

Copyright
by
Christian Stevenson Winn
2018

THE RELATIONSHIP BETWEEN TEACHER SELF-EFFICACY
AND PRINCIPAL LEADERSHIP BEHAVIORS

by

Christian Stevenson Winn, M.Ed.

DISSERTATION

Presented to the Faculty of
The University of Houston-Clear Lake

In Partial Fulfillment

Of the Requirements

For the Degree

DOCTOR OF EDUCATION

in Educational Leadership

THE UNIVERSITY OF HOUSTON-CLEAR LAKE

DECEMBER, 2018

THE RELATIONSHIP BETWEEN TEACHER SELF-EFFICACY
AND PRINCIPAL LEADERSHIP BEHAVIORS

by

Christian Stevenson Winn

APPROVED BY

Renée Lastrapes, PhD, Co-Chair

Thomas Cothern, EdD, Co-Chair

Antonio Corrales, EdD, Committee Member

Eric Tingle, EdD, Committee Member

RECEIVED BY THE SCHOOL OF EDUCATION:

Joan Y. Pedro, PhD, Associate Dean

Mark D. Shermis, PhD, Dean

Dedication

This is dedicated to my loving family and closest friends.

“Commit to the Lord whatever you do, and your plan will succeed.”

Proverbs 16:3

Acknowledgments

I am truly grateful to my family for supporting and encouraging me through this endeavor. The daily reminders, understanding of the time commitment, a few extra minutes of sleep when needed, and most importantly, the delicious meals when I had no time to cook are all so greatly appreciated. Odell, you are the best . . . I mean it! Ava and Odie, I couldn't ask for better children. You make my life so sweet and complete, and I thank God for you every day. The words "thank you" seem so inadequate for all you've done to help me push through the tough times.

To the UHCL staff, especially Dr. Schumacher, thank you for your direction. From the moment we met, there was something special about you. Your quick wit and encouragement would get anyone over a hurdle. Thank you for always answering my calls! I am deeply indebted to Dr. Renée Lastrapes for not only serving as my methodologist, but later accepting my call to step up as my co-chair. You never ceased to answer questions and assist however I have needed you to. You are the best! Dr. Thomas Cothorn, you too, moved from committee member to co-chair and you were always there to provide an encouraging word and guidance when I was in doubt. To Dr. Eric Tingle, you always made time to provide support and openly shared your reflections from this journey, which you took just a few years ago. I appreciate you many times over for the encouragement to keep going.

Lastly, David Muzyka and Donald Lam, you make T.H. Rogers worth coming to every single day. We've shared so many laughs and fun times! To my other T.H. Rogers family, I owe you all a huge hug for being understanding and giving me extra passes when I was tired, late, or just needed someone to pat me on the back to keep going. You guys are a big part of my life and I consider you a tremendous blessing from God.

ABSTRACT

THE RELATIONSHIP BETWEEN TEACHER SELF-EFFICACY
AND PRINCIPAL LEADERSHIP BEHAVIORS

Christian Stevenson Winn
University of Houston-Clear Lake, 2018

Dissertation Co-Chair: Thomas Cothorn, EdD
Co-Chair: Renée Lastrapes, PhD

More than 30 years ago, the concept of teacher efficacy, teachers' confidence and belief in their ability to promote students' learning (Protheroe, 2008), was first discussed as an imperative in educational outcomes. The impact of school leadership on teacher efficacy was soon discovered as a component to overall teacher effectiveness (Gallante, 2015). While many studies of each factor have been conducted in isolation, few studies have directly examined the relationship between teacher efficacy and principal leadership behaviors (Blase & Blase, 1999). The purpose of this study was to examine the relationship between principals' leadership practices and teachers' efficacy. In this mixed-methods study, 144 teacher participants from schools located in an urban school district responded to a 36-item survey instrument and participated in an interview to measure and assess teacher effectiveness and efficacy, as well as the leadership behaviors of their principals. The survey instrument administered to teachers included the Teacher Sense of Efficacy

Scale—Short Form (Tschannen-Moran & Woolfolk-Hoy, 2001) combined with the Principal Leadership Questionnaire (Jantzi & Leithwood, 1996). Teacher participants completed this questionnaire to measure their respective principals' leadership behaviors.

Results revealed a statistically significant relationship between the teachers' efficacy and principals' leadership behaviors. These findings offer new insights to teachers, principals and other school leaders. Additionally, those who support principals will also gain new leadership practices to positively impact teacher efficacy.

TABLE OF CONTENTS

List of Tables	xi
Chapter	Page
CHAPTER I: INTRODUCTION.....	1
Research Problem	2
Significance of the Study	5
Research Purpose and Questions	6
Definition of Key Terms	6
Conclusion	10
CHAPTER II: REVIEW OF LITERATURE	11
Teacher Quality.....	11
Characteristics of Effective Teachers	12
Measuring Teacher Effectiveness	14
Effective Leadership	15
The Principal’s Role	16
The Principal and School Culture	20
Teacher Support and Development.....	21
The Nature of Self-efficacy	22
Sources of Efficacy	23
Development of Efficacy	25
Teacher Self-efficacy and Experience	25
Teacher Self-efficacy and the Teaching Context.....	27
Collective Efficacy and Sense of Community	28
Factors That Diminish Efficacy	30
Self-efficacy Theory Applied to Teaching	31
Teacher Perceptions of Principal Leadership Behaviors	33
Measuring Beliefs and Behaviors	35
Teacher Self-efficacy	35
Leadership Inventories.....	37
Summary of Findings.....	39
Theoretical Framework.....	39
Conclusion	41
CHAPTER III: METHODOLOGY	42
Overview of the Research Problem	42
Operationalization of Theoretical Constructs	43
Research Purpose, Questions, and Hypotheses.....	44

Research Design.....	45
Population and Sample	46
Instrumentation	46
Teachers' Sense of Efficacy Scale.....	46
Leadership Questionnaire	48
Data Collection Procedures.....	49
Data Analysis	50
Quantitative.....	51
Qualitative.....	52
Validity	52
Privacy and Ethical Considerations	54
Conclusion	54
 CHAPTER IV: RESULTS.....	 56
Research Question One.....	56
Research Question Two	57
Research Question Three	57
Research Question Four.....	59
Autonomy	60
Trust.....	63
Leading by Example	66
Professional Development	69
Enhancing and Diminishing Leadership Behaviors.....	71
Key Leadership Behaviors.....	77
Summary of Findings.....	81
 CHAPTER V: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS	 83
Quantitative Research Questions	83
Qualitative Research Question.....	83
Summary	84
Research Question One.....	85
Research Question Two	86
Research Question Three	87
Research Question Four.....	90
Limitations	95
Implications.....	96
Recommendations for Future Research	98
Conclusion	99
 REFERENCES	 101
 APPENDIX A: LETTER FOR APPROVAL TO CONDUCT RESEARCH	 116

APPENDIX B: E-MAIL TO TEACHERS	118
APPENDIX C: SURVEY COVER LETTER.....	119
APPENDIX D: INFORMED CONSENT STATEMENT.....	120
APPENDIX E: TEACHER SURVEY	121
APPENDIX F: TEACHER INTERVIEW QUESTIONS.....	124

LIST OF TABLES

Table	Page
Table 3.1 Gender, Age Range, and Race/Ethnicity of Teacher Participants	47
Table 4.1 Teachers' Years of Experience and Perceptions of Principals' Leadership Behaviors.....	57
Table 4.2 Teachers' Sense of Efficacy Predictions From PLQ and TSES Scores	58
Table 4.3 Parameter Estimates for TSES Scores Predicted by PLQ Scores.....	58
Table 5.1 Teachers' Years of Experience and Perceptions of Principals' Leadership Behaviors.....	87
Table 5.2 Teachers' Sense of Efficacy Predictions From PLQ and TSES Scores	87
Table 5.3 Parameter Estimates for TSES Scores Predicted by PLQ Scores.....	88

CHAPTER I: INTRODUCTION

One of the top imperatives of the Every Student Succeeds Act (2015) is to ensure strong teachers in every classroom, which entails helping states and school districts support talented educators for the benefit of all students. The law has been enacted with a keen focus on developing and retaining effective teachers to achieve needed progress in America's schools. Therefore, the instructional leadership teachers receive from principals, and the effectiveness of their principals' daily practices, will be critical to the enhancement of teaching and learning (Cagle & Hopkins, 2009). Teacher efficacy has been a vital element of teacher effectiveness, and its role in teaching and learning continues to be of interest to researchers and practitioners (Hoy & Spero, 2005). Teacher efficacy is believed to affect teaching and learning, according to Hoy and Spero (2005), and therefore, teachers, administrators, and policy makers are interested in its development, how it is best supported, and the factors that diminish it. Moreover, researchers have found compelling relationships between various aspects of leadership and teacher quality (Kelley, Thornton, & Daugherty, 2005; Waters & Cameron, 2007), and thusly, their associations with overall school effectiveness (Waters, Marzano, & McNulty, 2003). These interesting relationships were the focus of this research. As an introduction to this research study, this chapter includes the research problem, significance of the study, the purpose of the study, research questions, and definitions of key terms.

Research Problem

The concept of efficacy, according to Bandura (1997), is the basis of a person's self-system, which is comprised of the attitudes, abilities, and cognitive skills a person possesses. Teacher efficacy, more specifically, refers to the level of confidence possessed and the extent to which teachers believe in their ability to influence student behavior and academic achievement (Friedman & Kass, 2002). Bangs and Frost (2012) suggested that teachers with strong beliefs of their own efficacy will be resilient, solve problems with greater effectiveness, and most importantly, learn from their experiences. Moreover, teachers with higher efficacy, according to Protheroe (2008), are "more open to new ideas and are more willing to experiment with new methods to better meet the needs of their students" (p. 43), as well as more committed to teaching (Coladarci, 1992).

Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998) reviewed a vast body of literature on teacher efficacy and referred back to Bandura's (1997) research, in which he asserted the prominence of efficacy as an essential part of human development. He connected this assertion to the context of teaching, stating that teachers' perceptions of efficacy depend on their ability to teach subject matter effectively (Bandura, 1977). Tschannen-Moran and Woolfolk-Hoy (2001) developed the Teachers' Sense of Efficacy Scale, which measures of teacher efficacy and consists of three correlated factors focusing on teachers' effectiveness, and the factors that create the most difficulties for teachers in daily school activities. Tschannen-Moran and Woolfolk-Hoy (2001) identified these three factors as instructional strategies, classroom management, and student engagement. The short form of the instrument includes 12 items that are based

on the teacher's ability to effectively engage students, implement instructional strategies, and manage the classroom. More specifically, instructional strategies refer to the extent to which the teacher crafts higher level questions, designs learning tasks at the appropriate level of challenge, and the teacher's ability to adjust the lesson, particularly by content area, to students' individual learning levels (Tshannen-Moran & Woolfolk-Hoy, 2001). Classroom management, as measured by Tshannen-Moran and Woolfolk-Hoy (2001), is the teacher's ability to effectively establish rules and routines, as well as manage time and other resources efficiently. Areas such as student behavior and the response to defiant student behavior are also included within in this area of the efficacy measure (Tshannen-Moran & Woolfolk-Hoy, 2001). Student engagement is measured through the teacher's ability to motivate students and instill in them a belief that they can excel academically (Tshannen-Moran & Woolfolk-Hoy, 2001).

McEwan (2002) proposed the idea that the capacity to select and cultivate effective teachers is a prerequisite for an instructional leader. Recent research promoting teacher effectiveness has been conducted, finding that leadership practices and behaviors have the potential to positively affect teachers' lifelong professional development in the school context and to empower them toward a commitment to change (Emmanouil, Ma, & Paraskevi-Ioanna, 2014). Through an extensive study of practices and behaviors related to principal leadership, Jantzi and Leithwood (1996) identified six factors of leadership with statistically significant correlations to the effectiveness of the leader as well as the level of commitment, engagement, and satisfaction of those that follow. These six core practices, Provides Vision, Fosters Commitment, Provides Individual

Support, Provides Intellectual Stimulation, Models Behavior, and Holds High Performance Expectations, were examined in this research study. According to Jantzi and Leithwood (1996), Provides Vision refers to the leader's ability to develop, articulate, and inspire others with his or her ideas for the future and the opportunities that await the school. Fosters Commitment refers to the leader's aim to promote cooperation among staff members and assist them in achieving common goals (Jantzi & Leithwood, 1996). Provides Individual Support denotes the leader's concern for the personal feelings and needs of all staff members (Jantzi & Leithwood, 1996). Jantzi and Leithwood (1996) identified Provides Intellectual Stimulation as an essential leadership practice as it refers to the leader who challenges staff members to reexamine their work and how it can be performed. Models Behavior refers to a leader's behavior that sets a standard for staff members to follow that is consistent with the values the leader espouses (Jantzi & Leithwood, 1996). Demonstrating the leader's expectation for high performance and excellence is referred to as Holds High Performance Expectations. Considering the nature and importance of these practices, principals must remain cognizant of the leadership behaviors they apply as well as make teachers aware of the practices that are in place to assist them in becoming the most effective teachers possible (Gallante, 2015). The relationship between leadership behaviors and teacher efficacy will be discussed further in Chapter II.

Recent research has illustrated the influence of teacher effectiveness on student behavior, motivation, and academic achievement (Friedman & Kass, 2002). Therefore, efficacious teachers are those who believe student success depends, even partly, on them

(DiGiulio, 2014). Similarly, effective leadership has a key role in motivating teachers toward success (Emmanouil et al., 2014). According to Goddard, Hoy, and Woolfolk Hoy (2000), principal leadership has strong measurable effects on the perceptions of collective teacher efficacy and student performance. If principal leadership behaviors are the medium between teacher self-efficacy and increased student achievement, researchers need to learn more about the key characteristics and/or behaviors that principals should employ to improve teacher efficacy (Gallante, 2015). A gap exists in the knowledge regarding the specific leadership behaviors and teacher efficacy as perceived by teachers themselves.

Significance of the Study

There is empirical evidence that leadership practices and behaviors are related to teacher efficacy in classrooms and throughout schools (Day, Harris, & Hadfield, 1999; Emmanouil et al., 2014; Gallante, 2015; Kelley et al., 2005; Parsons & Beauchamp, 2012) and other studies focused on the effects of teacher efficacy on student achievement, or the relationship therein (Blase & Blase, 1999; Friedman & Kass, 2002; Swan, Wolf, & Cano, 2011). Schools are very complex organizations, and principals must deal with the various levels of skills and abilities of their teachers (Kelley et al., 2005). They must also establish systems of support to attract and retain effective teachers, as well as prevent teacher burnout (Walhstrom & Louis, 2008). Equally paramount, principals must be able to assess and evaluate the impact and effectiveness of their leadership styles (Kelley et al., 2005). Many of the aspects of the organization are not always in the principal's span of control such as external pressure to meet accountability standards; however, the

variables that can be controlled by the principal are the leadership behaviors that are strategically applied to deal with these issues on a daily basis. Gaining an understanding of the relationship between principal leadership behaviors and teacher efficacy has the potential to enhance leadership development programs, teacher preparation programs, and other professional development initiatives.

Research Purpose and Questions

The purpose of this research study was to examine the relationship between principal leadership behaviors and teacher efficacy. The following research question guided this study:

1. What is the relationship between teacher self-efficacy and principal leadership behaviors?
2. Do teachers' years of experience predict their perceptions of their principal leadership?
3. Do teachers' ratings of their principals' leadership predict their own level of self-efficacy?
4. What are teachers' perceptions of principal leadership behaviors?

Definition of Key Terms

Behavior: An observable set of skills and abilities (Kouzes & Posner, 2012).

Combined-level school: A school that enrolls students in grades Kindergarten through eighth (Houston Independent School District, 2017).

Effectiveness ratings: A measure comprised of multiple years of data that are based on a student's learning history and improvement that could be attributed to the assigned teachers by content area (Carey, 2009).

Efficacy: Of or related to competence and confidence in one's abilities (Protheroe, 2008).

Experienced teacher: Also referred to as career teachers, experienced teachers have taught in a classroom setting and on a full-time basis for 4 or more years (Tschannen-Moran & Woolfolk-Hoy, 2007).

Instructional leadership: The integration of tasks of direct assistance to teachers through professional development, curriculum alignment, and action research (Blase & Blase, 1999).

Novice teacher: A full-time classroom teacher with 3 or fewer years of experience (Tschannen-Moran & Woolfolk-Hoy, 2007).

Perception: An individual's view of his or her abilities in multiple areas such as intellect, creativity, and scholastic competence (Yin, 2003).

Principal leadership practices: According to Jantzi and Leithwood (1996), these practices are defined within six major practices as follows:

1. *Provides vision* includes the principal's aim toward identifying new opportunities for the school. This dimension of leadership also encompasses the principal's ability to develop, articulate, and inspire others with his vision of the future;

2. *Fosters commitment* is characterized by the leader promoting cooperation among members of the staff, and achieving common goals with and through them;
3. *Provides individual support* refers to the high level of respect the leader holds for all staff members. In addition, the leader's concern for their personal feelings and needs is encompassed in this dimension;
4. *Provides intellectual stimulation* is characterized by the behavior and dialogue the leader presents that challenges staff members to rethink their approach to their work and how it is performed;
5. *Models behavior* refers to the example the leader sets for others to follow that are consistent with the values he espouses; and
6. *Holds high performance expectations* denotes the leader's demonstration of high expectations for excellence, quality, and exemplary performance from all staff members.

Professional development: The engagement of staff in learning and skill-developing experiences through direct teaching, individual or group reading, applying techniques or methods, and/or team activities (Salinas, Zarins, & Mulford, 2002).

Self-efficacy: A person's belief about their abilities and potential to manage, organize, and successfully complete a task. (Bandura, 1997).

Student achievement: The amount of academic content a student learns in a set amount of time (Chua & Rubenfeld, 2014).

Teacher efficacy: According to Tschannen-Moran and Woolfolk-Hoy (2001), teacher efficacy refers to the teacher's ability to influence student behavior and achievement as encompassed in following three areas of efficacy:

1. *Strategic use of instructional strategies* includes the extent to which the teacher designs learning experiences at the appropriate level of challenge for all students, crafts higher level questions, and the teacher's ability to adjust the lesson to meet the needs of students' varying learning levels;
2. *Student engagement* refers the teacher's ability to motivate students and instill in them a belief that they can excel academically; and
3. *Classroom management* includes the teacher's ability to enact rules and routines effectively, while managing time and other resources efficiently.

Transformational leadership: The ability to create a desire for change and improvement in others, as well as the desire to be led. This leadership style involves a keen assessment of staff members' motives, satisfying their needs, and conveying a strong message that they are valued in the organization (Balyer, 2012).

Value-added: A statistical measure of longitudinal student achievement data that is based on multiple outcomes including, but not limited to, criterion-referenced and norm-referenced standardized assessment results; provides an estimate of the effectiveness of school districts, schools, and teachers based on student academic growth over time (Sanders & Horn, 1998).

Conclusion

The roles of educators in schools are complex and dynamic. Educational leadership is possibly the single most important determinant of an effective learning environment (Kelley et al., 2005), while teacher effectiveness rests, in part, on a teacher's level of efficacy in establishing an environment for learning, maintaining classroom discipline, and utilizing resources effectively (Swan et al., 2011). Few studies have examined the relationship between principal leadership practices and the relationship of those practices on teacher efficacy levels (Blase & Blase, 1999). Teachers, school leaders, district-level officials, and policy makers should all be interested in this topic, and consider the direct impact of teacher efficacy on teaching and learning.

This study sought to examine the relationship between principal leadership behaviors and teacher efficacy. From this research, answers to questions around these concepts were presented. Chapter II provides a literature review, including more specifically, a description of self-efficacy, its sources, factors that impact self-efficacy, theoretical constructs, and an explanation of social learning and leadership theories.

