

ABSTRACT

Title of dissertation: AN ANALYSIS OF THE RELATIONSHIP
BETWEEN ELEMENTARY PRINCIPAL SELF-
EFFICACY AND 5TH GRADE READING
ACHIEVEMENT

Steven A. Lockard, Doctor of Philosophy, 2013

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Preparing students to be college or career ready in the 21st Century starts with the foundational skills they acquire in elementary school. Elementary school principals must work to ensure that, not only do they have a belief in their own abilities to provide this foundation, but that their school improvement efforts are reflected in the results of their students' achievement. This mixed-method study examines the relationship between elementary principals' perceptions of self-efficacy and student achievement scores in reading in a large suburban school district in the Mid-Atlantic region of the United States. In addition, the study

explored leadership behaviors exhibited by principals in schools with high principal self-efficacy and high reading achievement.

Data was gathered through the use of a survey (Principal's Sense of Efficacy Scale), principal interviews and teacher focus groups to answer the research questions. The researcher analyzed survey and interview data, utilizing the framework for the study -the triadic reciprocal causation model (Bandura, 1997). This framework provided a lens through which the construct of principal efficacy could be examined.

The findings from this study revealed that there was limited evidence to suggest that principal self-efficacy and reading achievement were correlated. However, there was some evidence to support general common leadership behaviors of principals who report high levels of self-efficacy, in schools where high reading achievement exists. The teacher focus group responses validated the same behaviors selected principals identified. The common behaviors as described by teachers included the four larger themes of trust, empowerment, expectations, and collaboration.

AN ANALYSIS OF THE RELATIONSHIP BETWEEN
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AND 5TH GRADE READING
ACHIEVEMENT

by

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Dissertation proposal submitted to the faculty of the graduate school
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Completing a doctoral dissertation has been a life-long goal of mine. This goal was established when I was a 13 year old boy and watched my father complete his dissertation. At the same time, my father was working in a demanding job in a school system, involved in numerous community activities, and never missed a single soccer game, music concert or any other important part of his children's lives. In what seems like the blink of an eye, with a family of my own, I was walking (and sometimes sprinting) down the same path and journey my father took. So thank you Dr. Brian Lockard, my father, for being the most important mentor in my life.

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Chapter One: *Introduction*

At no other time in our history have the accountability demands placed upon the shoulders of the school principal been so challenging. The increasing and competing demands from the school, the local school system, the state department of education and the Federal government pull principals in many conflicting directions as they try to keep on top of their managerial, leadership, and instructional responsibilities. The job responsibilities of the principal have changed dramatically over the last twenty years (Levine, 2005). Today's principals must spend just as much time in classrooms as they do in their office – and at the top of their priority list is student learning (The Wallace Foundation, 2012).

The leadership role of the principal has been closely researched and examined. The amplified emphasis placed on the role of the school principal over the last several years has dramatically increased the demands upon, and changed the role of, the principalship as it was once known. This re-imaging of the role of the principal has given birth to a new, fundamentally different and necessary view of school leadership. Most recently the research on principal leadership in schools has shown the school principal as the instructional leader of the building and the manager of all aspects of the school community. In this research, the principal is heralded as the heroic leader in the school - one to lead change, reform efforts and instructional initiatives, while teachers and other staff members follow under that leadership.

Currently, federal and state accountability measures such as those laid out in the No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1426 (2002) reform efforts have necessitated a change to the traditional and widely accepted role of the principal. Researchers now suggest that principals are responsible for far more than just instructional and managerial responsibilities; they must be, among other things, human resource managers, staff developers, curriculum designers, discipline and safety officers, public relations specialists, and technology consultants (Levine, 2006; Ferrandino, 2001).

A review of research indicates an effective principal is a necessity in successful schools (Seashore-Louis, et al. 2010, Waters, Marzano and McNulty 2003; Leithwood, et al. 2004). Among other factors, this research highlights the critical importance and link between effective principals and student achievement. Knowing the important connection between effective principals and student achievement; as well as the significantly increased demands of the principal's role – one thing is certain: school districts must work diligently to identify and support future school leaders who are ready to take on the complex, ever-changing, and challenging role of principal. More importantly to the immediate future, school districts must also support and develop the principals who preside over schools today. It is no longer good enough for districts to simply hire and retain those who appear to be the most capable principals. Districts must find and cultivate principals who truly believe they can be successful, even in the face of the most difficult challenges (Davis, et al. 2005).

Research regarding teacher effectiveness has dominated the educational research landscape for years. Within this realm of research, much has been studied regarding teacher efficacy and student achievement. Several studies reveal that when teachers believe in their own capabilities as effective teachers, and also share this belief regarding their colleagues, these collective efficacy beliefs can overcome perceived obstacles, such as the influence of demographic variables (Reeves, 2008; Bandura, 1993). Further, when teachers have opportunities to work together, particularly in a structured, purposeful setting such as a professional learning community structure (Marks, 2009), student achievement and teacher efficacy are further positively impacted.

A principal's self-efficacy belief is really a self-perception of his or her leadership capability (Tschannen-Moran & Garies, 2005). In several studies of leadership self-efficacy, it was determined that the self-efficacy beliefs of leaders impacted the attitude and performance of followers. In addition, leaders' self-efficacy beliefs were connected to followers' performance abilities and commitment to tasks (Chemers, Watson & May, 2000; Paglis & Green, 2000). Unlike teachers, principals don't have large groups of other principals readily available in their buildings with whom they can collaborate and share the same opportunities to build efficacy. However, we are learning that a principal's sense of efficacy is just as important and impactful as that of the teachers in their buildings.

McCormick (2001) noted that, "Successful leadership involves using social influence processes to organize, direct, and motivate the actions of others.

It requires persistent task-directed effort, effective task strategies, and the artful application of various conceptual, technical, and interpersonal skills” (p.28).

Hipp & Bredeson (1995), Hoy & Woolfolk (1993) and Moore & Esselman (1992), have all contributed research that demonstrates the ways in which effective principal leadership directly impacts teacher self-efficacy beliefs.

Certainly, for principals who lack even a moderate sense of self-efficacy, it can become a monumental task to create and support the conditions that foster teacher efficacy and collective efficacy in schools. Wood and Bandura indicated that a robust sense of efficacy is a necessity for principals for the ongoing focus and effort critical to meeting organizational goals in schools (1989). In an area of significant promise in educational research, Smith, Guarino, Strom, and Adams (2006) found that “research into the self-efficacy beliefs of school administrators regarding their ability to create and facilitate effective instructional environments has not enjoyed as much attention” (p. 8).

Principal Efficacy

A school in which teachers have a strong sense of efficacy or collective efficacy doesn’t happen by chance. Effective leadership is necessary to facilitate the structures, conditions, and culture for strong self and collective efficacy to thrive. While research on leadership and teacher efficacy is plentiful, the notion of principal efficacy is an emerging area of interest in educational leadership research with fledgling research pointing to a connection with a most valuable outcome – student achievement. Much of the literature on educational leadership examines behaviors or characteristics that contribute to teacher or collective

efficacy, student achievement and positive school outcomes (Blase & Blase, 1999; Liethwood & Riehl, 2003; Marzano, Waters, & McNulty, 2005). However, a principal's efficacy, or judgment of his or her capabilities to structure a particular course of action in order to produce desired outcomes in the school he or she leads (Bandura, 1977), can have a tremendous impact upon his or her level of aspiration, goal setting, effort, adaptability, and persistence (Bandura, 1986; Gist & Mitchell, 1992). Imants and DeBrabander (1996) state that a principal's perceived efficacy is certainly an important factor for improving student achievement.

In 1998, The National Association of Elementary School Principals and the National Association of Secondary School Principals conducted a survey and found that "increased responsibilities, long work days, difficult parents, pressure from school boards, and low pay made the principalship less desirable than ever before" (Potter, 2001). Additionally, almost half of the districts surveyed reported difficulties in filling principal vacancies. With survey data that reports elements like increased responsibilities and difficult parents as deterrents, one could guess that the problem with filling principal vacancies has as much to do with finding qualified candidates as it does with finding people who are actually interested in the principalship – even when they are considered qualified. Donahoe (1993) also reminds us, in fairly simplistic terms about the difficulty of retaining principals, by stating "the plain fact is that there simply are not enough good principals to go around."

Bandura (2000) recognized these “undesirables” associated with the principalship and explained that, “when faced with obstacles, setbacks, and failures, those who doubt their capabilities slacken their efforts, give up, or settle for mediocre solutions. Those who have a strong belief in their capabilities redouble their efforts to master the challenge” (p.120). When people doubt their abilities they risk burnout (Friedman, 1997). This is a common challenge among elementary principals. Accompanying burnout are often exhaustion, lack of a sense of accomplishment, negative attitudes, and a lack of empathy toward teachers, students and parents (Tschannen-Moran & Gareis, 2005). A principal’s self-efficacy appears to be directly affected by these obstacles and challenges.

Tschannen-Moran and Gareis (2004) noted:

In this era of accountability and significant school reform, efforts to improve schools increasingly look at the principal to spearhead change efforts at the school level. It is widely accepted that good principals are the cornerstone of good schools and that, without a principal’s leadership efforts to raise student achievement, schools cannot succeed. The principal is seen as a key agent at the school level, initiating change by raising the level of expectations for both teachers and students. One promising, but largely unexplored avenue to understanding principal motivation and behavior is principals’ sense of efficacy (p. 573).

