.

Given that the test results of Research Question 8 provided a strong positive linear correlation of a safe and collaborative culture to effective teaching, it was important to connect

this back to the research behind the High Reliability Schools™ framework. The model works based on five total levels of high reliability listed from Level 1 through Level 5—safe and collaborative culture, effective teaching in every classroom, guaranteed and viable curriculum, standards-referenced reporting, and competency-based education. Marzano et al. (2014) described the model as a model working in a level of hierarchies and that each previous level serves as a foundation to the next level. Marzano et al. (2014) further stated, "Level 1 can be considered foundational to all other levels. If students and faculty do not have a safe and collaborative culture in which to work, little if any substantive work can be accomplished" (p. 4).

Collaboration is difficult and has its ups and downs in any organization. To work through those ups and downs, the people of the organization must feel safe and secure within their team. Robbins (2020) discussed a study conducted by Google that concluded key factors that were present in high performing teams and determined that "first and foremost, it seems that *who* is on a team matters a bit less than *how* the team members interact, structure their work, and view their contributions" (p. 5). This specific research question of this study certainly helped to affirm this relationship given the strong positive relationship and description of variance that resulted. To achieve other levels of the High Reliability Schools™, such as effective teaching or a guaranteed and viable curriculum, the staff working within those levels must feel safe first, to be on the linear pathway to those other levels.

The researcher also outlined the importance of organizational culture in the literature review of this study. Culture can make or break any organization or school. School leaders can have the greatest ideas and strategies to implement into their schools, but without a culture that can support those ideas, it will always fail in the long run. Culture can either be "functional" or "dysfunctional" (Putter, 2020, p. 10), and as a result, either positively or negatively impacts a

school. A school leader, who does not recognize the importance of developing a strong safe and collaborative environment, is destined to fail.

Limitations

First and foremost, as outlined in Research Question 1–results and implications, the COVID-19 pandemic was a strong limitation to this research study. Although it could not be pinpointed to the exact extent, it must be assumed that teacher stress levels likely had a potential impact on responses to the survey that was utilized for this quantitative study. Teacher job duties have not looked the same since February/March of 2020, and as a result, many of the organizational structures that were in place leading up to the start of the pandemic have been difficult to sustain. Collaboration has been a difficult task during the pandemic and collaboration is not optional when developing shared leadership in any organization. Collaboration has shifted in and out of remote settings and continues to present a challenge to distributed leadership.

Another limitation is the response rates to principal participation in the IPLI. Of the 723 (n = 723) responses included in the inferential statistics only 22.3% that responded answered yes or no to their principal participating in IPLI; this left 77.7% of this data missing. Although analysis was run for these respective research questions, given the limited data, it was difficult to confidently make recommendations from this analysis. A future study could dive deeper into this subject with efforts to obtain higher reliability of data that can be used to give strong recommendations as a result.

Recommendations for Future Research

Based on interpretations of test results of this study, recommendations for future study and research can be concluded. First, this study was delimited to only Indiana secondary schools and their teachers. It may be important to expand this study with the same research questions into

the elementary school setting. Organizational structures differ from elementary settings to secondary school settings, and it cannot be assumed that the results and conclusions of this study can be naturally translated to have the same effect in the elementary setting. This would allow elementary school administrators and leaders to have research to assist in driving their decision making within their schools. Along similar lines, research could be done with correlations to school size. Almost half of this study's participants worked in schools with over 1,000 students. Does school size impact shared leadership and its dependent variables of building-level leadership teams and PLCs on a safe and collaborative culture or effective teaching? A school's organizational structure is a critical component to its operations, and the size of the school can possibly alter that structure.