CHAPTER II: REVIEW OF LITERATURE

The purpose of this study was to examine the relationship between principal leadership behaviors and teacher efficacy. As evidenced through research cited in Chapter I, teacher efficacy and leadership behaviors are two complex topics that have been studied individually using various methodologies to resolve many questions. Many definitions and theories of these concepts have developed over the years, lending credit to their complexities. Few studies have directly examined the relationship between teacher self-efficacy and principal leadership behaviors, and the impact of those behaviors on teacher practice (Blase & Blase, 2010).

Chapter II will further explore topics surrounding principal leadership behaviors and teacher efficacy. Also included in this chapter are the topics of teacher quality, effective leadership, self-efficacy, social learning theory, teacher perceptions of principal leadership, as well as leadership theories and constructs. This research was used to develop and relate objective connections to each of these topics.

Teacher Quality

Teachers are the most fundamental resource of public education (Carey, 2009). They are on the front lines and do the work that touches our students the most on a daily basis (Carey, 2009). Ritchhart (2012) stressed the importance of teachers and their influence on what and how students learn, stating that teachers serve as the ultimate model for learning dispositions. Students imitate teachers' ways of thinking, learning, creating, and engaging with content based on their day-to-day demonstrations in the classroom (Ritchhart, 2012).

The quality of teachers and good teaching have been studied from the time of Plato attributing Socrates' success in teaching by asking questions of his audience (Beishuizen, Hof, van Putten, Bouwmeester, & Asscheer, 2001). Going forward to the 1920s, Beishuizen et al. (2001) cited the first empirical research study that substantiated our understanding of good teaching and its central importance to the overall quality of education a student receives in school. Still a topic of immense attention in the mid-1960s, the Equality of Educational Opportunity report, commonly known as the Coleman Report, reached solid conclusions about the importance of teacher quality, despite variations in school resources, and students' racial or socioeconomic backgrounds (Coleman et al., 1966). Teacher quality continued to be widely studied (Beishuizen et al., 2001).

Coleman's (1966; as cited in Goldhaber, 2016) finding that "teacher quality is one of the few school characteristics that significantly affects student performance" is consistently proven in educational research of recent years. Teacher effectiveness became widely debated on a national level after the release of the publication, *A Nation at Risk*, in the mid-1980s (Sanders & Horn, 1998). Large-scale change for higher academic standards and increased accountability linked to standardized test results were enacted for all states, according to Sanders and Horn (1998). This new legislation marked the beginning of defining teacher quality and effectiveness.

Characteristics of Effective Teachers

Hanushek (1992) summarized the effect of being taught by a good and a bad teacher as the difference in a full grade level of achievement growth in 1 school year.

Sanders and Rivers (1996) determined that teacher effects can be enduring and cumulative, whether they advance student achievement or leave children behind. Moreover, their research demonstrated that the performance of fifth-grade students showed effects that were connected to the quality of those students' third-grade teacher (Sanders & Rivers, 1996). These results set the impetus for establishing standards for teacher quality. In a study focused on teacher quality and closing achievement gaps, Borman and Kimball (2005) found common characteristics of the most effective teachers in the study as determined by their students' achievement gains over the course of a school year. These exemplars of quality teachers included the following:

- Displays firm content knowledge and demonstrates a robust repertoire of current pedagogical practices for the subject-matter being taught;
- Design coherently sequenced delivery of the content, partnering materials and resources appropriately, and linking student assessment data to instructional planning and implementation;
- Demonstrate flexibility by making needed adjustments in planned lessons to match the students' needs;
- Differentiate by using alternative approaches and strategies for students who are not initially successful; and
- Engage students cognitively in activities and assignments, and groups students productively, using strategies that are congruent to instructional objectives (Borman & Kimball, 2005).

Adding to this list, Goldhaber (2016) identified key characteristics that are most pertinent in determining teacher quality that highly impact student achievement. These included the level of educational background, teaching experiences, and the teacher's perception of students' abilities. A skilled teacher, according to Dede (2009), is an expert in facilitating dialogue between students and maintaining order in a chaotic, unpredictable classroom discussion. In contrast, the inability to manage classroom discipline can be one of the main antecedents to teacher stress and loss of enthusiasm (Hagenauer, Hascher, & Volet, 2015). Similarly, Beishuizen et al. (2001) asserted other characteristics that are central to teacher effectiveness such as knowledge and skills related to content and pedagogy, the teacher's ability to maintain a strong sense of classroom management, as well as the level of value placed on interpersonal relationships with students.

Measuring Teacher Effectiveness

How teacher effectiveness in student achievement is measured can transform the way teachers and school leaders understand teacher quality, and the education that is being delivered to students on a daily basis (Carey, 2009). Teacher evaluation systems, particularly those that judge teacher quality based on student achievement, have been highly criticized (Carey, 2009). These systems were perceived as immensely unfair, according to Carey (2009) as achievement results do not factor in the student's academic starting points and they penalize the teachers who do not meet achievement standards, although they teach students with the greatest challenges. This is where value-added measures differ in evaluating teacher quality.

Value-added measures, according to Sanders and Horn (1998), are used in holistic teacher evaluation systems to provide a statistical estimate of effectiveness by teacher, school, and school district, by using longitudinal student achievement results from several data points, including state and national assessments. Carey (2009) noted that surveys of teachers from districts that incorporate value-added results in their evaluation systems support measures that recognize student growth while under their year of teaching.

Goldhaber (2016) declared that students assigned to high value-added teachers have a higher success trajectory; they are more likely to graduate from high school, attend college, remain gainfully employed, and earn higher wages. If the right data are being used to judge teacher effectiveness, Carey (2009) asserted that strengths, improvement areas, and professional development needs would be more accurately identified. While value-added measures cannot be the only source of data in evaluating teacher effectiveness, according to Sanders and Horn (1998), they can be used as a solid starting point for investigating both accelerators and inhibitors of students' academic growth. Improving teacher quality and reframing the way in which it is evaluated can reveal how well a teacher has accomplished the goals and professional growth set forth from one year to the next (Sanders & Horn, 1998).

Effective Leadership

Second only to teaching, leadership is the most crucial component of education (Leithwood, Louis, Anderson, & Walstron, 2004 as cited in Khalifa, Gooden, & Davis, 2016). Effective leaders are the key to meaningful teacher support and development, and

are the link to high-quality teachers (Khalifa et al., 2016; Leithwood et al., 2004).

Leithwood et al. (2004) also suggested ineffective leadership will cause the best teachers to falter, leave a school, or worse, exit the profession altogether. Effective leadership is also linked to healthy social and cultural norms on which a school is built, according to Blase (1987). In a comprehensive meta-analysis conducted through studying over 30 years of educational research, Waters et al. (2003) asserted that effective principal leadership encompasses the what, when, how, and why of doing things, along with a leader who imparts the vision on others in a way that influences them to follow.

Vennebo (2017) summarized the commonalities of effective leadership encompassed in the role of the school principal: possesses the capacity, expertise, and authority to manage the challenges posed in a school setting and bring forth new innovations that result in increased student achievement.

The Principal's Role

The role of a school principal is complex, multi-faceted, and ever changing (Rousmaniere, 2013). This position is the nexus of educational policy, success or failure of school reform initiatives, and practice (Rousmaniere, 2013). In a first-person account of the complexities of the principalship, Scudder (2018) stated that principals often lead and manage schools under unreasonable and unclear expectations due to the dynamic work context. Additionally, political, social, economic, and technological issues affect how school principals effectively achieve their goals, according to Scudder (2018).

Waters et al. (2003) described in their leadership framework the knowledge and skills

principals must possess for effectiveness in this multi-faceted role, beginning with the various aspects of instructional leadership and management.

Instructional leadership and management. Juxtaposed to the management aspects of the principalship is the role as instructional leader. As an instructional leader in the building, the principal is viewed as the “head teacher” (Vennebo, 2017, p. 299). This view requires the principal to be directly involved in processes in which curriculum, instruction, and assessment are designed and implemented (Waters et al., 2003). Also included here is the principal’s responsibility to provide teachers with resources necessary to carry out their jobs, which includes classroom materials as well as professional development (Waters et al., 2003). Tschannen-Moran and Hoy (1998) suggested that trusted professional relationships are needed for principals’ responsibilities to be carried out well. Two types of trust should exist in respect to school leadership and teacher professionalization, and that is trust among teachers and teacher trust in the principal. This established trusted relationship will undergird collaboration and enable the principal in providing guidance, resources, and support (Bryk & Schneider, 2003). In the realm of management, the principal is also expected to monitor and evaluate curriculum implementation and instruction, along with the impact these have on student achievement (Griffith, 1999; Muhammad, 2009; Waters et al., 2003). Effective instructional leadership and management encompass a broad range of formal knowledge of education and specific content areas (Blase, 1987).

Change management. Change is inherently a leadership responsibility as opposed to maintaining the status quo (Burns, 1978). Effective leaders prioritize

opportunities for change, and recognize that change can be difficult for some as capacities to handle certain changes vary (Benson, 2015). As emphasized in change leadership research, some changes have greater implications and effects than others on staff, students, parents, and other key stakeholders (Waters et al., 2003). Principals have access to a wealth of data that are used to identify the impetus for change as well as to note benchmarks (Benson, 2015; Dede, 2009). Muhammad (2009) pointed out one of the most common reasons school stakeholders resist change, noting that a clear rationale for the change was never provided to them. He added that the resistance is fueled by the simple notion that they do not understand why they need to change (Muhammad, 2009).

Moreover, effective leaders know how to gauge the effects of a change initiative and leverage their leadership strategies and resources wisely (Waters et al., 2003). It is this level of knowledge and understanding that allows a principal to enact changes while preserving the school culture, values, and norms (Waters et al., 2003). This combination of knowledge, skills, and understanding are central to effective leadership and change management.

Distributed leadership. Vennebo (2017) described the challenges of leadership as balancing the need for maintaining organizational routines and stability, while knowing when the status quo of the organizational routine needs to be changed. Distributed leadership is a concept and practice that involved the emergent properties of a group of interacting individuals (Bennett, Wise, Woods, & Harvey, 2003). When persons work together in concertive action, they pool their talents, initiative, and expertise, according to Bennett et al. (2003). Furthermore, the outcome or product of their efforts is

greater than the sum of their individual actions. Bolden (2011) reframed distributive leadership to understand it more deeply. Shared leadership, collective leadership, collaborative leadership, and co-leadership have been highlighted as other terms that describe the contexts of distributive leadership (Bolden, 2011). Fullan (2006) advocated for distributed leadership as a practice in schools in which structures and processes are established, and staff capacity is built.

In a recent study that examined leaders implementing innovative leadership approaches as a distributed practice, Vennebo (2017) analyzed the dynamics of groups, teams, and other networks. From this research, innovations and improvements were assessed from the perspective of contributing team members. Leadership, in turn, was viewed through the lens of the designated leaders as well as through the interactive dynamics of key players and purposes of work activities (Vennebo, 2017). The findings demonstrated the need for collaborative, “multi-voiced” work processes as essential (Vennebo, 2017, p. 310).

Building capacity. An organization cannot perform at a high level over time on the actions of the top leader alone (Fullan, 2002). School capacity, Fullan (2002) posited, is crucial to improving instruction and student achievement, and at the center are principals who focus on teacher development, professional learning communities, coherent programming, and school resources. Benson (2015) asserted that empowering staff and building a dynamic leadership team is critical to a school’s success. Capacity building is centered around a collective moral purpose—the idea that everyone is invested in the school’s improvement, not just a chosen few (Fullan, 2005). Fullan

(2005) further described capacity building as involving development experiences that include gaining new knowledge and competencies collectively with others in the school, engaging in improvement activities, and accessing additional resources such as time and money. Moreover, building the capacity of teachers and other school stakeholders Understanding the relationship and interactions among various leaders within schools is an integral part of understanding leadership practice (Spillane, 2006).

Contextually dependent. Research focusing on principal's role and overall effectiveness points out the dependency of the school's instructional and social climate (Griffith, 1999). Principals regularly function in social, economic, and political contexts that are dynamic and diverse in nature (Giles, Johnson, Brooks, & Jacobson, 2005). The foundation of school context is defined by the size of the school district and school itself, grade level span, and student population characteristics such as the predominant ethnic and socioeconomic identification (Griffith, 1999). Challenging schools facing high-stakes accountability, a common context characteristic of an urban setting, differ largely from those in suburban or rural settings as Giles et al. (2005) pointed out. Lastly, Griffith (1999) explained that effective leadership is also dependent the school level, i.e., elementary or primary, intermediate, or high school.

The Principal and School Culture

The concept of school culture has been a part of schools as long as they have been in existence; however, it is a relatively new field of research (Muhammad, 2009). School culture, as defined by Deal and Peterson (1998), refers to the norms and beliefs that make up the "persona" of the school (p. 28). Muhammad (2009) stated that the human factor

brought to a school through students, parents, and staff immensely impacts the way things are done in a school. Cromwell (2002) declared that the culture of a school profoundly affects the overall environment, and influences relationships and interactions between all members of the school community.

Principals have the positional power to identify and influence positive, student-centered cultures (Deal & Peterson, 1998). The role of the principal in shaping a school's culture is pervasive (Deal & Peterson, 1994). Deal and Peterson (1998) further explained that principals communicate the core values of the school in the way they interact with students and parents, and in what they say and do in their day-to-day work in the school. They develop policies and procedures, and enact practices that support their beliefs and values in the students the school serves (Muhammad, 2009). The specific actions are varied and diverse from one school to the next, and range from identifying classroom exemplars that align with the school mission, allocating resources for new programs, and or recognizing the hard work of others. The principal's attention to the school's vision and purpose, history, spoken and unspoken messages, accomplishments, and celebrations help lay the foundation for success (Deal & Peterson, 1998).

Teacher Support and Development

Supporting teachers and building their capacity are core features of effective principal leadership (Fullan, 2005). Engaging and focused teacher professional development is a hallmark of school improvement and school leaders cannot leave teacher development to chance (Ontario Ministry of Education, 2004 as cited in Fullan, 2005; Muhammad, 2009). Bray-Clark and Bates (2003) shared teachers' desire and need

for practical training that will prepare them to address their students' learning and improve outcomes. Principals are responsible for ensuring coherent, relevant professional development experiences that connect real-world practice to the classroom, which will result in increased teacher competence and confidence (WestEd, 2000 as cited in Bray-Clark & Bates, 2003). Learning through trial and error, Boles and Troen (1997) asserted, is essential to teacher growth and also develops trust as principals provide an environment where teachers can learn through success and failure, and these principals value failure as part of the learning process. On the contrary, Muhammad (2009) warned that the futures of our schools are in jeopardy without firm, intentional systems of support in place for teachers that "protect and groom" them for success and longevity in the field of education (p. 53). Attracting and retaining high-quality teachers, demands support and resources, in the form of professional development and training, from the school leader (Branch, Rivkin, & Hanushek, 2013; Waters et al., 2003).

The Nature of Self-efficacy

Individuals' levels of self-efficacy can be significantly impacted by many factors (Bandura, 1997). When facing a challenge, does a person rise to accomplish the goal or give up in immediate defeat? Bandura (1997), a leader in the development of self-efficacy theory, defined self-efficacy as a person's belief in one's abilities to achieve goals and deal with various situations successfully. This self-system, as Bandura (1997) proposed, is central to how situations are perceived and behaviors are demonstrated in response to challenges as it is comprised of a person's attitudes, abilities, and cognitive skills. Moreover, one's performance or task outcome that is perceived as successful

results in increased self-efficacy, while those interpreted as failures weaken it (Skaalvik & Skaalvik, 2007a). As explained by Bandura (1997), self-efficacy impacts the very way a person approaches goals, tasks, and challenges.

Sources of Efficacy

Sources of self-efficacy vary by individual, but commonly begin to form through childhood experiences and are linked to four major sources, including mastery experiences, social modeling, social persuasion, and psychological responses. Mastery experiences are the most powerful source of efficacy information (Tschannen-Moran et al., 1998). Mastery experiences refer to those tasks one performed successfully in the past and experienced a sense of accomplishment for doing so. One's sense of self-efficacy is strengthened if the mastery experience deepens interest in the task or performance area and, therefore, leads to repeated successes and achievements. Moreover, mastery experiences stem from teaching accomplishments with students and raise a teacher's perception of his or her performance, and thusly, increase the self-expectation of future proficient performance (Bandura, 1997 as cited in Tschannen-Moran & Hoy, 2007). The same perceptions result when a teacher experiences failure. Efficacy beliefs fall and the expectation of future failure is more prevalent (Tschannen-Moran & Hoy, 2007).

Social modeling, also referred to as vicarious experiences (Hoy, 2000), are those that positively influence a person's belief in his or her own abilities by witnessing another person's successful accomplishment of a task. Simply stated, vicarious experiences provide the observance of someone else modeling a target activity (Tschannen-Moran &

Hoy, 2007). Seeing another person's sustained effort raises the observer's belief that they, too, possess comparable abilities that are necessary to master that particular skill (Bandura, 1977). Tschannen-Moran and Hoy (2007) asserted that efficacy is essentially enhanced through vicarious experiences as the successful person serves as an example of the observer's potential for similar success.

Similarly, social persuasion is also provided by an external source. It is the influence on a person's own self-efficacy when another person shares persuading words that help that person overcome self-doubt and rather, focus on their skills, attributes, and giving their best effort (Bandura, 1977). Also referred to as verbal persuasion, Tschannen-Moran and Hoy (2007) stated that it is primarily related to the feedback centered on performance and the likelihood of success based on observations. Such thoughts about a teacher's success extend from many sources, including administrators, colleagues, parents, and persons from the school community (Tschannen-Moran & Hoy, 2007). Hoy (2000) suggested that such persuasion is likely to lose its positive impact if subsequent experiences repeatedly yield defeat.

Psychological responses refer to those feelings that are impacted by one's mood, emotional state, physical reactions, and stress level. All have the potential to impact a person's self-efficacy, either by strengthening it, or causing it to weaken in the face of a challenging task (Bandura, 1977). Psychological arousal, according to Tschannen-Moran and Hoy (2007), can create a sense of capability or incompetence. Euphoric feelings that result from successful teaching experiences may increase a teacher's sense of efficacy, while stressful situations or anxieties associate with uncertainty or loss of control may

result in diminished efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007). Further, Bandura (1997) noted that by learning how to minimize stress and evaluate mood when facing difficult or challenging tasks, one can improve his own sense of self-efficacy.

Development of Efficacy

While self-efficacy reaches back to early childhood as children encounter various experiences, it continues to evolve throughout life as new knowledge and skills are acquired, and persons undergo varied experiences (Bandura, 1997). Hoy (2000) posited related ideas specifically to the context of schools and teaching. Protheroe (2008) recommended practical strategies for principals to implement to build teachers' efficacy through experiences they facilitate. Hipp (1996) challenged principals of teachers reporting high levels of efficacy to model behaviors such as risk-taking and cooperation by allowing teachers to contribute to the development of school policies and programs. Building on these ideas, Goddard, Hoy, and Hoy (2000) suggested that principals can improve student achievement by increasing the collective efficacy of the faculty through frequent and ongoing collaborative work experiences. Goddard et al. (2000) further offered ideas for principals of faculties with low collective efficacy, suggesting that they intentionally provide efficacy-building mastery experiences through professional development activities and action research projects.

Teacher Self-efficacy and Experience

According to Tschannen-Moran and Hoy (2007), efficacy experiences positively impact a teacher's perceived performance success. Moreover, interpersonal support from administrators, colleagues, or others in the school community become a form of mastery

experience (Tschannen-Moran & Hoy, 2007). With fewer of these experiences in their repertoire, novice teachers rely on other sources of self-efficacy to prominently form these beliefs (Tschannen-Moran & Hoy, 2007). In a study that examined the relationship between the efficacy, engagement, and classroom goal structures of pre-service and full-time practicing teachers, researchers found that teachers with more experience reported higher levels of efficacy, engagement, and classroom mastery goal structures (Daniels, Radil, & Goegan, 2017). This study also discovered that novice teachers are less confident and appear less inclined to use adaptive instructional practices (Daniels et al., 2017).

