

Fall 2021

A Study on the Relationship Between Elementary Teacher Engagement and Collective Teacher Efficacy

Amy L. Falcone

Follow this and additional works at: <https://digitalcommons.unomaha.edu/edleadstudent>

 Part of the [Educational Leadership Commons](#)

A STUDY ON THE RELATIONSHIP BETWEEN ELEMENTARY TEACHER ENGAGEMENT AND
COLLECTIVE TEACHER EFFICACY

By

Amy L. Falcone

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

Major: Educational Administration

Under the Supervision of Dr. Kay A. Keiser

Omaha, Nebraska

October, 2021

Supervisory Committee:

Kay Keiser, Ed.D.

C. Elliott Ostler, Ed.D.

Amanda Steiner, Ed.D.

Jeanne Surface, Ed.D.

ABSTRACT

A STUDY ON THE RELATIONSHIP BETWEEN ELEMENTARY TEACHER ENGAGEMENT AND COLLECTIVE TEACHER EFFICACY

Amy Falcone, Ed.D.

University of Nebraska, 2021

Advisor: Dr. Kay A. Keiser

School leaders are continually looking for ways to improve instruction and increase student achievement. Collective teacher efficacy has shown to have a high effect size on student learning. However, as educators focus on building collective teacher efficacy and helping students, these same teachers may not be completely engaged in their work. With the complexity of building collective efficacy and potentially a disengaged staff, this poses a challenge to principals who have limited time and resources to make the biggest difference they can. If a positive relationship exists between the two, then principals could focus on increasing teacher engagement which would result in increased collective teacher efficacy. Therefore, the purpose of this correlational research study was to discover to what degree a relationship exists between teacher engagement and collective teacher efficacy.

To explore the relationship between teacher engagement and collective teacher efficacy, participants in this study completed two surveys focused on each of these concepts. These surveys were utilized to answer three questions for this study: How positive are teachers' collective teacher efficacy beliefs? How positive are teachers'

engagement? How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?

Results from the survey indicated that overall both collective teacher efficacy and teacher engagement are positive. In addition, relationships between the different subgroups had varying levels of strengths ranging from strong to weak. The findings from this study have implications for teachers, principals, and school districts. The conclusions and recommendations included can provide insight on ways to increase teacher engagement and collective teacher efficacy.

DEDICATION

This has been quite the journey and certainly not one that I could have done without the love and support from many special people in my life.

To my parents who have always believed in me and supported me in all of my endeavors. You instilled a strong work ethic and the importance of education. I attribute my love for learning and pursuing my goals to you. Throughout this journey, you checked in with me, listened to my ideas, proofread my paper, and took on extra babysitting responsibilities. For this, I am eternally grateful.

To my Grandma and Grandpa Wood, who always showed an interest in my education and encouraged me to pursue my dreams. I never would have thought that earning five dollars for every “A” on my report card would develop into the drive and motivation I have for continually learning and earning my doctorate. I wish I could talk with you now about this incredible journey, I know you would be proud.

To my husband, Dan, who was by my side every step of the way. Your encouragement and love gave me the strength to accomplish this. You took on extra responsibilities as Mr. Mom so I could have the time to dedicate to my dissertation. You listened to me when I needed to talk through my thoughts, you cheered me up when times were tough, and you believed in me. You are the love of my life.

To my beautiful children, Maci and Jude, you were my inspiration. You always told me I could do it and knew just when I needed a hug or an “I love you, mommy”. I am thankful that you were a part of this journey with me and hope that I showed you a love for learning and how hard work can help you to pursue your goals. I love you more!

ACKNOWLEDGMENTS

My career in education has been inspiring and fulfilling because of the wonderful individuals that I have shared it with. First off, I would like to thank Dr. Keiser for always being open and honest with me, sharing your ideas, and being positive throughout this process. I soaked up everything I could during our conversations and have learned so much from you. Your guidance and thoughtfulness are appreciated. Thank you to Dr. Ostler for always being willing to talk statistics with me and helping me truly understand what numbers can mean. Also, thank you to Dr. Surface and Dr. Steiner for serving on my committee and offering input, reading my writing, and supporting me.

To all of the talented and dedicated educators and leaders that I have had the pleasure of working with. I am forever grateful for the opportunities that I have been given to grow as an educator. Whether it was through reflective conversations, observing fabulous teaching, or discussing what we can do that is best for kids, you are inspiring.

To my friend, Ann, who was my accountability partner, cheerleader, and truly paved the way for the “A-Team”. Our weekly check-ins were invaluable and kept me continually progressing forward. I am so lucky that at the end of this journey I have gained a life-long friend. I look forward to the time when we get to write together again.

Finally, I would like to thank the teachers that participated in this study. Your days are busy and full, but you still took the time to share your thoughts and perspectives with me. I am thankful for your input and thankful for the difference you make every day for one another and our students!

TABLE OF CONTENTS

DEDICATION	i
ACKNOWLEDGMENTS	ii
LIST OF MEDIA.....	v
CHAPTER 1	1
INTRODUCTION	1
Purpose of the Study	3
Research Question	4
Definition of Terms	4
Conceptual Framework	5
Significance of the Study	6
Organization of the Study.....	8
CHAPTER 2	9
LITERATURE REVIEW	9
Collective Teacher Efficacy	9
<i>Background and Definitions.....</i>	<i>10</i>
<i>Social Cognitive Theory.....</i>	<i>12</i>
<i>Measurement</i>	<i>14</i>
<i>Positive and Negative Consequences.....</i>	<i>17</i>
Employee Engagement	18
<i>Definitions and Terms</i>	<i>19</i>
<i>Theory.....</i>	<i>21</i>
<i>Measurement</i>	<i>24</i>
<i>Positive and Negative Consequences.....</i>	<i>26</i>
<i>Developing Engagement in School Employees.....</i>	<i>27</i>
Connection Between Collective Teacher Efficacy and Employee Engagement	30
CHAPTER 3	33
METHODS.....	33
Research Design	33
Research Questions	33
Participants	34
Instrumentation	34
Data Collection and Procedures.....	35
Data Analysis	36
CHAPTER 4	37

RESULTS	37
CHAPTER 5	62
CONCLUSIONS AND DISCUSSIONS	62
Interpretation of the Findings.....	63
<i>Job.....</i>	<i>65</i>
<i>Team.....</i>	<i>67</i>
<i>Principal.....</i>	<i>69</i>
<i>School District.....</i>	<i>70</i>
Implications for Practice.....	72
<i>Systems Thinking.....</i>	<i>73</i>
<i>Personal Mastery.....</i>	<i>75</i>
<i>Mental Models.....</i>	<i>77</i>
<i>Shared Vision.....</i>	<i>79</i>
<i>Team Learning.....</i>	<i>80</i>
Limitations	82
Recommendations for Future Research.....	83
Conclusion	84
References	86
Appendix A.....	101
Appendix B.....	102
Appendix C.....	103

LIST OF MEDIA

Figure 1. <i>Peter Senge's Five Disciplines of a Learning Organization (Senge, 2006)</i>	6
Table 1. <i>Teaching Characteristics of Participants</i>	38
Table 2. <i>Teachers' Responses to Collective Teacher Efficacy's Instructional Strategies Questions</i>	41
Table 3. <i>Teachers' Responses to Collective Teacher Efficacy's Student Discipline Questions</i>	43
Table 4. <i>Collective Teacher Beliefs Survey Descriptive Statistics</i>	45
Table 5. <i>Teachers' Responses to Teacher Engagement's Job Questions</i>	48
Table 6. <i>Teachers' Responses to Teacher Engagement's Team Questions</i>	50
Table 7. <i>Teachers' Responses to Teacher Engagement's Principal Questions</i>	52
Table 8. <i>Teachers' Responses to Teacher Engagement's School District Questions</i>	54
Table 9. <i>Teacher Engagement Survey Descriptive Statistics</i>	56
Table 10. <i>Collective Teacher Efficacy and Teacher Engagement Spearman Rank-Order Correlations and Statistical Significance</i>	58
Table 11. <i>Spearman's Rank-Order Collective Teacher Efficacy and Teacher Engagement Correlations Listed from Strongest to Weakest r_s</i>	61
Figure 2. <i>Collective Teacher Efficacy and Teacher Engagement Correlations</i>	64

CHAPTER 1

INTRODUCTION

School leaders are tasked with a multitude of responsibilities. These responsibilities include engaging in practices that increase student achievement and lead to school success. With the variety of practices in existence to meet this goal, it is critical for school leaders to know how to devote their time, energy and resources, which are limited.

So, as a matter of self-preservation, they have to figure out where their time, effort, and influence will count the most. They must decide where their leadership practice can make the biggest difference and have the greatest impact, and then deliberately set their course in that direction (Hattie & Smith, 2020, p. 1).

One area a principal could focus their time on is building collective teacher efficacy which was recently determined to have the highest effect size on student achievement (Hattie, 2017). Collective teacher efficacy can be defined as, “the collective self-perception that teachers in a school make an educational difference to their students over and above the educational impact of their homes and communities” (Tschannen-Moran & Barr, 2004, p. 189). The role teachers play in a child’s education is critical and school leaders are ultimately responsible for their teachers. “Success lies in the critical nature of collaboration and the strength of believing that together, administrators, faculty, and students can accomplish great things. This is the power of collective efficacy” (Donohoo et al., 2018, p. 43). When a principal fosters collective

teacher efficacy, they are more likely to reach high levels of success, but this is not an easy task. There are multiple factors that contribute to building collective teacher efficacy and, therefore, it is essential for principals to know how specific practices might impact the collective teacher efficacy in their school. If principals know more about the relationships certain practices have with collective teacher efficacy, they can direct more of their time specifically to those practices.

A teacher's motivation, engagement and commitment are affected by job satisfaction, teaching efficacy, teacher stress and the school environment. Not only do these factors affect teachers, they also impact the academic performance and learning responsibility of students (W. B. Schaufeli & Bakker, 2004; Weiqi, 2007; Weiss, 1999). "Teachers do more than teach – they broaden imaginations, offer encouragement and support, foster social responsibility and can incite passion and curiosity within the minds of students" (Toddlytic Team, 2017). When teachers aren't engaged, these practices are less likely to happen in a classroom. Employee engagement is a strong predictor of high performance while collective teacher efficacy is a strong predictor of success for students. If leaders can increase employee engagement, then job performance may also rise, potentially leading to stronger collective efficacy beliefs which, in turn, could impact student achievement.

Unfortunately, principals are faced with the challenge of building collective teacher efficacy at the same time they are leading teachers that are stressed and not engaged in their job. Teaching, compared to other professions, is considered a very stressful job (Tschannen-Moran & Barr, 2004). In fact, up to one third of educators

surveyed indicated they are either stressed or extremely stressed (Geving, 2007; Thomas et al., 2003). In June 2020, only 31% of employees in the United States were engaged in the workplace, a number that dropped 7% from the previous month (Harter, 2020, para. 3). “Since employee engagement is highly related to many performance outcomes -- even more so in tough times -- this unprecedented drop in the percentage of engaged workers has significant potential performance consequences”(Harter, 2020, para. 5). With a percentage this low, principals might need to change some of their practices and focus on increasing teacher engagement, so student achievement does not suffer.

Purpose of the Study

Collective teacher efficacy does not just happen, it takes time and intentionality to build (DeWitt, 2019). A variety of factors exist that can contribute to the development of collective teacher efficacy in a school. Many of these factors coincide with descriptors of employee engagement. If a strong correlation exists between employee engagement and collective teacher efficacy, then a school leader could dedicate time to increasing employee engagement and increased collective teacher efficacy can result. Therefore, the purpose of this correlational research study was to discover to what degree a relationship exists between teacher engagement and collective teacher efficacy. The data can lead to conclusions on how the roles and responsibilities of principals as well as teachers and school districts can impact the collective efficacy in their schools through a focus on employee engagement.

Research Question

How strong is the relationship between an elementary teacher's engagement and their perception of their school's collective efficacy?

Definition of Terms

Classroom Discipline: Strategies used by teachers to minimize disruptions in class and maximize learning. This is one of the subscales on the Collective Efficacy Beliefs scale.

Collective Teacher Efficacy: "The collective self-perception that teachers in a school make an educational difference to their students over and above the educational impact of their homes and communities" (Tschannen-Moran & Barr, 2004, p. 189). This will be measured using the Collective Efficacy Beliefs scale.

Employee Engagement: The degree to which employees are involved, committed, and enthusiastic about their work and organization and how they express themselves cognitively, emotionally and behaviorally (Gallup, n.d.; Kahn, 1990).

Instructional Strategies: The variety of strategies teachers use to deliver content, engage students in learning and assess students. This is one of the subscales on the Collective Efficacy Beliefs scale.

Teacher Engagement: It is the degree to which teachers are involved, committed, and enthusiastic about their job, school, and school district and how they express themselves cognitively, emotionally and behaviorally (Gallup, n.d.; Kahn, 1990). This will be measured using the Teacher Engagement Survey.

Conceptual Framework

Peter Senge conceptualized the idea of a learning organization through his work of the Fifth Discipline. Senge defines a learning organization as a place “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (Senge, 2006, p. 1). In a learning organization, there are five disciplines (See Figure 1). *Systems thinking* focuses on the whole or the big picture. Individuals observe patterns and see how actions are interrelated. *Personal mastery* is an individual’s work to be the best person possible. They strive to expand their personal capacity and continually evaluate their vision. Individuals reflect on what they want to achieve and aim to reach their goals. *Mental models* are beliefs and generalizations that individuals hold on to. Reflection allows them to understand how their mental models influence their lives. Once there is understanding then it is possible for individuals to move beyond these to expand their own and their team’s capacity to create change. *Shared vision* describes how one’s personal mastery is extended into a shared vision. Together, a group of individuals share a common purpose and values as well as being committed to the organization and its future. Finally, *team learning* is all about people coming together where individuals focus on their shared vision and work together to achieve their common goal (Senge, 2006).

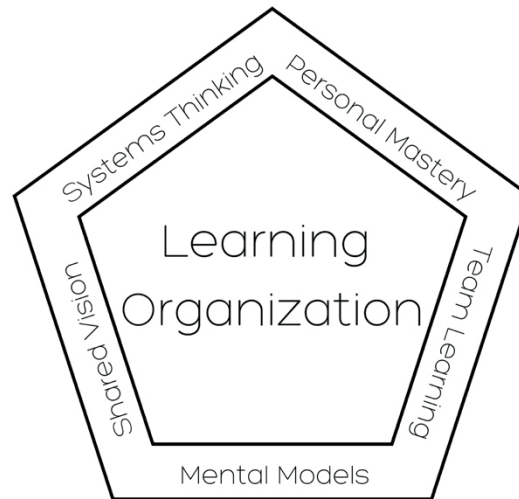


Figure 1. Peter Senge’s Five Disciplines of a Learning Organization (Senge, 2006).