It is important to understand the participants of this study were teachers and data collected were perceptions from those teachers on a safe and collaborative culture and effective teaching. The study could be expanded to connecting student achievement to these variables as well. After all, if students are not learning, then changes must be made when it comes to school initiatives. PLCs were a significant variable in this study. Two tenets of the PLC process are: *we want students to learn* and *how do we know they have learned it* (DuFour et al., 2010). Therefore, at the end of the day, ensuring an impact on student achievement is crucial. Student achievement could be looked at through testing variables, such as Northwest Evaluation Association or Indiana Learning Evaluation Assessment Readiness Network, or to accountability results, such as Indiana's A–F accountability school grading system, or for a high school, graduation rates could serve as a testing variable of student achievement. The overall goal of any school is student learning, just as DuFour and Fullan (2013) stated, "The fundamental purpose of

the school is to ensure all students learn at high levels; the future success of students will depend to a great extent on how effective educators are in achieving that fundamental purpose" (p. 14).

The research questions in this study that concentrated on a principal's participation in the IPLI did not yield clear results. These research questions could be targeted again with first efforts of increasing participation as the *n* was low and could have had a potential impact on the results. The study could also explore this participation further by pairing principals that had participated in IPLI and principals that had not participated in IPLI with their teacher data. Correlational tests or simple linear regression tests could be analyzed to achieve a more impactful result of the effect of the IPLI. Regier (2020) stated, "Leadership is not just about others. It starts and ends with how we lead ourselves. You can't lead others until you can lead yourself" (p. 23). Therefore, although this specific study did not yield significant results to these specific research questions, personal leadership capacity and growth, are worthy of further research.

Next, this study could be expanded to include principals as participants. Principal data within the variables of a safe and collaborative culture and effective teaching could be paired with their teachers to look for potential correlations. This could provide insights for school leaders into if and how shared leadership may exist in their school buildings.

The High Reliability Schools™ framework was a key component to this particular study. Level 1, safe and collaborative culture, and Level 2, effective teaching, both served as dependent variables to this study. The High Reliability Schools™ framework has a total of five levels, but three of those levels were not tested as part of this study. The final two levels of the model are rarely achieved due to the extensive work that is required to effectively work within the first three levels, but the third level, guaranteed and viable curriculum, is a commonly practiced level of work that schools discuss regularly. Thus, this study could extend past just testing the first two

levels and pull in the third level as well, guaranteed and viable curriculum, as a future dependent variable.

Last, this study could be replicated at a time much more removed from the COVID-19 pandemic. This study illustrated the impact that the COVID-19 pandemic had on teacher stress and efficacy during the pandemic through the first research question. Although it was an unknown if this had an impact on teacher responses to the study's survey, it may be valuable to conduct the survey at a time when teachers respond with a decreased level of stress due to the COVID-19 pandemic.

Conclusion

Overall, eight research questions were explored in this study. These research questions explored the following areas or variables: the current state of the COVID-19 pandemic on teacher stress and efficacy, the independent variables of building-level leadership teams, PLCs, and a principal's participation in the IPLI, along with the dependent variables of a safe and collaborative culture and effective teaching. Descriptive and inferential statistics were utilized to analyze this study's research questions.

This study will provide insight to school administrators on how shared leadership can positively impact a safe and collaborative culture and effective teaching using collaborative teacher teams, such as building-level leadership teams and PLCs. There are too many high-pressure demands in today's world of K–12 education for any one person to tackle alone, as Fullan (2016) specifically discussed the role of a principal over the past 10 years becoming more "complex [and] overloaded" (p. 123). Therefore, it is imperative for school leaders to develop their teams and create a successful collective culture in their school buildings.

This study also revealed the positive correlation of a safe and collaborative culture to effective teaching, so school leaders should also take note to invest properly in developing a school culture that spreads positive influence to maximize organizational success. Whitaker and Gruenert (2019) discussed the reality that culture is always alive in one's school, and the building leader must accept the hard work it takes so the culture is not "holding back your collective potential" (p. 108). As General Stanley McChrystal of the U.S. Army (Retired) stated, "The team is better off with the cohesive ability to improvise as a unit, relying on both specialization and overlapping responsibilities" (McChrystal, 2015, p. 119).