In another study involving elementary and secondary teachers that was designed to explore the relationship between teacher perceptions and attitudes toward the implementation of a new instructional program, Guskey (1987) concluded that neither years of experience nor teaching assignment was significantly related to any of the perceptual or attitudinal variables. According to Guskey, these variable differences did not associate with teachers' experience or the grade level at which they taught. Klassen and Chiu (2010) highlighted the findings in a study that was conducted by Wolters and Daugherty (2007), which showed modest correlations between years of experience and self-efficacy for instructional strategies and classroom management, and no effect for self-efficacy in student engagement and years of experience (Wolters & Daugherty, 2007 as cited in Klassen & Chiu, 2010).

From their most recent study, Klassen and Chiu (2010) found that self-efficacy increased from 0 to approximately 23 years of experience; however, self-efficacy levels

declined as years of experience increased. More specifically, teachers' ability to engage students in learning, manage behavior, and use effective instructional strategies showed the same pattern of growth and gradual decline (Klassen & Chiu, 2010). Despite increases in self-efficacy with experience, as noted by Wolters and Daugherty (2007), these results suggest increased self-efficacy through the mid-career years with a tendency to decline in the latter stages of teachers' careers (Klassen & Chiu, 2010).

Teacher Self-Efficacy and the Teaching Context

Teaching efficacy is declared as one of the most powerful predictors of teachers' pedagogical decisions and effectiveness (Summers, Davis, & Woolfolk-Hoy, 2015). It is defined as "the teacher's belief in his or her ability to organize and execute a set of actions required to successfully complete a task in a particular teaching context" (Davis, 1998, p. 233). Goddard et al. (2000) stated that "individual efficacy beliefs are excellent predictors of individual behavior" (p. 480). In addition to this, self-efficacy is a strong predictor of teacher adaptability, health, and job burnout (Skaalvik & Skaalvik, 2007b, 2010; Veiskarami, Ghadampour, & Mottaghinia, 2017).

Bandura (1997) also posits that self-efficacy beliefs are directly related to the teaching context as opposed to a generalized expectancy from the teacher. Through several studies, researchers have found that teacher self-efficacy is a strong predictor of both teaching practices and student learning (Ashton & Webb, 1986; Moore & Esselman, 1994; Ross, 1992). Research exists that indicates positively correlated higher teacher self-efficacy and improved student achievement, and increased self-esteem and self-regulation (Skaalvik & Skaalvik, 2007b; Veiskarami et al., 2017). Bray-Clark and Bates

(2003) highlight a number of studies that demonstrate that teachers with high levels of self-efficacy are more likely to produce students with higher achievement across a range of academic subjects. Examples include students assigned to teachers with high self-efficacy for classroom technology performed better when employing computer skills than students of teachers who had low self-efficacy for the same instruction (Ross, Hogaboam-Gray, & Hanay, 2001). Additionally, high self-efficacy teachers demonstrate more persistence in helping students when they experience learning challenges, and as a result, are more likely to see higher student outcomes (Podell & Soodak, 1993; Soodak, & Podell 1993). Accordingly, teacher self-efficacy has been studied through the lens of several context variables including principal leadership, school culture and climate, and the collective efficacy of the staff members across the organization (Tschannen-Moran & Hoy, 2007). The teaching context matters and may affect the development of teacher self-efficacy (Tschannen-Moran & Hoy, 2007).

Collective Efficacy and Sense of Community

Collective efficacy refers to the belief in a group's ability to achieve desired results (Tschannen-Moran & Hoy, 2007). Increased attention in this area has been drawn to its relationship with student achievement (Bandura, 1993). A sense of community in a school that centers on student achievement and success is the single greatest predictor of teacher self-efficacy (Lee, Dedrick, & Smith, 1991). Histories of low teacher efficacy have been linked to low collective efficacy among a school staff, as well as to student efficacy (Tschannen-Moran & Hoy, 2007). According to Bandura, collective efficacy beliefs were enhanced when other organizational characteristics such as emphasized

student academic success and staff innovation were added. Blase and Blase (1999) found in their study that schools with a strong sense of collaboration among the teachers positively developed the teachers' efficacy, reflective practice, and sense of risk-taking. In these school contexts where collective efficacy is at its highest, teachers visit each other's classrooms, observe at other schools, and develop a freedom to experiment with more effective approaches to teaching content in a way that more effectively supports students (Blase & Blase, 1999). In contrast, Goddard and Goddard (2001, as cited in Veiskarami et al., 2017) pointed out that in schools with low collective teacher efficacy, the teachers are less likely to be pressured by their colleagues and do not feel the need to change their teaching approaches when their students are unsuccessful academically. Establishing this sense of community is also attributed to parental involvement and the school's collective efforts to coordinate student behavior strategies (Blase & Blase, 1999).

Along the lines of collective teacher efficacy is collective responsibility, in which teachers' beliefs that they not only have the capacity to influence student learning, but also the shared obligation to do so (Wahlstrom & Louis, 2008). Goddard and Goddard (2001) studied a sample of teachers in a large urban district and found that individual self-efficacy of the teachers varied system-wide among 47 elementary schools in that district, but that a sense of collective efficacy at the school level explained much of the variation among individuals. Lee et al. (1991) similarly found an overlap between collective efficacy and collective responsibility in a study involving teachers who indicated a moral obligation that all school members should work toward increasing

student achievement across the school. In these cases, the collective sense of responsibility is regarded as the outcome of collective efficacy (Walhstrom & Louis, 2008).

Factors That Diminish Efficacy

Webb and Ashton (1987) described a number of factors that contribute to cultivating strong teacher efficacy as well as those that diminish it. Efficacy beliefs determine how opportunities and impediments are perceived (Bandura, 2006) and affect activity choices and how people will react and persevere in the face of obstacles (Pajares, 1997). Some of the factors that diminish teacher efficacy are isolation, lack of recognition, and “excessive role demands” (Tschannen-Moran & Hoy, 2007, p. 946). Richards (2011) recognized the increased demands placed on teachers and less time provided to fulfill their job many job duties. Similarly, a lack of autonomy—the freedom to choose goals or teaching materials and methods—may upend a teacher’s level of efficacy (Deci & Ryan, 2000). Additionally, low staff morale and inadequate resources are other factors that lead to diminished teacher self-efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007).

Long-term stress in their work can also diminish teachers’ sense of efficacy (Jennett, Harris, & Mesibov, 2003). Stressors are context-dependent and stress tolerance varies by teacher; however, some of the common stressors may include student discipline problems, conflicts with parents, negative team dynamics, or overcoming learning curves with new teaching methodologies as a consequence of a school reform initiative (Jennett et al., 2003). Most teachers activate coping skills and find success despite a stressful time

period, yet others, unfortunately, experience teacher burnout (Jennett et al., 2003; Skaalvik & Skaalvik, 2007).

Because teachers frequently plan, co-teach, and observe one another, collective teacher efficacy is grounded in shared experiences, as previously discussed (Skaalvik & Skaalvik, 2007). Collective teacher efficacy can undermine individual teacher efficacy if failure is experienced by a team and views of incapability surface (Goddard, 2001). Goddard et al. (2004) noted the reason for this decrease in individual efficacy level is the perception of collective self-efficacy in that it may serve as a normative expectation for one achieving set goals. Moreover, working alongside highly efficacious colleagues causes some teachers to compare themselves and feel that they may not be as skilled (Skaalvik & Skaalvik, 2007).

Relating to students, low expectations for student achievement and daily performance are also contributors to low teacher self-efficacy (Tschannen-Moran & Woolfolk-Hoy, 2007). It has been assumed that teacher efficacy will increase if teachers believe that student achievement and behavior can be influenced in the classroom (Guskey & Passaro, 1994; Rose & Medway, 1981). Tschannen-Moran and Woolfolk-Hoy (2007) posited that teachers' levels of efficacy increase when they cast higher expectations for success amongst their students and reported greater satisfaction with teaching overall.

Self-efficacy Theory Applied to Teaching

Bandura (1977), after developing the self-efficacy theory, related it to the context of teaching, theorizing the teacher behaviors that are common in those with a strong

sense of self-efficacy. Bandura (1977) initially declared that teacher efficacy depended on one's ability to teach subject matter effectively; however, he later added to this idea, stating that teachers' perceived efficacy rests on much more than their ability to deliver content, but rather, on many other complex skills such as the ability to maintain an orderly classroom, effectively enlist resources to enhance learning, and engage parents in their child's education (Bandura, 1997). Bandura (1997) further explained that teachers with a high level of self-efficacy (a) tend to exhibit greater levels of planning and organization, (b) are more willing to try new methods of teaching to better meet the needs of their students, (c) persist and demonstrate higher levels of resiliency when things do not always run smoothly or exactly as planned, (d) are less critical of students when they make errors, and (e) are less inclined to refer difficult students to special education. Building on these findings, Hoy (2000) viewed the school setting itself, particularly in the ways new teachers are inducted into the profession and socialized by their colleagues. These experiences, Hoy (2000) posited, have the potential to powerfully impact a teacher's sense of efficacy.

Research of teachers' sense of efficacy and the effect it has on student achievement continued. Ross (1994) reviewed 88 teacher efficacy studies and identified possible links between teacher efficacy and behavior. The findings suggested that (a) teachers with higher levels of efficacy are more likely to learn and use new approaches and strategies for teaching; (b) use management techniques that enhance student autonomy and self-management, reducing the need for control over students; (c) provide special assistance to low achieving students; (d) build students' self-perception of their

academic skills; (e) set attainable goals; and (f) persist in the face of student failure (Ross, 1994). From these results, teachers' efficacy beliefs appear to affect the overall effort they invest in teaching.

Not all researchers agreed that higher self-efficacy equates to positive influences. Wheatley (2002) proposed that lower levels of self-efficacy have benefits as well as the notion that teachers who doubt their skills and abilities are more inclined to reflect on their practice than those who are sure of their performance. Wheatley also suggested that teachers with lower self-efficacy have shown a greater motivation to learn and are more likely to engage in collaboration with other teachers who thirst to improve in their practice.

The role of self-efficacy in teaching and learning continues to be of interest to researchers and practitioners alike (Hoy & Spero, 2005). For principals, experiences that provide for collaboration and the exchange of ideas tend to positively impact teachers' sense of efficacy (Goddard et al., 2000). Self-efficacy beliefs are, in sum, individuals' estimation of their ability to perform, conceived as a dynamic set of beliefs that are linked to particular performance domains and activities (Bandura, 1997).

Teacher Perceptions of Principal Leadership Behaviors

Principal leadership has been connected to teacher self-efficacy for many years (Tschannen-Moran & Hoy, 2007). The principal is the one individual uniquely positioned in the school as the formal leader (Hipp, 1996). Allowing teachers flexibility and autonomy in decision making resulted in a higher sense of efficacy (Moore & Esselman, 1994). Pearson and Moomaw (2005) linked teacher autonomy to

empowerment, and asserted that exalting teachers as professionals requires them to be granted freedom to “prescribe the best treatment for their students as doctors/lawyers do for their patients/clients” (p. 38). Moreover, teachers feel that they are the most qualified authorities in the instructional process, which is credited to their specialized expertise and understanding of students’ needs (Pearson & Moomaw, 2005). Strong leaders who pave the way for a common purpose and vision for the school, in addition to creating a safe, orderly environment establish schools in which teachers felt a greater level of efficacy (Hipp & Bredeson, 1995). Finally, teachers who perceived fewer impediments to teaching and access to resources to enhance their classroom had a stronger sense of efficacy (Tschannen-Moran & Hoy, 2007 as cited in Moore & Esselman, 1992). According to Blase and Blase (1999), teachers reported positive outcomes on their efficacy, sense of security, and motivation when the principal encouraged reflection about teaching experiences in the classroom and student performance. The effects of such encouragement and feedback increased teacher innovation, creativity, and developed a stronger sense of risk-taking for teachers (Blase & Blase, 1999).

One of the earlier studies that connected teacher efficacy and student achievement found that the two were strongly related in both reading and mathematics (Armor, 1976 as cited in Hipp, 1996). Additionally, principal behaviors were found to significantly influence teacher motivation and student achievement in the following ways: (a) recognizing and supporting efforts, (b) clarifying roles and expectations, (c) encouraging a sense of competence and confidence in teachers and students, (d) empowering teachers in decision-making, (e) protecting the staff from external pressures and intrusions, and (f)

building bonds of community within the school. Simply stated, principals influence student learning through their work with teachers (Marzano et al., 2003). With the growing demands and rising expectations facing principals in their daily work, Hipp (1996) asserted that it is even more important to understand the interdependent relationship between the principal's work, and the individual and collective works of teachers.

Measuring Beliefs and Behaviors

This study examined the relationship between leadership behaviors and teacher self-efficacy. Cherniss (1993) claimed that diverse measures of teacher self-efficacy contribute to a deeper understanding of teacher self-efficacy through the many roles teachers fulfill (as cited in Friedman & Kass, 2002). Additionally, Bandura (1997) proposed that multi-faceted scales for evaluating teacher efficacy also enable researchers to skillfully select subjects and domains that further develop insights for increasing teacher effectiveness (as cited in Friedman & Kass, 2002). Moreover, teacher self-efficacy scales and leadership inventories such as these presented provide meaningful findings centered around beliefs and behaviors that are critical to educational practice (Hagan, 2014).

Teacher Self-efficacy

For decades, teacher self-efficacy has been studied in various contexts of educational research (Gavora, 2010). Beginning with a study conducted by the Research and Development Corporation, the first study was conducted that utilized a questionnaire with items that gathered data related to teachers' sense of efficacy (Gavora, 2010). This

study led to an unexpectedly high interest in teacher self-efficacy measures, according to Gavora (2010). Guskey (1981) followed this study and developed a related instrument to measure teacher efficacy through student performance outcomes. Ongoing developments of teacher self-efficacy scales ensued to measure it with greater accuracy and reliability, and to include varied factors (Gibson & Dembo, 1984; Guskey, 1981). Gibson and Dembo (1984) developed the Teacher Efficacy Scale (TES) to measure teacher self-efficacy with pre-service teachers, examining two dimensions known as personal teaching efficacy and general teaching efficacy. The TES was formatted in a 6-point, Likert-type response scale with items focused on the teacher's beliefs about his or her teaching in relation to student learning, according to Gibson and Dembo (1984). After revising the original 30-item instrument into a shorter form, the TES has been used with a wider range of teachers and in various school settings. Additionally, the Bandura Teacher Self-Efficacy Scale (Bandura, 1997) is another commonly used instrument in teacher self-efficacy research. The 30-item scale has seven subscales, including efficacy to influence decision making, efficacy to influence school resources, instructional efficacy, disciplinary efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvement, and efficacy to create a positive school climate (Bandura, 1997). Each item is measured on a 9-point scale, using ratings to describe the degree to which each item is applied. All items are scored such that a higher score indicates a greater efficacy. As previously described in Chapter I, the Teachers' Sense of Efficacy Scale, developed by Tschannen-Moran and Woolfolk-Hoy (2001), was proposed as a new instrument to measure teacher self-efficacy through the three constructs of

instructional strategies, student engagement, and classroom management, which affect teachers' beliefs in respect to the fulfillment of their role and tasks in the classroom.

Leadership Inventories

The Principal Leadership Questionnaire (PLQ) was previously introduced as an educational research inventory that is used to study transformational leadership in various school contexts (Jantzi & Leithwood, 1996). In addition to the PLQ, Hipp (1996) developed the Inventory of Strategies Used by Principals to Influence Classroom Teaching, an inventory used to examine teachers' perspectives on effective instructional leadership. Hipp (1996) developed this questionnaire in a mixed-methods study with open-ended questions that investigated one central question: What characteristics of school principals positively influence classroom teaching, and what effects do such characteristics have on classroom instruction? Examples of the characteristics studied are strategies, behaviors, attitudes, and goals. In the administration of the questionnaire, respondents are asked to provide detailed descriptions of one characteristic of a principal under whom they have worked who had a positive impact on their classroom teaching. The respondents were also asked to describe a principal who negatively impacted their classroom teaching. Further, Hipp (1996) designed this instrument to gather insights on the effects of principals' behaviors on classroom instruction, and the effectiveness of these behaviors. Involvement in the study was anonymous and voluntary (Hipp, 1996).

The Leadership Practices Inventory (LPI), developed by Kouzes and Posner (2012) is another leadership assessment tool that measures the frequency of 30 specific leadership behaviors on a 10-point scale, ranging from almost never to almost always.

The Likert-style survey is based upon five leadership practices which focus on behaviors such as establishing standards of excellence, inspiring a vision, eliminating the status quo, building teams, and empowering others. A total of six behavioral statements is included for each of the five leadership practices. The LPI is designed to provide feedback from individuals who work closely with the leader. This could be a manager, direct report, or a peer in the workplace. According to Kouzes and Posner (2012), these observers' responses are categorized as "other" to preserve observer anonymity. The LPI is also designed to serve as a self-assessment tool. Through an extensive meta-analysis of practices or behaviors related to leadership behaviors, Kouzes and Posner (2012) identified five leadership practices with statistically significant correlations to the effectiveness of the leader as well as the level of commitment, engagement, and satisfaction of those that follow. These five core practices, Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart, were examined in this research study. According to Kouzes and Posner (2012), Model the Way referred to the standard leaders set for others to follow. Inspire a Shared Vision referred to the leader's ability to create an image of a bright future and motivate others (Kouzes & Posner, 2012). Challenge the Process involved contesting the status quo (Kouzes & Posner, 2012). To Enable Others to Act, leaders built spirited teams and inspired determination in them as a practice of Encourage the Heart (Kouzes & Posner, 2012).

Summary of Findings

Bandura (1977) concluded the four sources of efficacy as mastery experiences, social modeling, social persuasion, and psychological responses. Other factors that are related to self-efficacy include years of experience and collective efficacy. Teachers' individual sense of efficacy is also a predictor of individual behavior, according to Goddard et al. (2000). From the school leadership standpoint, Blase and Blase (1999) attributed behaviors such as principal-teacher interactions focused on instruction, feedback, initiating processes of inquiry, and reflection as effective instructional leadership behaviors. Effective leadership is a key factor to teacher success, from meaningful support and development to selection and retention of high-quality teachers (Khalifa, Gooden, & Davis, 2016; Leithwood et al., 2004). Given the literature, the leadership practices principals employ can have an impact on teacher efficacy (Waters & Cameron, 2007).

Theoretical Framework

This study involved the examination of the relationship between teacher self-efficacy and principal leadership behaviors. Bandura (1997) theorized the concept of self-efficacy as a person's attitudes, abilities, and cognitive skills that comprise the self-system, which plays a major role in the perception of situations and response behaviors. Self-efficacy is an essential part of this self-system. According to Bandura (1997), a person develops a sense of self-efficacy within the early childhood years as experiences, tasks, and situations ensue, and it continues to evolve throughout life as a person acquires new skills and understanding. The four major areas of self-efficacy, which are mastery

experiences, social modeling, social persuasion, and psychological responses, according to Bandura (1997), are the sources from which self-efficacy derives.

Bandura's social cognitive theory provided the theoretical framework for this study. Social cognitive theory is based on the idea that individuals are agents proactively engaged in their own learning (Bandura, 1986). Key ideas within this theory are that individuals possess self-beliefs that enable them to control their thoughts, feelings, and actions. The idea that an individual has the potential to influence change, regardless of skill, is central to the social cognitive theory (Bandura, 1986). In addition, Bandura (1986, 1997) asserted that behavior, both cognitive and other personal factors, interacts with an individual's environment to influence through a process known as reciprocal determinism. This term, identified by Bandura (1997), refers to the relationship between cognition, behavior, and the environment.

Tschannen-Moran et al. (1998) further developed these concepts, positing that the perception of one's capabilities is more influential on one's performance than the actual level of ability. Tschannen-Moran et al. (1998) have proposed an integrated model of teacher self-efficacy that considers the research contributions of Rotter (1966) and Bandura (1997). This model includes the analysis of both teaching tasks and the context in which these tasks exist. Therefore, both internal and external factors can influence a teacher's perception of a student's capacity to accomplish a given task (Tschannen-Moran et al., 1998). Further explained, self-efficacy is a cognitive process and, therefore, the process of performance, reflection, and assessment are repeated. As efficacy increases, so does effort and persistence. On the contrary, negative experiences mirror the

same effect; failed tasks leading to lower self-efficacy lead to less effort, persistence, and resilience (Tschannen-Moran et al., 1998).