Elementary Reading

According to the 2004 National Assessment of Educational Progress, results showed that U.S. secondary school students are reading at a rate significantly below expected levels (NAEP, 2005). A recently released report from NAEP (2011) showed that fourth- and eighth-grade scores nationally were

far short of levels the government deems proficient. Furthermore, the national averages on the most current reading assessment continue to land in the basic range, meaning that a large majority of students are showing only partial mastery of the knowledge and skills fundamental to reaching proficiency in each grade. A pattern of consistent low scores in reading has been established in this country. There is a problem with effectively teaching reading and it starts in elementary school.

Principals have the greatest instructional impact at the elementary grades, less over middle schools, and the least over high schools (Leithwood, et al. 2004, Seashore-Louis, et al. 2010). Researchers attribute several reasons to this claim, including the fact that middle and high schools typically have more teachers to supervise than elementary schools resulting in less time for direct supervision of employees. In addition, teachers in middle and high schools are usually subject-specific. Consequently, principals are unlikely to have the subject specific knowledge necessary to provide the same instructional support as elementary school principals (Leithwood, et al. 2004, Seashore-Louis, et al. 2010).

Elementary school principals are responsible for observing and evaluating the effectiveness of instruction in several different content areas. Teaching students to read proficiently is one of the most important and essential components of an elementary school instructional program (Snow, Burns, Griffin, 1998). Finding from the National Conference of State Legislators concluded that, “Literacy is often referred to as the cornerstone of education and the building block for success” (NCSL, 2006). It is also well documented that reading is the

gateway to success in all other disciplines of study. If we want students to achieve, we'd better teach them how to read – and read well. Conversely, the consequences of struggling readers are also well researched and studied. Academics and life pursuits are imminently impacted by those who fail to read proficiently or struggle with comprehension.

No Child Left Behind requires research-based approaches to reading instruction, in an attempt to have all students reading at a proficient level by the end of third grade:

A primary focus of this law is the requirement that school districts and individual schools use effective research-based reading remediation programs so all children are reading at grade level by the end of third grade. The law authorizes funds to provide assistance to State educational agencies and local educational agencies in establishing reading programs for students in kindergarten through grade 3 that are based on scientifically based reading research, to ensure that every student can read at grade level or above no later than the end of grade 3 (20 U.S.C. § 6361).

The standards governing the content of elementary school reading curricula are vast and include a number of specific indicators that require a thorough understanding of pedagogy. These standards have been defined by the United States Department of Education, state Departments of Education, and the local boards of education. The Reading English/Language Arts State Curriculum to which all Maryland schools are held accountable was developed based on the work of the National Reading Panel, existing Maryland Content Standards and Core Learning Goals as well as the National Council for Teachers of

English/International Reading Association's *Standards for the English Language Arts*.

Research regarding the impact of principal leadership on student learning indicates that principals must be well versed with instructional practices and strategies that improve student achievement (Bell, 2001). Clearly, the research, the law, and the existing curriculum demand that effective reading instruction be an essential component of our elementary schools.

Statement of the Problem

The role of the principal has changed – and so has the type of leadership necessary for schools to be successful. Through No Child Left Behind, elementary principals have been given the task of ensuring that every child in their school, regardless of background, disability, or situational challenges, be proficient in reading. In addition to Federal legislation, a myriad of state and local accountability measures also outline a variety of other subject areas for which principals are responsible for achieving certain proficiency requirements. However, reading is the gateway to student success. In this Mid-Atlantic state, where this study was conducted, all elementary students in grades 3, 4, and 5 must be proficient on the state assessment to meet adequate yearly progress in reading by 2014. The central purpose of this research was to better understand the relationships among principal efficacy and reading achievement.

In 2011, a Senate committee approved an updated education bill, but partisanship politics held up the measure in the full Congress. Even in an election year, there appears little political will for compromise despite widespread

agreement that changes are needed to No Child Left Behind. Critics of NCLB have long said that the law carries too rigid and unrealistic expectations. In addition, the heavy emphasis on tests for reading and math at the expense of a more well-rounded education, have also been common complaints.

As a result of congressional inaction, President Barack Obama told states in the fall of 2011 that they could seek a waiver for proficiency requirements in exchange for states' commitments to the four assurances of Race to the Top. These assurances require states to demonstrate that they are 1.) adopting rigorous standards that prepare students for success in college and the workforce; 2.) recruiting and retaining effective teachers, especially in classrooms where they are needed most; 3.) turning around low-performing schools; and 4.) building data systems to track student achievement and teacher effectiveness.

To date, a majority of states, including the Mid-Atlantic state where this research will be conducted, have applied for, and received a waiver of several NCLB requirements. The waiver that was approved in May of 2012 in the state where the research was conducted includes:

- Adequate Yearly Progress (AYP) determinations will no longer be produced
- Assignment to and listing of schools in "School Improvement" will be discontinued.
- AYP will be replaced by a new School Progress Index. The index will be comprised of three weighted parts, achievement, achievement gaps, and individual student growth.
- Schools will be placed on one of five "strands" based on their 2012 index, with a focus on increased technical support and assistance for schools at upper strands rather than the prior "shame and blame" list of schools in improvement.
- New Annual Measurable Objectives (AMO) have been established for each school – overall and for each reported subgroup - using 2011 proficiency percentages as the starting point. Those new AMOs compare each school to its own prior performance, not the "one size fits all" AMOs previously used to determine AYP.
- The AMO increments for each successive school year are designed to ensure that individual schools reduce their percent of non-proficient students – overall and for each subgroup – by half -within six years (by 2017).
- Adoption of the Common Core Standards will lead to the replacement of the current state tests with new, higher level tests developed by a 24-state consortium - The

Partnership for the Assessment of Readiness for College and Careers (PARCC). The replacement testing program is currently planned for full implementation in the 2014-15 school year.

We are in a time where, with respect to education, our nation is muddling through waivers of the existing law and another potential shift in the law on the horizon. As evidenced by the description of the waiver in the state where research is being conducted, this shift will include accountability measures, the introduction of the Common Core Standards, and the reality of teacher and principal evaluation measures linked to student achievement. Regardless of what accountability measures, evaluations or curriculum are enacted, understanding the impact of efficacy will continue to be an important consideration for school improvement.

The more that is learned about the link between principal efficacy and reading achievement, the more knowledge we gain to target strategies to support principals in building their sense of efficacy. This knowledge can also provide important direction for cultivating and nurturing school leaders that positively effects student achievement, thus furthering the efforts to meet and exceed the accountability demands facing our nation's elementary schools in reading.

Purpose of the Study

The purpose of this mixed method study was to conduct an exploratory analysis of the relationships between principal efficacy and reading achievement in elementary schools within a public school district with 40,000 students located in the mid-Atlantic region of the United States. Elementary principals in the district were asked to complete the Principals' Sense of Efficacy Scale (PSES), developed by Tshannen-Moran & Gareis (2004).

Principals and staff from three schools were then invited to be part of separate interviews for individual principals and focus group discussions for small groups of teachers. The three schools were selected based on principal perceived self-efficacy levels and 5th grade reading achievement scores as measured on a state assessment. After being identified, data was gathered from the principals and staffs of the three schools with regards to the levels of principal perceived self-efficacy and reading achievement to determine if a correlation exists.

The researcher used Bandura's triadic reciprocal causation model as the conceptual framework through which the construct of principal perceived self-efficacy was examined. Derived from social cognitive theory, Bandura's research (1977) reveals that three factors exist when examining his triadic reciprocal causation model:

- Personal Factors
- Behavior
- The Environment

Bandura's triadic reciprocal causation model will be more fully discussed in this chapter in the section on conceptual framework.

Research Questions

The following research questions were developed to provide structure to the study for the purposes of data collection and analysis. This study focused on two central research questions:

1. Is there a relationship between principal efficacy and reading achievement?

2. What behaviors do principals in high principal efficacy / high reading achievement schools exhibit?

Significance of the Study

An examination of the relationship between principal efficacy and reading achievement is important for several reasons. Principals' judgment of their capabilities to impact student achievement has been demonstrated to affect their behavior and attitudes (Tschannen-Moran & Gareis, 2005). Given the increasing demands for student achievement in the context of No Child Left Behind, the demands for improved student achievement will continue to climb. It will be critical for school principals to be effective in facilitating the improvement of achievement in reading for all students in their charge. This study can provide practicing principals with an understanding of their own efficacy as well as the impact their efficacy has on collective teacher efficacy, and ultimately- student achievement.

Secondly, the findings from this study can be used by school system leaders who support, nurture, and develop existing and future school principals. Having increased awareness of principals' sense of efficacy will better help district leaders plan and provide professional development for both existing and prospective principals.

Finally, understanding a principals' sense of efficacy in the context of the high-stakes accountability climate of No Child Left Behind, coupled with the implications self-efficacy has on student achievement, may affect policy makers'

decisions during future reauthorizations of No Child Left Behind or in the development of other legislation impacting education in the United States.

Conceptual Framework

Bandura holds that an individual's behavior is more concisely predicted by the belief a person holds regarding their own capabilities rather than what they are actually capable of accomplishing (Bandura, 1997). He stressed the importance of cognitive factors in developing our sense of self and argued that three key components make up this integrated system:

- Observational learning
- Self-efficacy
- Self-regulation (using our cognitive processes to regulate and control our behavior).