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APPENDIX A: SURVEY INSTRUMENT APPROVAL

RE: Marzano Resources Permission Request Form External Inbox ×

Sarah Ludwig Tue, Aug 17, 8:56 AM (4 days ago)
to me

Hello Brent,

Thank you for the clarification! We have reviewed your request to use and adapt the reproducibles on pages 17–26 and 39–45 of *A Handbook for High Reliability Schools* by Robert J. Marzano, Philip B. Warrick, and Julia A. Simms. The pages you requested and all pages in Marzano Resources and Solution Tree Press publications marked "Reproducible" can be reproduced freely without permission as long as they aren't reprinted in a formal book that is published and sold or adapted. The copyright line on the pages must remain intact.

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If you have any questions, please let me know. Thank you!

Best,

Sarah Ludwig
Editorial Assistant
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APPENDIX B: TEACHER EMAIL AND SURVEY

Dear Indiana Public school teacher.

I respectfully invite you to participate in a research study titled *An Exploration of Shared Leadership Through Teacher Teams and Its Impact on a Safe and Collaborative Culture and Effective Teaching.* Brent Bokhart, a doctoral candidate in the Department of Educational Leadership at Indiana State University, under the supervision of Dr. Bradley Balch, Professor of Educational Leadership and Dean Emeritus, is conducting the study.

Indiana public school teachers have been selected to participate in this study in an effort to analyze data that will inform administrators a better understanding of the impact of sharing decision making with teachers in their building.

Your participation in this study is voluntary and all responses will be anonymous and no one will be able to identify you, your responses, or that you participated in the study. There are no costs or risks involved with your participation in the study.

The survey that can be found HERE will take approximately 10 minutes to complete. Your participation is greatly appreciated and will be valuable to the field of education as a public school teacher who makes a difference with Indiana's youth every day in the classroom.

Please don't hesitate to contact Brent Bokhart at bbokhart@sycamores.indstate.edu or Dr. Bradley Balch at Brad.Balch@indstate.edu with any additional questions.

Thank you in advance for your thoughtful responses to this research study. The survey can be found again below.

https://indstate.qualtrics.com/jfe/form/SV_2gI4AK5WWWeaapg

Brent Bokhart
Doctoral Candidate
Indiana State University

1. Informed Consent
    a. I Consent
    b. I Do Not Consent

Section I: Professional Information

2. How many years of teaching experience do you have at your current building?
    a. 0-4 years
    b. 5-9 years
    c. 10 years or more

3. What is your teaching content area?
    a. Mathematics
    b. English
    c. Social Studies
    d. Science
    e. Special Education
    f. Related Arts, World Languages, or CTE

4. What is your building's grade-level setting?
    a. Grades 6-8
    b. Grades 9-12
    c. Grades 7-12
    d. Other

5. What is the enrollment size of your building?
    a. 499 or Less Students
    b. 500-999 Students
    c. 1,000 Students or More

6. Does your building have an established building-level leadership team that comprises of both teachers and administrators?
    a. Yes
    b. No

7. Does your building have established professional learning communities?
    a. Yes
    b. No

8. Has your current principal participated in the Indiana Leadership Institute (IPLI)?
    a. Yes
    b. No
    c. Don't Know

9. How has your personal stress level changed during the COVID-19 pandemic?
    a. Strongly Decreased

b. Somewhat Decreased
c. Neither Increased Nor Decreased
d. Somewhat Increased
e. Strongly Increased

10. Do you have the necessary tools and resources to be an effective teacher during the COVID-19 pandemic?
    a. Definitely Not
    b. Probably Not
    c. Probably Yes
    d. Definitely Yes

Section II: Safe and Collaborative Culture

11. It is clear which types of decisions will be made with direct teacher input.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

12. Techniques and systems are in place to collect data and information from teachers on a regular basis.
    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

13. Notes and reports exist documenting how teacher input was used to make specific decisions.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

14. Electronic tools (for example, online survey tools) are used to collect teachers' opinions regarding specific decisions.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree

5: Strongly Agree

15. Groups of teachers are targeted to provide input regarding specific decisions.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

16. A professional learning community (PLC) process is in place in our school.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

17. Our school's PLC collaborative teams have written goals.
    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

18. School leaders regularly examine PLC collaborative teams' progress toward their goals.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

19. Our school's PLC collaborative teams analyze student achievement and growth.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

20. School leaders collect and review minutes and notes from PLC collaborative team meetings to ensure that teams are focusing on student achievement.