Significance of the Study

Understanding the significance of the relationship between teacher engagement and collective teacher efficacy can provide insight to improved school success and specifically student achievement. “The way in which educators take the reins and see they can change the status quo may be just as important as the destination” (DeWitt, 2019). The role of a principal is challenging and being able to identify factors of employee engagement that relate to collective teacher efficacy can help narrow their focus of responsibilities. School principals will be better prepared for leading a school by incorporating activities that impact both teacher engagement and collective teacher efficacy. The result could be teachers that are more excited to be at work, more committed to the school’s mission and values, all while strengthening the collective efficacy beliefs.

In addition to impacting principals, this study can benefit others in education. For teachers, they could be indirectly impacted by the actions taken by school leaders from

what they learn from this study. Teachers may be more engaged at work and increase their collective efficacy beliefs. In addition, teachers could learn from this study how they can better contribute to the engagement of their co-workers and collective teacher efficacy. District administrators could increase practices that build employee engagement that have the highest correlation to collective teacher efficacy. This could lead to a more engaged and productive staff, lower turnover rates, a positive school culture, and a higher collective efficacy. They could also adjust their professional development to have a greater focus in the areas shown to be most impactful on developing a school's collective efficacy. In addition, they could support principals as they work to increase employee engagement within their school. Ultimately, when all of these individuals contribute to improving employee engagement as it relates to collective teacher efficacy, students will benefit.

This study contributes to existing research about both teacher engagement and collective teacher efficacy. In addition, this research provides initial findings on the relationship between teacher engagement and collective teacher efficacy that future research can build on. This research provides conclusions on what school characteristics are associated with collective teacher efficacy and teacher engagement, which could lead to future studies. Although this research does not identify the specific causes or effects teacher engagement and collective teacher efficacy have on one another, it adds to the body of research and describes some relationships that exist. For further research, this contributes to learning more about whether or not employee engagement actually leads to collective teacher efficacy and vice versa.

Organization of the Study

This study takes on the format of a typical dissertation. Following the literature review in chapter 2, there is a detailed chapter 3 describing the study's design, participants, instrument selection, methods of data collection and statistical analysis. In chapter 4, results of the statistical analyses are reported and chapter 5 summarizes the major findings and implications for practice.

CHAPTER 2

LITERATURE REVIEW

Schools and its employees are faced with the challenge to increase student achievement and have a successful school. With many factors contributing to this goal, schools aim to put their focus on what matters most. Through employee engagement and collective teacher efficacy schools can invest in teachers because teachers are the most important influence in a classroom (Marzano et al., 2003; Opper, 2019). Literature reviewed will outline the main ideas surrounding both collective teacher efficacy and employee engagement, and explore a deeper understanding surrounding the relationship that could exist between the concepts of employee engagement and collective teacher efficacy. This includes the beliefs about what employee engagement is, how it can be measured, and the impact it has in education. In addition, the sources of collective teacher efficacy, measurements used, and if it actually contributes to an increase of school success will be presented. The purpose of this review is to outline the research currently conducted on these topics, so a relationship between the two can be established for further recommendations on what actions could be taken to increase these concepts in schools.

Collective Teacher Efficacy

Collective teacher efficacy is currently a common topic in education due to the research that came out of John Hattie's meta-analysis. He recently ranked collective teacher efficacy as being the greatest factor in student achievement with an effect size of 1.57 (Donohoo et al., 2018). This idea of collective teacher efficacy is still developing

and the amount of research is limited in comparison to self-efficacy (Tschannen-Moran & Barr, 2004). However, with the potential impact this could have on student achievement it is a concept that needs to be even further researched. "Alone we can do so little; together we can do so much" (Lash, 1997, p. 489).

Background and Definitions

Through research conducted at the Rand Corporation in 1966, they "first conceived of teacher efficacy as the extent to which teachers believed that they could control the reinforcement of their actions" (Goddard et al., 2000, p. 481). This was identified as an internal locus of control. Albert Bandura further established the concept of teacher efficacy in 1977. He defined it as "a type of self-efficacy-the outcome of a cognitive process in which people construct beliefs about the capacity to perform at a given level of competence" (Goddard et al., 2000, p. 481). Some educators believed these to be identical when, in fact, they have very little or no empirical connection. The locus of control is not concerned with personal efficacy but rather the causal beliefs surrounding the relationship that exists between actions and outcomes. A teacher may believe that they can control a given outcome based on their actions but may not have strong beliefs that they can accomplish their goals (Goddard et al., 2000). In other words, efficacy is focused on the perceptions of future actions rather than the outcomes of those actions (Bandura, 1993).

Furthering the concept of teacher efficacy is collective teacher efficacy. As a foundation, collective efficacy beliefs are a "group's shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels

of attainments” (Bandura, 1997, p. 477). Collective teacher efficacy can then be characterized as “the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (Goddard et al., 2000). Others defined it as “the collective self-perception that teachers in a school make an educational difference to their students over and above the educational impact of their homes and communities”(Tschannen-Moran & Barr, 2004). Collectively, these definitions focus on the beliefs of teachers and that these beliefs can result in action (Hoogsteen, 2020).

In 2004, a particular study resulted in prior student achievement predicting collective teacher efficacy (Ross et al., 2004) which had the same results as previous studies (Bandura, 1993; Goddard, 2001). Studies conducted in the early 2000s established that collective teacher efficacy impacts future student achievement. Therefore, when combining these two findings, a reciprocal relationship exists between student achievement and collective teacher efficacy in a school (Ross et al., 2004). This reciprocal relationship has also been described as bi-directional meaning that if collective teacher efficacy positively impacts student achievement, then when student achievement is high this can, in turn, positively impact collective teacher efficacy (Goddard et al., 2000; Hoogsteen, 2020).

Although there are some studies showing a link between collective teacher efficacy and student achievement, little research exists as to whether collective teacher efficacy can cause a rise in student achievement (Eacott, 2017; Tschannen-Moran & Barr, 2004). Most research surrounding collective teacher efficacy is in regards to antecedents, benefits of collective teacher efficacy and how it can be developed

(Hoogsteen, 2020; Loughland & Ryan, 2020). However, there is enough research supporting the impact it has on student achievement and should, therefore, not be overlooked (Donohoo, 2017; Ross et al., 2004).

Social Cognitive Theory

Both self-efficacy and collective efficacy are grounded in the social cognitive theory developed by Albert Bandura (Goddard & Skrla, 2006). He developed social cognitive theory to “explain that the control humans exercise over their lives through agentive actions is powerfully influenced by the strength of their efficacy beliefs” (Goddard & Goddard, 2001). Key to this theory is the concept of human agency which describes how an individual’s actions are influenced by their level of efficacy (Huber, 1991; Pierce, 2019). Human agency is used to describe individuals, however, the social cognitive theory applies to multiple agencies; personal, proxy, and collective. For example, rather than living in autonomy, people interact with others to reach their desirable outcomes. It is the interdependent efforts of multiple people to accomplish what they are unable to do on their own. Human agency then extends to collective agency (Bandura, 2000).

Schools are an organizational agency where teachers interact and work together. “Social cognitive theory asserts that individual and collective efficacy beliefs are influenced by the dynamic interplay between personal factors, environment and behavior” (Pierce, 2019). Social and interactive processes within a school contribute to this environment. Overall, it is a teacher’s perception as an individual as well as the

school that influence their actions and beliefs that they can collectively make a difference (Bandura, 1997; Tschannen-Moran & Barr, 2004).

Four sources of efficacy emerged from Bandura's social cognitive theory, including mastery experiences, vicarious experiences, social persuasion, and affective states. These were initially used to describe an individual's self-efficacy. With more research, it was determined these are also critical in the growth of collective teacher efficacy (Goddard et al., 2000).

The strongest predictor and powerful source of collective efficacy was proposed (Bandura, 1997) and determined (Lent et al., 1991; Lopez & Lent, 1992) to be mastery experiences. These experiences occur through success and failure within an organization. When successes occur, collective efficacy beliefs rise. It is from these successes they experience that the organization gains stronger beliefs of future success (Huber, 1991; Pierce, 2019). On the other hand, when schools are faced with failures, this diminishes the collective efficacy (Huber, 1991).

Vicarious experiences occur when individuals learn from others through observation. Teachers might observe other effective teams or even other schools to study their practices (Loughland & Ryan, 2020; Pierce, 2019). In addition, teachers can learn through modeling their own effective practices (Pierce, 2019). Teachers and organizations learn by observing other effective teachers and organizations (Huber, 1991).

Social persuasion happens when other teachers or school leaders share ideas, knowledge, and skills as well as give feedback to one another. When encouraging

feedback is used, this can create an environment where teachers can grow professionally (Pierce, 2019). Social persuasion also includes teachers working collaboratively to achieve goals through their shared vision (Loughland & Ryan, 2020).

Affective states describe the emotional-social well-being of individuals which impacts the organization. When the emotional-social well-being is supported then there is less likelihood of stress, anxiety or fear. Therefore, trust, respect, safety, and open communication are essential for developing collective teacher efficacy (Loughland & Ryan, 2020; Pierce, 2019). If schools are utilizing affective states then they are more likely able to handle pressure and crises (Goddard et al., 2000).

Measurement

Albert Bandura identified three different methods to measure collective efficacy. First, one could take each individual members' assessment of their own abilities to meet the goals of the group and aggregate the data. Another method is to gather each individual members' assessment of the group's ability to operate collectively. Finally, the third method is to have the group work together to come up with a consensus of their collective efficacy (Bandura, 2000).

In consideration of the first two methods of measurement the individual and interactive factors are not clearly defined. Much overlap exists between individuals' judgments of themselves and the judgments of the group. In many situations, they are interdependent of one another and one may attribute their own success to the group's success and vice versa. The degree of interdependency will determine how predictive each method is in measuring collective efficacy (Bandura, 2000). In addition, according

to Goddard and Goddard, when these two measures are used, there is high correlation (2001). Therefore, in appropriate situations, personal efficacy is a suitable measurement of collective efficacy.

The last method mentioned has serious limitations. During this group consensus, there is a chance for social persuasion to occur and individuals with commanding power may sway the groups decision. In fact, this process, itself, may even change the efficacy beliefs of the group. In addition, when organizations are forced to come up with a group consensus, the variances in efficacy beliefs are not observed (Bandura, 2000).

A key factor in measuring collective efficacy is timing. For example, when measuring the impact collective teacher efficacy has on student achievement, results could be different if achievement was measured before or after collective teacher efficacy. In addition, most measurements only occur once and, therefore, only measuring one point in time. Collective teacher efficacy is constantly changing (Ross et al., 2004) so when only one measurement is considered, the results may not be as valid.

Multiple scales have been developed to measure collective teacher efficacy, but not nearly as many in comparison to teacher efficacy alone. The survey used for this research was adapted by Tschannen-Moran (2004) from an earlier survey created by researchers out of Ohio State University based on Bandura's teacher efficacy scale. This scale is divided into two sub-scales: instructional strategies and student discipline.

Instructional Strategies

It is believed when teachers have high efficacy beliefs that they are more likely to use mastery instructional strategies resulting in an increase of student's self-efficacy

(Bandura, 1993). A wealth of research exists on effective instructional strategies. Two frameworks used are the Marzano Art and Science of Teaching Framework and Danielson's Framework for Teaching. Marzano's Framework consists of four domains with domain 1, classroom behaviors and strategies aligning most with instructional strategies. This domain includes 41 different elements, including note taking, setting goals, building vocabulary, graphic organizers, and interactive games (Learning Science Marzano Center, 2013). Danielson's Framework for Teaching is also divided into four separate domains with domain 3 focusing on instruction. This domain is divided into five components: Communicating with Students, Using Questioning and Discussion Techniques, Engaging Students in Learning, Using Assessment in Instruction and Demonstrating Flexibility and Responsiveness (Danielson, 2014). Hattie also has several instructional strategies ranked with effect sizes greater than one year's progress. Some of these include; jigsaw, summarization, mnemonics, problem-solving, direct instruction, cooperative learning and inquiry-based teaching (Hattie, 2017).

These instructional strategies are combined with teacher's perceptions in the questions asked on the Collective Teacher Beliefs Scale. Some of the questions include:

How much can teachers in your school do to produce meaningful student learning?

How much can teachers in your school do to help students master complex content?

Student Discipline

Student discipline is time-consuming and on the rise. Over half of teachers surveyed hoped they could spend more time helping students learn and spend less time disciplining. In addition, 68% of elementary teachers believe negative behaviors have increased since they first started teaching (Scholastic & Bill and Melinda Gates Foundation, 2012). A variety of methods exist to support staff in helping shape student behavior. Whether it is through teaching Boys Town Social Skills, Positive Behavior Interventions and Support, restorative justice, social-emotional learning or trauma-informed practices, the goal is to be able to spend less time on student discipline.

Questions from the Collective Teacher Beliefs Scale include:

What extent can teachers in your school make expectations clear about appropriate student behavior?

How well can teachers in your school respond to defiant students?

Positive and Negative Consequences

Although limited, research has shown that “collective teacher efficacy beliefs contribute significantly to the school’s level of academic success” (Donohoo, 2017, p. 6). Marzano (2003) concluded from his research that “schools that are highly effective produce results that almost entirely overcome the effects of student background” (p. 7). This concept of collective teacher efficacy can have positive results in schools with the greatest of those being its influence indirectly on student achievement (Hoogsteen, 2020). Efficacious schools have several attributes present. These schools set high expectations for student achievement (Bandura, 1997). They accept challenging goals

and give up less easily (Protheroe, 2008). Teachers work together to respond to disruptive behavior and persist to find solutions and manage misbehavior of students (Hoogsteen, 2020). Teachers are committed to both their students and the organization as they work to improve student achievement. Along with this commitment, teachers are often involved in decision making processes (Donohoo, 2017). When highly efficacious schools are faced with setbacks or challenges, they view these as temporary obstacles, and their sense of purpose helps them to overcome the setbacks (Goddard & Skrla, 2006).

Negative consequences exist for those schools with low levels of collective teacher efficacy. Teachers often set lower performance expectations (Tschannen-Moran & Barr, 2004). They are also more likely to pinpoint causes of low performance to poverty or limited English rather than accepting responsibility (Protheroe, 2008). When teachers have lower expectations and are less committed, this can result in students continuing to struggle in school (Bandura, 1997).

Employee Engagement

Many claims exist stating that employee engagement is a critical component for the success of an organization (Macey & Schneider, 2008; Rich et al., 2010). Unfortunately, employee engagement is headed in the wrong direction and an increase of disengaged employees is on the rise (Bates, 2004; Richman, 2006). Specifically in educational research, there is a common thought that it is essential that all students are provided a teacher with high engagement in their work (Klassen et al., 2011). In simple

terms, engagement is investing the “hands, head, & heart” (Ashforth & Humphrey, 1995, p. 110).