Conclusion

Efficacy has been identified as a predictor of success and achievement in teaching. Several research studies revealed that many factors impact a person's sense of efficacy (Bandura, 1997; Ross, 1994; Tschannen-Moran et al., 1998; Wheatley, 2002). Moreover, educational research has been focused on understanding teacher self-efficacy and the factors that affect it to further improve teacher quality (Gavora, 2010). This chapter presented an overview of theories, scales and inventories, and the concept of teacher efficacy. In addition, areas of research on teacher quality as well as effective leadership were also presented. Robust definitions and examples as well as actionable behaviors were described in the context of teaching and leadership. Finally, a number of sources addressed relationships between teacher efficacy and principal behaviors, as well as the positive and negative impact of these behaviors. This study sought to examine the relationship between teacher self-efficacy and principal leadership behaviors. Discovering the relationship between these two factors was the goal of this study.

CHAPTER III: METHODOLOGY

The purpose of this study was to examine the relationship between principal leadership behaviors and teacher self-efficacy. This mixed methods study collected survey data from a purposeful sample of teachers in an urban school district that serves approximately 210,000 students. The sample of teachers was drawn from the district's combined-level campuses that serve students from kindergarten through eighth grade.

Teacher self-efficacy and principal leadership are complex topics that have been studied extensively (Gallante, 2015; Hoy & Spero, 2005; Jantzi & Leithwood, 1996; Kelley, Thornton, & Daugherty, 2005; Kouzes & Posner, 2012; Protheroe, 2008; Tshannen-Moran & Woolfolk-Hoy, 2001; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998; Waters & Cameron, 2007; Waters, Marzano, & McNulty, 2003). This chapter begins with an overview of the research problem, a description of the operationalization of theoretical constructs, the research purpose and questions, as well as the hypothesis. The research design, population and sample, instrumentation, data collection procedures, and data analysis will be presented at the end of the chapter. Finally, after providing a statement of the ethical considerations of this research study, the chapter concludes with an overview of the research design limitations.

Overview of the Research Problem

Teacher self-efficacy, and its impact on teaching and learning, continues to be of interest to researchers and practitioners alike (Hoy & Spero, 2005). In his initial research on teacher efficacy, Bandura (1977) determined that it depended on one's ability to teach subject matter effectively; however, he later added that teachers' perceived efficacy rests

on much more than their ability to deliver content, but on many complex skills they employ in their daily roles. In sum, self-efficacy beliefs are individuals' estimation of their ability to perform, conceived as a dynamic set of beliefs that are linked to particular performance domains and activities (Bandura, 1997). Given that principals and teachers have direct control and influence on these beliefs, further research is needed in examining the relationship between teachers' efficacy and principals' leadership behaviors, particularly in public school settings.

Operationalization of Theoretical Constructs

This study consisted of three constructs in teacher efficacy: (a) use of instructional strategies, (b) student engagement, and (c) classroom management. According to Tschannen-Moran and Woolfolk-Hoy (2001), teacher efficacy, as a whole, encompasses these three areas. The strategic use of instructional strategies includes the extent to which the teacher designs learning experiences at the appropriate level of challenge for all students and possesses the ability to meet the needs of all students' varying learning levels (Tschannen-Moran & Woolfolk-Hoy, 2001). Student engagement is defined as the teacher's ability to motivate students and bestow upon them the belief that they can achieve academic success, while Tschannen-Moran and Woolfolk-Hoy (2001) defined classroom management as the teacher skillfully enacting rules and routines effectively and managing resources efficiently. These three constructs were measured using the Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk-Hoy, 2001), which assessed teachers' efficacy beliefs for completing critical tasks associated with teaching in these areas (Fives & Buehl, 2010).

The Principal Leadership Questionnaire (PLQ; Jantzi & Leithwood, 1996) was conducted with the teacher participants in this study. According to Jantzi and Leithwood (1996), the PLQ is designed to assess principal leadership behaviors, yielding feedback regarding the impact the principal has on the teachers. The six core leadership practices that were measured and assessed in this instrument are known as follows: (a) Provides Vision, (b) Fosters Commitment, (c) Provides Individual Support, (d) Provides Intellectual Stimulation, (e) Models Behavior, and (f) Holds High Performance Expectations (Jantzi & Leithwood, 1996). Provides Vision focuses on the leader inspiring others with his vision for the future. Fosters Commitment refers to promoting cooperation among staff members, and Provides Individual Support focuses on demonstrating respect and concern for staff members' needs. Challenging staff members to rethink how their job is performed and setting an example for others to follow are the focus of Provides Intellectual Stimulation and Models Behavior, respectively. Holds High Performance Expectations refers to the leader's expectations for excellent performance from all staff members (Jantzi & Leithwood, 1996).

Research Purpose, Questions, and Hypotheses

The purpose of this study was to examine the relationship between principals' leadership behaviors and teacher self-efficacy. The following questions guided this study:

1. What is the relationship between teacher self-efficacy and principal leadership behaviors?

2. Do teachers' years of experience predict their perceptions of their principal leadership?
3. Do teachers' ratings of their principals' leadership predict their own level of self-efficacy?
4. What are teachers' perceptions of principal leadership behaviors?

Research Design

The research design for this study was an explanatory sequential mixed methods approach. This approach provided the researcher opportunities to collect and integrate both qualitative and quantitative data in two consecutive phases within one study. The rationale for this integrated approach is supported by the need to use both types of data for a comprehensive examination of the emerging themes related to the self-efficacy and leadership; neither qualitative nor quantitative methods would sufficiently capture these data alone. A purposeful sample of teachers ranging from kindergarten through eighth grades was solicited to complete the TSES survey, which is intended to assess the teachers' level of efficacy and their beliefs about approaching challenging tasks within their various teacher duties (Tschannen-Moran & Woolfolk-Hoy, 2001). The teachers also completed the PLQ survey, assessing the leadership behaviors their school principals employed and their assessment of the effectiveness of these behaviors therein.

Quantitative data were analyzed using a Pearson's Product Moment Correlation (r), a one-way analysis of variance (ANOVA), and a simple linear regression was calculated. Qualitative data collected from teacher interviews were analyzed using an inductive coding process.

Population and Sample

The population of this study was drawn from 11 campuses serving students in kindergarten through eighth grades. The schools are located in an urban school district that serves approximately 210,000 students who speak 25 different languages (National Center for Education Statistics, 2015). Within this district are nearly 300 schools comprised of early childhood centers, elementary, middle, high, and combined-level schools. There are multiple campuses that serve students in kindergarten through eighth grades, which are classified as combined-level schools. The schools were selected according to their combined-level classification, which generally results in a broad section of teacher experience, grade levels, and subject areas.

A purposeful sample of teachers from combined-level schools was solicited to complete the TSES and PLQ. The teachers were invited to participate in a face-to-face interview. For the purposes of this study, only teachers that were classified as full-time employees participated. The purposeful sample of teachers (n=144) possessed a range of experience and taught various content areas and grade levels. Table 3.1 displays the participant demographics by gender, age range, race/ethnicity, level of education, years of teaching experience, and teaching assignment by content area and grade level.

Instrumentation

Teachers' Sense of Efficacy Scale

The TSES was utilized in this study to determine the level of efficacy of the participating teachers. The TSES was developed by Tschannen-Moran and Woolfolk-Hoy (2001) to determine teachers' beliefs in their ability to make a difference in student

Table 3.1

Gender, Age Range, and Race/Ethnicity of Teacher Participants

	Frequency (<i>n</i>)	Percentage (%)
1. Gender		
Male	18	17.1
Female	87	82.9
2. Age Range		
20-29 Years Old	17	16.7
30-39 Years Old	27	26.4
40-49 Years Old	35	34.3
50-59 Years Old	20	19.6
60 Years Old or Older	3	0.03
3. Race/Ethnicity		
Black or African-American	18	17.0
Caucasian or White	39	36.8
Hispanic or Latino	33	31.1
Asian or Pacific Islander	9	8.5
Middle Eastern	1	0.9
Multi-Racial/Ethnic	3	2.8
Other	3	2.8

Note. Three participants did not enter Age Range, which resulted in the percentages not totaling a 100%.

learning as well as the ability to successfully teach students who are difficult to manage or are unmotivated. The TSES asked teachers to assess their ability related to instructional strategies, student engagement, and classroom management (Tschannen-Moran & Woolfolk-Hoy, 2001). Tschannen-Moran and Woolfolk-Hoy (2001) conducted a factor analysis to determine how participants would respond to the questions. Three moderately-correlated factors were found: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. The two forms of the TSES are the full 24-item scale, which is recommended for pre-service teachers and the

short 12-item scale to be used with in-service teachers. The 12-item scale, which was used in this study, reported a reliability coefficient range from .86 to .90 using Cronbach's alpha (Tschannen-Moran & Woolfolk-Hoy, 2001). Reliability coefficients greater than .70 are considered acceptable reliability (Creswell, 2015).

Leadership Questionnaire

The PLQ was used to measure and assess principal leadership behaviors as observed by the teacher participants. The six PLQ leadership practices consist of Provides Vision, Fosters Commitment, Provides Individual Support, Provides Intellectual Stimulation, Models Behavior, and Holds High Performance Expectations. The 24-item survey includes a 5-point response scale that incorporates specific behaviors to assess in each competency area (Jantzi & Leithwood, 1996). The behavioral statements are based on the following Likert-type responses: 1—strongly disagree, 2—disagree, 3—undecided, 4—agree, and 5—strongly agree (Jantzi & Leithwood, 1996). The Cronbach's alpha reliability coefficient range for the questionnaire is from .77 to .88 (Mees, 2008). According to Mees (2008), research supports that the PLQ is internally reliable as its statements pertaining to each leadership practice are highly correlated. Its test-retest reliability is also high (Jantzi & Leithwood, 1996). Moreover, PLQ has been applied in studies examining principal leadership practices, particularly focusing on instructional and/or transformational leadership (Blase & Blase, 1999; Jantzi & Leithwood, 1996).

Data Collection Procedures

The researcher obtained approval to collect data from the Committee for the Protection of Human Subjects (CPHS) at the University of Houston-Clear Lake. Part of the CPHS approval process entailed gaining the approval to conduct research in the school district included in this study (see Appendix A). After all approvals were granted, the data collection phase began by contacting the school principal at each of the combined-level schools regarding teacher participation in the study. An overview of the process for collecting survey data was explained. Once the researcher received approval from the principal, an e-mail was sent to the teachers to introduce the study (see Appendix B). The teachers were informed of their participation being on a voluntary basis.

The TSES and PLQ online surveys were sent to the teachers via e-mail, using the Qualtrics system. Prior to completing the survey, the teachers were prompted to read a survey cover letter (see Appendix C), which explained the purpose of the study, provided a brief description of the survey, informed the teachers of their voluntary participation, and provided an estimated amount of time the survey would take to complete. At the end of the cover letter, the teachers were prompted to read and acknowledge the participation conditions, and to use the hyperlink to access the survey (see Appendix D).

Because teachers may perceive the PLQ survey portion of the study as evaluative of their principal, they were reminded of their concealed identity and the confidentiality of all results. If the teachers decided not to complete the study, no further action was taken and they were not contacted further. All participants who decided to continue in

the study received an overview of the survey instruments, interview protocol, and the approximate amount of time each would take to complete (see Appendix E and Appendix F). The surveys were conducted anonymously via the Qualtrics system. The only identifying information was found at the end of the survey instrument if the teacher was willing to participate in an interview, and thusly, provided general demographic and contact information. The interviews, set at approximately 30 to 45 minutes in length to complete, were conducted in a mutually-agreed upon location that was convenient to both the participant and the researcher. The interviews were audiotaped and transcribed at the conclusion of each interview.

Upon receiving all surveys, the data were downloaded from the Qualtrics system into an Excel spreadsheet. The data from the surveys as well as the interviews were saved on the researcher's desktop computer and on a memory storage device. The interview audio recordings were transferred to electronic files on the researcher's computer. All documents were password protected to ensure security.

Data Analysis

The analyses of data in this mixed methods study involve the use of both quantitative and qualitative analytical techniques. Data analysis in mixed methods research, as noted by Creswell and Clark (2007), consisted of analyzing data using quantitative and qualitative methods. All survey data were collected and analyzed through SPSS for completeness and accuracy.

Quantitative

To answer research question one, a Pearson product moment correlation coefficient (r) was conducted to determine if there was a statistically significant relationship between teacher self-efficacy and principal leadership behaviors. Using this statistical method, the two variables were measured equally and were not distinguished as independent and dependent (Gravetter & Wallnau, 2009). This method helped the researcher further determine the consistency and predictability of this relationship. Both variables were of continuous measure.

To answer Research Question Two, a one-way analysis of variance (ANOVA) was conducted to determine if teachers' years of experience significantly predict their perceptions of their principals' leadership skills. Teachers' years of experience was treated as a categorical variable in the analysis. This one-way ANOVA compared the mean differences and evaluated whether any of them were statistically significantly different from each other. Using Cronbach's alpha, the instrument reliability was calculated.

To answer the third research question, a simple linear regression was calculated to determine if teachers' ratings of their principals' leadership behaviors significantly predicted their own self-efficacy. The dependent variable or outcome measure was the teacher's sum score on the TSES survey. The independent variable was the PLQ sum score. In addition, both variables were continuous in measure and instrument reliability was reported using Cronbach's alphas.

Qualitative

To answer Research Question Four, an inductive coding process was applied to find emergent themes in the teachers' interview responses. The data gathered from the interviews were analyzed throughout the collection process. The researcher transcribed the responses to the individual interviews and analyzed them to determine the themes and codes. The coded data were framed to provide general, identified themes and more abstract, complex themes. After the coding was completed, the researcher transferred the data into categories to support leadership principles, practices, and strategies.

The researcher intended to interview teachers of varied backgrounds, including years of experience, and grade and content area assignment from the 11 combined-level schools in an effort to ensure diverse perspectives. A total of 12 interviews were conducted. The teachers were asked nine questions regarding their level of self-efficacy and their principals' leadership behaviors and practices.

To ensure reliability, the researcher documented the procedures of the study, including as many details within each step as possible (Yin, 2003). The reliability procedures of checking transcripts for accuracy, as well as comparing data with the codes and memo writing, were followed (Gibbs, 2007). Utilizing this process as outlined by Gibbs (2007), themes that provided overarching commonalities between the perceptions of the principals' leadership behaviors were developed and summarized.

Validity

Validity pertains to accurately assessing the concepts and/or results that the instrument is designed to measure (Heppner & Heppner, 2004). Validity is considered in

the process of describing, interpreting, and explaining research data (Maxwell, 1992). To ensure quality and validity of the data gathered from the interviews, Creswell (2009) recommended the following strategies: triangulation; member checking; rich, thick description; bias; discrepant information; and peer debriefing. In triangulating the data, the researcher examined several sources of information, including the teachers' professional backgrounds, content area and grade level assignments, and the overall reflections on teaching experiences that were shared in the interviews to justify the established themes. For member checking, the researcher provided the participants an opportunity to review their interview to verify accuracy and completeness of the content captured through the interview process. Finally, peer debriefing was utilized to ensure validity, which consisted of a colleague and faculty sponsor reviewing, and asking questions about the study to provide rich, diverse viewpoints. The researcher maintained a methods journal throughout the qualitative data-gathering steps (see Appendix G).

The researcher's experience as both a teacher, central office administrator, and principal connected strongly with this research study. First and foremost, the researcher was reared in a family of educators and possessed a deep understanding of various educational settings and the political influences therein. Overall, the researcher experienced success as a teacher as well as when serving as a central office and school administrator. Additionally, the researcher has positive recollections of principal-teacher relationships and interactions. The varied school environments and cultures were expected to provide a unique perspective of both teachers and principals, according to the researcher. Admittedly, biases, assumptions, and subjectivities may have impacted the

researcher's analysis of the themes, codes, and general analysis of the interview dialogues.

Privacy and Ethical Considerations

The researcher sought approval from the CPHS at the University of Houston-Clear Lake. A request for approval to utilize the TSES survey was submitted to the authors, with authorization to properly acknowledge its use. The researcher e-mailed the survey link to teachers at the combined-level campuses directly. The communication consisted of a survey cover letter stating the purpose of the study, a brief description of the survey, and informed the teachers that their participation in this study was voluntary. The cover letter also provided the estimated amount of time the survey would take to complete. At the end of the cover letter, the teachers were asked to read and acknowledge the participation conditions, and use the hyperlink to access the survey. To ensure data security, the researcher created password-protected files, and will maintain the data for at least 3 years before deleting it.

Conclusion

This mixed methods research study was conducted to examine the relationship between teacher self-efficacy and principal leadership behaviors. This chapter included an overview of the research problem; a description of the population and sample, and instruments used to collect data; the data collection procedures, the qualitative and quantitative data analysis methods, privacy and ethical considerations, and limitations of the study. The researchers' perspective on the research data and how they were analyzed

was also presented. Chapter IV includes the results of the data, analysis of the data, and relevant findings in detail.

CHAPTER IV: RESULTS

The purpose of this study was to examine the relationship between principal leadership behaviors and teacher self-efficacy. This chapter presents the results of the quantitative and qualitative data analysis of this study. An online survey was utilized to gather quantitative data. The survey was sent to 443 teachers and 144 of them responded, yielding a response rate of 32.5%.

The results are presented with each of the research questions this study sought to answer. This chapter begins by presenting a detailed description of the participants' demographics, followed by instrument reliability, and the data analysis for each of the three research questions. A conclusion with a summary of the findings is also presented.

Research Question One

Research Question One, *What is the relationship between teacher self-efficacy and principal leadership behaviors?*, was answered using a Pearson product moment correlation coefficient (r) to determine if there was a statistically significant relationship between teacher self-efficacy and principal leadership behaviors. The correlation outcomes were $r = .29, p = .003$. To fully describe the magnitude of this relationship, Hemphill (2003) established empirical guidelines based on the results of 380 meta-analytic reviews. He compiled all results into a table with empirical guidelines of correlations that were less than .20 in the lower third, .20 to .30 in the middle third, and correlations greater than .30 to be in the upper third of effect size. These findings suggested that the relationship between the teachers' sense of efficacy and the ratings of their principals' leadership behaviors is significant and positive.

Research Question Two

Research Question Two, *How do teachers' years of experience predict their perceptions of their principal leadership?*, was answered using a one-way analysis of variance (ANOVA), which was conducted to determine if teachers' years of experience significantly predict their perceptions of their principals' leadership skills. ANOVA was used because the independent variable, years of experience, was treated as a categorical variable. Table 4.1 presents the results of the analysis. The results indicate that years of experience do not significantly predict teachers' perceptions of their principals' leadership skills, $F(3, 96) = 1.56, p = .20$.

Table 4.1

Teachers' Years of Experience and Perceptions of Principals' Leadership Behaviors

Years of Experience	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
0-3 years	16	108.5	10.9	2.7	83	120
4-7 years	16	93.1	25.3	6.3	38	120
8-12 years	21	98.0	19.6	4.3	46	120
13 years or more	47	100.2	22.0	3.2	41	120
Total	100	99.9	20.9	2.1	38	120

Research Question Three

Research Question Three, *Do teachers' ratings of their principals' leadership predict their own level of self-efficacy?*, was answered using a simple linear regression to

determine if teachers' rating of their principals' leadership behaviors significantly predicted their own self-efficacy. The calculations revealed that the PLQ score significantly predicted the teachers' sense of efficacy scores, $F(1, 98) = 9.3, p = .003$. Table 4.2 reveals the prediction, using the TSES and PLQ sum totals.