    1: Strongly Disagree
    2: Disagree

3: Neither Disagree Nor Agree
4: Agree
5: Strongly Agree

21. Data collection systems are in place to collect opinion data from teachers and staff regarding the optimal functioning of our school.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

22. Opinion data collected from teachers and staff are archived.
    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

23. Reports of opinion data from teachers and staff are regularly generated.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

24. The manner in which opinion data from teachers and staff are used is transparent.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

Section III: Effective Instruction

25. I have written statements about my instructional growth goals.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

26. I keep track of my progress on my instructional growth goals.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

27. School leaders meet with me to discuss my instructional growth goals.
    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

28. I can describe my progress on my instructional growth goals.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

29. Data from walkthroughs at our school are aggregated to show our school's predominant instructional practices.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

30. School leaders can describe our school's predominant instructional practices.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

31. I can describe our school's predominant instructional practices.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree

5: Strongly Agree

32. School leaders give me forthright feedback about my instructional practices.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

33. Teacher-led professional development that is relevant to my instructional growth goals is available to me.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

34. School leaders collect data about how effective professional development is in improving teacher practice.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

35. Teachers can describe how the available professional development supports achievement of my instructional growth goals.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

36. I have opportunities to engage in instructional rounds.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

37. I have regular times to meet with other teachers to discuss effective instructional practices.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

38. We regularly discuss instructional practices at faculty and department meetings.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

39. School leaders have information available about teachers' participation in opportunities to observe and discuss effective teaching.

    1: Strongly Disagree
    2: Disagree
    3: Neither Disagree Nor Agree
    4: Agree
    5: Strongly Agree

APPENDIX C: INFORMED CONSENT LETTER

Indiana State University

Informed Consent

An Exploration of Shared Leadership Through Teacher Teams and Its Impact On a Safe and Collaborative Culture and Effective Teaching

You are being invited to participate in a research study. This study aims to find out the impact that building administrators can have on a safe and collaborative culture and effective teaching by sharing decision making with teachers through teams such as building level leadership teams and professional learning communities. This study will also aim to find out the impact in school buildings of those that have principals who invest in their own leadership capacity through professional learning. The way you can help me answer the question is by answering the questions in this anonymous survey, which should take you about ten minutes.

Some reasons you might want to participate in this research are your expertise as a current Indiana public school teacher is important and valuable to evaluating and reflecting on the field of education and how it serves its youth, as well as helping administrators understand the impact of involving teachers in decision making within their schools. You might not want to participate in this research, as there are no immediate direct benefits to you as an individual.

The choice to participate or not is yours; participation is entirely voluntary. You also can choose to answer or not answer any question you like, and to exit the survey if you wish to stop participating. No one will know whether you participated or not.

The survey asks questions about a safe and collaborative culture, which focuses on how teachers are involved currently with decision making in their school and the current involvement of teams such as professional learning communities. The survey also asks questions about effective teaching, which focuses on their building's teaching methods, professional instructional growth goals, and opportunities currently available to you to grow instructionally. You have been asked to participate in this research because you are a current Indiana secondary public school teacher.

Although every effort will be made to protect your answers, complete anonymity cannot be guaranteed over the Internet.

It is unlikely that you will benefit directly by participating in this study, but the research results may benefit the educational field, including administrators and teachers, as it will illustrate the impact that sharing leadership has within school operations.

If you have any questions please contact either of the following:

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IRBNet #: 1821962-1

Exempt Date: October 26, 2021

Indiana State University Institutional Review Board