Definitions and Terms

A consistent definition for employee engagement does not currently exist. One reason is that there is a lack of agreement on how employee engagement should be referred to (Bakker et al., 2011; Cole et al., 2012). Some refer to it as employee engagement while others use the words job engagement or work engagement (Schaufeli & Salanova, 2011). In addition, due to the fact that other terms and constructs have been established that have overlap with engagement, a consensus has not been developed. Some of these overlaps include job involvement, organizational commitment, and job satisfaction (Cole et al., 2012; Saks, 2006; Shuck et al., 2013). One of the first definitions proposed came from William Kahn in 1990. He defined engagement as “the harnessing of organization members’ selves to their work roles; in engagement people employ and express themselves physically, cognitively, and emotionally during role performances” (Kahn, 1990). Robinson, Perryman, and Hayday defined engagement as the following:

A positive attitude held by the employee towards the organization and its value.

An engaged employee is aware of business context and works with colleagues to improve performance within the job for the benefit of the organization. The organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee (2004, p. ix).

Regarding the two-way relationship, the Institute of Employment Studies emphasizes that both the employer and employee have jobs to be done in this relationship (Rafferty et al., 2005; Robinson et al., 2004). Most recently, Gallup has defined engaged employees as “those who are involved in, enthusiastic about and committed to their work and workplace” (Gallup, n.d.). Still several other definitions for engagement exist beyond these.

Collectively, engagement has components of cognition, emotion and behavior (Saks, 2006). This is what sets it apart from other terms like job involvement which focuses primarily on cognitive judgment. Job involvement is how individuals identify with their jobs in relation to their overall lives and to what degree (Kanungo, 1982). Engagement will use cognitions but will be combined with emotions and behaviors as employees engage in their overall job performance (May et al., 2004). It is suggested that when employees have high levels of engagement, they are often able to successfully identify with their job (May et al., 2004). Therefore, engagement is a precursor to job involvement. Organizational commitment refers to the relationship that an employee has with the organization itself and more specifically, their attitude and attachment (Saks, 2006). Job satisfaction refers to the emotional state of an employee based on their overall job experience. The perceptions individuals have about their experiences in combination with their coworkers and supervisors, impact their total job satisfaction (Russell et al., 2004). Job involvement, organizational commitment, and job satisfaction all have similar characteristics to engagement, however, there are

distinguishable differences. These differences help to more clearly define and understand what engagement truly is.

Theory

Initial research around employee engagement began with Kahn (1990) as he conceptualized a theory of employee engagement. He created two studies looking at a summer camp and architectural firm to investigate both personal engagement and disengagement. Kahn's goal through his conceptual framework was to illustrate both of these concepts that were results of his research. He defined personal engagement as, "the simultaneous employment and expression of a person's preferred self in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotions), and active, full role performances" (p. 700). In contrast, Kahn defines personal disengagement as, "the simultaneous withdrawal and defense of a person's preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absences, and passive, incomplete role performances" (p. 701). Furthermore, individuals will either display engaged or disengaged behaviors based on their psychological experiences related to the relationship between one's self and their role. Through his analysis of the research conducted and connections to theoretical concepts that already existed, there were three dimensions of engagement that emerged. These dimensions were identified as meaningfulness, safety and availability.

Psychological meaningfulness can be described as an individual feeling valued in the job they are doing and that they are making a difference. It is a combination of

giving one's self and also being able to receive from their work role. Engaged employees will find meaning in the work they are doing whereas disengaged employees will feel there is little to give or receive in their role performance (Kahn, 1990). Employees are more likely to experience psychological meaningfulness when there is creativity in tasks, autonomy and an appropriate level of complexity (Hackman & Oldham, 1980; Kahn, 1990). Employees are given identities based on the role they have at their job and will find either a like or dislike for that role based on how they see the roles fitting for themselves (Goffman, 2013; Hochschild, 2012). When individuals had rewarding relationships with their coworkers, they also experienced psychological meaningfulness. People have a need for these relationships in their lives and these connections provide meaning (Alderfer, 1972).

In order for individuals to show their true self, they need to have a sense of safety when it comes to their own image, professional status and career. If people are in trusting and supportive relationships, then psychological safety is enhanced. On the other hand, if employees feel uncomfortable to share ideas or feel threatened, then this may lead to disengaged employees. For psychological safety to exist, not only does the relationship among coworkers need to feel supportive, but also the relationship with their manager. In a supporting relationship people will take risks without fear of negative consequences.

People are faced with stressors, distractions and demands in both their work life and personal life. Psychological availability describes how employees can engage in their work given these external factors. Available people are those that are able to

dedicate themselves completely given what they are faced with where disengaged employees are less available. Both physical and emotional energy impact an employee's availability. When individuals are able to maintain the needed level of physical and emotional energy rather than feeling depleted, they are able to personally engage (Kahn, 1990). Finally, if work and family are not balanced, this distracts individuals and impacts their psychological availability (Hall & Richter, 1988).

In addition to Kahn's contribution to the employee engagement theory, there are other theories related to this. One of those theories is the work-motivation theory developed by Vroom which suggests that individual behaviors are an effect of motivation (Vroom, 1994). Furthermore, when employees devote themselves to specific tasks that are part of the demands of their job, they become engaged which aligns with the motivational concept (Christian et al., 2011). It has also been proposed that engagement is, in fact, a concept that stands alone and independent from other concepts within the motivational construct (Bakker, 2011). Due to the fact that engagement can motivate others to perform in their jobs, it is suggested that "work engagement should be considered an antecedent of job performance" (Song et al., 2018, p. 255).

Job Demands Resource Method

The Job Demands-Resource Method (JD-R) was initially created from the work on job burnout (Bakker & Demerouti, 2007). It considers the variety of job resources in relation to the job demands to predict how an employee may become engaged or disengaged (Bakker & Demerouti, 2007; Crawford et al., 2010). Job resources include

personal resources as well, including self-efficacy, optimism, hope and resilience just to name a few (Luthans et al., 2007). The belief is that the motivational process is started through the availability of job resources which will then lead to engagement (Bakker & Demerouti, 2007; Crawford et al., 2010). If the demands of the job are too high then this can lead to burnout rather than engagement (Saks & Gruman, 2014). Although there is some correlation between these resources impacting employee engagement, (Bakker et al., 2011; Cole et al., 2012; Crawford et al., 2010; Rich et al., 2010) others suggest that engagement is only impacted minimally (Saks & Gruman, 2014).

Measurement

Just like the variety of definitions used, there is no agreed upon tool for measuring employee engagement. Several measurements have been created and used, but most often only for the purpose of one study (Saks & Gruman, 2014). There has been criticism of many existing measures, due to the fact, that they do not completely correlate with the conceptualization from Kahn and the focus on cognitive, physical, and emotional characteristics (Newman & Harrison, 2008). Not only do they not clearly align with Kahn's conceptualization, it seems as if the tools are measuring different constructs (Ellis & Sorensen, 2007; Robinson et al., 2004). In addition, some have questioned whether or not any of these measurements are appropriate to be used outside of the business world, specifically in education (Klassen et al., 2013). Although many of the general findings of engagement can relate to the educational world, some suggest that a better type of measurement should be used when looking at engagement in education.

The Utrecht Work Engagement Scale (UWES) is the most popular measure that has been used (Bakker et al., 2011; Cole et al., 2012; Crawford et al., 2010; Rich et al., 2010). The UWES is comprised of three different subscales based on the engagement dimensions of vigor, dedication and absorption and has been validated in many countries (Bakker, 2009). Concerns exist around using the UWES as an accurate measure of engagement. Some question the validity of specific items because the items overlap with antecedents of engagement (Rich et al., 2010). In addition, some of the items are similar to those used to also measure other constructs like, job satisfaction and organizational commitment (Newman & Harrison, 2008). As stated earlier, these two constructs are similar, but not identical and, therefore, should be measured differently. It is important to note that this scale was originally created from the research surrounding job burnout (Saks & Gruman, 2014). Due to this, there is concern that an overlap exists between the engagement survey and burnout survey resulting in the UWES not being an independent measure (Cole et al., 2012; W. B. Schaufeli et al., 2002). With the varying definitions and measurement tools for engagement, this poses a challenge for organizations. As organizations and managers look for ways to improve engagement, it would be helpful to have a clear definition that could then be built upon to create a related measurement tool (Endres & Mancheno-Smoak, 2008).

To better understand employee engagement, one can look at the characteristics that engaged employees possess. Engaged employees are passionate and energetic about their work. They exert enthusiasm and energy in their daily responsibilities to help their organization be successful (Bakker, 2009; Baumruk, 2004; Schaufeli &

Salanova, 2011). This can be described as having an extra bounce in their step (Baumruk, 2004). In addition, they are committed, connected and focused to their organization. An engaged employee goes the extra mile to ensure success and embraces the mission, culture and goals of the organization (Baumruk, 2004; Kahn, 1992).

Positive and Negative Consequences

Employee engagement or disengagement can have lasting effects on an organization. Engagement is related to many professional outcomes, such as job performance (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008). When engagement is higher, employees are performing at a higher level. Organizations often focus on team aspects or the collective effort of their employees. Within these organizations, emotional contagion may occur, meaning that, positive experiences transfer among employees (Bakker et al., 2009). This would mean that if individuals are engaged then their positivity, passion and energy could transfer to their teammates (Bakker et al., 2011). High levels of employee engagement can also result in high productivity, shareholder loyalty and satisfaction and low employee turnover (Markos & Sridevi, 2010; Richman, 2006).

Unfortunately, if engagement is too high it can lead to performance decline. This decline could be brought on by having high levels of job excitement which may conflict with cognitive function (Bakker et al., 2009). Employees may even reach a state of overengagement where they absorb themselves into their work and do not leave time or energy for life outside of work (Bakker et al., 2011). This could lead to one of the most referenced topics in regards to negative consequences of disengagement; job

burnout. Job burnout can be the result of disengagement and is also described as the opposite of engagement. Further consequences of disengagement include employees having higher levels of stress, feeling less satisfied, increased absences, decrease in production and being less committed to their organization (Richman, 2006).

Developing Engagement in School Employees

Although the basis of employee engagement could be related to education, the majority of engagement research is specific to business settings (Bakker et al., 2011; Sonnentag, 2003). The benefits of engagement in schools is similar to other professions and includes lower absenteeism, decreased turnover as well as increased student engagement and achievement (Hodges, 2015). The attitudes of teachers and their levels of motivation are transferred to students (Bakker et al., 2011; Sonnentag, 2003). Some argue that one major missing link to engagement measurements is social engagement and relationships with students (Jennings & Greenberg, 2009). Educators who focus on developing positive and caring relationships with their students often have an overall high well-being and lower levels of stress and burnout (Jennings & Greenberg, 2009). Therefore, if we consider the opposite of burnout to be engagement, there is a higher likelihood of these educators being engaged.

Within the school system, individuals in a variety of roles make decisions that impact teacher engagement. Since the goal is to have high teacher engagement, the research below highlights those behaviors of individuals that can positively contribute to employee engagement.

Principals

Principals are the most referenced individuals that make a difference for employee engagement. Increasing employee engagement begins with building relationships with teachers. It is critical that principals get to know their teachers, including their lives outside of work allowing them to see the whole person and showing teachers they are valued (Abitabile, 2020; Blaschka, 2021; Kappel, 2018). Once a principal knows their staff, they can focus on their strengths and encourage the growth of their talents (Blaschka, 2021; Hodges, 2015). Another key ingredient for leading an engaged school is recognizing teachers. In fact, 37% of employees identified recognition as the most important thing leaders could do (Jouany & Makipaa, 2021). Recognition includes praise, but can also be simply acknowledging teachers. Meaningful recognition will help nurture a positive environment and build a culture of acknowledgement “The best ideas often come from those closest to the action on a daily basis” (Hodges, 2015, para. 3). Principals should encourage dialogue among staff, take the time to listen to their teachers, and involve them in decision-making processes (Blaschka, 2021; Hodges, 2015; Kappel, 2018; Zahed-Babelan et al., 2019). Finally, principals need to take care of themselves before they can care for others. This includes being cognizant of their own strengths and weaknesses and remembering the reasons why they became a school leader in the first place (Blaschka, 2021).

School Districts

There is much overlap between what a principal can do to impact teacher engagement compared to a school district. One way that school districts could

specifically focus on increasing engagement would be by offering growth opportunities to their teachers which would allow them to further their education and shows them that their career growth is valued (Kappel, 2018). Not only could this boost employee engagement, but it could also improve teaching practices. Districts can also provide initial training to new staff members to ensure teachers know what is expected of them and they feel supported from the beginning (Kappel, 2018). The school district should focus on hiring the right principals and supporting them in their endeavors to build employee engagement in their schools (Hodges, 2015; Kappel, 2018). Finally, school districts should participate in the same actions as principals, such as acknowledging employees, allowing teachers autonomy to make decisions about their teaching, providing clarity through communication, creating a collaborative culture and involving teachers in decision-making (Blaschka, 2021; Hodges, 2015; Kappel, 2018).

Teachers

Although leaders are instrumental in establishing a positive culture and increasing employee engagement, teachers can do their part as well. Emotions are contagious (Goleman, n.d.), therefore, teachers' attitudes, whether positive or negative, affect other teachers' attitudes. "Happiness is an inside job. Don't assign anyone else that much power over your life" (Oppong, 2019, para. 1). As teachers, it is important to remain positive even when others are not. This can help teachers combat their own work-related stress, enhance their performance through their positive attitudes and potentially spread positivity to others. Another way for teachers to feel more engaged is

to share their ideas with others and participate in discussions on how to meet the goals of the school (Hodges, 2015).

Connection Between Collective Teacher Efficacy and Employee Engagement

Overlap exists between the concepts of employee engagement and collective teacher efficacy leading one to believe that a relationship also exists between the two. In one of the first definitions established for employee engagement, Kahn used the words physically, cognitively, and emotionally to describe how individuals engage in their work (Hodges, 2015). Further research indicated that cognition, emotion and behavior are essential components of engagement which distinguish it from other engagement concepts (Saks, 2006). This is similar to the basis of the social cognitive theory from where collective efficacy evolved. "People respond cognitively, emotionally, and behaviorally to environmental events. Also, through cognition people can exercise control over their own behavior, which then influences not only the environment but also their cognitive, emotional, and biological states" (Maddux & Gosselin, 2012, p. 199). Therefore, when individuals respond through these states, they are addressing both their engagement with their work as well as their level of efficacy.