Table 4.2

Teachers' Sense of Efficacy Predictions From PLQ and TSES Scores

	N	Minimum	Maximum	Mean	Std. Deviation
TSES Total	115	52	108	89.6	12.6
PLQ Total	101	38	120	99.8	20.8

Table 4.3 provides the parameter estimates for TSES scores as predicted by the PLQ score. Findings suggested that when the PLQ score was 0, the TSES score would be 73.4. For every unit increase in PLQ score, there was an increase of .17 in the TSES score.

Table 4.3

Parameter Estimates for TSES Scores Predicted by PLQ Scores

	B	SE	Standardized B	t	p-value
Intercept	73.4	5.8		12.5	.000
PLQ Score	.174	.06	.29	3.0	.003

Research Question Four

Research Question Four, *What are teachers' perceptions of principal leadership behaviors?*, was answered by utilizing an inductive coding process that was applied to find emergent themes in the teachers' interview responses. A total of 13 teachers participated in the interviews, in which interview protocol questions were used to address their perceptions of their principals' leadership behaviors. The participants also shared insights on their own level of self-efficacy and the attributes for each of these. Of the 13 participants, 9 were female. The participants nearly evenly represented elementary and middle school teaching assignments, with six of them being kindergarten through fifth grade teachers and the other seven representing middle school. Two of the participants were math teachers and two taught science. One teacher represented social studies, and one represented English/language arts and reading (ELAR). One teacher represented secondary special education. Two of the elementary teachers taught in a self-contained setting, in which they were responsible for teaching all core content areas. One teacher had a dual content area teaching assignment of ELAR and social studies. Two teachers represented the fine arts, music and theatre, in both kindergarten through fifth grades, and sixth through eighth grades, respectively. All 13 participants were assigned pseudonyms after the interviews to ensure the confidentiality of their responses.

The researcher identified emergent themes to organize and capture similar, interconnected points in the response data. The purpose of this approach is to make the most meaning and deeply analyze the complex data that were generated from the 13 interviews (Shank, 2006). Four major emergent themes were identified across the

teachers' interviews, regardless of teaching assignment or content area: (a) autonomy, (b) trust, (c) leading by example, and (d) professional development. Themes unique to the three correlated factors of self-efficacy, instructional strategies, student engagement, and classroom management, also emerged. These themes were organized through the aspect of principal leadership behaviors that enhanced or diminished teacher self-efficacy in the three correlated factors. Common themes, which were reported across the teacher interviews, will be reported first followed by the themes that were unique to instructional strategies, student engagement, and classroom management. Themes that emerged from teachers' perceptions of their principals' leadership strengths and weaknesses were also reported.

Autonomy

Autonomy was a recurring factor that teachers connected to their perception of principal leadership behaviors, both positively and negatively. This theme emerged in nearly two-thirds of the participants' responses. From most responses, the teachers felt that principals' ability to release control and give them freedom in the classroom made a positive impact on the way they approached their job as a teacher. Amy is a fourth grade self-contained teacher with 5 years of teaching experience and has worked under her principal's leadership for 4 of those years. Her principal had 19 years of experience as a principal. She shared her thoughts about the level of autonomy her principal allows, saying,

She generally allows us to be autonomous and take responsibility for our classrooms. I really appreciate that. I don't have to do any sort of asking [or getting permission] about my curriculum, or what I want to teach, or really how I

want to teach. So if I was going to say something positive, it would be that I feel like I have a lot of control over my classroom most of the time.

Many teachers are directed by their principals to teach content in a particular sequence or under specific pedagogies, which is perceived as a constraint. Amy feels that the freedom to make her own decisions in what to teach and in what way, allows her the flexibility to respond to her students' needs and learning styles most effectively.

Maria teaches sixth grade ELAR and social studies, and has taught for 2 years, both under her current principal, who had served in the principalship for 16 years. She echoed Amy's reflections on the positive impact autonomy has on her perception of effective principal leadership and on her performance as a teacher. She stated,

My principal gives us a lot of freedom; it can go both ways. You can have freedom to try out new things and be a risk-taker, which is what they like to say, or you can just stall and stay where you are. I've chosen to go the way of growing and learning, more and more each year.

Both being relatively new to teaching, with 5 or fewer years of experience, Amy and Maria's comments suggested that the autonomy and freedom to take risks in the classroom supported their quest to learn the best and most effective ways to teach their students. They both acknowledged that the experiences they gain through the trial and error helps them grow as a teacher, and these experiences would be very limited if they did not have the level of autonomy their principal affords them in their classrooms.

Katherine, a seventh and eighth grade science teacher, was a 1st-year teacher. She has worked under her principal for a total of 2 years as she began as a student teacher. Katherine's principal had served in his role for 16 years. She indicated that autonomy from the principal positively impacts her work in the classroom. She added

that a principal who gives teachers autonomy is an indication of “the principal’s confidence in teachers to do their job. It should be given with the right balance of freedom, not micromanaging, but also know what’s going on in the classrooms.”

Leon teaches sixth and eighth grade social studies, and was in his 5th year as a teacher, all under the same principal. His principal had served as school principal for 13 years. Leon shared thoughts regarding autonomy that are contrary to the previous three teachers’ perspectives. He felt that his principal allows too much autonomy and it has adversely impacted his perception of his principal’s leadership behaviors. Leon shared,

I would say that there’s sometimes a little too much federalism. I’ll use a social studies term! We’re trusted to do what we’re there to do, but we need a national system for some things. Maybe there’s too much delegated power for some things. We do need some strictness and guidance.

Leon’s comments suggested that he perceives too much autonomy or freedom to mean there is an absence of rules and that expectations are rarely met. Leon felt that more guidance and accountability were needed from the principal and members of the school administration team.

Evan is a veteran teacher with 28 years of experience. He teaches sixth through eighth grade theatre arts and has worked under his current principal’s leadership for the past 3 years. Evan’s principal had 14 years of experience as a principal. He shared a similar perspective to Leon’s on a principal’s lack of leadership when too much autonomy is granted to teachers. He expressed an appreciation for the level of autonomy his principal gives to teachers, but believes there are consequences for too much autonomy. Evan stated, “She also gives independence and leeway to do the job I was

hired to do. However, my principal is removed from key processes at times when we need her.”

Overall, the interview participants shared positive perceptions of their principals’ leadership when they allowed them to work autonomously and independently in their daily efforts. Moreover, the majority of the teachers who commented on autonomy felt that the freedom to do their job increased their effectiveness in the classroom. On the contrary, too much autonomy resulted in negative perceptions of principal leadership as two participants equated excess freedom to a lack of rules, structure, and direct principal involvement in key school activities.

Trust

Another common theme that emerged from the teacher interviews was trust as a leadership behavior that principals demonstrate on a daily basis. The teachers who mentioned trust in their responses all described it in the positive sense and perceived their principals’ leadership as stronger for this reason. This theme was present in five of the participants’ responses. Of the five responses, four of them discussed their principals’ trust in them, while one teacher described the trust she has placed in her principal through actions she has consistently demonstrated over the years they have worked together. There were recurring comments centered around principals who demonstrate trust in their teachers to perform effectively in the classroom.

Darla was a 1st-year teacher, teaching sixth and seventh grade science. Her principal had 5 years of experience. She shared her thoughts on the perception of trust as demonstrated by her principal. Darla stated,

I do sense that my principal has a great deal of trust in the teachers' ability to teach and in their knowledge of the content. I feel there is trust because he hired us and thinks we are capable of doing our jobs. I also feel an increased level of respect that I have for my principal, knowing I'm supported and trusted to do my job well.

Teachers perceive trust from the principal as a testament of their confidence in their knowledge and abilities. Darla's thoughts reflect that trust is not only valued by teachers, it results in an increased level of respect for the principal who shows confidence in knowing teachers can and will do well in their job.

Evan teaches theatre arts and also serves as the fine arts department chair. In this role, he acknowledged several leadership responsibilities that have afforded him the opportunity to work closely with the principal and school leadership team, and as a result, the principal's level of trust over the 3 years they have worked together has increased.

Evan described their working relationship as follows:

I have taken on lots of roles and responsibilities such as UIL Literary League, fine arts magnet program lead team, and department chairperson. I have been exposed to lots of experiences and different leadership roles, and my principal trusts my decisions and ideas.

Evan also noted that serving on special committees and teams has allowed him to work closely with his principal. He believed their shared experiences in these roles outside of the classroom had positively impacted his perception of the principal's leadership behaviors through increased trust.

Leon, a middle school social studies teacher, shared similar sentiments about his perception of his principal's level of trust in him as an effective teacher when he stated,

There's a good level of trust. Our principal doesn't spend an exorbitant amount of time in the classroom. I think they understand that we're trained to do this job and we can get it done. Obviously observations and appraisals are important part

of the job, but we're trusted to do what we need to do and they are there to help support us.

Leon recognized that principals should visit and observe classrooms periodically to fulfill their supervisory responsibilities. He also acknowledged that less frequent visits are an indicator of the principal's level of trust in his abilities as a professional educator.

Martha Kate, a kindergarten self-contained teacher, has taught for 4 years with this being the 1st year she has worked under her current principal. Her current principal had 7 years of experience. Martha Kate brought forth the notion that trust is earned through actions. She described her principal as a skilled early childhood educator and instructional leader. Martha Kate's sentiments emphasized that trust is not only given to teachers from the principal, but that teachers reciprocate trust toward the principal. She stated,

My principal has a strong background in early childhood education, and she and any of the administrators can walk into my classroom and teach my students. They know how to teach and could probably pick up where I am and do the job better than I do with no lesson plans. I trust what they're telling me because they can do the work.

Martha Kate's thoughts reflected that teachers perceive principals to be instructional leaders of the school when they witness you in a teacher role, effectively teaching students. While it may be a rare opportunity for a teacher to observe a principal teaching, Martha Kate's reflections are indicative of the impact it may have on a teacher's perception of the principal's leadership.

Overall, teachers across grade levels and content areas expressed a positive perception of their principals' leadership when there was a recognizable level of trust that was demonstrated from the principal. Teachers felt that principals who demonstrated

trust were those who allowed a reasonable amount of distance from the classroom. In other words, they did not spend an excessive amount of time conducting walkthroughs and observations, nor did they find the need to direct every facet of their job duties. The teachers perceived a high sense of trust from the principal when they felt they were allowed to perform their job duties as capable and effective professional educators.

Leading by Example

Another common perception teachers had of their principals' leadership behaviors was their practice of leading by example. Specifically, this referred to the principal modeling the behaviors and or characteristics he or she wishes to see in others within the school community. This theme occurred in five of the participants' responses. The interview participants were of various professional backgrounds, represented different combined-level schools, and had worked with their current principal for varied numbers years. The consensus among these teachers was that modeling behavior is perceived as the most impressionable approach to setting an example for others to follow.

Alicia was a sixth grade math teacher in her 1st year of teaching. She has worked under her principal's leadership for 2 year as she began as a student teacher. Alicia's principal had 13 years of experience. She shared her perceptions of her principal leading by example when she stated:

She [my principal] is super active. She is always really positive by greeting the students and kissing them on the forehead. She models the behavior I know I should be exhibiting to the students, even on their worst days or even on my worst days. When I see my principal do that I know I can keep going, I can keep pushing a little harder. She also is super understanding with the demographics and the situations we have here. She's always digging further and asking "Why?". That always encourages me to do that with my students as well; keep wondering where their behaviors are coming from, or what sources lead to their

quirks or the way that they are. That really helps me keep going and know that it's not all so bleak.

Alicia expressed a sense of optimism and inspiration that she gains from her principal's positive attitude and interactions with the students. She further explained that her principal demonstrates the importance of knowing students personally to understand the challenges they bring to the classroom. Through her daily efforts, the principal sets an example for building meaningful relationships with students.

Maria, a sixth grade ELAR and social studies teacher, described ways her principal leads by example by stating, "My principal definitely does everything that he asks us to do. Everything is about the students. For example, student involvement—he's there, he's involved, he's a role model." Similarly, Katherine, a seventh and eighth grade science teacher echoed Maria's thoughts when she stated,

Leading by example is what my principal does. He guides the students and guides me as well. He also knows the kids, every kid in our school. He knows their names and every kid's story. I think that's a big plus.

Both teachers described lessons they have learned through observing their principals' actions with students, in addition to expressing a sense of inspiration these examples have imparted on them as educators.

Leon, a sixth and eighth grade social studies teacher, expressed a positive perception of his principal's leadership behaviors throughout the interview, and particularly when he described how he perceives she sets an example that aligns with the values she espouses and expects to observe in others. Leon shared,

Our principal wants us to achieve our goals. She focuses on positive relationships and has a good understanding of our student population. She also demonstrates compassion for teachers and for the kids. We're encouraged to be compassionate

as well because our administration always tells us that kids work for their teachers. If we don't share that compassion, they're going to shut down, and so this sort of example she sets creates a virtuous circle, if you will.

Leon further elaborated on his principal's commitment to demonstrating compassion, care, and love toward all students. He described her approach as helpful in reaching their students and instilling in them a thirst to learn.

Martha Kate, a kindergarten self-contained teacher, shared her perceptions of principal leadership behaviors through collegial interactions and professional relationships. She described her previous school that harbored a negative, toxic environment. Compared to her current position, Martha Kate compared her current and former principals, and made note of the differences in their approach to interacting in a professional manner with all adults all the time. Martha Kate said,

I worked in a very poorly run school, and the environment was very negative. The culture overall was negative. But in my current position, I am treated with a lot of respect, dignity, and trust. I'm treated as a professional, and I feel that my principal believes in me as a teacher.

Martha Kate's past experiences in an unhealthy work environment have enriched her perspective on modeled leadership behaviors that enhance or diminish a school environment.

The overall consensus among the teachers was that principal leadership behaviors can be modeled for others to follow. In fact, they elevate the teachers' level of buy-in and support for the principal as they see the principal committing to the very acts that he or she says are important. Their responses indicated numerous and extensive observations of their principals setting an example that aligns with the values they espouse and commit to engraining within their school culture.

Professional Development

The fourth common theme in teachers' perceptions of principals' leadership behaviors was access to and encouragement to attend professional development. This theme was present in one-third of the participants' responses. The teachers' responses indicated that they view professional development as an opportunity learn more about teaching methodologies or resources, and improve their teaching practice. Moreover, principals who willingly offer these opportunities and encourage teachers to attend were demonstrating a commitment to supporting their achievement toward individual professional goals. Martha Kate, a kindergarten self-contained teacher, shared her thoughts on access to professional development by stating,

She [my principal] provides access to a lot of resources, and that definitely enhances and has been very helpful to me because it's my first year. She's given me the access to go to trainings during the school day. She's been generous with budget for trainings in content areas that I'm not familiar with. Anything I've wanted in terms of instructional [professional] development, she is willing and able to provide access to that.

Teachers feel valued when their principal demonstrates a commitment to their development and improvement. Martha Kate expressed an understanding of issues associated with her school's reduced budget and stated that she admires her principal for managing the funds in such a way that continues to support teacher professional development.

Maria, a sixth grade ELAR and social studies teacher, also discussed ways her principal provides resources and encourages professional development to enhance instruction. She shared,

He gives us resources and enhances my ability to apply all instructional strategies I want to try. We have PLC meetings every two weeks to talk about what we should be trying in the classroom and he encourages us to use what we learn from professional development.

Maria's comments suggested that she knows professional development is an important aspect of growth and improvement among the teachers at her school. She felt that her principal values professional development outside of school as well as internally through teacher staff meetings where ideas for the classroom can be easily dissected and exchanged.

Darla, a sixth and seventh grade science teacher, echoed the thoughts about a principal's encouragement to attend and support of professional development when she stated,

I do feel like my principal is supportive of various trainings that I may request as well as bringing certain trainings on campus so that it is available and easily accessible to us. Instructional strategies are talked about often in staff meetings and professional developments that they will bring to campus.

Darla also shared that her principal encourages the teachers to share ideas about instruction and effective practices that are working well in their classrooms. She feels very fortunate to work in such a supportive environment that encourages professional growth.

Unlike the previous teachers, Nathan, a kindergarten through fifth grade music teacher, shared his experience with a principal at his previous campus. Nathan had been a teacher for 19 years, with 3 years under his current principal. Nathan's principal had been in his role for 9 years. He recalled, "You were not allowed to attend different professional developments. I was never allowed to leave campus for any reason." He

later described his current principal as a leader who supports professional growth opportunities and stated in comparison,

He gives us opportunities to go to professional development to further develop in ways that you think you may lack or things you just want to add to your own repertoire. I think that has had the biggest effect on me because I know that if I need to do better in something, I'll have the opportunity to learn about it.

Overall there were several factors that were associated with professional development and teachers' perceptions of principal leadership. Factors such as having access to quality professional development and the principal encouraging teachers to attend workshops was prominently discussed. Teachers also felt that their principal was committed to their growth and quest to achieve their professional goals when they encouraged them to attend professional development, use what they learned in the classroom, and share those practices with each other.

Enhancing and Diminishing Leadership Behaviors

Participants were asked three questions regarding the constructs, or correlating factors, of self-efficacy: In what ways does your principal enhance or diminish your ability to implement effective instructional strategies? The question was posed similarly for student engagement and classroom management as correlating factors of self-efficacy. Themes related to the principal enhancing or diminishing instructional strategies included professional support and resources, and the principal's instructional leadership. Two unique themes that emerged when discussing student engagement were positive relationships and classroom expectations. Emergent themes from participant responses regarding classroom management included consistency and support.

Instructional strategies. The teachers stated that professional support and resources were important aspects of their principals' leadership, and ways their instructional strategies were enhanced or diminished. Martha Kate shared, "My principal provides access to a lot of resources and to needed trainings." Leon also commented on resources from the principal enhancing instructional strategies in his classroom by stating, "She shares information with us regularly from the district that we can use with our students. We're also given freedom to teach how we need to teach using various resources that are available to us." Katherine extended the ideas around resources a bit further when she stated,

Instruction in my classroom is enhanced by the environment the principal has created. He has invested in instructional support such as a math coach, reading specialist, and dyslexia specialist. He values these human resources to support instruction and I like having these experts around to help me get better as a teacher.

While Katherine shared thoughts on instructional leadership enhancing her practices, Amy commented on principal leadership behaviors that diminish her ability to implement effective instructional strategies. She said, "Having too many programs to focus on at once makes me lose traction. There's just too much going on and I'm not good at any of the things we do outside of Montessori." Katherine was referring to the school-wide Montessori program, in which she had received specialized training and on which most of her teaching focus was placed. Her comment aligned with the ideas that teachers perceive principal leadership to be a major factor in their ability to deliver high-quality instruction to their students. Moreover, they realize how the principals' instructional leadership, or lack thereof, directly ties into their success in the classroom.

Student engagement. One dominant theme that emerged when the teachers discussed principal leadership behaviors and student engagement was relationships with students. Two teachers described the importance of student relationships in their school and the emphasis their principal placed on them. Alicia shared,

I see my principal and the relationships she has with our kids. It pushes me to keep having those relationships as well and to engage my students by understanding what's going on in their lives . . . and to know their interests. I think that keeps it going in my classroom, as far as my instruction.

Alicia believed strong relationships with the students in their school was one of her principal's most emphasized imperatives. Alicia regularly observed her principal interacting with students, demonstrating the importance of knowing them and maintaining a relationship with every student. Darla, another teacher who discussed her principal's focus on student engagement, commented similarly to Alicia by saying,

My principal knows the students and what's going on in their lives. He has very personal relationships with the students; he knows them by name and they are interested in wanting to share with him about what's going on. He creates a sense of safety for students to interact with the adults in our school. I think that does impact my relationship with them as well because there's that model.

Another emerging theme related to student engagement and the teachers' perceptions of their principals' leadership was modeling the expectations. Two teachers shared thoughts about the perception of their principals' leadership to engage students.

Katherine, a seventh and eighth grade science teacher, stated,

There is a high expectation in the school as to what goes on in a classroom. We have a common practice of using visuals to make our classrooms engaging spaces, and our principal has set a bar for reimagining how classrooms look and operate. He encourages this and whenever he's in our room, he models it.