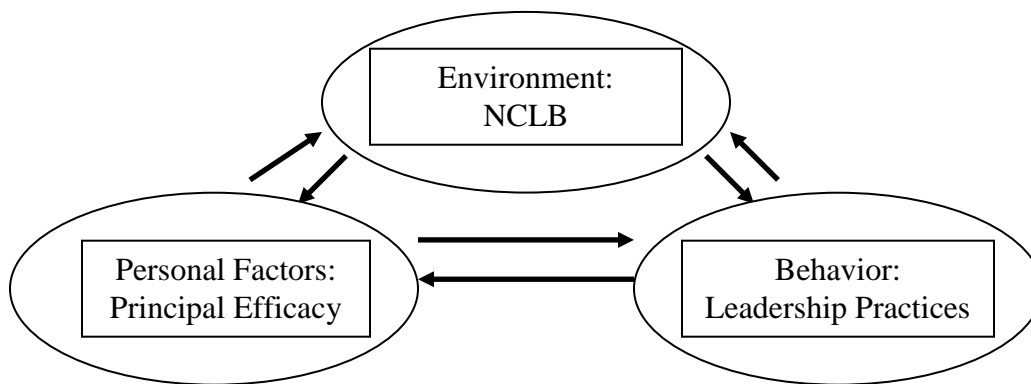
Within social cognitive theory, environmental factors are connected to behavioral and personal influences. Bandura's theory of triadic reciprocal causation illustrates how these three factors – behaviors, the environment, and personal factors all exert multidirectional influences upon each other. Pajares (1996) describes how an individual operates within the triadic reciprocity to form his or her self-efficacy beliefs, and how individuals are “capable of exercising a degree of control over their thoughts, feelings, motivation, and actions” (Pajares, 2002, p.7). It is this “control” that impacts and has the potential to affect subsequent actions.

The reciprocal nature of the determinants of human functioning in social cognitive theory makes it possible for therapeutic and counseling efforts to be directed at personal, environmental, or behavioral

factors. Strategies for increasing well-being can be aimed at improving emotional, cognitive or motivational processes, increasing behavioral competencies, or altering the social conditions under which people live and work (Pajares, 2002).

Translated to practice, social cognitive theory helps illustrate that principals routinely operate within the three components of Bandura's triadic reciprocal causation model as their leadership practices, their own efficacy beliefs, and the accountability context of No Child Left Behind constantly impact effectiveness, and ultimately, student achievement. The triadic reciprocal causation model provides a conceptual framework through which the construct of principal efficacy can be examined. An illustration of Bandura's triadic reciprocal causation model as it is intended to be used in this study is shown in

Figure 1: Bandura's Triadic Reciprocal Causation Model



Research Design

This mixed method study used both quantitative and qualitative research methods as a means to explore the relationship between principal efficacy and reading achievement. Mixed methods research is a design for collecting, analyzing, and blending both quantitative and qualitative data into a single study

or series of studies to understand a research problem (Creswell and Plano Clark, 2007). Bryman (2006) points to several important reasons for conducting a mixed methods study that are applicable to this research. First and foremost, a mixed method approach corroborates quantitative and qualitative data that supports the overall validity of the study. In addition, a broader depth of understanding and explanation can be developed when qualitative results can explain quantitative results, and vice-versa. Finally, a mixed methods study enhances the “completeness” of the research, offering a more comprehensive account than that of qualitative or quantitative research alone.

As it is federally mandated in No Child Left Behind, while half of the elementary grades are required to test students reading proficiency (grades 3, 4, and 5), the entire elementary school (K-5) is responsible for preparing students for successful reading proficiency. It is these factors that make elementary schools and elementary school principals an important focus for this study on efficacy.

Three elementary school principals, out of an initial participation pool of approximately 30 elementary principals were selected from a county in a mid-Atlantic state based on their level of efficacy on the PSES -an instrument for examining principal efficacy which already exists and was utilized in this study.

The PSES was sent to principals in the district who have at least two years’ experience as principal at their current schools. The number of years of experience a principal has in any school has a positive impact on school performance measures (Rice, 2010). In addition, researchers have found evidence connecting principal effectiveness, in terms of student achievement, to levels of

experience (Clark, Martorell, and Rockoff , 2009). While three to five years' experience would be desirable to consider for this study, the realities of the rate of principal turnover would limit the survey size should this range be chosen. A minimum of two years' experience eliminates any possibility of sampling from new principals, but still allows for a larger survey group.

Tschannen-Moran & Gareis (2004) analyzed three studies to support and validate a reliable measure of principals' sense of efficacy. The Principals' Sense of Efficacy Scale (PSES) was developed as a result. The PSES captures three major factors referred to as subscales of principal efficacy:

- efficacy for management
- efficacy for instructional leadership
- efficacy for moral leadership

Each subscale of the PSES reflects an emphasis of principal leadership, each uniquely intertwined with the other. Instructional leadership, as previously noted, dominates the research base as it relates to the significance of the principal's role. Management leadership refers to those leadership roles that are specific to the management of a school and the efficiency in which schools are run (Leithwood and Duke, 1999). Moral Leadership refers to the moral obligations principals face each and every day in their role. Principals must exercise not only their authority, but their priorities, in an ethical manner, and promoting ethical behavior among all (Fullan, 2003; Tschannen-Moran & Gareis, 2004).

For the qualitative portion of the research design, focus group interviews with high efficacy / high reading achievement schools were conducted.

Individual interviews with the principals of three high efficacy / high reading achievement schools were also completed as a means to further examine and explore a subset of the PSES -Efficacy for Instructional Leadership – which is defined as a beliefs in one’s capabilities to “create a positive learning environment in your school; generate a shared vision for your school” (Tschannen-Moran & Gareis, 2004, p.580).

Bandura’s triadic reciprocal causation model was used as the conceptual framework for the study. Interview sessions using an open-ended semi-structured process were tape-recorded and transcribed. All transcribed interviews were offered to be shared with the study participants to verify accuracy. Names of schools, participants, or any other personal identifiers were not included in the study.

Definition of Terms

The following definitions provide details and clarification for the terms used in this study.

Principal Self- Efficacy – A principals’ belief of their own sense of ability in an area of leadership that impacts the results or outcomes of the school they lead.

Self-Efficacy – One’s beliefs about themselves as it relates to their ability to successfully perform certain tasks or complete an activity.

Collective Efficacy – A group’s shared belief in their ability to successfully perform certain tasks or complete activities.

School Efficacy – Combination of teacher collective efficacy and principal efficacy.

Triadic Reciprocity - Bandura’s framework that illustrates how three factors – behaviors, the environment, and personal factors - all exert multidirectional influences upon each other to create self-efficacy.

Social Cognitive Theory - defines human behavior as a triadic, dynamic, and reciprocal interaction of personal factors, behavior, and the environment.

Efficacy for Instructional Leadership – A principal’s belief in their ability to develop and facilitate a strong instructional learning environment that leads to high student achievement.

Efficacy for Moral Leadership – A principal’s belief in their ability to develop and facilitate a culture that is ethical, collaborative, and positive.

Efficacy for Management – A principal’s belief in their ability to effectively manage their schools, prioritize demands, and provide for a safe and orderly environment.

No Child Left Behind Act of 2001 (NCLB)- The reauthorized Elementary and Secondary Education Act (ESEA) enacted in an attempt to strengthen high quality education and proficiency on academic achievement standards.

Adequate Yearly Progress (AYP) – An achievement designation for testing results within NCLB in reading and math. Schools and school systems are obligated to meet this ever-increasing benchmark each year for all students, as well as for

defined sub-groups of students. Schools not meeting AYP face a progressive series of interventions at the local and state levels with the aim of improving student achievement. Proficiency in reading and mathematics by 2014 is the expectation for all students attending public schools in the United States.

Leadership - Refers to purposeful actions and plans tied to the core work of the organization, carried out by organizational members that influence the practice and outcomes of the organization.

Principal Leadership – Refers to purposeful actions and plans taken by principals that are tied to the core work of the school that influence the practice of staff and the success of students.

Limitations of the Study

There are a number of limitations to the present study that derive from its conceptual framework and design.

1. The study was based upon schools identified by principals' self-assessment of efficacy levels. The findings of the study, therefore, are based in part on the self-reflection of individual principals.
2. The findings of the qualitative component of the study were limited to contextual circumstances of a relatively small number of elementary schools in which the interviews and focus group discussions were conducted.
3. The findings of the qualitative component of the study were limited to the principals and teachers of selected schools that participated in the study.

4. The principal efficacy ratings and the reading test scores may not be generalizable.

Delimitations of the Study

1. The study was bound to the framework. The framework is not comprehensive enough to take into consideration all the potential variables in individual schools that may impact the principal's sense of self-efficacy.
2. This study only focused on the perceptions of elementary school principals and elementary school staffs. There was no focus on middle or high schools.
3. It is important to note that the researcher is the deputy superintendent in the mid-Atlantic county in which the study was conducted. There may be a concern for the potential of researcher bias. To limit this concern, multiple methods of data collection were employed.

Organization of the Study

This study is organized in five chapters. Chapter one provides an introduction to the study, pertinent background information, justification of the significance of the problem, definitions of important concepts, research methods that were utilized, and limitations and delimitations of the study.

Chapter two provides a review of related literature and major themes and concepts with regards to principal efficacy and its impact on student achievement. A thorough investigation of social cognitive theory, Bandura's triadic reciprocal causation framework, self-efficacy, teacher efficacy, collective teacher efficacy,

principal leadership, principal efficacy, and principal leadership as it relates specifically to reading achievement, was conducted. Attention was paid to connecting recent research on principal efficacy to teacher efficacy and the links of both to student achievement.