Employee engagement falls within the motivational construct. It is believed that engaged employees are motivated themselves but can also motivate others to perform in their jobs (Song et al., 2018). In analyzing different social systems, findings showed that when collective efficacy was high, the group's motivational investment was also higher. This higher efficacy and motivation led to a greater persistence in the face of challenges as well as overall higher performance accomplishments (Bandura, 2000). It

can be concluded that employee engagement and collective efficacy are related through the motivational construct, but it is not clear if one affects the other or how strong of a correlation exists.

The emotions and well-being of individuals describe one source of collective efficacy known as affective states. This source is closely related to the motivational construct which is also a foundation of employee engagement. When the emotional well-being of individuals is supported, their levels of stress decrease (Loughland & Ryan, 2020; Pierce, 2019). Unfortunately, disengaged employees are often characterized by having high levels of stress (Richman, 2006). These high levels of stress can negatively impact Individual teacher efficacy (Bliss & Finneran, 1991) as well as weakening a group's ability to function (Mosoge et al., 2018). To conclude, stress is a common factor within employee engagement and collective teacher efficacy and can result in a decrease for both.

Both employee engagement and collective teacher efficacy can produce similar positive effects. To begin, high engagement among staff has been linked to high job performance whereas high collective efficacy has been linked to higher student achievement. In addition, individuals that are engaged are committed to their organization (Baumruk, 2004). Similarly, collective teacher efficacy helps to build commitment from teachers to the school (Donohoo, 2017; Protheroe, 2008). Engaged employees strive to do their best by putting forth greater effort and going above and beyond (Baumruk, 2004). In the same way, an outcome of collective teacher efficacy is greater effort (Hoogsteen, 2020).

School leaders need to capitalize on what makes the biggest difference for their teachers and students. Employee engagement and collective efficacy have been proven to contribute to the overall work environment and goals set forth. By understanding how strong of a relationship exists between these two concepts, teachers and school leaders can make deliberate and intentional decisions to raise them both. When employees are engaged and collective teacher efficacy is high, then teachers and students will benefit and success in schools can increase.

CHAPTER 3

METHODS

The purpose of this study was to explore the relationship between employee engagement and collective teacher efficacy. A correlational study was designed to utilize quantitative survey results to explore connections and determine how these two concepts are related. This chapter includes a description of participants, the instrumentation utilized, procedures for distributing the survey, and an explanation of how the data was analyzed.

Research Design

This research was a correlational study designed to explore connections and determine how the variables of engagement and collective efficacy may be related. This method was appropriate, as the purpose of a correlational study is to describe how two variables in data sets containing non-parametric data are related (Gravetter et al., 2021). Furthermore, in a correlational design, researchers investigate two or more variables by measuring the degree of their relationship (Creswell, 2014). This method was selected so the correlation between teacher engagement and collective teacher efficacy could be explored to determine to what degree a relationship exists between these two variables.

Research Questions

To determine how strong is the relationship between an elementary teacher's engagement and their perceptions of their school's collective efficacy, the following questions were explored:

1. How positive are teachers' collective teacher efficacy beliefs?
2. How positive are teachers' engagement?
3. How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?

Participants

Preschool through fifth grade elementary teachers from a midwestern, suburban, public school district were participants of this study. A total of 69 out of 191 (36%) elementary teaching staff, who have been teaching at their school for at least one year, from six of the seven district elementary schools completed the survey on a voluntary basis. One of the schools had just opened for the 2021-2022 school year and was not included in this survey.

Instrumentation

The Teacher Engagement Survey was adapted from an Employee Engagement Survey created by DecisionWise (See Appendix A). They are a consulting organization which aims to help individuals, teams, and organizations to understand their current employee engagement and can support them in providing feedback on how to increase engagement leading to a more engaging culture. DecisionWise has helped administer tens of millions of employee engagement surveys from over seventy countries which have been gathered and analyzed for the past two decades. The survey instrument used in this study included 30 research-based questions, divided into four categories; my job, my team, my principal, my school district. Each question was answered on a five-point

Likert-type scale. The descriptors include: Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree.

To measure collective teacher efficacy, the Collective Teacher Efficacy Scale developed by Tschannen-Moran was utilized (See Appendix B). This scale was adapted from the Ohio State Teacher Efficacy Scale which was based on Bandura's teacher efficacy scale. Evidence exists from pilot studies and factor analysis showing this is a reliable measurement and aligns with the theoretical construct of collective efficacy (Klassen et al., 2011). This tool consists of 12 items and teachers rated their current ability, resources, and opportunities on a five-point Likert-type scale. The descriptors included: 1 (none at all), 2 (very little), 3 (some degree), 4 (quite a bit), and 5 (a great deal). An overall Collective Teacher Efficacy score was obtained through this assessment as well as two subscale scores in the areas of "Instructional Strategies" and "Student Discipline".

In addition to these two surveys, there were 4 open-ended questions asked of the participants. Demographic information was also collected including their teaching position (classroom teacher or non-classroom teacher), the number of years teaching overall as well as the number of years teaching in their current school will be collected (See Appendix C).

Data Collection and Procedures

Permission from school district personnel was obtained to survey all elementary teaching staff. In August, a link to the electronic survey was emailed to each staff member eligible to take the survey. With the support of the principals, time was set

aside during a staff meeting where elementary teachers could choose to take the survey. A follow-up email was sent to all staff reminding them when the survey would close.

Data Analysis

After the data was collected it was analyzed using quantitative methods. First, each item on the Teacher Engagement Survey was measured by finding the mean and standard deviation. Further analysis was done by finding the mean of all items in each of the four areas: my job, my team, my principal, my school district. A similar analysis was done on the data from the Collective Teacher Efficacy Scale. The mean for each item was calculated separately along with the standard deviation. Then the mean and standard deviation was determined for both of the subgroups: instructional strategies and student discipline. These calculations represent how positively staff scored both teacher engagement and collective efficacy. A Spearman rank-order correlation was used to measure the strength existing between the two variables. Data from the entire engagement survey was correlated with all items from the collective teacher efficacy survey. Further calculations were done between each of the collective teacher efficacy subscale scores and the four areas from the staff engagement data. For example, the data from the “my principal” subgroup on the employee engagement survey was correlated with both the “instructional strategies” and “student discipline” subgroups from the collective teacher efficacy survey.

CHAPTER 4

RESULTS

The purpose of this study was to explore the relationship of a teacher's perceptions between teacher engagement and collective teacher efficacy. This correlational study utilized quantitative survey results to explore connections and determine the strength of the relationship between these two concepts. Participants were surveyed through an online survey and results were analyzed by the researcher. Chapter four presents the results and findings of this research.

The participants of this study included preschool - fifth grade teachers who had been teaching for at least one year in their current school within a midwestern, suburban, public school district. Of the 191 teachers that received the survey, a total of 69 (36%) completed the survey. These teachers had varying years of experience in both education in general and experience in their current school. Characteristics of the participants can be found in Table 1.

Table 1*Teaching Characteristics of Participants*

Characteristics	<i>n</i>	%
Position		
Classroom	43	62.32
Non-Classroom	26	37.68
Years of Experience Teaching		
1-3 Years	8	11.59
4-10 Years	17	24.64
10+ Years	44	63.77
Years of Teaching in Current School		
1-3 Years	23	33.33
4-10 Years	23	33.33
10+ Years	23	33.33

To determine how strong is the relationship between an elementary teacher's engagement and their perceptions of their school's collective efficacy, the following questions were explored:

1. How positive are teachers' collective teacher efficacy beliefs?
2. How positive are teachers' engagement?
3. How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?

Research Question 1

How positive are teachers' collective teacher efficacy beliefs?

To explore how positive teachers' perceptions of their collective teacher efficacy beliefs are, study participants responded to 12 questions in the Collective Teacher Beliefs Scale (see Appendix B) created by Tschannen-Moran and Barr (2004). The Collective Teacher Beliefs Scale measures two subgroups: Instructional Strategies and Student Discipline with six questions in each subgroup. For this study, participants indicated, on a nine-point Likert scale (None at all = 1, Very little = 3, Some degree = 5, Quite a bit = 7, A great deal = 9) indicating their current ability, resources, and opportunity of the teaching staff in their school. The mean (M) and standard deviation (SD) for each individual statement were calculated as well as for each subgroup and overall collective teacher efficacy (see Tables 2-4).

The two subgroups on the Collective Teacher Beliefs Survey scored similarly. The Instructional Strategies (Table 2) subgroup had a slightly lower mean (M = 8.03, SD =

1.16) compared to Student Discipline. Within this subgroup, the means ranged from 7.72 to 8.45. The question “How much can teachers in your school do to produce meaningful student learning?” had the highest mean of 8.45 (SD = 0.89). One other question, “How much can your school do to get students to believe they can do well in schoolwork?” had a mean higher than 8.00 (M = 8.31, SD = 0.95). The lowest scoring question was, “How much can your school do to foster student creativity?” with a mean of 7.72 (SD = 1.51). This same question also had the lowest minimum score of a 3.

Table 2*Teachers' Responses to Collective Teacher Efficacy's Instructional Strategies Questions*

Instructional Strategies (<i>n</i> = 69)	Min.	Max.	M	SD
How much can teachers in your school do to produce meaningful student learning?	7.00	9.00	8.45	0.89
How much can your school do to get students to believe they can do well in schoolwork?	7.00	9.00	8.31	0.95
How much can teachers in your school do to help students master complex content?	7.00	9.00	7.98	1.00
How much can teachers in your school do to promote deep understanding of academic concepts?	5.00	9.00	7.79	1.19
How much can teachers in your school do to help students think critically?	5.00	9.00	7.81	1.14
How much can your school do to foster student creativity?	3.00	9.00	7.72	1.51
Overall Instructional Strategies Subscale Score	3.00	9.00	8.03	1.16

Note. A great deal = (9), Quite a bit = (7), Some degree = (5), Very little = (3), None at all = (1)

The Student Discipline (Table 3) subgroup had the slightly higher mean from the Collective Teacher Beliefs survey ($M = 8.09$, $SD = 1.26$). Three questions scored relatively high with means higher than 8. The question, “To what extent can teachers in your school make expectations clear about appropriate student behavior?” had the highest score ($M = 8.79$, $SD = 0.61$). The lowest scoring question, “How much can school personnel in your school do to control disruptive behavior?” had a mean 1.83 less than the highest scoring question ($M = 6.96$, $SD = 1.31$). The question “How well can teachers in your school respond to defiant students?” was the next lowest with a mean of 7.05 ($SD = 1.45$) while the question, “How much can your school do to help students feel safe while they are at school?” had the second highest with a mean of 8.74 ($SD = 0.68$).

Table 3*Teachers' Responses to Collective Teacher Efficacy's Student Discipline Questions*

Student Discipline (<i>n</i> = 69)	Min.	Max.	M	SD
To what extent can teachers in your school make expectations clear about appropriate student behavior?	7.00	9.00	8.79	0.61
To what extent can school personnel in your school establish rules and procedures that facilitate learning?	7.00	9.00	8.58	0.82
How well can teachers in your school respond to defiant students?	5.00	9.00	7.05	1.45
How much can school personnel in your school do to control disruptive behavior?	5.00	9.00	6.96	1.31
How well can adults in your school get students to follow school rules?	5.00	9.00	7.93	1.16
How much can your school do to help students feel safe while they are at school?	7.00	9.00	8.74	0.68
Overall Student Discipline Subscale Score	5.00	9.00	8.09	1.26

Note. A great deal = (9), Quite a bit = (7), Some degree = (5), Very little = (3), None at all = (1)

The highest score possible for each statement on the Collective Teacher Beliefs survey was nine. The means from the two subgroups are 8.03 (SD = 1.16) and 8.09 (SD = 1.26). The overall mean of 8.06 (SD = 1.21) was calculated by combining the scores from all 12 questions in the survey. In addition, the median, mode, and standard error of mean (SEM) were calculated for overall collective teacher efficacy as well as for each subgroup (Table 4).

Table 4*Collective Teacher Beliefs Survey Descriptive Statistics*

Variable (<i>n</i> = 69)	M	Median	Mode	SD	SEM
Instructional Strategies	8.03	9.00	9.00	1.16	0.057
Student Discipline	8.09	9.00	9.00	1.26	0.062
Overall Collective Teacher Efficacy Score	8.06	9.00	9.00	1.21	0.042

Note. A great deal = (9), Quite a bit = (7), Some degree = (5), Very little = (3), None at all = (1)

Research Question 2

How positive are teachers' engagement?

To explore how positive teachers' perceptions of their engagement are, study participants responded to a total of 30 statements on the Teacher Engagement Survey (see Appendix A) adapted from DecisionWise (2004). The Teacher Engagement Survey measures four subgroups. The Job subgroup has 13 statements, the Team subgroup has five statements, the Principal subgroup has five statements and the School District subgroup has seven statements. Participants indicated, on a five-point Likert scale (Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5) indicating their current perceptions of their engagement. The mean and standard deviation for each individual statement were calculated as well as for each subgroup and overall teacher engagement (see Tables 5-9).

The Job (Table 5) subgroup had the third highest mean out of the four subgroups in the Teacher Engagement Survey ($M = 4.26$, $SD = 0.77$). Eleven out of the thirteen statements had a mean above 4.00. The two statements that had a mean below 4.00 were, "The level of stress in my job is manageable" ($M = 3.51$, $SD = 0.91$) and "The amount of work I am expected to do is reasonable" ($M = 3.54$, $SD = 1.03$). These same two statements also had the lowest minimum score of 1.00. There were two other statements that were below the overall mean as well. They were "My work is valued by the school district" ($M = 4.04$, $SD = 0.75$) and "I have the freedom to choose how to best perform my job" ($M = 4.23$, $SD = 0.73$). The statement, "My job provides me with a

sense of meaning and purpose” had both the highest mean (4.72) and lowest standard deviation (0.45).

Table 5*Teachers' Responses to Teacher Engagement's Job Questions*

Job (n = 69)	Min.	Max.	M	SD
I have the tools and resources I need to do my job well.	2.00	5.00	4.30	0.73
I have received the training I need to do my job well.	2.00	5.00	4.30	0.67
The amount of work I am expected to do is reasonable.	1.00	5.00	3.54	1.03
I find enjoyment in my job.	3.00	5.00	4.52	0.53
My job provides me with a sense of meaning and purpose.	4.00	5.00	4.72	0.45
I have the freedom to choose how to best perform my job.	2.00	5.00	4.23	0.73
I feel challenged and stretched in my job in a way that results in personal growth.	3.00	5.00	4.33	0.67
The level of stress in my job is manageable.	1.00	5.00	3.51	0.91
My job is stimulating and energizing.	3.00	5.00	4.33	0.53
Most days, I see positive results because of my work.	3.00	5.00	4.36	0.51
It is easy to become absorbed in my job.	3.00	5.00	4.61	0.54
My work is valued by the school district.	2.00	5.00	4.04	0.75
Overall, I love my job.	4.00	5.00	4.52	0.50
Overall Job Subscale Score	1.00	5.00	4.26	0.77

Note. Strongly Agree = (5), Agree = (4), Neutral = (3), Disagree = (2), Strongly Disagree = (1)

The Team (Table 6) subgroup had the second highest overall mean ($M = 4.46$, $SD = 0.65$) of all the Teacher Engagement subgroups. All of the means of the individual statements had a mean greater than 4.00 and the difference between the lowest and highest mean is only 0.29. The statement with the highest mean is “There are people at work who care about me” ($M = 4.57$, $SD = 0.52$) and the statement with the lowest mean is “The people I work with take accountability for results” ($M = 4.28$, $SD = 0.68$).