Katherine shared details of the classroom environment, describing the furniture arrangement, lighting, and inviting atmosphere. She admitted that the physical space is not all it takes to engage her students, but it makes a positive impression on the students, she stated. Donna has taught for 4 years, all under the same principal, who has served in the principalship for 5 years. Donna teaches first grade teacher and spoke openly about her principal's practice:

My principal does a morning assembly every morning, with the whole school. It's kind of like a calendar time, like morning meeting that we do, but he does it with the whole school in Chinese. He starts it 20 minutes before school starts, so teachers are required to be there. I've seen how he addresses and talks to the students, and what he does to keep their attention. It's been helpful just from me watching him, I've picked up some things, some new tips.

Donna stated that she is impressed with her principal's commitment to teaching the daily lessons each morning. She viewed it as a testament of his love for teaching and a way for him to continue teaching, despite the demands of his current role as school principal.

These teachers realized their principals value student relationships. They believed their principals understand the interrelatedness of strong relationships and student engagement. It was also apparent from their responses that the emphasis placed on student relationships was modeled by the principals in their daily interactions, which pushed it to the forefront of importance.

Classroom management. The discussions around classroom management drew comments on principals enhancing and/or diminishing teachers' ability to effectively manage their classroom. The teachers' perceptions of principal leadership varied in both areas. When discussing ways the principal enhances classroom management, one central theme was derived from the teachers' interviews, which was principal support. Three

teachers shared thoughts on enhanced classroom management and principal support. An underlying theme herein was mentoring, which one teacher coupled with support. Darla, a sixth and seventh grade science teacher, stated,

Consistency and support are the key. It's nice to have a behavioral management system that is uniformly implemented across the school. Plus, the leadership team provides support on these kinds of issues immediately. They address it with urgency.

Darla felt strongly that her principal's background as a special education teacher gave him a richer perspective to behavior management. She described his approach to behavior management as a principal to that of a special education teacher. He remains calm, talks through the situation, and helps the students to get refocused in the classroom. Darla described a consistent behavior management system across the school that enhances her ability to enact rules and procedures that are aligned with those.

Two teachers described their principals' support in classroom management similarly as "having their back" in student and or parent situations. Katherine, a seventh and eighth grade science teacher, said,

My principal has my back when it comes to students and parents, which is important when you're in the classroom. I've heard him say to kids, 'If this teacher or any teacher even thinks you're being disrespectful, that's a problem.' He cares about the students and wants them to do well, but he doesn't let their behavior get out of hand. He demands respect in a caring, loving way.

Similarly, Sujana is a veteran teacher with 21 years of experience in the classroom. She has worked with her current principal for two years, and he has served in his role for 9 years. Sujana teaches fourth grade math teacher and echoed Katherine's sentiments by saying,

It comes down to offering support, not just in terms of resources, but behavior support. I've always had administration back me up, and I've had very few behavior concerns over the years. Whenever there was an issue, administration always recognized how closely I work with students and parents from the beginning and they supported me if I needed back-up.

The teachers believed their ability to manage their classroom effectively was enhanced when they had their principals' support. The support, as described in their comments, gives them a sense of provision when it is handled with consistency across the school and in a timely manner. As well, their comments suggested that they benefit from principal support when it feels like "back-up" if there is ever opposition from students and or parents that stems from classroom behavior issues.

On the contrary, three teachers shed light on principal leadership behaviors that diminished their ability to effectively manage their classroom. Amy, a fourth grade self-contained teacher, candidly described how her principal's inconsistent approach to student behavior diminished her ability to effectively manage her classroom. She said,

In terms of classroom management, we do not get a lot of support from our principal at all. There's really not a discipline system in place in our school that has any regularity. This year we have the gift of having a magnet coordinator who has worked at other schools, and she acts as our help, but this is the first year we've had like lunch detention or anything where we've gotten support from the office. Generally, in years past, if you really needed help from the office and you send a child, they would return ten minutes later with like a note that says, 'I'm sorry'. Unless the child was someone she wanted to get out of the school, I know that sounds terrible, but there isn't really a better way to describe it, that same behavior might end up with that child being suspended, and then after three suspensions, they would be asked to leave the program, so it's [discipline] is a mixed bag.

Amy felt that her principal was not helpful in managing student behavior. While she had found the school's magnet coordinator to be a resource, she believed the principal could do far more. Amy's frustration was evident when she described the inconsistent

responses to misbehavior in the classroom. Similarly, Leon discussed the inconsistencies in school-wide behavior management when he said, “We need more guidance on mid-level classroom management issues. For example, how to handle those behaviors that are worse than tardy, but a student who won’t stop talking.” Leon acknowledged that he has not experienced many major classroom management issues during his years as a teacher; however, he believed a consistent, school-wide system would alleviate teachers’ questioning what to do when behavior issues arise in their classroom.

Evan, a sixth through eighth grade theatre arts teacher, frankly discussed the lack of principal leadership in classroom management when he said,

Discipline issues do not involve the principal at my school. All the APs handle it. When I do need her support, the students are sent right back and that’s one of my concerns regarding discipline in my school.

Evan believed that his principal should be more involved in student discipline. He commented that her presence and direct leadership in behavior issues would help him show the students that he had the support of the principal. From his perspective, the students need to know the principal and teachers are of one accord. According to each of these teachers’ comments, principal leadership enhances or diminishes their ability to manage their classroom from several different points of view. From their responses, it is apparent that consistency in school-wide rules and consequences is very important, as well as providing support when tense student or parent situations arise.

Key Leadership Behaviors

The participants were asked to reflect on their principals’ leadership behaviors as identified by the Principal Leadership Questionnaire (Jantzi & Leithwood, 1996). Six

leadership qualities were described in detail along with characteristics that are central to each. The first part of the question focused on the teachers' perception of the area in which his or her principal was most skilled and ways these practices increased their sense of self-efficacy. Conversely, the participants were asked about their principals' weakest leadership behavior and how it diminished their level of self-efficacy.

Key leadership strengths. There were commonalities in teachers' perceptions of their principals' key leadership strengths. Themes emerged as nearly one-half of the teachers interviewed discussed two areas in which their principal was most skilled, which included providing vision and fostering commitment. Four teachers referred to their principal providing a vision for the school, while two teachers described their principal as most skilled in fostering commitment. Teachers shared perceptions of these behaviors and their sense of self-efficacy.

Provides vision. The teachers stated that knowing the vision for the school was important, citing it as an essential aspect to forecasting their future and giving them a sense of direction as a school community. Nathan, an elementary music teacher, shared, "He provides a vision for us. This tells us where we are and where we're headed. He makes sure we are all moving in same direction". Alicia, a sixth grade math teacher, described her principal similarly when she said, "My principal encourages us to have the same goals. It's very motivational and inspires us. We're more purpose-driven by knowing her vision." Amy shared reflections on her principal's leadership strengths: "She articulates the vision, although she doesn't say exactly how to get there. She is very passionate about Montessori and our school". Amy went further, affirming her

principal's vision by stating, "Through all these years of [district] budget cuts, she has fought for our school in to save our program". In addition to the previous sentiments, Katherine shared,

Providing vision is definitely his strength. He develops and articulates the vision for our school. We are on the forefront of inquiry-based learning, which doesn't just happen; it takes leadership and vision.

Katherine affirmed her own sense of efficacy stemming from her principal's beliefs when she stated, "My principal inspires me toward excellence. He believes that I can do it, and can be better, and a lot of what I believe is based on what he believes." The teachers' statements revealed the need and desire to know the principals' vision for the school as an indication of the future of the school and to provide a sense of direction for all members of the school community.

Fostering commitment. Two teachers perceived the area of fostering commitment to be their principals' strongest leadership skill. Martha Kate, a kindergarten self-contained teacher, revealed her principal's strengths of fostering commitment from a personal experience when she said,

She fosters commitment by recognizing that we have a life outside of school. The teachers with children who get sick, me recently getting engaged, and on to a teacher who lost two family members in one year—a parent and a sibling. We are viewed as a person to her. I don't get the sense that she thinks, "You're costing me money when you are not here." She understands and extends grace to us when life happens and that strengthens my commitment to it all.

Leon shared similar thoughts by stating, "She increases my commitment when she takes time to recognize things we do well. She also maintains an open-door policy, which helps us solve problems before they get out of hand. It's good communication." The teachers' comments indicated these leadership characteristics are vital to maintaining a

strong sense of dedication to teaching as well as to their school. Their thoughts also indicated that principals foster teachers' commitment in various ways, through demonstrating an understanding for personal life situations to ensuring ongoing communication and accessibility.

Leadership weaknesses. As perceived leadership strengths were highlighted, principals' leadership weaknesses were also discussed. Two central themes emerged as leadership behaviors that were perceived to be the principals' weakest areas, according to the participants' reflections in the interviews. The principals' practice of providing individual support was identified by three teachers as a commonly weak leadership behavior. Three teachers also perceived leadership weaknesses in the area of holding high expectations for all.

Provides individual support. Providing individual support to a teacher was cited as an area that was lacking in principals' leadership practice. Darla commented, "My principal is so far removed from my classroom. He approaches everything in the school, issues and problems, from a large scale." Alicia recognized that her principal has a very demanding job and inability to provide individual support when she said, "It's hard for her with all the staff, but it would really help if she checked-in a little more often." Donna shared similar sentiments when she said, "They [administrators] don't know what I do. I like them, but they don't know what to look for in my classroom." The teachers' responses indicate their thoughts about individualized support and attention to their class or content area, and to their overall performance as a teacher.

Holds high performance expectations. The other area that was perceived as the principals' weakest leadership skill was related to demonstrating high performance expectations for all staff members. Two teachers made comments about high performance expectations from their principal. Maria remarked, "There's no follow-through on things. Some teachers get stuck in a rut and can do a better job." Donna pointed to many aspects of her principal's leadership that connect with high performance expectations. She stated,

Expectations go along with recognition. I gave a lot of effort and coordinated activities for the entire school, but didn't feel my principal appreciated it. It was like he didn't care. Admin needs to do shout-outs as a way to recognize and motivate teachers.

According to these teachers, high performance expectations were lacking most when the principals did not hold teachers accountable for maintaining excellence in their teaching practice, or overall job performance. Without upholding the expectations for quality teaching, there was a tendency to perform at a mediocre level, from this teacher's perspective. Holding high expectations was also linked to recognizing the performance exemplars that teachers should be working toward.

Summary of Findings

Surveys were sent to teachers at 11 combined-level schools in a large urban school district. Each of these schools serves students in kindergarten through eighth grades. An electronic survey was sent to the teachers of these campuses, with 144 returned completed. The quantitative analysis indicated a relationship between teachers' sense of efficacy and principal leadership behaviors. The findings suggested that there was a significant and positive relationship between teachers' sense of efficacy and their

ratings of principals' leadership behaviors. The findings also indicated that years of experience do not significantly predict teachers' perceptions of their principals' leadership skills. When looking at the teachers' ratings of principals' leadership behaviors and determining if they significantly predicted their own self-efficacy, the researcher found that there was a significant relationship between the two. The researcher found that as the PLQ score increased, there was an increase in the TSES score.

The qualitative analysis found that autonomy, trust, support, and professional development had an effect on teachers' perceptions of principal leadership behaviors. The researcher also found six themes that were unique to enhancing or diminishing teachers' sense of efficacy, which included professional support and resources, instructional leadership, positive relationships, and consistency in practice. Teachers' perceptions of their principals' leadership strengths and weaknesses resulted in four themes, which included providing vision and fostering commitment, and providing individual support and holding high expectations for performances as perceived leadership strengths and weaknesses, respectively. Overall, teachers indicated that an ample amount of autonomy to do their job and professional support significantly contributed to their sense of efficacy.

CHAPTER V: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents the summary of findings, implications, and recommendations for further research. The purpose of this study was to examine the relationship between teacher self-efficacy and principal leadership behaviors. The research questions that guided this study follow.

Quantitative Research Questions

1. What is the relationship between teacher self-efficacy and principal leadership behaviors?
2. How do teachers' years of experience predict their perceptions of their principal leadership?
3. Do teachers' ratings of their principals' leadership predict their own level of self-efficacy?

Qualitative Research Question

4. What are teachers' perceptions of principal leadership behaviors?

The research design for this study was an explanatory sequential mixed methods approach in order to collect and integrate both qualitative and quantitative data in two consecutive phases in one study. The study was conducted in the spring of 2018. An electronic survey was sent to teachers at 11 combined-level schools that serve students in kindergarten through eighth grades. Of those, 144 teachers completed and submitted their surveys for quantitative analysis. In addition, 13 teachers participated in interviews which provided qualitative data from responses to a set of questions from an interview

protocol. The teachers' job assignments and years of experience varied. Six teachers taught in elementary grades and seven teachers taught in middle school grade levels.

The quantitative data were analyzed through a Pearson product moment correlation to determine statistical significance. The *p*-values of the data were used to determine if the relationship between teacher self-efficacy and principal leadership behaviors were significantly correlated for Question One. Quantitative data were also analyzed using an ANOVA to determine if teachers' years of experience significantly predicted their perceptions of their principals' leadership behaviors. The third question was analyzed from the results of a simple linear regression to determine if teachers' ratings of their principals' leadership behaviors were a significant predictor of their own self-efficacy. The qualitative data were analyzed by utilizing an inductive coding process to address the interview protocol questions collected from each teacher interview. The researcher then looked for themes that developed from the teachers' interview responses.

Summary

The research questions from this study examined teacher self-efficacy and principal leadership behaviors. Research Question One focused on the significance between teachers' sense of efficacy and teachers' ratings of their principals' leadership behaviors. The levels of significance, *p*-values, were explained in greater detail in Chapter IV. These results indicate that there was a statistically significant relationship between the teachers' sense of efficacy and the ratings of their principals' leadership behaviors.

Research Question One

Research Question One examined whether teachers' sense of efficacy influenced their ratings of their principals' leadership. The quantitative analysis conducted by the researcher suggested that the correlation between teacher self-efficacy and principal leadership behaviors was statistically significant for the participants in this study. The positive *r*-value indicated that a positive correlation exists between teacher self-efficacy and principal leadership behaviors. As teacher self-efficacy levels increased, teachers' ratings of their principals' leadership behaviors increased.

There was a significant portion of the qualitative data that aligns with these quantitative results. The interviews allowed the teachers to elaborate on how their principals' leadership affected their sense of efficacy. According to the interview participants, when principals provide support and resources, their ability to perform tasks in the classroom is enhanced and there is an increase in their rating of their principals' leadership. These results aligned with Blase and Blase (1999), whose study found that teachers reported positive outcomes on their efficacy, sense of security, and motivation when the principal encouraged reflection about teaching experiences in the classroom and student performance. Tschannen-Moran and Hoy (2007) also reported similar findings with positive outcomes on teacher efficacy when the principal removed impediments to teaching and encouraged reflective practices. In both studies, as teachers' efficacy levels increased, there was also an increase in the ratings of the principals' leadership practices.

Research Question Two

Research Question Two asked how teachers' years of experience predicted their perceptions of their principals' leadership. The quantitative analysis indicated that there was not a significant difference in teachers' years of experience and their perceptions of principals' leadership behaviors. Table 5.1 summarizes the findings of Research Question Two. Although the number of participants ranged across the categories of years of experience, the majority of teachers were categorized as having 13 years or more teaching experience. Of the 100 survey participants, 47% (n = 47) identified themselves as having completed 13 or more years of teaching. However, there was not a significant mean difference between these teachers and those in other categories. These findings are indirectly reinforced by the interview responses that indicated teachers' perceptions of principals' leadership, of which skills and characteristics were identified without respect to years of experience. Several studies indicated the importance of leadership practices such as allowing teachers autonomy and flexibility, providing a common purpose and vision for the school, and creating a safe school environment (Moore & Esselman, 1992; Hipp & Bredeson, 1995; Tschannen-Moran & Hoy, 2007; and Marzano, Waters, & McNulty, 2003). Pearson and Moomaw (2005) linked teacher autonomy to teacher empowerment, stating that teachers are empowered when they are granted the freedom to make instructional decisions in their classroom. Hipp and Bredeson (1995) asserted that leaders who establish a common purpose for the school and create an orderly environment enhance teachers' efficacy. Additionally, teachers' perceptions of fewer impediments in their work and access to resources had a stronger sense of efficacy

(Tschannen-Moran & Hoy, 2007 as cited in Moore & Esselman, 1992). Each of these leadership practices is adopted and enacted throughout one’s career, and is not necessarily connected to his or her years of experience.

Table 5.1

Teachers’ Years of Experience and Perceptions of Principals’ Leadership Behaviors

Years of Experience	N	Mean
0-3 years	16	108.5
4-7 years	16	93.1
8-12 years	21	98.0
13 years or more	47	100.2
Total	100	99.9

Research Question Three

Research Question Three asked if teachers’ ratings of their principals’ leadership predicted their own level of self-efficacy. Table 5.2 summarizes the research findings of Research Question Three in this study. Based on the results of the study, the PLQ score significantly predicted the teachers’ sense of efficacy scores.

Table 5.2

Teachers’ Sense of Efficacy Predictions From PLQ and TSES Scores

	N	Mean	Std. Deviation
TSES Total	115	89.6	12.6
PLQ Total	101	99.8	20.8

Table 5.3 summarizes the parameter estimates for the TSES scores as predicted by the PLQ score. These findings revealed that when the PLQ score was 0, the TSES score would be 73.4. For every unit increase in PLQ score, there was an increase of .17 in the TSES score.

Table 5.3

Parameter Estimates for TSES Scores Predicted by PLQ Scores

	<i>p</i> -value
Intercept	.000
PLQ Score	.003

*Statistically significant ($p < 0.05$)

These results are in agreement with Tschannen-Moran and Hoy's (2007) findings regarding verbal persuasion, in which they asserted that a teacher's success extends from many sources, including administrators, colleagues, parents, and persons from the school community. Similarly, Bandura (1977) asserted that through social persuasion, principals can influence teachers' level of self-efficacy by sharing persuading words to help them overcome self-doubt and focus on their skills, attributes, and giving their best effort. Hoy's (2000) research tied this together by finding that such persuasion is likely to lose its positive impact if subsequent experiences repeatedly yield defeat.

The findings associated with Research Question Three are significant because they all include responses related to principal leadership and changes in teachers' level of

self-efficacy. Research Questions One and Two focused on the relationship between the teachers' sense of efficacy and the ratings of their principals' leadership behaviors, and teachers' years of experience and their perceptions of their principals' leadership skills. These two questions revealed that there was a significant relationship between teachers' sense of efficacy and principal leadership behaviors. These findings are supported by conclusions Guskey (1987) reached in a study involving elementary and secondary teachers in which he concluded that neither years of experience nor teaching assignment was significantly related to any of the perceptual or attitudinal variables of new program implementation. The variable differences did not associate with teachers' experience or the grade level at which they taught, according to Guskey (1987). On the contrary, Wolters and Daugherty (2007, as cited in Klassen & Chiu, 2010) conducted a study that showed modest correlations between years of experience and self-efficacy for instructional strategies and classroom management, and no effect for self-efficacy in student engagement and years of experience. The qualitative data indicated that teachers' perceptions of principal leadership were significantly related to leadership behaviors they demonstrate on a daily basis, the support principals provided to the teachers, and the leadership strengths and weaknesses they possess. These perceptions are highly correlated to the research presented by Marzano, Waters, and McNulty (2003) in which principal behaviors were found to significantly influence those of teachers, particularly through actions such as encouraging a sense of competence and confidence in teachers and empowering teachers in decision-making. These findings also aligned with Hipp

(1996) who asserted the importance of understanding the interdependent relationship between principals and teachers.

Research Question Four

Research Question Four examined teachers' perceptions of principal leadership behaviors. There were 13 teachers who participated in interviews, of which 6 were teachers in elementary grade levels and the other 7 taught middle school. Content area teaching assignments as well as years of experience varied among these teachers. The qualitative analysis of this study found four common themes that were identified across the teachers' interviews, regardless of teaching assignment or content areas. These emergent themes were autonomy, trust, leading by example, and professional development.