Chapter three presents the methodology and explains how the study is structured, including how data was collected, organized, and analyzed. Ethics and validity are also defined and discussed.

Chapter four provides a review and analysis of the data collected from the methodology employed in the study.

Chapter five provides interpretations of findings, including a summary of both the quantitative and qualitative findings, and conclusions. Recommendations for practice and further study are also included in this chapter.

Chapter Two: *Review of Literature and Research*

Introduction

“We begin with the simple question, ‘What causes student achievement?’ In some schools, the responses are clearly associated with the actions of teachers and leaders. They attribute the causes of achievement to their own efficacy – their excellence in teaching, curriculum, feedback, high expectations, assessment, leadership, and other factors within their control. In other schools, the response to the question, ‘What causes student achievement’ is strikingly different. Rather than their own impact, this second group of leaders attributes the causes of achievement to student demographic characteristics. These leaders have engaged in chosen victimhood, a status that becomes a self-fulfilling prophecy. The data from our studies suggests that where there is a high degree of teacher and leadership efficacy, the gains in student achievement are more than three times greater than when teachers and leaders assume that their impact on achievement is minimal.”

Reeves (2008)

Since the publication of the National Commission on Excellence in Education report – *A Nation at Risk* (1983), ongoing reform in our nation’s schools has been the norm. Over the past thirty-plus years, much of the reform efforts in this country have focused on effective schools, school improvement, and accountability. It was the NCEE report that helped lead researchers to the study of the impact of school culture on learning (Rosenholtz, 1989), and ultimately to the concept of organizational learning.

It is Peter Senge’s book, *The Fifth Discipline* (1990), which, though aimed at corporate America, appears to have really touched off the education world’s discussion, analysis, and pursuit of organizational learning. Senge described the

creation of organizations in which “people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (1990, p.3).

During the time since *A Nation at Risk* was published, the achievement challenges facing elementary principals have become ever-increasing and quite daunting. As expected levels of achievement continue to climb, and with standards and assessment measures that seem destined to change, a principal must be armed with a robust sense of efficacy if he/she is to achieve the sustained, productive intentional focus and persistent effort needed to succeed at organizational goals (Wood & Bandura, 1989). A principal’s efficacy, or judgment of his or her capabilities to structure a particular course of action in order to produce desired outcomes in the school he or she leads (Bandura, 1977), can have a tremendous impact upon his or her level of aspiration, goal setting, effort, adaptability, and persistence (Bandura, 1986; Gist & Mitchell, 1992).

This review of literature and research relates principal self-efficacy to student achievement. Several areas within the research provide background to this study. These are: social cognitive theory, Bandura’s triadic reciprocal causation framework, self-efficacy, teacher efficacy, collective teacher efficacy, principal leadership, principal efficacy, and dimensions of principal leadership. This chapter will provide the background and context for understanding principal efficacy as it relates to student achievement, evidence of the importance of efficacy, and the necessity for studies examining principal efficacy.

The common strand found in the research, as it relates to this study, is that emerging information about the impact of efficacy on leadership behavior and characteristics has positive implications for student achievement. (Tschannen-Moran & Gareis, 2005).

Social Cognitive Theory

Social Cognitive Theory is derived from Social Learning Theory, which has its origins in behavioral and social psychology of the late 1800's. Social Learning Theory is comprised of psychological theories intended to explain why people and animals behave the way they do. Albert Bandura has helped to lead the way in further developing Social Learning Theory. Bandura's theory of social learning puts focus on cognitive concepts and how children and adults operate cognitively on their social experiences and how these experiences influence their behavior and development. Bandura's theory introduced vicarious learning, or "modeling," as a form of social learning. Bandura also brought forth other important concepts to social learning theory, such as reciprocal determinism and self-efficacy. In 1986, Bandura renamed his Social Learning Theory to Social Cognitive Theory, in an attempt to emphasize the influence of cognition on one's capability to encode information, self-regulate, and perform behaviors (Bandura, 1986).

Social Cognitive Theory focuses on human agency, or the way in which people exercise some level of control over their own lives. The Social Cognitive Theory's strong emphasis on one's cognitions suggest that the mind is an active force that constructs one's reality, selectively encodes, information, performs

behavior on the basis of values and expectations, and imposes structure on its own actions (Jones, 1989; Goddard & Skrla, 2006).

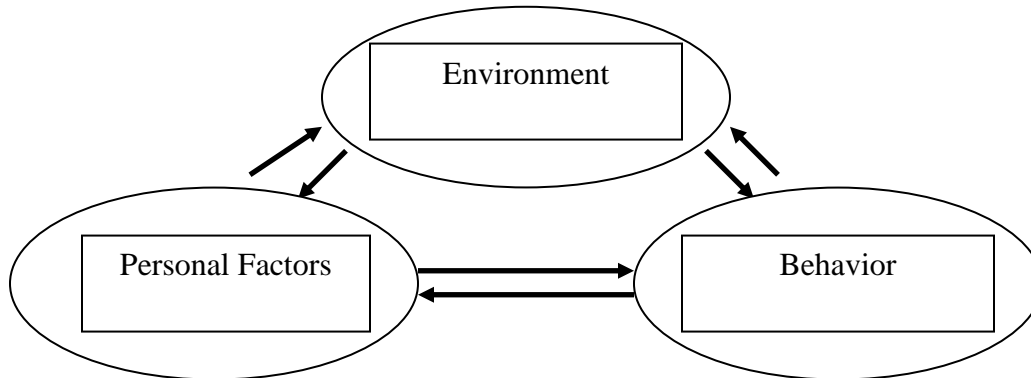
Key Constructs to Social Cognitive Theory

Social Cognitive Theory assumes that individuals have several basic capabilities that characterize them as human being (Bandura, 1986). These key constructs to cognitive theory include:

Triadic Reciprocal Determinism:

The Social Cognitive Theory explains behavior in terms of a triadic reciprocal interaction between the environment, personal factors, and behavior. Bandura's theory of triadic reciprocal causation illustrates how these three factors – behaviors, the environment, and personal factors all exert multidirectional influences upon each other. The degree to which these factors influence each other is based on the individual, the behavior, and the context (Bandura, 1989). Pajares (2002) describes how an individual operates within the triadic reciprocity to form his or her self-efficacy beliefs, and how individuals are “capable of exercising a degree of control over their thoughts, feelings, motivation, and actions” (Pajares, 2002, p.7). It is this “control” that impacts and has the potential to affect subsequent actions. The conceptual model of Triadic Reciprocal Determinism is shown in figure 2.

Figure 2: Model of triadic reciprocal determinism



Symbolizing Capability:

Bandura suggests that symbols serve as the mechanism for thought, and through the formation of symbols such as words, images, and mental pictures, people are able to give meaning to their experiences. Further, symbols provide the impetus for problem solving and foresightful action. Foresightful action allows one to think through the consequences of a behavior without actually performing the behavior (Bandura, 1989).

Vicarious Capability:

Human beings have the ability to learn from direct experience as well as from the observation of others. Vicarious learning allows a person to quickly develop an idea of how a new behavior is formed without actually having to perform the behavior (Bandura, 1986; 1989). Individuals can learn vicariously by observing other's actions as well as their consequences of these actions.

Forethought Capability:

Most human behavior is regulated by forethought – a person’s capability to motivate oneself and guide actions anticipatorily (Bandura, 1989). The capacity to plan, regulate, strategize, set goals and anticipate reactions to actions based on expectations and expectancies provide the mechanism for foresightful behavior.

Self-Regulatory Capability:

Bandura’s theory is that self-regulation helps mediate external influences and provides a basis for purposeful action, thus allowing people to have personal control over their thoughts, feelings, motivations, and actions (1989). It is also theorized that control over actions, provides one the ability to change their behavior.

Self-Reflective Capability:

Being self-reflective allows people to analyze their thought processes, experiences, and behaviors, and as a result, adjusting their thinking accordingly. An important type of self-reflection is self-efficacy.

Self-Efficacy

In 1977, as an explanation to how personal motivation and expectations can affect outcomes, Albert Bandura identified what he believed was a key aspect missing from all previous Social Learning theories, including his own Social Cognitive Learning theory – self-efficacy (Bandura). Bandura defined self-efficacy as the belief in one’s ability to organize and execute the courses of action required to produce given attainments (1977). Bandura (1986) went on to say

that self-efficacy is “concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses (p.391). This notion was supportive of Bandura’s claim of distinction between self-efficacy and other self-constructs (self-concept, self-esteem, and locus of control). He contends that self-efficacy differs because it is centered around judgments of capabilities to perform a certain task.

Pajares (1996, p.544) states that “efficacy beliefs help determine how much effort people will expend on an activity, how long they will persevere when confronting obstacles, and how resilient they will prove in the face of adverse situations.” Efficacy beliefs develop in response to cognitive and affective processes (Bandura, 1993).

Sources of Efficacy:

Bandura’s (1977) theoretical model involved the concept of efficacy expectations. He defined efficacy expectations as one’s belief to be able to successfully execute the behavior required to produce desired outcomes. Efficacy expectations are based on four sources of information: performance accomplishments, vicarious experiences, verbal persuasions, and emotional arousals.

Performance accomplishments, also known as mastery experience, involve the interpreted result of an individual’s actions and/or completion of a task. Performance accomplishments have the greatest potential for raising self-efficacy beliefs.