Table 6*Teachers' Responses to Teacher Engagement's Team Questions*

Team (<i>n</i> = 69)	Min.	Max.	M	SD
I enjoy working with the people on my team.	2.00	5.00	4.45	0.65
There are people at work who care about me.	3.00	5.00	4.57	0.52
The people I work with take accountability for results.	2.00	5.00	4.28	0.68
The people I work with treat me with respect.	3.00	5.00	4.52	0.63
The people on my team collaborate and help each other.	2.00	5.00	4.48	0.69
Overall Team Subscale Score	2.00	5.00	4.46	0.65

Note. Strongly Agree = (5), Agree = (4), Neutral = (3), Disagree = (2), Strongly Disagree = (1)

The Principal (Table 7) subgroup had the highest overall mean ($M = 4.59$, $SD = 0.57$) of all the Teacher Engagement subgroups. Three statements had the highest mean of 4.68, “My principal treats people with fairness and respect” ($SD = 0.47$), “My principal creates a positive and energizing workplace” ($SD = 0.50$), and “I clearly understand what my principal expects of me” ($SD = 0.55$). The statement with the lowest mean is “My principal gives me ongoing feedback about my performance” ($M = 4.41$, $SD = 0.67$). The other statement, “My principal regularly recognizes my efforts and contributions” had a mean of 4.49 ($SD = 0.60$).

Table 7*Teachers' Responses to Teacher Engagement's Principal Questions*

Principal (n = 69)	Min.	Max.	M	SD
My principal regularly recognizes my efforts and contributions.	3.00	5.00	4.49	0.60
My principal treats people with fairness and respect.	4.00	5.00	4.68	0.47
My principal creates a positive and energizing workplace.	3.00	5.00	4.68	0.50
My principal gives me ongoing feedback about my performance.	3.00	5.00	4.41	0.67
I clearly understand what my principal expects of me.	3.00	5.00	4.68	0.55
Overall Principal Subscale Score	3.00	5.00	4.59	0.57

Note. Strongly Agree = (5), Agree = (4), Neutral = (3), Disagree = (2), Strongly Disagree = (1)

The subgroup, School District (Table 8), had the lowest overall mean of all the Teacher Engagement subgroups. The statement, “The vision and goals of my school district are important to me personally” had the highest mean of 4.61 (SD = 0.54). Close to the highest is, “I am confident that this school district has a successful future” (M = 4.55, SD = 0.60). Means for this subgroup range from 3.64 to 4.61. The statement, “This school district values employee input, feedback and suggestions” had both the lowest mean (M = 3.64, SD = 0.99) as well as the lowest minimum score of 1.00. The statement “This school district communicates well with all employees about what is going on” was close to the lowest scoring with a mean of 3.65 (SD = 0.65).

Table 8*Teachers' Responses to Teacher Engagement's School District Questions*

School District (n = 69)	Min.	Max.	M	SD
The vision and goals of my school district are important to me personally.	3.00	5.00	4.61	0.54
I am satisfied with the opportunities for my own professional growth in this school district.	2.00	5.00	3.97	0.92
I am confident that this school district has a successful future.	3.00	5.00	4.55	0.60
This school district values employee input, feedback and suggestions.	1.00	5.00	3.64	0.99
This school district cares about employees.	2.00	5.00	4.20	0.69
I would recommend this school district as a great place to work.	3.00	5.00	4.42	0.65
This school district communicates well with all employees about what is going on.	2.00	5.00	3.65	0.65
Overall School District Subscale Score	1.00	5.00	4.15	0.86

Note. Strongly Agree = (5), Agree = (4), Neutral = (3), Disagree = (2), Strongly Disagree = (1)

The highest score possible for each statement on the Teacher Engagement survey was five. The means from all four subgroups range from 4.15 to 4.59. These results indicate that the participants agree or strongly agree with the statements related to their engagement. The overall mean of 4.32 (SD = 0.76) was calculated by combining the scores of all questions in the survey. In addition, the median, mode, and standard error of mean were calculated for overall teacher engagement as well as for each subgroup (Table 9).

Table 9*Teacher Engagement Survey Descriptive Statistics*

Variable (n = 69)	Mean	Median	Mode	SD	SEM
Job	4.26	4.00	4.00	0.77	0.026
Team	4.46	5.00	5.00	0.65	0.035
Principal	4.59	5.00	5.00	0.57	0.031
School District	4.15	5.00	4.00	0.86	0.039
Overall Teacher Engagement Score	4.32	5.00	4.00	0.76	0.017

Note. Strongly Agree = (5), Agree = (4), Neutral = (3), Disagree = (2), Strongly Disagree = (1)

Research Question 3

How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?

To explore the relationship between teacher's engagement and their collective beliefs, a series of 15 Spearman's rank-order correlations (r_s) were calculated along with their statistical significance (p) (Table 10). These correlations included one for the overall collective teacher efficacy and teacher engagement along with correlations between the two collective teacher efficacy subgroups and four teacher engagement subgroups. All correlations were positive with the strongest correlation being the relationship of instructional strategies and engagement with their job (0.606) with the weakest correlation being the relationship between student discipline and their team (0.214).

Table 10

Collective Teacher Efficacy and Teacher Engagement Spearman Rank-Order Correlations and Statistical Significance

<i>n</i> = 69	Instructional Strategies		Student Discipline		Overall Collective Teacher Efficacy	
	<i>r_s</i>	<i>p</i>	<i>r_s</i>	<i>p</i>	<i>r_s</i>	<i>p</i>
Job	0.606	0.0016	0.350	<0.0001	0.535	<0.0001
Team	0.235	0.0390	0.214	0.0259	0.270	0.0126
Principal	0.434	0.0043	0.314	<0.0001	0.426	0.0001
School District	0.382	0.0006	0.380	0.0006	0.419	0.0001
Overall Teacher Engagement	0.587	0.0002	0.410	<0.0001	0.564	<0.0001

Note. r_s - Very Strong = (0.80-1.0), Strong = (0.60-0.79), Moderate = (0.40-0.59), Weak = (0.20-0.39), and Very Weak = (0.00-0.19)

Table 11 orders the different correlations based on their strength of relationship. The strength was determined by a Spearman's Correlation and ranked from strongest to weakest. The ranks can be described by their absolute value of r_s . Very Strong = 0.80-1.0, Strong = 0.60-0.79, Moderate = 0.40-0.59, Weak = 0.20-0.39, and Very Weak = 0.00-0.19.

The teacher engagement overall ranks towards the top with the relationship between both instructional strategies (0.585) and overall collective teacher efficacy (0.564). The relationship between overall engagement and student discipline has a moderate correlation (0.410).

The highest correlation that exists is between their job and instructional strategies (0.606). The job subgroup had a moderate relationship with the overall collective teacher efficacy (0.535). The correlation between their job and student discipline was lower and in the weak range (0.350). The lowest rankings exist between all relationships with team.

The lowest ranking is between the team and student discipline (0.214). The relationship between the team and instructional strategies is 0.235 while the relationship between the team and overall collective teacher efficacy is 0.270.

Relationships with the principal range from moderate to weak (0.314 to 0.434). The highest of the relationships were between the principal and instructional strategies. This was followed by the principal and the overall collective teacher efficacy (0.426) while the lowest was between the principal and student discipline.

The relationships with the school district also ranged from a moderate to weak

correlation. The highest correlation with the school district was with the overall collective teacher efficacy (0.419). The relationship with instructional strategies was 0.382 and student discipline was 0.380.

Table 11

Spearman's Rank-Order Collective Teacher Efficacy and Teacher Engagement Correlations Listed from Strongest to Weakest r_s

Collective Teacher Efficacy Survey	Teacher Engagement Survey	Spearman's Coefficient	Statistically Significant (<0.05*, <0.0001**)
Instructional Strategies	Job	$r_s = 0.606$	*
Instructional Strategies	Overall	$r_s = 0.585$	*
Overall	Overall	$r_s = 0.564$	**
Overall	Job	$r_s = 0.535$	**
Instructional Strategies	Principal	$r_s = 0.434$	*
Overall	Principal	$r_s = 0.426$	*
Overall	School District	$r_s = 0.419$	*
Student Discipline	Overall	$r_s = 0.410$	**
Instructional Strategies	School District	$r_s = 0.382$	*
Student Discipline	School District	$r_s = 0.380$	*
Student Discipline	Job	$r_s = 0.350$	**
Student Discipline	Principal	$r_s = 0.314$	**
Overall	Team	$r_s = 0.270$	*
Instructional Strategies	Team	$r_s = 0.235$	*
Student Discipline	Team	$r_s = 0.214$	*

Note. r_s - Very Strong = (0.80-1.0), Strong = (0.60-0.79), Moderate = (0.40-0.59), Weak = (0.20-0.39), and Very Weak = (0.00-0.19)

CHAPTER 5

CONCLUSIONS AND DISCUSSIONS

The purpose of this correlational research study was to discover to what degree a relationship exists between teacher engagement and collective teacher efficacy. This chapter includes a discussion of major findings as related to the literature on collective teacher efficacy and teacher engagement and what implications may be valuable to teachers, principals, and school districts. Also included is a discussion on connections to this study and Peter Senge's Fifth Discipline. This chapter concludes with a discussion of the limitations of the study, areas for future research, and a brief summary.

This chapter contains discussion and future research possibilities to help answer the research questions:

1. How positive are teachers' collective teacher efficacy beliefs?
2. How positive are teachers' engagement?
3. How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?

Participants also answered eight open-ended questions. The purpose of these questions was to provide insight on specific beliefs around the different roles of an individual, a team, a principal and a school district on collective teacher efficacy and teacher engagement. This data provides further understanding of what they believed to be the impact between the different subgroups within collective teacher efficacy and

teacher engagement. Participants' responses to these questions will be discussed in this chapter because of the quantitative results presented in Chapter 4.

Interpretation of the Findings

Research question #1 measured how positive teachers' collective teacher efficacy beliefs are. With an overall mean of 8.06, on a range of 1-9, this falls between teachers' ratings of "quite a bit" and a "great deal". In fact, there was only one response that fell below a rating of "some degree" (5.00). Therefore, this research suggests that collective teacher efficacy beliefs are positive.

Research question #2 measured how positive teachers' engagement is. Although there were individual responses of "disagree" and "strongly disagree" to some of the questions within the teacher engagement survey, the mean was still 4.32, on a range of 1-5. This means that the participants as a whole are between "agree" and "strongly agree" on teacher engagement. This implies that teachers' engagement is positive.

Research question #3, "How strong is the relationship between a teacher's engagement, measured by job, team, principal and school district, with their collective beliefs, measured through instructional strategies and classroom discipline?" was explored through a Spearman correlation. The open-ended questions asked of the participants also support this question. Findings show that different strengths of relationships exist ranging from strong to weak. Figure 2 displays these correlations by representing the strength of the relationship with the thickness of the line connecting the two subgroups.

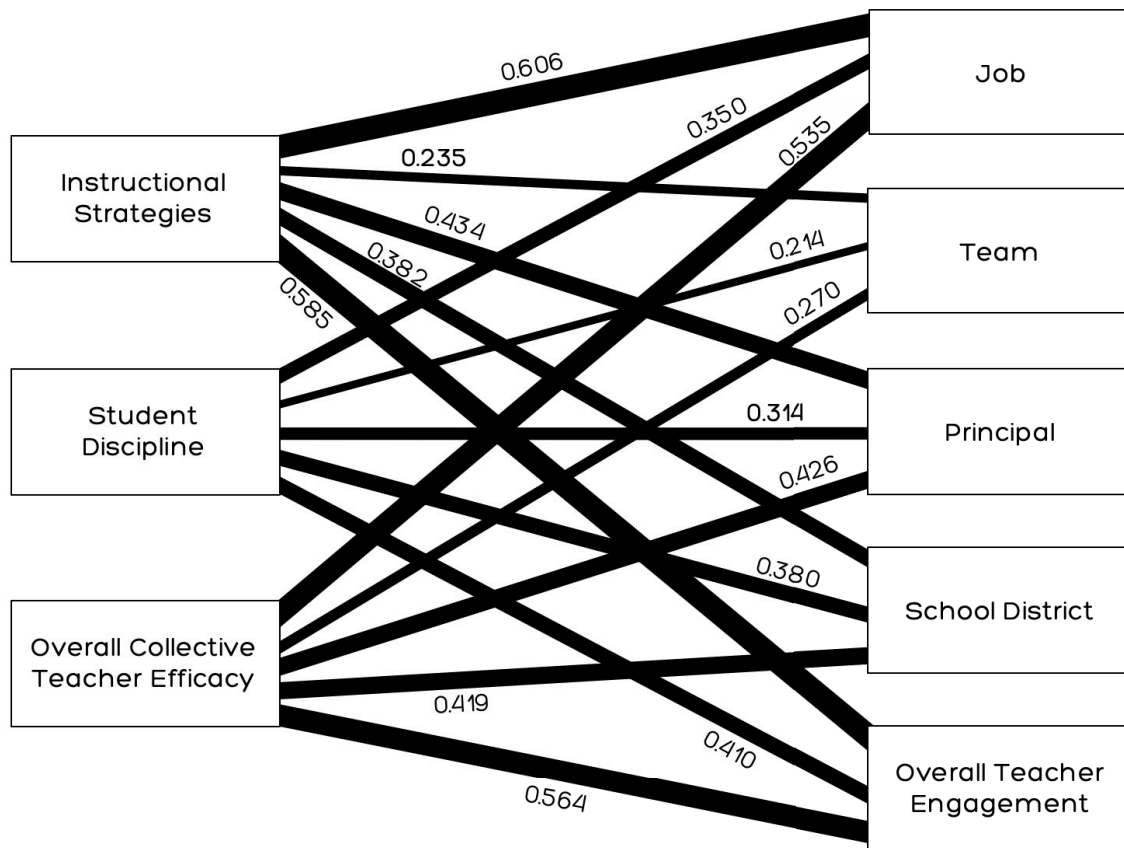


Figure 2. Collective Teacher Efficacy and Teacher Engagement Correlations

One way to interpret the data is to explore each subgroup within teacher engagement. The desired outcome of this study was to determine if it would be beneficial for a principal to focus on increasing teacher engagement to indirectly impact collective teacher efficacy. Therefore, looking at the subgroups; job, team, principal and school district, rather than the collective efficacy subgroups of instructional strategies and student discipline aligns with this purpose. Further interpretation about each subgroup including connections to literature is expanded on in the next several sections.