One of the themes that emerged was teacher autonomy to perform one's job. Factors that teachers discussed included being free to make decisions in content materials and lesson sequence, and the positive impact this made on the way they approached their job as a teacher. Additionally, the principals' ability to release control and grant teachers freedom in the classroom positioned them to better meet the needs of their students. This was consistent with research that identified autonomy as one of the most important aspects of teacher success. A lack of autonomy—the freedom to choose goals or teaching materials and methods—may upend a teacher's level of efficacy (Deci & Ryan, 2000). Pearson and Moomaw (2005) cited the lack of teacher autonomy as a critical component of teacher motivation, and a common reason teachers leave the profession. Richards (2011) also recognized that increased demands are being placed on teachers and

their level of freedom to meet the new demands should increase. Teachers discussed an increased willingness to take risks in the classroom when they are given the freedom to do so from their principal. The autonomy warrants new experiences through trial and error, which helps teachers grow. The comments shared here indicated that these experiences would be very limited if the teachers did not have the level of autonomy they had from their principal. This is in alignment with the study that found that constraints on autonomy are perceived as a lack of control, create a sense of powerlessness, and are related to tension, frustration, and anxiety among teachers (Bacharach, Bauer, & Conley, 1986). Lastly, autonomy was perceived by teachers as an indication of the principals' confidence in teachers to do their job.

Another theme that emerged from the interviews around teacher perceptions of principal leadership was trust. The teachers revealed their perceptions of their principals' level of trust in them, while also describing the trust they have in the principals, which was based on actions the principals had consistently demonstrated over several years. This aligns with the research of Tschannen-Moran and Hoy (1998) that concluded that trust should exist in school leadership, in particular, teachers' trust in the principal. These conclusions are also supported by the research findings of Bryk and Schneider (2002) who stated that the principal needs to be trusted to be able to lead the school staff, to collaborate with members of the faculty, and in other efforts such as providing guidance, resources, and support.

Other evidence of trust pointed to principals demonstrating trust in their teachers to perform effectively in the classroom as these comments recurred in multiple

interviews. Moreover, teachers perceived trust from the principal as a testament of their confidence in their knowledge and abilities. Likewise, teachers felt that principals who demonstrated trust were those who allowed a reasonable amount of distance from the classroom. In other words, they did not spend an excessive amount of time conducting walkthroughs and observations, nor did they find the need to direct every facet of their job duties. The teachers perceived a high sense of trust from the principal when they felt they were allowed to perform their job duties as capable and effective professional educators. Boles and Troen (1997) confirmed these ideas when they asserted that principals who have earned teachers' trust provide an environment where teachers can learn through success and failure, and these principals value failure as part of the learning process.

This study also found that teachers have a strong perception of principals leading by example and value it as an asset that undergirds their own success. These actions and behaviors refer to the principal modeling the behaviors and/or characteristics he or she wishes to see in others within the school community. The teachers came from varied professional backgrounds, represented different combined-level schools, and had worked with their current principals for varied numbers years. A commonality among these teachers was that modeling behavior is perceived as the most impressionable approach to setting an example for others to follow. These actions and behaviors referred to the principal modeling the behaviors and/or characteristics he or she wishes to see in others within the school community. The teachers in this study came from varied professional backgrounds, represented different combined-level schools, and had worked with their

current principal for varied numbers of years. A commonality among these teachers was that modeling behavior was perceived as the most impressionable approach to setting an example for others to follow. Muhammad's (2009) research supported these ideas in which he concluded that the human factor of schools, particularly through school leaders, immensely impacts the way things are done in a school. Cromwell (2002) also found that interactions between principals and staff influence the school culture and profoundly affect the overall environment.

Other teachers pointed out observations of their principals' interactions with students, parents, and other staff members. One teacher described a strong sense of optimism and inspiration that she gained from observing the principal's positive attitude and interactions with the students. As one teacher spoke specifically of observing the principal interacting with students in a positive manner, she commented on her consistently positive attitude toward the students as an example of modeling the behavior she knew she should be exhibiting to the students. The teachers explained how the principal demonstrated the importance of knowing students by name and understanding the challenges they bring to the classroom. More specifically, the principal understood the student demographics and family situations within the school community on a deep and personal level. The lessons learned, as told by these teachers, through observing their principals' actions with students, had given them a great sense of inspiration as educators. The overall consensus among the teachers was that principal leadership behaviors can be modeled for others to follow. Giles et al. (2005) and Griffith (1999) recognized these dynamic observations in their research, stating that principals function

in social, economic, and political contexts that are diverse in nature and that the school context is defined, in part, by the student population characteristics such as the predominant ethnic and socioeconomic identification. Interestingly, the teachers indicated that their level of support for the principal increased as a result of the principal modeling a commitment to the values they espouse. Deal and Peterson (1998) explained similar results in their research by stating that principals communicate the core values of the school in the way they interact with students and parents, and in what they say and do in their day-to-day work in the school.

The final common theme that emerged across the teacher interviews was professional development and principals who promoted the opportunity to attain meaningful professional learning. Fullan (2005) confirmed that supporting teachers and building their capacity are core features of effective principal leadership. Professional development was viewed as an opportunity for teachers to learn more about their instruction, methodologies or resources, and improve their teaching practice. The interview responses indicated that principals who offered these opportunities and encouraged attendance were demonstrating a commitment to supporting their achievement toward individual professional goals. The teachers felt valued when their principal demonstrated a commitment to their development and improvement. Moreover, the teachers revealed that the principals valued professional development outside of school as well as internal professional learning community meetings where ideas for the classroom were discussed and dissected in a practical manner. This was consistent with the research identified by Bray-Clark and Bates (2003) regarding teachers' desire and

need for practical training that addresses their students' learning and improves outcomes. Further aligned with these findings was principals' responsibility for ensuring coherent, relevant professional development experiences that connect real-world practice to the classroom, which promote teacher competence and confidence (WestEd, 2000 as cited in Bray-Clark & Bates, 2003). According to the teachers' responses, valuable professional conversations contributed to a supportive environment and encouraged professional growth. These thoughts were also in conjunction with several researchers who concluded that attracting and retaining high-quality teachers lies in the hands of the school principal, and demands support and resources, in the form of professional development and training (Waters, Marzano, & McNulty, 2003; Banch, Rivkin, & Hanushek, 2013). In summary, engaging and focused teacher professional development is a hallmark of school improvement and school leaders cannot leave teacher development to chance as reported in the research of Fullan (2005) and Muhammad (2009).

Limitations

There were three primary limitations in this study. First, the study included teachers from combined-level campuses in a large, urban school district, which limits generalizability. Second, the interviews and surveys may have presented a limitation of honesty from the participants as self-reported data primarily reflects information participants were willing to provide. In addition, this study took place immediately after a superintendent transition. The superintendent who was exiting the district was not perceived as being very supportive of teachers, which adversely impacted employee morale. Therefore, the cultural norms in the district at that time may have negatively

affected the teacher participants' level of efficacy. This left the researcher to assume the information that was shared was honest and complete. Thirdly, this study occurred during the school year, which presented time constraints for teachers. The researcher believed this limited the number of teacher participants in this study and that additional teachers would have been more willing to participate if the study was conducted at a time of year when they had fewer job obligations. An example may be during the pre-service duty period in August, during a holiday break, or in the summer when most teachers are not on duty.

Implications

Teacher self-efficacy is a critical factor in a teacher's success in the classroom. According to Bang and Frost (2012), teachers with a strong sense of self-efficacy will be resilient, solve problems with greater effectiveness, and most importantly, learn from their experience. These ideas align with the social cognitive theory, the theoretical framework of this study (Bandura, 1986). According to Bandura (1986), an individual possesses self-beliefs that enable him or her to control their thoughts, feelings, and actions. The conclusion that teachers with higher efficacy are "more open to new ideas and are more willing to experiment with new methods to better meet the needs of their students" (Protheroe, 2008 , p. 43), as well as more committed to teaching (Coladarci, 1992) is supported by the social cognitive theory. Recent research promoting teacher effectiveness has been conducted, finding that leadership practices and behaviors have the potential to positively affect teachers' lifelong professional development in the school context and to empower them toward a commitment to change (Emmanouil, Ma, &

Paraskevi-Ioanna, 2014). Moreover, effective leadership has a key role in motivating teachers toward success (Emmanouil et al., 2014).

These findings are important and have the potential to inform teacher and leadership preparation programs, as well as professional development and training that is tailored to meet teachers with varied skill sets in teaching. Although teachers can recover from negative experiences they attribute to their principals' leadership practices and experience success in the classroom, their performance is higher overall when their principal demonstrates one of the six leadership behaviors as described in the PLQ (Jantzi & Leithwood, 1997; Kouzes & Posner, 2012). Principals should first become aware of these leadership practices, reflect on those they possess or lack, and gain a deeper understanding of how these practices can positively impact their teachers' performance if exercised consistently.

Additionally, the level of confidence teachers possess and the extent to which the teachers believe in their ability greatly influences student behavior and academic achievement (Friedman & Kass, 2002). Teacher preparation programs that do not bring this matter to the forefront should provide opportunities for teacher candidates to know the correlation exists and help them develop strategies to overcome them. Similarly, principal leadership programs and professional development initiatives should also raise awareness around the impact, both positive and negative, that leadership practices can have on a teacher's overall effectiveness in the classroom. With rising expectations of teachers and principals, it is imperative that teachers experience success in the classroom

and possess a high level of efficacy to move beyond the many obstacles they may face in teaching.

Recommendations for Future Research

Several recommendations are presented for future research. First, this study should be extended to 1st-year teachers whose levels of self-efficacy are compared to the same teachers 3 years later. The classroom experiences, teaching assignments, school climate, and other factors would have to be considered in the data collection and analysis. Second, student achievement data of teachers who possess a high level of self-efficacy could be compared to that of students of teachers with lower levels of self-efficacy since research has shown a correlation between teacher self-efficacy and student achievement outcomes. The next recommendation is centered on principal leadership practice. If an instrument such as the PLQ were used with principals to gather feedback and promote self-reflection as opposed to using it as an evaluative tool, principals would likely be more open to learning from the feedback on their effectiveness as a leader. Because the PLQ is intended to be completed anonymously and can be used as a 360-feedback tool, principals would gather the unique perspectives of their subordinates, peers, and superiors. In addition, it could be used as self-assessment tool to allow the principal to reflect on the leadership practices observed by others and compare them those completed by the teachers. The researcher also recommends changes in legislation and practices as developed by policy makers as appraisal and other evaluative tools are identified for measuring teacher and principal effectiveness. It is imperative for policy makers to enact laws that align with increasing student achievement through increased teacher self-

efficacy. A final recommendation would be to revise the teacher interview process to help the participants further understand the PLQ leadership behaviors, and thusly, allow for more elaboration questions or general understanding of the instrument. As it was, the researcher provided the teacher participants with the overview of terminology and ideas, which included the leadership practices that are identified in the PLQ. The document was provided to the teachers prior to the interview. Allocating time for a pre-interview meeting would allow the researcher and participant to discuss these concepts, share examples, and clarify similarities and differences amongst the five behaviors. In addition, setting aside time before the interview to deepen the participants' understanding of these key terms and ideas would allow more time to reflect on their past experience, and therefore, prompt more elaborative responses and details in the actual interview.

Conclusion

Every classroom needs a strong teacher. Teacher quality the single most impactful school characteristic that significantly impacts student achievement. Teachers' roles are complex and multi-faceted as they are expected to firmly possess content-area knowledge, design and sequence lessons effectively, and engage students in learning activities that support higher order thinking. Monitoring and supporting students' social-emotional well-being is another important aspect of a teacher's role and professional expectations. Strong beliefs in one's ability to fulfill these and many other duties that comprise the teacher role are highly linked to students' achievement outcomes and success. Efficacious teachers are found to be more resilient, greater risk takers, resolve problems more efficiently, and learn from day-to-day experiences in the classroom.

Arguably as important as an effective teacher is an effective principal, for they select and cultivate strong teachers. Principals who are instructional leaders create a school culture that promotes the very qualities teachers are expected to possess—resilience, problem solving, risk taking, lifelong learning, to name a few. The relationship between effective teachers and effective principals is compelling and they are infinitely connected in their associations with overall school effectiveness.

Teacher efficacy is vital to teaching and learning, and the instructional leadership teachers receive from principals is interconnected to the success of both areas. This study provided teachers an opportunity to identify and describe the relationship between their own self-efficacy and principal leadership behaviors. The teachers reflected on their years of experience with their current and previous principals, and indicated their perceptions of the principals' leadership skills. Through interviews, the teachers had an opportunity to identify the leadership behaviors that enhanced and diminished their level of efficacy, and the teachers clearly identified these qualities. The teachers illustrated autonomy, trust, and leading by example as aspects of principal leadership that enhance or diminish their self-efficacy. They also identified professional development opportunities as a key aspect of principal leadership that is related to their self-efficacy. By acknowledging these findings, school and district leaders may incorporate effective leadership practices that will enhance teacher self-efficacy, and positively contribute to teachers' growth and success.

REFERENCES

- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York, NY: Longman.
- Bacharach, S. B., Bauer, S. C., & Conley, S. (1986). Organizational analysis of stress: The case of elementary and secondary schools. *Work and Occupations, 13*, 7-32.
- Balyer, A. (2012). Transformational leadership behaviors of school principals: A qualitative research based on teachers' perceptions. *International Online Journal of Educational Sciences, 4*(3), 581-591.
- Bandura, A. (1977). Self-efficacy: Toward unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman & Co.
- Bandura, A. (2006). Adolescent development from an agentic perspective. *Self-efficacy beliefs of adolescents, 1-43*. F. Pajares & T. Urban (Eds.). Greenwich, CT: Information Age.
- Bangs, J., & Frost, D. (2012, February). Teacher self-efficacy, voice, and leadership: Towards a policy framework for education international. Education International Research Institute: University to Cambridge.
- Beishuizen, J. J., Hof, E., van Putten, C. M., Bouwmeester, S., & Asscheer, J. J. (2001). Students' and teachers' cognitions about good teachers. *British Journal of Educational Psychology, 71*, 185-201.

- Bennett, N., Wise, C., Woods, P. A., & Harvey, J. A. (2003). *Distributed leadership: A review of literature*. National College for School Leadership.
- Benson, J. (2015). *10 steps to managing change in schools: How do we take initiatives from goals to actions?* Alexandria, VA: Association for Supervision and Curriculum Development.
- Berry, S. (2007). *Chapter LI: Leadership practices inventory*. Retrieved from <http://www.irma-international.org/viewtitle/20262/>
- Blase, J. (1987, Winter). Dimensions of effective school leadership: The teacher's perspective. *American Educational Research Journal*, 24(4), 589-610.
- Blase, J., & Blase, J. (1999). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, 38(2), 130-138.
- Bolden, R. (2011). Distributed leadership in organizations: A review of theory and research. *International Journal of Management Reviews*, 13, 251-269.
- Boles, K., & Troen, V. (1997). *Making professional development schools work*. New York: Teachers College Press.
- Borman, G. D., & Kimball, S. M. (2005). Teacher quality and educational equality: Do teachers with higher standards based evaluation ratings close student achievement gaps? *The Elementary School Journal*, 106(1), 1-20.
- Branch, G. F., Rivkin, S. G., & Hanushek, E. A. (2013, Winter). School leaders matter: Measuring the impact of effective principals. *Education Next*, 13(1), 1-8.

- Bray-Clark, N., & Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *The Professional Educator, 26*(1), 13-22.
- Bryk, A. S., & Schneider, B. (2003, March). Trust in schools: A core resource for school reform. *Educational Leadership, 60*(6), 40-45.
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Cagle, K., & Hopkins, P. (2009). Teacher self-efficacy and the supervision of marginal teachers. *Journal of Cross-Disciplinary Perspectives in Education, 2*(1), 25-31.
- Carey, K. (2009). The real value of teachers: If good teachers matter, why don't we act like it? *Education Canada, 49*(4), 70-75.
- Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli, C. Maslach, and T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*, 135-149. Washington, D. C.: Hemisphere.
- Chua, A., & Rubinfeld, J. (2014). *The triple package: How three unlikely traits explain the rise and fall of cultural groups in America*. New York, NY: The Penguin Press.
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education, 60*, 323-337.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of educational opportunity* (Research

- Report No. ED012 275). U.S. Department of Health, Education, and Welfare.
Retrieved from <https://files.eric.ed.gov/fulltext/ED012275.pdf>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New York: Pearson.
- Creswell, J., & Clark, V. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications.
- Cromwell, S. (2002). Is your school toxic or positive? *Education World*, 6(2), 1.
Retrieved from https://www.educationworld.com/a_admin/admin/admin275.shtml
- Daniels, L. M., Radil, A. I., & Goegan, L. D. (2017). Combinations of personal responsibility: Differences on pre-service and practicing teachers' efficacy, engagement, classroom goal structures and wellbeing. *Frontiers in Psychology*, 8.
Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5449472/>
- Davis, H. A. (1998). Variables influencing the development of the student-teacher relationship. *Educational Psychologist*, 38(4), 204-234.
- Day, C., Harris, A., & Hadfield, M. (1999, April). *Challenging the orthodoxy of effective school leadership*. Paper presented at the Annual Meeting of the American Educational Research Association, Quebec, Canada.
- Deal, T. E., & Peterson, K. D. (1994). *The leadership paradox: Balancing logic and artistry in schools*. San Francisco, CA: Jossey-Bass.

- Deal, T. E., & Peterson, K. D. (1998). How leaders influence the culture of schools. *Educational Leadership, 56*(1), 28-30.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Dede, C. (2009, July). Comparing frameworks for “21st century skills”. Harvard University Graduate School of Education, Cambridge, MA.
- DiGiulio, R. C. (2014). *Great teaching: What matters most in helping students succeed*. Thousand Oaks, CA: Corwin Press.
- Emmanouil, K., Ma, A. O., & Paraskevi-Ioanna, L. (2014). The impact of leadership on teachers’ effectiveness. *International Journal of Humanities and Social Science, 4*(7), 34-39.
- Every Student Succeeds Act, Pub. L. No. 114-95, § 2, 334 S. 1177 (2015).
- Fives, H., & Buehl, M. M. (2010). Examining the factor structure of the Teachers’ Sense of Efficacy Scale. *The Journal of Experimental Education, 78*, 118-134. Doi: 10.1080/00220970903224461
- Friedman, I. A., & Kass, E. (2001). Teacher self-efficacy: A classroom-organization conceptualization. *Teaching and Teaching Education, 18*, 675-686.
- Fullan, M. (2002, May). The change leader. *Educational Leadership, 59*(8), 16-20.
- Fullan, M. (2005, Winter). Turnaround leadership. *The Educational Forum, 69*, 174-181.
- Fullan, M. (2006). *Turnaround leadership*. London: Routledge Falmer.
- Gallante, P. E. (2015). *Principal leadership behaviors and teacher efficacy* (Doctoral dissertation, Walden University). Retrieved from

- <http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1580&context=disse>
rtations
- Gavora, P. (2010). Slovak pre-service teacher self-efficacy: Theoretical and research considerations. *The New Educational Review, 21*(2), 17-30.
- Gibbs, G. (2007). *Analyzing qualitative data*. New York: Sage Publications.
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569-582.
- Giles, C., Johnson, L., Brooks, S., & Jacobson, S. L. (2005, September). Building bridges, building community: Transformational leadership in a challenging urban context. *Journal of School Leadership, 15*, 519-527.
- 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.
- 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*, 807-818.
- 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.
- Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. W. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher, 33*, 3-13.
- Goldhaber, D. (2016). In schools, teacher quality matters most. *Education Next, 56*-62.