Vicarious experiences have to do with the effects produced by the actions of others. When an individual observes someone else completing a task with success, it molds their own efficacy, both positively and negatively. According to Bandura, “Seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities to succeed” (1994).

Verbal persuasion, also known as social persuasion, is a source of efficacy derived from social messages an individual receives from others. Verbal persuasion can allow an individual to overcome doubt when others are encouraging or expressing belief in their ability, such as a teacher telling a student that, “I know you can do this.” However, just as positive persuasion can build self-efficacy, negative verbal persuasion can have a conversely negative impact on efficacy.

Finally, emotional arousal, also known as physiological states, describes the emotional conditions that play into beliefs about one's performance or anticipated performance with a certain task. For example, butterflies in the stomach before a public speech, anxiety in taking a test, and stress about a certain assignment, all provide information about an individual's efficacy beliefs. Emotional states can often lead to avoidance behavior. When an individual perceives something to be too risky, threatening, or uncomfortable, they will choose an alternative. Bandura (1977, p. 198) sums it up best: “Because high arousal usually debilitates performance, individuals are more likely to expect success when they are not beset by aversive arousal than if they are tense and

viscerally agitated.” Under current accountability measures- for instance, having your school labeled a “failure” as a result of adequate yearly progress standards- the effects of stress, anxiety and other similar physiological states can truly impact a principals’ efficacy.

Characteristics of Self-Efficacy:

Self-efficacy beliefs differ in level, generality, and strength. There are different levels of task demands necessary to successfully accomplish a task. Task demands can be labeled as simple, moderate, or difficult. Beliefs also differ in generality. Generality includes the range of activities included in the perception. When tasks are similar in nature, situation, and capability, they become more generalizable to individuals. Strength also varies with self-efficacy beliefs. Individuals with strong self-efficacy beliefs will “redouble their efforts to master the challenge” (Bandura, 2000, p.120). Those with weaker self-efficacy beliefs will “slacken their efforts, give up, or settle for mediocre solutions (Bandura, 2000, p.120).”

Bandura’s self-efficacy theory maintains that self-efficacy expectancy- the belief an individual holds about their ability to perform a behavior successfully- is independent of outcome expectancy, the belief an individual holds regarding the likelihood of the behavior leading to a specific outcome. Efficacy expectations determine an individual’s experience with specific actions. If the individual perceives their ability to be successful in accomplishing a task or activity, then the individual is more likely to engage in the task. When an individual successfully completes the task, self-efficacy is positively impacted and strengthened. For

individuals with weaker self-efficacy who reluctantly attempt a task, there is a greater chance that these individuals will give up or quit in the face of challenge or adversity, further eroding their perception of self-efficacy (Bandura, 1977, 1986; Gibson & Dembo, 1984).

Teacher Efficacy

Research on teacher efficacy as it relates to student achievement is abundant over the last thirty years (Hoy and Woolfolk, 1993; Tschannen-Moran et al., 1998; Marks, 2009, Gibson & Dembo, 1984. Among other things, these studies reveal that when teachers believe in their own capabilities as effective teachers, and in addition believe in the capabilities of their colleagues, their beliefs can positively impact student achievement. These beliefs can even overcome perceived obstacles, such as the influence of demographic variables (Reeves, 2008, Bandura, 1993). Tschannen-Moran and Woolfolk Hoy (1998) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated."

A wide variety of studies examining teacher efficacy have informed the growing research base in this area. Ashton and Webb (1986) found that teachers' levels of self-efficacy could be used to predict student levels of language arts and math achievement over the school year. Guskey (1988) found a relationship between teacher self-efficacy and the willingness of teachers to try new instructional strategies. Gibson and Dembo (1984) concluded that teachers with

high levels of self-efficacy gave greater attention to academic learning, supporting struggling students, and praising students for accomplishments.

Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) developed a measure for teacher efficacy that includes three areas of measurement: (1) efficacy for instructional strategies; (2) efficacy for classroom management; (3.) efficacy for student engagement.

Friedman and Kass (2001) also explored the dimensions of teacher efficacy. According to Friedman and Kass, teacher efficacy is not confined just to the context of the classroom. The school context and inter-personal relations between teachers and others within the school context can impact teacher efficacy. Variables within a school, such as organizational climate, principal's behavior, sense of community, and decision-making procedures all affect teacher efficacy.

Recent literature on the variables within a school that impact teacher efficacy recognizes the necessity of developing teacher efficacy in order to impact school improvement, shared governance, site-based management, shared decision making and increasing teacher professionalism and professionalization (Sato, Hyler, Monte-Sano, 2002). However, most schools continue to structurally model themselves after the 19th century industrial model in terms of organizational hierarchy. Research in education indicates it has been tough to break this structural mentality (Troen and Boles, 1994).

Teacher efficacy is also linked to student variables that affect academic achievement such as greater confidence in their abilities and higher levels of

motivation and enthusiasm. For example, Bandura (1993) found that teachers who believe strongly in their own instructional ability to create mastery experiences for students, increase self-efficacy levels among their students. In addition, teacher efficacy has also been studied to determine its impact on student academic interests. Nelson, (2007), found that there is a relationship of teacher efficacy to student interest, enjoyment, and intrinsic motivation in academics (specifically elementary mathematics), as well as to the potential mediation of these three student variables on the relationship between teacher efficacy and student achievement.

Collective Teacher Efficacy

Many of the problems facing teachers and schools are problems that require people to work together in a unified, collaborative manner on a regular basis to solve them. The degree and strength of collective efficacy on a school staff can positively influence outcomes for students when the staff comes together to solve a problem (Bandura, 1995).

Researchers have also taken the concept of teacher efficacy, expanded upon it and developed a parallel construct called collective teacher efficacy. Collective teacher efficacy has been widely researched over the past several years and has revealed positive impact upon student achievement (Goddard et al., 2004; Goddard, Hoy, and Woolfolk, 2000; Bandura, 1997; Skrla & Goddard, 2002; Wheelan & Kesselring, 2005; Marks, 2009). Goddard, Hoy, and Hoy (2000) define this as “the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students.”

Bandura (1997) identified five positive constructs for building the collective efficacy of teachers:

1. Collective efficacy is positively associated with the differences in student achievement that occur between schools.
2. High levels of collective efficacy beliefs are more likely to act purposefully to enhance student learning.
3. Teachers with high collective efficacy beliefs are likely to meet the unique needs of students.
4. High levels of collective efficacy influence the level of effort and persistence that individual teachers put forth in their daily work.

According to Goddard, Hoy, and Woolfolk, collective efficacy consists of two elements: 1.) the school staff's assessment of the teaching task and what would be necessary to affect a positive outcome, and 2.) the staff's perception of their own competence. When teachers believe their peers are capable of promoting student achievement and success, a positive atmosphere for student learning results. Research has found a positive relationship between Collective Teacher Efficacy and an increase in student achievement (2000).

In a study by Goddard, Hoy, and Woolfolk (2000), an analysis of teacher task and perceptions of group competence was shown to affect perceptions of collective teacher efficacy. Teachers determined the task by analyzing the motivation and experience of the student, availability of teacher materials, support of community resources, and the conditions of the school facility (Goddard, Hoy, & Woolfolk Hoy, 2000). In determining group competence, the teacher inferred

the training, teaching skills, and experience of other teachers on staff. It was the analysis of a combination of teacher task and perception of group competency that collective teacher efficacy was developed (Goddard, Hoy, & Woolfolk Hoy, 2000).

In a study on teacher's collective efficacy beliefs in professional learning communities, Mawhinney, Haas, and Wood (2005) found that there were moderate to significant correlations between teachers' collective efficacy beliefs and their perceptions of conditions supporting professional learning communities. They found that these correlations suggested that teachers who perceived the schools they were working in that were characterized by shared leadership, focused vision, collaborative work, shared observation, and supportive conditions, also perceived their colleagues to be effective in bringing about student learning.

To further add to this strand of the research base, a study examining the relationship between professional learning communities and the collective efficacy of school staffs, Marks (2009) found that there is a significant relationship between the five dimensions of professional learning communities and collective efficacy. Additional research has found that student learning improves when there is a high degree of professional community among teachers. It is within this community that teachers collaborate and begin to assume collective responsibility for student achievement (Newmann and Wehlage, 1995).

Wheelan and Kesselring (2005) studied the effectiveness of school level teams, which included the school principal and teachers in the school. The research questions in the study asked if there were significant differences in the

performance of fourth grade students on standardized tests in schools where faculty groups perceived their faculty group as a whole to be functioning at a higher versus a lower level of group development. Results of the study indicated that significantly more children were proficient in reading in schools where teachers perceived that faculty groups functioned at higher levels of group development. The study concluded that one method of increasing student achievement was to build the capacity of faculty groups to work together.

Research has also concluded that there are strong correlations between teacher efficacy and collective efficacy. Goddard and Goddard (2001) studied this relationship and found that a positive relationship exists, and that collective efficacy is predictive of differences in teacher efficacy. Bandura (1997) concurs that individuals are not resistant from the influence of the collective group around them and the stronger the collective efficacy is, the more significant the impact on individual teachers.

Principal Leadership

Leadership refers to activities tied to the core work of the organization that are designed by organizational members to influence the motivation, knowledge, affect, and practices of other organizational members or that are understood by organizational members as intended to influence their motivation, knowledge, affect, and practices (Spillane, 2005).