Job

“Management and leadership play a significant role in employee engagement, but it is equally important for employees to have enthusiasm for the work that they do” (Zahed-Babelan et al., 2019, p. 143). When asked about the role the participant believes they personally have in overall teacher engagement, common responses included; a “huge part”, “complete responsibility”, and “100%”. Several participants believe their positive attitude also affects their engagement. Although many believe that it is their responsibility to be engaged, other participants stated that outside sources, the environment, and support from others are also factors in their engagement.

When asked about the role teachers believe they personally have in building collective teacher efficacy, one participant stated, “I think we all have a role in building up those around us. If we encourage each other, teachers in general will be more effective. Students will gain. It is a win win.” Multiple participants believed teachers must work together, support each other, and support kids in their role of building collective efficacy. They also mentioned again the importance of a positive atmosphere and attitude.

Within the teacher engagement survey, the *Job* subgroup had the highest scoring statement, “My job provides me with a sense of meaning and purpose”. However, this subgroup also had a mean lower than the overall teacher engagement score. In comparison to the other subgroups, it also had the lowest median of 4.00. This could have occurred because of two specific statements on this survey scoring the lowest; “The amount of work I am expected to do is reasonable,” and “The level of

stress in my job is manageable". Although this subgroup had a lower score, it still showed a high correlation. In fact, the relationship between one's job and instructional strategies had the highest correlation overall. Furthermore, the correlation between one's job and the overall collective teacher efficacy had the fourth highest relationship. This finding may be indicative of how disengaged employees have higher levels of stress, decrease in job performance, and are less committed to their organization (Richman, 2006). Due to the fact that the relationship between an employees' job and instructional strategies resulted in the highest correlation, it is critical for a principal to monitor the stress and amount of work expected to ensure engagement can remain high.

In previous literature, a reciprocal or bi-directional relationship was found to exist between student achievement and collective teacher efficacy. This meant that when student achievement was high, collective teacher efficacy was also high and vice versa (Goddard et al., 2000; Hoogsteen, 2020). The results of this study indicate that there might be a similar type of relationship between teacher engagement and collective teacher efficacy. In this study, both collective teacher efficacy and teacher engagement were positive and a strong correlation exists between the two. Therefore, it can be concluded that collective teacher efficacy and teacher engagement have a bi-directional relationship. "The more employees feel they are building their own skill sets and feel competent and in control of their work product, the more likely they are to demonstrate high levels of engagement" (Wiley, 2010, p. 49).

As this study verified, engaged employees do find meaning in the work they do (Kahn, 1990). Overall, the participants in this study are highly engaged while at the same

time they believe their job provides them with a sense of meaning and purpose. One interesting finding is that the lowest scores on the collective teacher efficacy survey for instructional strategies was about how much the school can do to foster student creativity. In addition, participants ranked the statement, “I have the freedom to choose how to best perform my job” ranked below the overall mean for their job engagement. Both of these statements relate to the literature that states employees are more likely to experience meaningfulness when there is creativity in tasks and autonomy (Hackman & Oldham, 1980; Kahn, 1990). So, although participants are engaged overall and find meaning in their jobs, this might increase if chances for creativity and autonomy were increased. Teachers make decisions and take actions every day that can potentially affect their overall engagement and this study has confirmed the important correlation it has with collective teacher efficacy.

Team

The overall *Team* subscale measured high with a mean of 4.46 out of 5.00. Although the mean was high, the relationship the team has with overall collective teacher efficacy and its two subgroups received the three lowest correlation measurements. Therefore, this research implies that although teacher’s engagement with their team is high, the team does not have as strong of a relationship with collective teacher efficacy as compared to all other subgroups.

From the open-ended responses, teachers shared that they believe the role of the team, as it related to teacher engagement, should include inspiring, encouraging, and supporting each other. They also value working, planning, and collaborating

together. One teacher stated, "Positive brings out more positive. As each team works towards success for their students and school, it "catches" on. Each team striving to do their best for the education of the children in their care".

Similar thoughts were shared about the role a team has in building collective teacher efficacy. Teamwork and collaboration were referenced often. In addition, many commented about how important having a positive attitude is for working together and achieving results. One teacher wrote, "Teachers working together push each other to be better and do better". This encompasses so much of what collective teacher efficacy is. Out of all the open-ended questions, this question had the most responses about teachers being unsure about the role of the team in building collective efficacy. In addition, some stated that their team does not have direct impact or only some impact on building collective teacher efficacy. These comments, although only a few, align with the data from the correlation survey showing that the team has the least significant relationship than other subgroups.

The researcher thought that the consistent lower correlations may have occurred because of how team dynamics function in schools. Since there are a variety of teaching positions within a school, certain positions may naturally belong more to a team compared to others. The researcher separated the data into classroom and non-classroom responses and calculated a new correlation. The results were insignificant. Therefore, the researcher concluded that the combination of the participants' comments about their team's impact and the lower correlation shows the initial findings are accurate. Even though the correlation is weaker, there is still a correlation that exists

between teams and collective teacher efficacy. Individuals matter and the way these individuals interact together as a team still matters for school success.

Principal

The most positive subgroup within the teacher engagement survey was the *Principal*. “An employee who receives support, inspiration, and quality coaching from the supervisor is likely to experience work as more challenging, involving, and satisfying, and, consequently, to become highly engaged with the job tasks” (Bakker et al., 2011, p. 13). This quote aligns with the results of the teacher engagement survey. The overall principal subscale score was 4.59, which had the highest mean of all the subgroups. The means of the individual statements were very consistent ranging from 4.41-4.68 and there were no outlying answers.

The relationship between the principal and instructional strategies and the principal and overall collective teacher efficacy measured in the top half of all the relationships researched. Although the relationship isn't as strong as a teacher's job or the overall engagement, these two comparisons were higher than both the school district and team.

The results of this study would agree with the literature regarding the impact a principal has on teacher engagement (Abitabile, 2020; Blaschka, 2021; Kappel, 2018). Principals are the most referenced individuals that make a difference for employee engagement. Several responses describe what they believe the role of the principal to be in overall teacher engagement as they “set the tone”. Some participants stated the principal has a very big role and one person said they have the primary role of building

teacher engagement. They describe the principal as a role model that leads by example. They believe the principal should be encouraging, positive, and supporting of the staff. This belief aligns with the research on affective states, one of the sources of efficacy. A key to building teacher engagement is to consider the social-emotional wellbeing of teachers. The principal can recognize the efforts and contributions of their staff, treat people fairly, and create a positive and energizing school.

Teachers had similar beliefs about the role the principal plays in building collective teacher efficacy. Many agree that the principals have a very large and important role in building collective efficacy. They can do this by providing feedback and evaluation to the teachers to encourage growth. Communication was also mentioned as key to their role. "Leading people should not be a reward, it should be a responsibility that requires talent and training. And that training must include expertise in the most important part of any organization – its people" (Gallup Inc., n.d.).

School District

The *School District* did have the lowest mean compared to the other subgroups with a measure of 4.15. Although it had the lowest mean, the relationship that exists between the school district and the overall collective teacher efficacy as well as its two subgroups measured close to the middle in comparison to all other correlations. Two of the lowest scoring statements were, "The school district values employee input, feedback and suggestions" and "The school district communicates well with all employees about what is going on". These two statements scored almost a full point below the highest statement in this group. The researcher is part of the district surveyed

and from a staff survey conducted less than a year ago, similar questions also received a lower score. Therefore, the researcher believes these scores accurately reflect teachers' perceptions of their school district. According to the open-ended questions, some staff members responded with beliefs aligned to these statements. They believe that the school district's role is to value their employees, have opportunities for their voices to be heard, and to communicate with their staff. A few comments were also made about how the school district plays a large role in overall teacher engagement but not as much when compared to the principal.

There were similar responses about what teachers believe the role the school district has in building collective efficacy and teacher engagement. Similar to previous studies, the participants believe school districts should offer growth opportunities and professional development. "The more school leaders focus on instructional improvement, the more teachers collaborate to improve instruction and the greater their sense of collective efficacy" (Goddard et al., 2017, p. 223). Others feel that supporting the staff and appreciating the work they do can contribute to the collective teacher efficacy and teacher engagement of their employees. This study is also consistent with the belief that employee engagement is a critical component for the success of an organization (Macey & Schneider, 2008; Rich et al., 2010). For example, the results of this study show that employee engagement is positive while at the same time participants agreed that the school district has a successful future. As shown through this study and previous research, school districts lead the way and can

contribute to the overall teacher engagement and collective teacher efficacy in their schools.

In summary, common themes emerged from the open-ended questions about the role an individual, a team, a principal, and a school district play in building teacher engagement and collective teacher efficacy. These included working together, supporting each other, having a positive attitude and being encouraging. There are several characteristics that overlap between collective teacher efficacy and teacher engagement, so this is not surprising that these themes were evident throughout. This supports the idea that if a principal were to focus on improving teacher engagement then the chances are great that collective teacher efficacy would also improve.

Implications for Practice

The role of a principal is complex. They are faced with a multitude of responsibilities that indirectly impact the education of students in their building. They are expected to lead their staff while maintaining the day-to-day operations of running a school. The ultimate goal for principals is to ensure students are successful and have high levels of student achievement. Many factors contribute to this and principals must determine how best to spend their time, energy and resources.

Collective teacher efficacy has been proven to have a large effect size on student achievement. However, this is a broad construct and can be difficult for a principal to specifically focus on. The results from this survey prove that a strong relationship exists between teacher engagement and collective teacher efficacy. This means a principal could prioritize their time on improving teacher engagement, which could result in

higher levels of collective teacher efficacy. Principals can more easily take action steps to improve teacher engagement. The reward from this work could be increased collective teacher efficacy.

“Employee engagement is a matter of concern for leaders and managers in organizations across the globe; they recognize it as a vital element affecting organizational effectiveness” (Welch, 2011, p. 328). This study’s results emphasized a strong relationship between overall teacher engagement and overall collective efficacy. Based on these results, it would be worthwhile for a principal to dedicate time and resources to improve the engagement of their teachers. In addition, participants in this study believe the principal plays a huge role and sets the tone for teacher engagement. This section will discuss implications for principals, as well as teachers and school districts, by exploring how Peter Senge’s Fifth Discipline, collective teacher efficacy, and teacher engagement work together.

Systems Thinking

Systems thinking is fundamental for an organization. Within this discipline, individuals understand that their own actions have consequences. They are able to see how parts are connected within the big picture in any situation. Through a web of interdependence, individuals understand how things unfold which can provide insight on what organizations may do differently in the future. “Organizations need the ideas, self-expressions, questionings, and creativity that comes from empowering organization members and asking them to involve more of themselves in ways that help the organization reflect on itself and change accordingly” (Kahn, 1992, p. 1).

Examples exist in this study that relate to systems thinking. The collective teacher efficacy survey captures the big picture and how teachers as individuals are connected with each other. This study showed that the participants have an overall positive collective teacher efficacy belief with a mean of 8.06 (SD = 1.21). It is the belief that together they can solve problems, reach their goals and make a difference for students. For the question, "What role do you believe your school district has in building collective efficacy?", one participant responded with, "Collaborative conversations with teachers and administrators." This touches upon the importance of how in order for change to occur, school leaders could begin the dialogue and discussions.

A school district is instrumental in creating and leading an effective organization. A key component is communication. In order for others to understand how the big picture and all the parts are related, a school district should communicate frequently with principals, teachers, and district leaders. The scores from this survey show a lower mean of 3.65 (SD = 0.65) in comparison to others. They can also model solving problems together and striving to reach their goals. The principal can lead the staff in discussions about what they want for their school in five years. They can focus on the big picture while together creating a vision that will guide their decision making. Principals can help rally teachers around the vision to create a sense of community and commitment to the students and each other. This relates to the survey question about principals creating a positive and energizing work place (M = 4.68, SD = 0.50). Instead of being isolated in their classrooms, teachers can collaborate with others, ask questions to learn, and seek opportunities to be involved in district committees. Participants in this study scored

“The people on my team collaborate and help each other” with a mean of 4.48 (SD = 0.69). Everyone can work together to help each other see how the big picture and all the parts are connected.

Personal Mastery

Personal mastery can be described as an individual having a sense of purpose and a vision for their goals. They are often inquisitive and involve themselves in a larger creative process. When given the opportunity, they embrace forces and change. They are lifelong learners who are continually in learning mode (Senge, 2006). Similar characteristics exist between job engagement and personal mastery. One example is how engaged individuals have a job that provides them with a sense of meaning and purpose (M = 4.72, SD = 0.54). Another similarity is individuals feeling challenged and stretched in their job in a way that results in personal growth (M = 4.33, SD = 0.67). Participants also agreed it was easy to become absorbed in their job (M = 4.61, SD = 0.54).

This purpose, and these challenges and opportunities for growth open the door for personal mastery to exist. When individuals focus on their efforts and are committed to their goals, then their personal vision is deepened. When teachers engage in ongoing learning then the school could be positively impacted. “To seek personal fulfillment only outside of work and to ignore the significant portion of our lives which we spend working, would be to limit our opportunities to be happy and complete human beings” (Senge, 2006, pp. 128-129).

Teachers have a direct impact on their personal mastery. An important component to this would be for teachers to have a growth mindset. When they are open to learning new things, and trying new teaching strategies, then their mastery may increase. They could also seek out their own growth opportunities like taking graduate courses or reading instructional articles and books. Teachers are also encouraged to ask each other questions and participate in discussions with other educators.

To support the development of teachers' personal mastery, a principal can provide multiple opportunities for teachers to focus on learning and continual improvement. This could include offering professional development opportunities throughout the school year. Principals could provide these during a staff meeting by having other staff share what they are doing in their classrooms, reading a professional article, or bringing in an outside educator. They could also organize and lead book studies. Principals could provide ongoing feedback from walk-throughs and formal observations. In this study participants scored "My principal gives me on going feedback about performance" with a mean of 4.41 (SD = 0.67).

Similar to principals, school districts could also offer teachers opportunities for growth. This could help further their education while at the same time showing them they value their career growth. This study showed a mean of 3.97 (SD = 0.92) for "I am satisfied with the opportunities for my own professional growth in this school district." Also, offering initial training to new teachers can improve their mastery and offer support. Through all of these opportunities, teachers will have successes and failures. These mastery experiences can help an organization grow stronger in the future.