- Gravetter, F. J., & Wallnau, L. B. (2009). *Statistics for the behavioral sciences*. Belmont, CA: Wadsworth Cengage Learning.
- Griffith, J. (1999). The school leadership/school climate relation: Identification of school configurations associated with change in principals. *Educational Administration Quarterly*, 35(2), 267-291.
- Guskey, T. R. (1981). Measurement of responsibility teachers assume for academic successes or failures in the classroom. *Journal of Teacher Education*, 34, 44-51.
- Guskey, T. R. (1987). Teacher efficacy, self-concept, and attitudes toward the implementation of mastery learning. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D.C.
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31, 627-643.
- Hagan, T. L. (2014, July). Measurements in quantitative research: How to select and report on research instruments. *Oncology Nursing Forum*, 41(4), 431-433. doi: 10.1188/14.ONF.431-433
- Hagenauer, G., Hascher, T., & Volet, S. E. (2015). Teacher emotions in the classroom: Associations with students' engagement, classroom discipline and the interpersonal teacher-student relationship. *European Journal of Psychological Education*, 30, 385-403.
- Hanushek, E. A. (1992). The trade-off between child quantity and quality. *Journal of Political Economy*, 100, 84-117.

- Hemphill, J. F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist*, 58(1), 78-79.
- Heppner, P. P., & Heppner, M. J. (2004). *Writing and publishing your thesis, dissertation, and research: A guide for students in the helping professions*. Belmont, CA: Brooks/Cole Cengage Learning.
- Hipp, K. A. (1996, April). *Teacher efficacy: Influence of principal leadership behavior*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.
- Hipp, K. A., & Bredeson, P. V. (1995). Exploring connections between teacher efficacy and principals' leadership behaviors. *Journal of School Leadership*, 5(2), 136-150.
- Houston Independent School District (2017). *General information*. Retrieved from <http://www.houstonisd.org/Page/135309>
- Hoy, A. W. (2000, April). *Changes in teacher efficacy during the early years of teaching*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21, 343-356. Doi: 10.1016/j.tate.2005.01.007
- Jantzi, D., & Leithwood, K. (1996, October). Toward an explanation of variation in teachers' perceptions of transformational school leadership. *Educational Administration Quarterly* (32)4, 512-538.

- Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Development Disorders*, 33, 583-593.
- Kelley, R. C., Thornton, B., & Daugherty, R. (2005). Relationship between measures of leadership and school climate. *Education*, 126(1), 17-25.
- Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016, December). Culturally responsive school leadership: A synthesis of literature. *Review of Educational Research*, 86(4), 1272-1311. Doi: 10.3102/0034654316630383
- Klassen, R., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 103(3), 741-756.
- Kouzes, J. M., & Posner, B. Z. (2012). *Leadership Practices Inventory: LPI*. San Francisco, CA: Pfeiffer Assessments.
- Lee, V. E., Dedrick, R. F., & Smith, J. B. (1991). The effects of the social organization of schools on teachers' efficacy and satisfaction. *Sociology in Education*, 64(3), 190-208.
- Leithwood, K., Aitken, R., & Jantzi, D. (2006). *Making schools smarter* (3rd ed.). Thousand Oaks, CA: Corwin Press.
- Leithwood, K., Louis, K. S., Anderson, S., & Walstron, K. (2004). *How leadership influences student learning: Review of research*. New York: Wallace Foundation.

- Maxwell, J. (1992, September). Understanding and validity in qualitative research. *Harvard Educational Review*, (62)3, 279-301. doi: 10.17763/haer.62.3.8323320856251826
- McEwan, E. (2002). *Ten traits of highly effective teachers: How to hire, coach, and mentor successful teachers*. Thousand Oaks, CA: Corwin Press.
- Mees, G. W. (2008). The relationships among principal leadership, school culture, and student achievement in Missouri middle schools (Unpublished doctoral dissertation). University of Missouri-Columbia: Columbia, MO.
- Moore, W. P., & Esselman, M. E. (1994). Exploring the context of teacher efficacy: The role of achievement and climate. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Muhammad, A. (2009). *Transforming school culture: How to overcome staff division*. Bloomington, IN: Solution Tree Press.
- National Center for Education Statistics. (2015). *Search for public school districts*. Retrieved from <http://nces.ed.gov/ccd/districtsearch/>
- Pajares, F. (1997). Current directions in self-efficacy research. In M. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement* (pp. 1-49). Greenwich, CT: JAI Press.
- Parsons, J., & Beauchamp, L. (2012). Leadership in effective elementary schools: A synthesis of five case studies. *US-China Education Review*, 8, 697-711.

- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, (29)1, 38-54.
- Podell, D. M., & Soodak, L. C. (1993). Teacher efficacy and bias in special education referrals. *Journal of Educational Research*, 86(4), 247–253.
- Protheroe, N. (2008, May/June). Teacher efficacy: What is it and does it matter? *Principal*, 88(4), 42-45.
- Richards, J. (2011). Help teachers feel less stressed. *Principal Journal*, 91(1), 30-33.
- Ritchhart, R. (2012). The real power of questions. *Creative Teaching & Learning*, 2(4), 8-12.
- Rose, J. S., & Medway, F. J. (1981). Measurement of teachers' beliefs in their control over student outcome. *Journal of Educational Research*, 74, 185-190.
- Ross, J. A. (1992). Teacher efficacy and the effect of coaching on student achievement. *Canadian Journal of Education*, 17(1), 51-56.
- Ross, J. A. (1994, June). *Beliefs that make a difference: The origins and impacts of teacher efficacy*. Paper presented at the Annual Meeting of the Canadian Association for Curriculum Studies.
- Ross, J. A., Hogaboam-Gray, A., & Hannay, L. (2001). Effects of teacher efficacy on computer skills and computer cognitions of Canadian students in K–3. Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.

- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28.
- Rousmaniere, K. (2013, November). The principal: The most misunderstood person in all of education. *The Atlantic*. Retrieved from <https://www.theatlantic.com/education/archive/2013/11/the-principal-the-most-misunderstood-person-in-all-of-education/281223/>
- Salinas, H., Zarins, S., & Mulford, B. (2002). What characteristics and processes define a school as a learning organization? Is this a useful concept to apply to schools? *International Education Journal*, 3(1), 24-29.
- Sanders, W. L., & Horn, S. P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Sanders, W., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville: University of Tennessee Value-Added Research and Assessment Center.
- Scudder, J. (2018, May). School leadership: Keeping it simple. *Principal Leadership*, 18(9), 53-56.
- Shank, G. D. (2006). *Qualitative research: A personal skills approach* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Incorporated.
- Skaalvik, E. M., & Skaalvik, S. (2007a). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher

- burnout. *Journal of Educational Psychology*, 99(3), 611-625. doi: 10.1037/0022-0663.99.3.611
- Skaalvik, E. M., & Skaalvik, S. (2007b). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26, 1059-1069.
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059-1069.
- Soodak, L. C., & Podell, D. M. (1993). Teacher efficacy and student problems as factors in special education referral. *Journal of Special Education*, 27(1), 66–81.
- Spillane, J. P. (2006). *Distributed leadership*. San Francisco, CA: Jossey-Bass.
- Summers, J. J., Davis, H. A., & Woolfolk-Hoy, A. (2015). The effects of teachers' efficacy beliefs on students' perceptions of teacher relationship quality. *Learning and Individual Differences*, 53, 17-25.
- Swan, B. G., Wolf, K. J., & Cano, J. (2011). Changes in teacher self-efficacy from the student teaching experience through the third year of teaching. *Journal of Agricultural Education*, 52(2), 128-139. Doi: 10.5032/jae.2011.02128
- Tschannen-Moran, M., & Hoy, W. K. (1998). Trust in schools: A conceptual and empirical analysis. *Journal of Educational Administration*, 36(4), 334-352.
- Tschannen-Moran, M., & Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23, 944-956.
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and its measure. *Review of Educational Research*, 68, 202-248.

- Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.
- Veiskarami, H. A., Ghadampor, E., & Mottaghinia, M. R. (2017). Interactions among school climate, collective efficacy, and person efficiency: Evidence from education institutions. *International Journal of Economic Perspectives, 11*(1), 481-488.
- Vennebo, K. F. (2017). Innovative work in school development: Exploring leadership enactment. *Educational Management Administration & Leadership, 45*(2), 298-315.
- Wahlstrom, K. L., & Louis, K. S. (2008, October). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational Administration Quarterly, 44*(4), 458-495.
doi.org/10.1177/0013161X08321502
- Waters, T., & Cameron, G. (2007). *The balanced leadership framework: Connecting vision with action*. Aurora, CO: Mid-continent Research for Education and Learning.
- Waters, J. T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-continent Research for Education and Learning.
- Webb, R., & Ashton, P. T. (1987). Teacher motivation and the conditions of teaching: A call for ecological reform. In S. Walker & L. Barton (Eds.), *Changing policies,*

- changing teachers: New directions for schooling* (pp. 22-40). Milton Keynes, England: Open University Press.
- WestEd. (2000). *Teachers who learn, kids who achieve: A look at schools with model professional development*. San Francisco, CA: WestEd.
- Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for education reform. *Teaching and Teacher Education, 18*(5), 5-22.
- Wolters, C. A., & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: Their relation and association to teaching experience and academic level. *Journal of Educational Psychology, 99*, 181–193.
- Woolfolk Hoy, A., & Burke Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*, 343–356.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

APPENDIX A:

LETTER FOR APPROVAL TO CONDUCT RESEARCH

Dear District Officer:

I am writing to request the approval of the Research Committee your school district to conduct a research study involving human subjects. I am currently a doctoral student at the University of Houston-Clear Lake, pursuing a degree in Educational Leadership. The purpose of my research study is to examine the relationship between teacher self-efficacy and principal leadership behaviors.

While teacher self-efficacy was first brought to the forefront more than 30 years ago, it is still an imperative in educational outcomes (Prothero, 2008). Moreover, the impact of school leadership on teacher self-efficacy has been linked to overall teacher effectiveness (Gallante, 2015). This mixed-methods study will examine the relationship of principal leadership behaviors and teacher self-efficacy, as few studies of this nature have been conducted previously. The study directly aligns with the District's strategic plan and core initiatives of an effective teacher in every classroom and an effective principal in every school.

More specifically, if granted approval by the Research Committee, the study will involve teacher participants from your combined-level schools. Each teacher participant will be asked to respond to a 36-item survey instrument, and by self-selection, will participate in an interview to measure and assess teacher effectiveness and principal leadership as it relates to efficacy. The Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) and Principal Leadership Questionnaire (Jantzi & Leithwood, 1996) will be used in this study. Revisions to the surveys will be applied, if necessary.

Further, the data collection phase will begin with contact to the school principal to provide an overview of the study as well as an overview of the process for collecting survey data for all participants involved in the study. A copy of the survey instrument will be provided to the principals via e-mail. Similarly, the teachers at the school sites will receive an e-mail inviting them to participate in the study, along with an explanation of the survey instrument and optional, self-selected interview. All participants will be reminded of their voluntary participation. Written consent will be received from each participant as an initial step in the research study.

To ensure the safety and security of all data collected, and to ensure confidentiality of information shared through the interviews, I as the student researcher, will utilize the Qualtrix system to collect and analyze the teacher responses, which will be gathered anonymously. The interview audio recordings and written transcripts, which will be stored for three years prior to deleting, will be secured on a desktop computer with password

protection software, as well as on a memory storage device. In addition, I will communicate with the principal to ensure minimal interruptions of the regular school program and require as little demands of the teacher participants as possible. At the conclusion of the research study, two final copies of the results and findings will be provided to the district Research Committee.

In closing, gaining a deeper understanding of the relationship between teacher self-efficacy and principal leadership behaviors will provide new insights on the correlated factors regarding instructional practice, classroom management, and student engagement. In addition, new knowledge regarding these correlations has the potential to impact the leadership practices principals employ on a daily basis, as well as to enhance leadership preparation programs and other professional development initiatives. I greatly appreciate your consideration and look forward to your response to this request. If you have any questions or concerns, please do not hesitate to contact me.

Enclosures

APPENDIX B:
E-MAIL TO TEACHERS

Good morning,

Thank you for agreeing to participate in my survey. This research examines the relationship between teacher self-efficacy and principal leadership behaviors. The two-part survey is designed to gather information from your personal perspective based on your experiences as a teacher. It should not take longer than 20-30 minutes to complete. Your participation is voluntary and your identity is anonymous.

If you are unable to access the survey, please let me know as soon as possible. Your response no later than **Tuesday, October 4th** would be greatly appreciated. Thank you for your time and continued support!

To access the survey, please click on the link below:

https://uhcl.co1.qualtrics.com/SE/?SID=SV_b7akZ8w1Wsj4Ycd

APPENDIX C:
SURVEY COVER LETTER

Dear Teachers:

You are being solicited to complete the *Teacher Self-Efficacy and Principal Leadership Behaviors* survey. The purpose of this survey is to examine the relationship between teacher self-efficacy and principal leadership behaviors, which continues to be an imperative in our profession and daily practice as educators. The data obtained from this study will not only allow principals and teachers to gain new insights on the impact of leadership in the classroom, it will also reveal the needs for improved leadership preparation programs as well as other professional development initiatives.

Please try to answer all the questions. Completing the online survey is entirely voluntary, but answering each response will make the survey most useful. This survey will take approximately 20 minutes to complete and all of your responses will be kept completely confidential. No obvious undue risks will be endured and you may stop your participation at any time. In addition, you will also not benefit directly from your participation in the study.

Your cooperation is greatly appreciated and your willingness to participate in this study is implied if you proceed with completing the survey. Your completion of the *Teacher Self-Efficacy and Principal Leadership Behaviors* survey is very valuable to our future practice as educators. If you have any further questions, please feel free to contact me. Thank you again for your participation.

APPENDIX D:

INFORMED CONSENT STATEMENT

Your signature below acknowledges your voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to you. By signing the form, you are not waiving any of your legal rights.

The purpose of this study, procedures to be followed, and explanation of risks or benefits have been explained to you. You have been allowed to ask questions and your questions have been answered to your satisfaction. You have been told who to contact if you have additional questions. You have read this consent form and voluntarily agree to participate as a subject in this study. You are free to withdraw your consent at any time by contacting the Principal Investigator or Student Researcher/Faculty Sponsor. You will be given a copy of the consent form you have signed.

Subject's printed name: _____

Signature of Subject: _____

Date: _____

APPENDIX E:

TEACHER SURVEY

Part I. Teachers' Sense of Efficacy Scale

By Megan Tschannen-Moran and Anita Woolfolk Hoy (2001)

Teacher Beliefs	How much can you do?									
<p>Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.</p>										
1. How much can you do to control disruptive behavior in the classroom?										
2. How much can you do to motivate students who show low interest in school work?										
3. How much can you do to get students to believe they can do well in school work										
4. How much can you do to help your students value learning?										
5. To what extent can you craft good questions for your students?										
6. How much can you do to get children to follow classroom rules?										
7. How much can you do to calm a student who is disruptive or noisy?										
8. How well can you establish a classroom management system with each group of students?										
9. How much can you use a variety of assessment strategies?										
10. To what extent can you provide an alternative explanation or example when students are confused?										
11. How much can you assist families in helping their children do well in school?										
12. How well can you implement alternative strategies in your classroom?										

Part II. Principal Leadership Questionnaire

By Doris Jantzi and Kenneth Leithwood (1996)

Leadership Practices	Response Scale				
Directions: This questionnaire contains 24 behavioral statements that are aligned with the Principal Leadership Questionnaire. The survey takes 10-15 minutes to complete. Teachers participating in this study are asked to respond to each statement as it applies to the principal with whom they are working at this time. All responses are confidential.	1 - SD	2 - D	3 - Neutral	4 - A	5 - SA
1. My principal possesses both the capacity and the judgment to overcome most obstacles.					
2. My principal has earned the respect from everyone on the faculty and staff.					
3. My principal excites the staff with visions of what we may be able to accomplish if we work together as a team.					
4. My principal makes the staff members feel and act like leaders.					
5. My principal makes staff members feel and act like leaders.					
6. My principal leads by “doing” rather than simply by “telling.”					
7. My principal symbolizes success and accomplishment within the profession of education.					
8. My principal provides good models for staff members to follow.					
9. My principal includes staff members in the process of developing school goals.					
10. My principal encourages staff members to work toward the same goals.					
11. My principal uses problem solving with the staff to generate school goals.					
12. My principal works toward full-staff consensus in establishing priorities for school goals.					
13. My principal regularly encourages staff members to evaluate our progress toward the achievement of school goals.					
14. My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school staff.					
15. My principal provides the necessary resources to support my implementation of the school’s program.					
16. My principal treats me as an individual with unique needs and expertise.					

17. My principal takes my opinion into consideration when initiating actions that affect my work.					
18. My principal behaves in a manner thoughtful of my personal needs.					
19. My principal challenges me to reexamine some basic assumptions I have about my work in the school.					
20. My principal stimulates me to think about what I am doing for the school's students.					
21. My principal provides information that helps me think of ways to implement the school's program.					
22. My principal insists on only the best performance from the school staff.					
23. My principal shows us that there are high expectations for the school's staff as professionals.					
24. My principal does not settle for second best in the performance of our work as the school's staff.					

APPENDIX F:

TEACHER INTERVIEW QUESTIONS

The purpose of this research study is to examine the relationship between teacher self-efficacy and principal leadership behaviors. Surveys will be conducted with teachers, as well as individual, face-to-face interviews. All interviews will be conducted per a self-selection consent form. The surveys will take approximately 20 minutes to complete, and the interviews will be conducted within approximately 45 minutes. The researcher will adhere to the interview protocol provided below.

Introduction and Overview: Thank the interviewee for participating in this research study. Read the purpose of the study and other pertinent information as stated in the paragraph provided above. The researcher will confirm that the interviewee's questions and or concerns, if any, have been addressed prior to beginning the interview. In addition, a completed consent form for each interviewee will be required prior to proceeding to the next steps.

Interview Questions: The researcher will remind the interviewee that participation in this research study is completely voluntary and that he or she may opt out of any questions that raise concerns. Remind the interviewee that the interview will be audio recorded and the researcher will document responses in written form. The researcher will read each question as stated below and document the interviewee's responses in writing as well as via an audio recording device.

1. Please provide the following demographic data which describes you:

Years of experience _____ Years at current school site _____

Grade taught _____ Content area _____

Gender _____ Age _____

Race/Ethnicity _____

Years working with current principal _____

School enrollment <500 students 501-799 students 800-1000 students 1000+ students

Highest level of education earned Bachelor's degree Master's degree Doctoral degree

Did the formal education you received include a teacher training program or course(s)? Y N

A) Self-efficacy is defined as a person's belief about their abilities and potential to manage, organize, and successfully complete a task. On a scale of 1-10 (1 lowest, 10 highest), how would you rate your own level of self-efficacy?

B) To what do you attribute to your level of efficacy (i.e., teacher training, principal support, access to resource, etc.)? Feel free to expound with examples from your previous experience.

2. What are some key leadership behaviors your principal demonstrates on a regular basis that positively impact(s) your sense of efficacy?
3. What are some leadership behaviors your principal demonstrates that adversely impact(s) your sense of efficacy?
4. Part of this study focuses on teacher self-efficacy through the use of effective instructional strategies. In what way(s) does your principal enhance/diminish your ability to effectively implement instructional strategies?
5. Another area of this study is the teacher self-efficacy through the lens of student engagement. In what way(s) does your principal's leadership enhance/diminish your ability to effectively engage your students in learning?
6. Lastly, classroom management includes the teacher's ability to enact rules and routines effectively, while managing time and other resources efficiently. Does your principal's leadership enhance/diminish your ability to effectively manage your classroom, and if so, how?
7. You may recall some of the key leadership behavior themes as identified by the Principal Leadership Questionnaire, which you recently completed. Refer to the handout for an overview of the key leadership behaviors.

A) In which area is your principal most skilled?

B) In what ways does this strongest leadership practice increase your sense of self-efficacy?

C) In what ways does the weakest leadership behavior diminish your level of efficacy?

8. If you could give your principal a piece of advice about his/her leadership behaviors, what would it be and why?
9. Are there any closing thoughts or comments you would like to share before we adjourn today? Thank you for your time!