Tschannen-Moran & Garies (2004) purport that the purpose of leadership is to support and facilitate group goal attainment. The leadership role of the principal has been closely researched and examined for many years. Hallinger

and Heck, describe leadership actions taken by principals as those that are “aimed toward influencing internal school processes that are directly linked to student learning. These internal processes range from school policies and norms to the practices of teachers” (1996, p. 38). Burch and Spillane (2004) also assert for principals that, “Leadership involves the identification, acquisition, allocation, coordination, and use of the social, material, and cultural resources necessary to establish the conditions for the possibility of teaching and learning” (p. 24).

We know that an effective principal is a necessity in an effective school (Louis and Kruse, 1995; Hallinger and Heck, 1996; Leithwood and Duke, 1999). As detailed in the preceding section in this review of the literature, we also know that principal leadership impacts teacher efficacy and student achievement.

Most recently, in terms of the research on principal leadership in schools, the school principal was viewed as the instructional leader of the building and manager of all in the realm of the school community. In a six-year study from the Center for Applied research and Educational Improvement at the University of Minnesota and the Ontario Institute for Studies in Education at the University of Toronto (Louis, et. al., 2010), researchers found that principal leadership practices perceived by both teachers and principals, as well as the concept of shared leadership to be essential to supporting instruction. From this study, and built on an extensive research base, a framework of core practices essential for successful leaders was developed and includes:

- Setting direction for the school – aimed at “bringing a focus to the individual and collective work of staff members”

- Developing people
- Redesigning the organization to support collaboration
- Managing the instructional program

(Protheroe, 2011).

The growing body of recent research about principal leadership continues to highlight the importance of shared leadership by principals and the notion of developing learning communities so that school staffs have a collegial environment to learn from one another, build their individual capacities, and improve outcomes for students. Research has found that student learning improves when there is a high degree of professional community among teachers. It is within this community that teachers collaborate and begin to assume collective responsibility for student achievement (Newmann and Wehlage, 1995).

The work of Hord (1997), Massell (2000), Morrissey (2000) Lambert (1998), and Supovitz & Poglinco, (2001) supports the notion that the formation of professional learning communities offers promising opportunities to build teacher capacity, and in turn, improve student achievement.

Lambert defines this type of capacity building as “broad-based, skillful participation in the work of leadership” (1998). Lambert notes that leadership capacity suggests several goals:

- Development of all adults within the school community (teachers, staff, parents, community members) as reflective, skillful leaders.
- Achievement of steady and lasting improvement in student performance and development.

- Construction of schools and districts that are sustainable organizations.

(Lambert, 2003)

The notion of trust has also emerged in the research as a critical thread to shared leadership and, ultimately, the development of professional learning communities. Hord (1997, 2000, 2004) and Huffman and Hipp (2003) have conducted case studies on schools revealing trust as an essential element to the development of the professional learning community. Trust leads to the conditions that “enable teachers’ voices to be heard, and that provide opportunities for open discussions about the impact of programmatic changes on teachers’ work” (Mawhinney, Haas, and Wood, 2005). Woods and Weasmer (2004) found that teachers who have the conditions established in their buildings to “claim a voice in moving toward organizational goals, increase their commitment to the district and enhance their job satisfaction” (p. 119). These studies point to the realization that through trust building, a staff is able to strengthen its collective capacity, thus strengthening the opportunity for shared leadership to exist.

It is suggested and supported through research that skillful participation in the work of leadership by school staffs leads to opportunities for teachers to learn from each other. When educators have opportunities to learn from one another, they are more likely to lead themselves, which contributes to the development of a learning community (Little, 2002).

Principal Efficacy

With regards to the relationship between self-efficacy and leadership, Tschannen-Moran and Gareis (2007) purport:

It is important to recognize the inherent connection between a principal's self-efficacy and the outward responsibilities of working with and leading others. As school leaders, principals must facilitate group goal attainment by establishing and maintaining conditions favorable to group performance... The emerging picture of the role of self-efficacy beliefs in principals suggest important potential ramifications considering the central leadership role that principals fulfill. Self-efficacy beliefs affect the development of functional leadership strategies and the skillful execution of those strategies (p. 91).

A principal's self-efficacy belief is really a self-perception of his or her leadership capability (Tschannen-Moran & Garies, 2005). In several studies of leadership self-efficacy, it was determined that the self-efficacy beliefs of leaders impacted the attitude and performance of followers. In addition, leaders' self-efficacy beliefs were connected to followers' performance abilities and commitment to tasks (Chemers, Watson & May, 2000; Paglis & Green, 2002).

We know through research that principals' actions, what they monitor, and the beliefs they expound, can influence staff. In their research, Smylie & Hart (1999, p. 421) reveal that, "Principals have substantial influence on the development, nature, and function of teacher social relations, teacher learning, and change." However, as Fullan and Stiegelbauer (1991) note, used in the wrong manner, this influence can be counterproductive – "Principals would do more lasting good for schools if they concentrated on building collaborative cultures rather than charging forcefully in with heavy agendas for change."

While there are currently few studies of principal efficacy, those that have been done have shown promise for important implications and further areas of study. Of the relatively few studies conducted examining the impact of principal efficacy, certain leadership characteristics are beginning to emerge. Principals with a strong sense of efficacy have been found to be persistent in pursuing their goals – they articulate goals of the school and are steadfast in their efforts to achieve their goals. Principals are also more flexible and more willing to adapt their strategies based on contextual conditions. This flexibility allows them to be more situational in their thinking and leadership style as opposed to viewing leadership as universal and insisting that what may have been successful before in another situation, will fit comfortably in any situation. Principals with a strong sense of efficacy view change as a slow process. They don't rush to implementation before they garner buy-in and understanding, and identify how teachers feel about their abilities to initiate and understand change will have a significant impact on how well change is implemented (Osterman & Sullivan, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2005).

Further, studies of principals with a strong sense of efficacy have shown that principals won't persist in unsuccessful strategies. Principals who are confident in their instructional abilities are not afraid to initiate a change to improve student achievement and will not sit idly waiting to do so. In addition, principals don't interpret their inability to solve problems immediately as a failure. A strong sense of efficacy allows principals to gather feedback, solicit

suggestions, and share in decision-making (Osterman & Sullivan, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2005).

Finally, principals with a strong sense of efficacy have been found to regulate personal expectations to correspond to conditions. They understand that they can't do it all and know how to delegate and share leadership, they prioritize and realize what is most important and what realistically can get accomplished. Throughout, these principals typically remain confident and calm and keep a sense of humor – even in difficult situations and are more likely to use internally-based power, such as expert and referent power when carrying out their roles (Osterman & Sullivan, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2005).

Several studies have established a strong correlation between principal self-efficacy and the use of power. Principals use power to influence the behavior of teachers and students. Expert and referent power are power bases that are controlled by an individual. Reward and coercive power bases are largely dependent on forces outside of the individual (Lyons and Murphy, 1994). In their study on principal efficacy and the use of power, Lyons and Murphy (1994) conclude that “principals who depend on externally based power did not believe that their ability as instructional leaders caused student achievement to be higher or lower. Self-efficacy, thus, was negatively related to externally based power and positively related to internally based power” (p.14).

The work of Osterman & Sullivan, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2005, have identified certain important leadership

characteristics that are key to a principal's success. These characteristics are evident in principals with a strong sense of efficacy. The emerging information about the impact of efficacy on leadership behavior and characteristics has implications for student achievement. More specifically, the leadership behaviors of principals with a strong sense of efficacy, have been linked to a strong sense of teacher and collective efficacy beliefs (Tschannen-Moran & Gareis, 2005), and this, as research already tells us, can have a significant impact on student achievement.

A recent study by Tschannen-Moran and Gareis (2007) looked to identify important antecedents of the self-efficacy beliefs of 558 principals in Virginia schools. Several different sources of possible influence were included in their study, such as demographic factors (gender and race of the principal), school level, school setting (urban, suburban, rural), and percentage of students on free and reduced meals (poverty level). Interestingly, the results did not show any significant relationship between principal self-efficacy and school setting, school level, or the poverty level of the school and that the context of the school that a principal leads was unrelated to his or her self-efficacy beliefs. "Although schools with a larger proportion of low socioeconomic students are often thought to be more challenging to lead, the principals from those contexts in this study did not differ systematically in their beliefs about their capabilities to lead than did principals in contexts that, on the surface, might be considered more conducive to eliciting self-efficacy" (Tschannen-Moran & Gareis, 2007, p. 104).

Two other studies of note on principal efficacy, include Dimmock and Hattie (1996) who found efficacy as a valued element for principals in a school restructuring process, and Smith, Guarino, Strom and Adams (2006) who concluded that the quality of teaching and learning is influenced by principal efficacy.

Principal Leadership and Elementary Reading

As highlighted in this literature review, principals can positively impact student achievement. Research regarding the impact of principal leadership on student learning indicates that principals must be well versed with instructional practices and strategies that improve student achievement (Bell, 2001). It has also been clearly delineated that shared leadership practices and creating conditions for professional learning communities to thrive in schools greatly contribute to the principals' efforts in improving student achievement. What we have also learned from research is that the role of the principal is complex and seems to continually expand. Researchers suggest that principals are responsible for far more than just instructional and managerial responsibilities; (Levine, 2006; Ferrandino, 2001; Cuban, 1988; Elmore, 1999; Potter, 2001).

Ultimately, a principal is responsible for the individual and collective attainment levels of every child in their school. With regards to the elementary principal, they are responsible for observing and evaluating teacher performance as it relates to content delivery by teachers and acquisition by students. They must not only perform this observation for reading instruction, but also for other

content related instructional programs, such as math, science, social studies, music, art, physical education, etc.