Collectively, teachers, principals, and school districts can help develop teachers' personal mastery.

Mental Models

Individuals have mental models that exist in their mind that can be unknown at times or resistant to change. Mental models are a basis of one's personal awareness. These mental models can cause assumptions to be made and interfere with solving problems. On the other hand, they could influence our decisions and actions positively. Although individuals have complete control over their mental models, this study shows there may be elements of teacher engagement and collective teacher efficacy that may impact it.

Mental models can be influenced by other people. The new perspectives and different views that coworkers share may encourage an individual to question their own set of beliefs. In schools, teachers often work with teams to collaborate and help each other. This not only impacts their engagement but could also alter their mental models. Collective teacher efficacy is based on the beliefs of what staff can do together. As teachers share their own beliefs and ideas around instructional strategies and student discipline, everyone can begin to challenge each other's thinking, support one another and encourage open conversations to more effectively make decisions. This study shows a positive correlation between collective teacher efficacy and teacher engagement ($r_s = 0.564$) which supports a plan to focus on these concepts to indirectly influence an individuals' mental models.

At times, these conversations can be tough and the success of them might be dependent on the relationship that exists. Teachers can work to build relationships with their co-workers so these conversations can be more meaningful and productive. Results from this study indicate a high team engagement among the participants ($M = 4.46$, $SD = 0.65$). As individuals, teachers need to not only share their thinking but also listen to what others have to say. By going into these conversations with an open-mind, teachers are more likely to adjust their mental models.

Principals are instrumental in creating a safe environment for teams to ask curious questions and challenge each other's thinking. They can model this by opening up about their own ideas and being influenced by others. They can reflect on how what they see and how they act influences their mental models. Additionally, a principal can dedicate time for teams to work together and share ideas. By allowing opportunities for teachers to hear other perspectives, they can reflect on their own mental models.

School districts can lead discussions with principals and teachers where they not only share their thinking and decisions but also ask others for their input. Teachers can begin to reflect on and alter their own mental models based on these discussions. School districts can also model this by truly reflecting on their own mental models during these conversations, and take principal's and teacher's thoughts into consideration. Participants in this study scored this similar idea the lowest in the statement, "This school district values employee input, feedback and suggestions" ($M = 3.64$, $SD = 0.99$). Change can be difficult for all, but with a safe environment and open minds, mental models can be influenced.

Shared Vision

“More people actively sharing in the vision not only bolsters their self-esteem and sense of worth, it also makes full use of everyone’s personal strengths, thus enhancing the strength of the collective as a whole” (Senge, 2006, p. 198). A shared vision starts with individual personal visions. Through a collective process, personal visions are expressed and a shared vision emerges. A shared vision includes the commitment that everyone has along with the guiding practices to achieve the goals. Individuals work together to create, discuss, and change the vision to best align with the common goal.

A key component of a shared vision is the collectiveness of the staff. It is evident in this study that the collective teacher efficacy is positive ($M = 8.06$) and has a strong relationship with the engagement in the school district ($r_s = 0.419$). The participants in this study agree that the vision and goals of their school district are important to them personally ($M = 4.61$, $SD = 0.54$). Furthermore, with a positive overall collective teacher efficacy score, this survey supports the value of a shared vision. “When people truly share a vision they are connected, bound together by a common aspiration. Personal visions derive their power from an individual’s deep caring for the vision” (Senge, 2006, p. 191).

“Collective teacher efficacy happens when teachers have influence over instructionally relevant school decisions.” (Goddard et al., 2004, p. 3). When given the opportunity, teachers should speak up to share their thoughts about school and district decisions. These are valued opportunities for their voices to be heard. With this being

said, it is important for staff to support and follow the decisions made to truly have a shared vision.

Both principals and school districts can seek input from teachers and engage them in making decisions for the school. They can set up structured opportunities for teachers to share their thoughts and opinions. They can also create an environment that values employee input, feedback and suggestions. This also aligns with the statement, “The school district values employee input, feedback and suggestions” ($M = 3.64$, $SD = 0.99$). When this is created then social persuasion, one of the sources of efficacy, happens. Teachers are working collaboratively to achieve goals through their shared vision (Loughland & Ryan, 2020). In order for a vision to truly be shared and lived out each day, it is critical that everyone works together and that all voices are continually heard.

Team Learning

Team learning is practically synonymous with “collective”. It involves individuals collaborating and learning things together. It requires effort from the entire team to collectively create combined power. Through team learning, individuals are sharing insights, knowledge and skills with one another. The process of thinking together leads to greater results than what an individual could have accomplished on their own. “They rally to get a critical mass behind decisions, doing the right thing, for the right reason, at the right time, while assessing the impact of their actions” (Donohoo & Katz, 2019, para. 3).

The literature emphasizes how powerful team learning can be for an organization. However, one interesting difference in this study is that a teacher's team has the lowest correlation to collective teacher efficacy ($r_s = 0.214$, $r_s = 0.235$, $r_s = 0.270$). In addition, multiple open-ended responses from the participants indicated they believed their team did not play much of a role in teacher engagement or building collective efficacy. Regardless of these findings, team engagement still has a positive correlation with collective teacher efficacy.

Teachers should be aware of their emotions and attitudes as these could contribute or interfere with team learning. As one participant stated, "I believe the attitude of one can affect all." They should also work to build trusting, supportive, and caring relationships with their teammates. For the majority of participants in this study they believe people at work care about them ($M = 4.57$, $SD = 0.52$). This mutual trust combined with respect for individual's strengths and talents help establish and maintain a strong team. The participants also believe the people they work with treat them with respect ($M = 4.52$, $SD = 0.63$). In addition, teachers can also hold each other accountable for student learning ($M = 4.28$, $SD = 0.68$), collaborate to meet their goals ($M = 4.48$, $SD = 0.69$), and encourage each other to do their best.

To encourage team learning, principals could create a supporting environment where teachers feel safe to discuss student achievement freely. Similarly, principals can set up a platform for teachers to have open debate. They could be given the opportunity to learn different perspectives and engage in reflective and inquiry conversations. In

addition, principals can set up opportunities for vicarious experiences to occur like teachers observing other teachers and teachers modeling their own teaching practices.

School districts should start by creating a culture of teamwork. They can model team learning by all district administrators reflecting and learning together. They can provide support to principals as they work to set up successful team learning in their schools. It is also crucial that they clearly define the district's mission and purpose so teams can work together on the same vision. Teachers, principals and school districts thinking together and learning together can lead to accomplishments greater than an individual can on their own.

Limitations

This survey was collected in August of 2021, at the beginning of the school year. Collective teacher efficacy is always changing, so this survey is capturing only one point in time and may have resulted in different responses based on the timing of the survey. The beginning of the school year is also an extra busy time of year for teachers which could have impacted their feelings about the survey questions. Also, teachers are still faced with challenges from the COVID-19 pandemic. This may have affected their overall perceptions of both collective teacher efficacy and teacher engagement.

This was a quantitative research study involving the perceptions of the participants. An assumption is made that all participants responded honestly to all items in each instrument, but this may not provide results that are as reliable compared to those from surveys not utilizing perceptions. In addition, these perceptions may not

have been as accurately captured through the digital survey as compared to an interview with the participants.

Recommendations for Future Research

Several areas for future research on the relationship between collective teacher efficacy and teacher engagement could add findings to this study. Overall, this survey measured both collective teacher efficacy and teacher engagement as positive. It would be beneficial to expand this survey to other districts to see if different levels of positivity affect the correlations between the subgroups.

This study found that the relationship between a teacher's engagement with their job and instructional strategies was highest. Additional research could be done to determine the specific day-to-day parts of their job that contribute to their engagement. This could provide helpful information on practical implications in a school.

A qualitative study could be developed to gain a deeper understanding of teachers' beliefs on what specific actions principals take to engage staff and build collective teacher efficacy. Perhaps the actions would provide additional insight that would complement the description of the role they believe they have.

A study that looked closer into the perceptions of principals could be compared to this study for further findings. Through an interview, principals could share about their specific actions they take which they believe to have a positive impact on collective teacher efficacy and teacher engagement. This information could be further analyzed to see how it related to teacher's beliefs.

Conclusion

In conclusion, the results of this study suggest that there are varying degrees of strength in the relationships among the different subgroups of collective teacher efficacy and teacher engagement. Rising to the top is the relationship of a teacher's job and the collective beliefs around instructional strategies. Not far behind is the relationship of the overall teacher engagement and overall collective teacher efficacy. Perhaps this is the most significant finding from this study because it addresses the overarching problems this study was based on.

Due to the high effect size that collective teacher efficacy has on student achievement, it is essential to find ways to increase collective teacher efficacy. "Once the collective efficacy of a school is established, whether it enhances student learning or obstructs it, it becomes a stable component of the culture that requires substantial effort to change" (Tschannen-Moran & Barr, 2004, p. 191). This details, in part, the complexities associated with improving collective teacher efficacy.

In addition to these intricacies, principals are trying to lead schools and make a difference for students and staff while potentially being faced with a high number of disengaged staff. It poses a challenge to collectively come together for a common purpose and make a difference if staff members are not engaged. This study was designed to address these problems and find solutions for principals.

A key takeaway from this study is the simple fact that if a principal were to focus on building the overall teacher engagement of their staff, then there is a likelihood of increased collective teacher efficacy. There is a strong relationship. A relationship that

teachers, principals and school districts can use to determine how they can spend their time to make the biggest impact for students. “You can do what I cannot do. I can do what you cannot do. Together we can do great things” (Hennessey, 2015, para. 15).

References

- Abitabile, A. (2020, January 1). *Making teachers stick: January 2020*. NASSP.
<https://www.nassp.org/publication/principal-leadership/volume-20/principal-leadership-january-2020/making-teachers-stick-january-2020/>
- Alderfer, C. P. (1972). *Existence, relatedness, and growth: Human needs in organizational settings*. n.p.
- Al-Fudail, M., & Mellar, H. (2008). Investigating teacher stress when using technology. *Computers & Education, 51*(3), 1103–1110.
<https://doi.org/10.1016/j.compedu.2007.11.004>
- Ashforth, B. E., & Humphrey, R. H. (1995). Emotion in the workplace: A reappraisal. *Human Relations, 48*(2), 97–125. <https://doi.org/10.1177/001872679504800201>
- Bakker, A. (2009). Building engagement in the workplace. In C. Cooper & R. Burke (Eds.), *The peak performing organization* (Vol. 3, pp. 50–72). Routledge.
<https://doi.org/10.4324/9780203971611.ch3>
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology, 20*(1), 4–28. <https://doi.org/10.1080/1359432X.2010.485352>
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology, 83*(1), 189–206. <https://doi.org/10.1348/096317909X402596>

- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328.
<https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., Westman, M., & Hetty van Emmerik, I. J. (2009). Advancements in crossover theory. *Journal of Managerial Psychology, 24*(3), 206–219.
<https://doi.org/10.1108/02683940910939304>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*, 117–148. Education Source.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*(3), 75–78. <https://doi.org/10.1111/1467-8721.00064>
- Bates, S. (2004, February 1). *Getting engaged*. SHRM. <https://www.shrm.org/hr-today/news/hr-magazine/pages/0204covstory.aspx>
- Baumruk, R. (2004). The missing link: The role of employee engagement in business success. *Workspan, 47*, 48–52.
- Beal, D. J., Barros, E., Macdermid, S., Beal, D. J., Weiss, H. M., Barros, E., & Macdermid, S. M. (2005). An episodic process model of affective influences on performance. *Journal of Applied Psychology, 90*(6), 1054–1068. <https://doi.org/10.1037/0021-9010.90.6.1054>
- Blaschka, A. (2021, March 6). *9 ways leaders can increase productivity, customer satisfaction, and employee engagement*. Forbes.

<https://www.forbes.com/sites/amyblaschka/2021/03/06/9-ways-leaders-can-increase-productivity-customer-satisfaction-and-employee-engagement/>

Bliss, J., & Finneran, R. (1991, April). *Effects of school climate and teacher efficacy on teacher stress*. American Educational Research Association, Chicago.

Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology, 28*(2), 195–209.

<https://doi.org/10.1080/01443410701491858>

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>

Cole, M. S., Walter, F., Bedeian, A. G., & O'Boyle, E. H. (2012). Job burnout and employee engagement: A meta-analytic examination of construct proliferation. *Journal of Management, 38*(5), 1550–1581.

<https://doi.org/10.1177/0149206311415252>

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology, 95*(5), 834–848.

<https://doi.org/10.1037/a0019364>

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). SAGE Publications.

Danielson, C. (2014). *The framework for teaching: Evaluation instrument*.

- DeWitt, P. (2019). How collective teacher efficacy develops: The path to developing empowered team dynamics can be just as important as the destination. *Educational Leadership*, 76(9), 31–35. Education Source.
- Donohoo, J. (2017). *Collective efficacy: How educators' beliefs impact student learning*. Corwin.
- Donohoo, J., Hattie, J., & Eells, R. (2018). The power of collective efficacy. *Educational Leadership*, 75(6), 40–44. Education Source.
- Donohoo, J., & Katz, S. (2019, July 1). *What Drives Collective Efficacy?* ASCD.
<http://www.ascd.org/publications/educational-leadership/jul19/vol76/num09/What-Drives-Collective-Efficacy%C2%A2.aspx>
- Eacott, S. (2017). School leadership and the cult of the guru: The neo-Taylorism of Hattie. *School Leadership & Management*, 37(4), 413–426.
<https://doi.org/10.1080/13632434.2017.1327428>
- Ellis, C., & Sorensen, A. (2007). Assessing employee engagement: The key to improving productivity. *Perspectives*, 15(1).
- Endres, G. M., & Mancheno-Smoak, L. (2008). The human resource craze: Human performance improvement and employee engagement. *Strategic Direction*, 24(8). <https://doi.org/10.1108/sd.2008.05624had.007>
- Gallup. (n.d.). *What is employee engagement and how do you improve it?* Gallup.
<https://www.gallup.com/workplace/285674/improve-employee-engagement-workplace.aspx#:~:text=Gallup%20defines%20engaged%20employees%20as,to%20their%20work%20and%20workplace.>

- Gallup Inc. (n.d.). *How to improve teamwork in the workplace*. Gallup.Com.
<https://www.gallup.com/cliftonstrengths/en/278225/how-to-improve-teamwork.aspx>
- Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education, 23*(5), 624–640.
<https://doi.org/10.1016/j.tate.2007.02.006>
- Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of schools and student achievement. *Journal of Educational Psychology, 93*(3), 467–476.
<https://doi.org/10.1037/0022-0663.93.3.467>
- Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education, 17*(7), 807–818. [https://doi.org/10.1016/S0742-051X\(01\)00032-4](https://doi.org/10.1016/S0742-051X(01)00032-4)
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37*(2), 479–507. <https://doi.org/10.3102/00028312037002479>
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2004). Collective Efficacy Beliefs: Theoretical Developments, Empirical Evidence, and Future Directions. *Educational Researcher, 33*(3), 3–13. <https://doi.org/10.3102/0013189X033003003>
- Goddard, R. D., & Skrla, L. (2006). The influence of school social composition on teachers' collective efficacy beliefs. *Educational Administration Quarterly, 42*(2), 216–235. <https://doi.org/10.1177/0013161X05285984>

- Goddard, R. D., Skrla, L., & Salloum, S. J. (2017). The role of collective efficacy in closing student achievement gaps: A mixed methods study of school leadership for excellence and equity. *Journal of Education for Students Placed at Risk (JESPAR)*, 22(4), 220–236. <https://doi.org/10.1080/10824669.2017.1348900>
- Goffman, E. (2013). *Encounters: Two studies in the sociology of interaction*. Martino Fine Books.
- Goleman, D. (n.d.). *Your emotions at work are contagious*. Korn Ferry. <https://www.kornferry.com/insights/articles/emotional-intelligence-emotions-contagious>
- Gravetter, F. J., Wallnau, L. B., Forzano, L.-A. B., & Witnauer, J. E. (2021). *Essentials of statistics for the behavioral sciences* (10th ed.). Cengage Learning.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Addison-Wesley.
- Halbesleben, J. R. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), 242–256. <https://doi.org/10.1080/02678370802383962>
- Hall, D. T., & Richter, J. (1988). Balancing work life and home life: What can organizations do to help? *Academy of Management Perspectives*, 2(3), 213–223. <https://doi.org/10.5465/ame.1988.4277258>
- Harter, J. (2020, July 2). *Historic drop in employee engagement follows record rise*. Gallup.Com. <https://www.gallup.com/workplace/313313/historic-drop-employee-engagement-follows-record-rise.aspx>

Hattie, J. (2017, December). *Hattie ranking: 252 influences and effect sizes related to student achievement*. Visible Learning. <https://visible-learning.org/hattie-ranking-influences-effect-sizes-learning-achievement/>

Hattie, J., & Smith, R. (2020). *10 mindframes for leaders: The visible learning (r) approach to school success*. Corwin.

Hennessey, R. (2015, December 21). *5 things Mother Teresa never said that can nevertheless inspire the hell out of you*. Entrepreneur. <https://www.entrepreneur.com/article/254232>

Hochschild, A. R. (2012). *The managed heart: Commercialization of human feeling* (3rd ed.). University of California Press.

Hodges, T. (2015, February 26). *Six things the most engaged schools do differently*. Gallup.Com. <https://www.gallup.com/education/231743/six-things-engaged-schools-differently.aspx>

Hoogsteen, T. J. (2020). Collective efficacy: Toward a new narrative of its development and role in achievement. *Palgrave Communications*, 6(1), 1–7. <https://doi.org/10.1057/s41599-019-0381-z>

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1), 88–115. <https://doi.org/10.1287/orsc.2.1.88>

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review*

of Educational Research, 79(1), 491–525.

<https://doi.org/10.3102/0034654308325693>

Jouany, V., & Makipaa, M. (2021, January 4). *8 employee engagement statistics you need to know in 2021 [Infographic]*. Smarp. <https://blog.smarp.com/employee-engagement-8-statistics-you-need-to-know>

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
<https://doi.org/10.2307/256287>

Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321.

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67(3), 341–349. <https://doi.org/10.1037/0021-9010.67.3.341>

Kappel, M. (2018, January 4). *How to establish a culture of employee engagement*. Forbes. <https://www.forbes.com/sites/mikekappel/2018/01/04/how-to-establish-a-culture-of-employee-engagement/>

Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, 23(1), 21–43. <https://doi.org/10.1007/s10648-010-9141-8>

Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research*, 1(2), 33–52. <https://doi.org/10.14786/flr.v1i2.44>

- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27–35. <https://doi.org/10.1080/00131910120033628>
- Lash, J. P. (1997). *Helen and teacher: The story of Helen Keller and Anne Sullivan Macy*. AFB Press.
- Learning Science Marzano Center. (2013). *Developing a passion for professional teaching: The Marzano Teacher Evaluation Model*. Learning Science International. <https://www.learningsciences.com/wp-content/uploads/2020/06/The-Marzano-Teacher-Evaluation-Model.pdf>
- Lent, R. W., Lopez, F. G., & Bieschke, K. J. (1991). Mathematics self-efficacy: Sources and relation to science-based career choice. *Journal of Counseling Psychology*, 38(4), 424–430. <https://doi.org/10.1037/0022-0167.38.4.424>
- Lopez, F. G., & Lent, R. W. (1992). Sources of mathematics self-efficacy in high school students. *The Career Development Quarterly*, 41(1), 3–12. <https://doi.org/10.1002/j.2161-0045.1992.tb00350.x>
- Loughland, T., & Ryan, M. (2020). Beyond the measures: The antecedents of teacher collective efficacy in professional learning. *Professional Development in Education*, 0(0), 1–10. <https://doi.org/10.1080/19415257.2020.1711801>
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford University Press.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>

- Maddux, J. E., & Gosselin, J. T. (2012). Self-efficacy. In *Handbook of self and identity, 2nd ed.* (pp. 198–224). The Guilford Press.
- Markos, S., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International Journal of Business and Management, 5*(12).
<https://doi.org/10.5539/ijbm.v5n12p89>
- Marzano, R. J. (2003). *What works in schools: Translating research into action.*
<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=103644>
- Marzano, R. J., Marzano, J. S., & Pickering, D. (2003). *Classroom management that works: Research-based strategies for every teacher.* Association for Supervision and Curriculum Development.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*(1), 11–37.
<https://doi.org/10.1348/096317904322915892>
- Mosoge, M. J., Challens, B. H., & Xaba, M. I. (2018). Perceived collective teacher efficacy in low performing schools. *South African Journal of Education, 38*(2).
<https://doi.org/10.15700/saje.v38n2a1153>
- Newman, D. A., & Harrison, D. A. (2008). Been There, Bottled That: Are State and Behavioral Work Engagement New and Useful Construct “Wines”? *Industrial and Organizational Psychology, 1*(1), 31–35. <https://doi.org/10.1111/j.1754-9434.2007.00003.x>

- Nobile, J. J. D., & McCormick, J. (2007). Job satisfaction and occupational stress in Catholic primary schools: Implications for school leadership. *Leading and Managing, 13*(1), 31–48.
- Opper, I. M. (2019). Teachers matter: Understanding teachers' impact on student achievement. *RAND Cooperation*.
https://www.rand.org/pubs/research_reports/RR4312.html
- Oppong, T. (2019, January 3). *Here's why you should see happiness as an inside job*. Thrive Global. <https://thriveglobal.com/stories/happiness-inside-job-advice-life/>
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 365–386). Springer US.
https://doi.org/10.1007/978-1-4614-2018-7_17
- Pierce, S. (2019, October). *The importance of building collective teacher efficacy*. Leadership Magazine. <https://leadership.acsa.org/building-teacher-efficacy>
- Protheroe, N. (2008). What is it and does it matter? *Principal, 42*–45.
- Rafferty, A., Maben, J., & West, E. (2005). What makes a good employer? *International Council of Nurses, 3*.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*(3), 617–635.
<https://doi.org/10.5465/amj.2010.51468988>

- Richman, A. (2006). Everyone wants an engaged workforce, how do you create it? *Workspan*, 49(1), 36–39.
- Rimm-Kaufman, S., & Hamre, B. (2010). The role of psychological and developmental science in efforts to improve teacher quality. *Teachers College Record*, 112, 2988–3023.
- Robinson, D., Perryman, S., & Hayday, S. (2004). The drivers of employee engagement. *Institute for Employee Studies*, 1–87.
- Ross, J. A., Hogaboam-Gray, A., & Gray, P. (2004). Prior student achievement, collaborative school processes, and collective teacher efficacy. *Leadership and Policy in Schools*, 3(3), 163–188. <https://doi.org/10.1080/15700760490503689>
- Russell, S. S., Spitzmüller, C., Lin, L. F., Stanton, J. M., Smith, P. C., & Ironson, G. H. (2004). Shorter can also be better: The abridged job in general scale. *Educational and Psychological Measurement*, 64(5), 878–893. <https://doi.org/10.1177/0013164404264841>
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>
- Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155–182. <https://doi.org/10.1002/hrdq.21187>

- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology, 20*(1), 39–46. <https://doi.org/10.1080/1359432X.2010.515981>
- Scholastic, & Bill and Melinda Gates Foundation. (2012). *Primary Sources 2012: America's teachers on the teaching profession*. https://www.scholastic.com/primarysources/pdfs/Gates2012_full.pdf
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (2nd ed.). Random House Business.
- Shuck, B., Ghosh, R., Zigarmi, D., & Nimon, K. (2013). The jingle jangle of employee engagement: Further exploration of the emerging construct and implications for workplace learning and performance. *Human Resource Development Review, 12*(1), 11–35. <https://doi.org/10.1177/1534484312463921>
- Song, J. H., Chai, D. S., Kim, J., & Bae, S. H. (2018). Job performance in the learning organization: The mediating impacts of self-efficacy and work engagement. *Performance Improvement Quarterly, 30*(4), 249–271. Education Source.

- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *The Journal of Applied Psychology, 88*, 518–528. <https://doi.org/10.1037/0021-9010.88.3.518>
- Staiger, D. O., & Rockoff, J. E. (2010). Searching for effective teachers with imperfect information. *Journal of Economic Perspectives, 24*(3), 97–118. <https://doi.org/10.1257/jep.24.3.97>
- Thomas, N., Clarke, V., & Lavery, J. (2003). Self-reported work and family stress of female primary teachers. *Australian Journal of Education, 47*(1), 73–87. <https://doi.org/10.1177/000494410304700106>
- Toddlytic Team. (2017, April 24). Why happy teachers make smarter students. *Toddlytic*. <https://www.toddlytic.com/happy-teachers-make-smarter-students/>
- Tschannen-Moran, M. (2004). *Research Tools*. Megan Tschannen-Moran's Web Site. <https://wmpeople.wm.edu/site/page/mxtsch/researchtools>
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership & Policy in Schools, 3*(3), 189–209. Education Source.
- Vroom, V. H. (1994). *Work and motivation*. Jossey-Bass.
- Weiqi, C. (2007). The structure of secondary school teacher job satisfaction and its relationship with attrition and work enthusiasm. *Chinese Education & Society, 40*(5), 17–31. <https://doi.org/10.2753/CED1061-1932400503>
- Weiss, E. M. (1999). Perceived workplace conditions and first-year teachers' morale, career choice commitment, and planned retention: A secondary analysis.

Teaching and Teacher Education, 15(8), 861–879.

[https://doi.org/10.1016/S0742-051X\(99\)00040-2](https://doi.org/10.1016/S0742-051X(99)00040-2)

Welch, M. (2011). The evolution of the employee engagement concept: Communication implications. *Corporate Communications: An International Journal*, 16(4), 328–346. <https://doi.org/10.1108/135632811111186968>

Wiley, J. W. (2010). The impact of effective leadership on employee engagement.

Employment Relations Today, 37(2), 47–52. <https://doi.org/10.1002/ert.20297>

Zahed-Babelan, A., Koulaei, G., Moeinikia, M., & Sharif, A. R. (2019). Instructional leadership effects on teachers' work engagement: Roles of school culture, empowerment, and job characteristics. *CEPS Journal*, 9(3), 137–156. Education Source.

Appendix A

Teacher Engagement Survey

My Job	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
I have the tools and resources I need to do my job well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have received the training I need to do my job well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of work I am expected to do is reasonable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find enjoyment in my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job provides me with a sense of meaning and purpose.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the freedom to choose how to best perform my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel challenged and stretched in my job in a way that results in personal growth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The level of stress in my job is manageable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job is stimulating and energizing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most days, I see positive results because of my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy to become absorbed in my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is valued by the school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I love my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My Team					
My Team	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
I enjoy working with the people on my team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are people at work who care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people I work with take accountability for results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people I work with treat me with respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people on my team collaborate and help each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My Principal					
My Principal	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
My principal regularly recognizes my efforts and contributions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My principal treats people with fairness and respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My principal creates a positive and energizing workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My principal gives me ongoing feedback about my performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I clearly understand what my principal expects of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My School District					
My School District	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
The vision and goals of my school district are important to me personally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the opportunities for my own professional growth in this school district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that this school district has a successful future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This school district values employee input, feedback and suggestions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This school district cares about employees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend this school district as a great place to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This school district communicates well with all employees about what is going on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B

Collective Teacher Beliefs

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the *current* ability, resources, and opportunity of the teaching staff in your school to do each of the following.

	None at all	Very Little	Some Degree	Quite A Bit	A Great Deal				
1. How much can teachers in your school do to produce meaningful student learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can your school do to get students to believe they can do well in schoolwork?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. To what extent can teachers in your school make expectations clear about appropriate student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. To what extent can school personnel in your school establish rules and procedures that facilitate learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. How much can teachers in your school do to help students master complex content?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can teachers in your school do to promote deep understanding of academic concepts?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can teachers in your school respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How much can school personnel in your school do to control disruptive behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can teachers in your school do to help students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How well can adults in your school get students to follow school rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. How much can your school do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can your school do to help students feel safe while they are at school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

For office use only.

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

Appendix C

Open-Ended Questions

What role do you believe you personally have in...

your overall employee engagement?

building collective efficacy?

What role do you believe your team has in...

your overall employee engagement?

building collective efficacy?

What role do you believe your principal has in...

your overall employee engagement?

building collective efficacy?

What role do you believe your school district has in...

your overall employee engagement?

building collective efficacy?

Demographic Questions

How many years have you been an educator? 1-3 years, 4-10 years, 10+ years

How many years have you been teaching in your current school? 1-3 years, 4-10 years,
10+ years

Are you a classroom or non-classroom teacher?

ProQuest Number: 28773069

INFORMATION TO ALL USERS

The quality and completeness of this reproduction is dependent on the quality and completeness of the copy made available to ProQuest.



Distributed by ProQuest LLC (2022).

Copyright of the Dissertation is held by the Author unless otherwise noted.

This work may be used in accordance with the terms of the Creative Commons license or other rights statement, as indicated in the copyright statement or in the metadata associated with this work. Unless otherwise specified in the copyright statement or the metadata, all rights are reserved by the copyright holder.

This work is protected against unauthorized copying under Title 17, United States Code and other applicable copyright laws.

Microform Edition where available © ProQuest LLC. No reproduction or digitization of the Microform Edition is authorized without permission of ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346 USA