While it becomes more and more challenging to find principals who are experts in all content areas they are responsible for observing and evaluating, successes and failures of reading programs in schools rely on a principal's understanding and support of literacy in schools (Zipperer, Worley, Sisson, & Said, 2002). Booth & Rowsell (2002) concur that schools with successful reading programs have evidence of strong committed principals who guide teachers and staff to follow a specific literacy agenda and promote reading in their buildings. In a study by Mackey, Pitcher, & Decman (2006), the authors analyzed principal influence on reading. Three areas found to allow principals to positively influence reading achievement were discovered:

1. Principal vision for the reading program
2. Principal educational background and experience
3. How the principal defines and applies their role as instructional leader

Hallinger, Bickman, & Davis (1996) performed a study in 87 schools to measure the effects of the principal on reading achievement. Like the findings from Mackey, Pitcher & Decman (2006), how the principal applies their instructional leadership and the type of learning environment that is created, affects reading gains made by students.

In a study of 10 Florida Reading First elementary schools by Crawford & Torgesen (2006), schools with successful outcomes in reading had strong leadership with knowledge of the children in the school, specifics of the reading

program, data for instructional decision-making, schedules that were conducive to student learning, and what teacher's professional development needs were (p.3). Bottoms & O'Neill (2001) suggest that prospective school principals possess a deep knowledge of best instructional practices and content. Bottoms goes on to purport that principals do not have to be the experts in curriculum, but must certainly know it well enough to be able to support teachers so that students are receiving instruction that will allow them to meet reading standards.

With changing standards, changing curriculum and continued turnover of teachers and administrators, it becomes paramount to the success of our students to ensure that school leaders have the skills that research suggests to impact reading achievement. In a recent report from Education Week, Aarons (2011) reports that U.S. elementary school principals "lack access to the focused professional development to help them meet the higher expectations of modern early-childhood education." Gail Connelly, Executive Director for the National Association of Elementary School Principals, reports that training programs that provide current and prospective principals with content expertise in the area of reading are in "rare supply."

Currently, components of No Child Left Behind heavily influence, and even dominate, what happens in principal preparation programs in U.S. colleges and universities, as well as in local school system "in-house" leadership development programs. NCLB places heavy emphasis on school reform through accountability measures. Little to no attention is given to the development of deep content understanding in principal preparation programs. Local districts are

typically responsible for trying to piece-meal professional development opportunities for prospective, new and current principals who lack the content knowledge necessary to adequately support teachers with instruction in specific areas. As research reports, as a nation we are not doing a sufficient job of providing these opportunities, and where we are, there are inconsistencies in approach.

Along with understanding and developing proficiency with NCLB, principal preparation requires the Interstate School Leaders Consortium (ISLLC) standards. The ISLLC standards are national standards adopted by most state departments of education as norms of competency for administrative certification. These are the assessed standards by which a prospective principal can gain the required administrator endorsement on their teaching certificate and become officially eligible for an administrative position.

ISLLC's Standards for School Leaders:

1. Setting a widely shared vision for learning;
2. Developing a school culture and instructional program conducive to student learning and staff professional growth;
3. Ensuring effective management of the organization, operation, and resources for a safe, efficient, and effective learning environment;
4. Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources;
5. Acting with integrity, fairness, and in an ethical manner; and

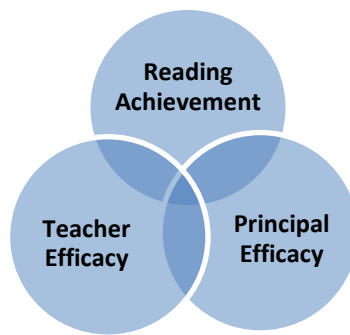
6. Understanding, responding to, and influencing the political, social, legal, and cultural contexts.

(Counsel of Chief State School Officers, 2008)

Summary

The literature review relates principal self-efficacy to student achievement. Several bodies of research demonstrate this connection - the principal's leadership, the development of individual teacher and collective teacher efficacy, and the impact on student achievement. The research reviewed in this chapter suggests that a linear relationship exists between principal efficacy, teacher efficacy, and reading achievement (see figure 3) - the higher the principal efficacy, the higher the teacher efficacy, and the higher the reading achievement.

Figure 3: *Hypothesized linear relationship*



It is recognized that there are many leadership styles and characteristics that impact student achievement. In addition, the research on principal leadership outlines a variety of standards, characteristics, frameworks and constructs. While all of these mention instruction or leading the instructional program as a component in some aspect, none mention the specificity and deep understanding of content that some research suggests is necessary. In fact, what appears to be

the trend is that principals who do possess much of this long list of desirable characteristics seem to rarely possess a meaningful and specific content knowledge in reading. They are simply hard to find – as is evidenced by the lack of training programs that provide current and prospective principals with content expertise, and the overall continued shortage in filling the growing demand for qualified applicants to the principalship.

There is promise in understanding principal efficacy as it relates to reading achievement. Perhaps, while principals must have some working knowledge of, and possess the potential to learn new standards, curricula, and specific instructional strategies, the more important component to their impact on reading achievement could be their own judgment of their capabilities to structure a particular course of action in order to produce desired outcomes in the school that they lead. What research has shown us is that self-efficacy beliefs affect the development of functional leadership strategies and the skillful execution of those strategies (Tschannen-Moran and Gareis, 2007).

It is critical for school principals to be effective in facilitating the improvement of achievement in reading for all students in their charge. Understanding how principals have a sense of their own efficacy as well as the impact their efficacy has on collective teacher efficacy, and ultimately- student achievement in reading will lead to research that will enhance this relationship. Having increased awareness of principals' sense of efficacy will better help district leaders plan and provide professional development for both existing and prospective principals. And finally, understanding a principals' sense of efficacy

in the context of the high-stakes accountability climate of No Child Left Behind, coupled with the implications self-efficacy has on student achievement, may affect policy makers' decisions during future reauthorizations of No Child Left Behind or in the development of other legislation impacting education in the United States. Given this context, the following research questions guided this study of the relationship between elementary principals' perceptions of self-efficacy and student achievement scores in reading:

1. Is there a relationship between principal efficacy and reading achievement?
2. What behaviors do principals in high principal efficacy / high reading achievement schools exhibit?

Chapter 3: *Design and Methodology*

Introduction

Elementary school teachers who have high levels of individual and/or collective efficacy can positively impact student achievement (Bruce, et al., 2010; Goddard, Hoy & Hoy, 2000). Effective reading instruction in elementary school is critical to students' life-long success (NCSL, 2006). Not only must elementary school principals be knowledgeable of and effectively involved in, improving a school's reading program and students' reading achievement, but as research indicates, a principal must bring a robust sense of efficacy in order to achieve organizational goals (Bandura, 1989).

This chapter outlines the methodology for this study, which examines the relationship between principal efficacy and reading achievement. The chapter includes an overview of the research design. Identification of the population to be studied and why it was chosen is also examined. The chapter includes a discussion of the data that was used, how the data was analyzed, as well as the data collection tools and interview strategies of the study. Finally, ethical issues pertinent to the study will be outlined.

Research Methods

A mixed-method approach that includes both quantitative and qualitative methods is the most appropriate methodology for uncovering the answers to the research questions posed. Russek and Weinberg (1993) claim that by using both quantitative and qualitative data, insights are afforded that neither type of analysis could provide alone.

Other researchers concur that a mixed-methods approach allows the researcher to expand the scope or breadth of research to offset the weaknesses of either approach alone (Blake 1989; Greene, Caracelli, and Graham 1989, Rossman and Wilson 1991).

The data was gathered through the use of surveys, focus groups, and structured interviews. The study was not evaluative, as it did not focus on the successes or failures of individual principals or teachers' collective efficacy. Rather, it focused on the relationship between elementary principals' sense of self-efficacy and reading achievement, as measured by 5th grade reading results on the Maryland School Assessment (MSA).

Qualitative inquiry strengthens the understanding of the social world by providing opportunities to get close to the people, circumstances, and direct, real world experiences of a question of inquiry (Patton, 2002). Additionally, Strauss and Corbin (1994) reveal that a theory is a plausible relationship among concepts and sets of concepts. In order to thoroughly study how people act and react to this phenomenon, interviews and focus group discussions at the selected schools allowed the researcher to develop a better understanding of perceptions, attitudes and beliefs. Understanding these perceptions and developing "an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem" (Creswell, 1998) justify the rationale for using qualitative inquiry.

Quantitative methods were utilized to determine efficacy levels of principals and teachers within a school district, as well as within selected

groupings of schools. Patton (1990) points out “the advantage of the quantitative approach is that it is possible to measure the reactions of many subjects to a limited set of questions, thus facilitating comparison and statistical aggregation of data” (p. 165). For this study, a survey was used to measure principal efficacy and reading achievement.

Research Design

This mixed-methods study is designed to examine the relationship between principal efficacy and student achievement in reading. The self-efficacy construct provides perspective for examining the complexities of human beliefs in a variety of task and context specific situations (Bandura, 1997; Luthans & Peterson, 2002). The theoretical framework of Bandura (1977) guided this research project. According to Bandura, an individual’s behavior is more concisely predicted by the belief a person holds regarding their own capabilities rather than what they are actually capable of accomplishing (Bandura, 1977). Bandura identifies three key cognitive factors in his theoretical framework: observational learning, self-efficacy, and self-regulation. The Principal Sense of Efficacy Scale (PSES) captures three major factors referred to as subscales of principal efficacy – efficacy for management, efficacy for instructional leadership, and efficacy for moral leadership (Tschannen-Moran & Gareis, 2004).

Study Setting and Sample Population

The study sample was comprised of elementary principals from a county school system in the mid-Atlantic region of the United States. All eligible elementary schools were asked to participate in the survey portion of the research. The district has a student population of 40,000 students. It is a growing community with regards to diversity. The minority and immigrant population has grown significantly in the last ten years, representing approximately 30% of the student population. Black or African Americans represent the largest minority population in the school district, comprising 17% of the county's population.

The Hispanic or Latino population is the fastest growing racial/ethnic group in the county, as well as in the state. In the last 10 years, the Hispanic or Latino student population grew by 700%.

The school district has 27% of its students qualifying for free or reduced meals – a number that has seen a sharper increase over the last two years, indicative of the downturn in the global economy.

For this study, 5th grade reading achievement was determined using the 5th grade reading scores from the Maryland School Assessment (MSA). The MSA is a criterion referenced, statewide standardized examination that provides proficiency level scores to describe how well students performed in reading and mathematics. This assessment is designed to meet the federal testing requirements of the No Child Left Behind Act. The MSA is given annually to students in grades 3 through 8 in reading and mathematics. There are four days of testing – two days for reading and two days for math. Students test for

approximately 90 to 120 minutes each day. The assessment includes both selected response questions and questions that require written responses. The assessment is derived from indicators of the State Curriculum. The school district curriculum is consistent with the state curriculum – and all schools involved in the study follow the same language arts continuum of curricular indicators.

Scores on the MSA show how well students are learning the reading and mathematics skills specified in the Maryland Content Standards. In addition, scores are used to measure schools and school system's adequate yearly progress in reading and mathematics. Since the assessment's inception in 2003, Maryland has used three performance level categories: advanced, proficient, and basic. Maryland's goal is for 100% of students to perform at the proficient or advanced level by 2014.

A description of Maryland's three levels of achievement for MSA is included:

- **Advanced** is a highly challenging and exemplary level of achievement indicating outstanding accomplishment in meeting the needs of students.
- **Proficient** is a realistic and rigorous level of achievement indicating proficiency in meeting the needs of students.
- **Basic** is a level of achievement indicating that more work is needed to attain proficiency in meeting the needs of students.

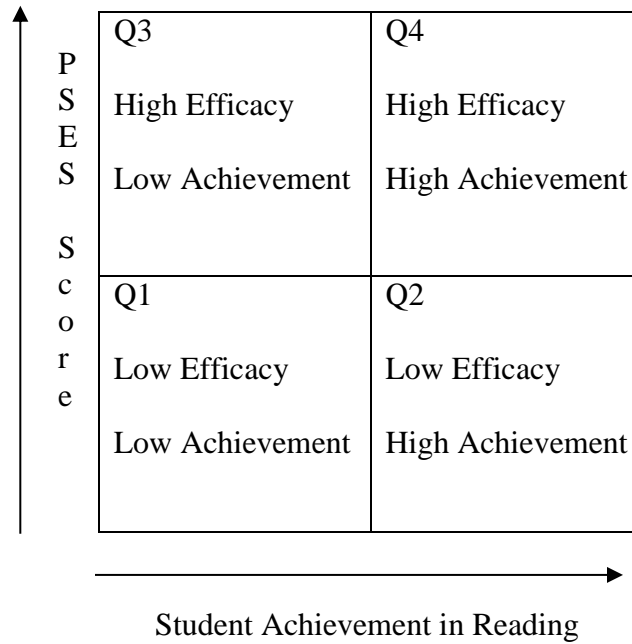
(MD State Department of Education, 2006).

While some achievement gaps still exist between overall and subgroup performance in reading, significant gains have been made in the school district to

reduce those gaps. Fifth grade Maryland School Assessment (MSA) scores for all students in reading have steadily increased since the baseline data was established in 2003, rising 17.7 points from 75.7% proficient/advanced in 2003, to 93.4% proficient/advanced in 2010. In addition, the total percentage of elementary schools making Adequate Yearly Progress (AYP) has risen from 82% in 2003 to 92% in 2010.

All eligible elementary principals in the district were asked to complete the Principals' Sense of Efficacy Scale (PSES), developed by Tshannen-Moran & Gareis (2004).

Figure 4 displays the data collection matrix for principal efficacy for the district. Three principals from the high efficacy / high achievement quadrant (Q4) were invited to participate in the interview component of the study.

Figure 4: *Study sample of selected elementary principals to complete PSES**

Three principals were chosen from quadrant 4 to complete the interview component of the study. The principals and their schools were identified by examining self-efficacy scores from the survey, as well as Maryland School Assessment (MSA) reading scores, which range between 240-650. A total score (efficacy and reading achievement) was used to determine who would be asked to participate in the study. Schools who had a principal who had not been in the school for more than a year were not considered.

For the qualitative element of the study, staff from the three schools of quadrant 4 were invited to be part of a focus group discussion, where the focus was on the leadership characteristics of high efficacy principals. Focus groups were utilized as a means to provide a triangulation of data collected. One expected outcome of the focus groups was that teacher responses would be able to

validate (or not) the principal survey results, as the PSES is a self-perception of efficacy.

The three schools were selected based on principal efficacy levels. In addition, principals of the three schools were interviewed, but separately from the teachers. A semi-structured interview format was utilized. A protocol was developed for interviews with teachers regarding perceptions of the possible impact of principal leadership behaviors on collective teacher efficacy, with a focus on the area of reading instruction. Likewise, a protocol was developed for interviews with principals with the purpose of gathering additional anecdotal information of their sense of self-efficacy, particularly as it pertains to the subscale for principal efficacy for instructional leadership in the area of reading instruction.

Follow up and probing questions were constructed as necessary, based on the responses of the initial interviews. The interview format allowed the researcher to include a list of questions that were necessary to capture the perspective of teachers and principals and the true understanding of the impact of principal efficacy on reading achievement. The interview design provided the researcher with a rich description of each of the participant's perspectives (Bogdan & Biklen, 1998). The interview protocols provided for approximately forty-five to sixty minutes of interview time with principals and teachers. Interviews were recorded and transcribed. The interview location was at each principal's school. Table 1 provides an illustration of the interviews and focus

group discussions that took place in the three schools selected from the high efficacy / high achievement quadrant (Q4).

Table 1: *Study Sample- Interviews and Focus Groups*

Format	Quadrant 4
Interviews	3 Principals
Focus Groups	3 schools Approx. 4-10 Teachers at each school

Instrumentation

Principal Efficacy is the “judgment of his or her capabilities to structure a particular course of action in order to produce the desired outcomes in the school he or she leads” (Bandura, 1977). The Principal Sense of Efficacy Scale (PSES) was developed by Tschannen-Moran & Gareis (2004). The PSES is an adapted scale of the Teacher Sense of Efficacy Scale developed by Tschanne-Moran and Woolkolk and Hoy (2001). This 18-item scale is used to measure principals’ beliefs about their capability to complete school leadership tasks (Tschannen-Moran & Gareis, 2004).

Tschannen-Moran & Gareis (2004) analyzed several studies (Hillman, 1986; Imants & DeBranbender, 1996) to support and validate a reliable measure of principals’ sense of efficacy. The PSES captures three major factors referred to as subscales of principal efficacy, with each subscale comprising six survey items:

- Principals’ Sense of Efficacy for Management
- Principals’ Sense of Efficacy for Instructional Leadership

- Principals' Sense of Efficacy for Moral Leadership

The Cronbach's alpha was used to measure the reliability of the PSES.

The results of Cronbach's alpha are:

- .789 for management efficacy
- .832 for instructional leadership
- .785 for moral leadership efficacy

The survey was posted on SurveyMonkey, an online survey tool already utilized by the school district. An e-mail letter was sent to each eligible principal and staff of the district's schools announcing the survey. Using an on-line tool such as SurveyMonkey, allowed the participant to complete the survey at their convenience. The principal survey took approximately 12 – 15 minutes to complete.

Data Collection

Approval of the dissertation proposal was obtained through the research committee and the University Human Subjects Review Board. Permission was requested and granted from the school district's research and evaluation division to conduct the study. Once written consent was obtained from the school system, a request for participation was mailed to all eligible elementary principals and teachers. A signed informed consent form was required from each participant prior to completing the surveys. Following receipt of the consent forms, an invitation to complete the online surveys was sent to the principals.

After the initial elementary schools' efficacy data was collected and analyzed, based on principal efficacy levels, three schools were asked to

participate in principal interviews and teacher focus group discussions. A request for participation in the focus groups was sent to all teachers in the identified schools. Principals of the identified schools were asked to participate in an individual interview. Before participating in the focus groups and individual interviews, participants were asked to sign an informed consent form.

Focus group discussions and individual principal interviews were recorded and transcribed. Focus group discussions and individual principal interviews were arranged at convenient times for participants at their schools. Coding of qualitative data allowed the researcher to apply a set of categories to data to be able to track categories and frequencies within the data collection.

Data Analysis

The framework for the study -the triadic reciprocal causation model - provided a conceptual framework through which the construct of principal efficacy could be examined and also supported the analysis of data. Analysis of quantitative data was supported by the use of the statistical software, SPSS. Mean score analysis was performed for each survey item, subscale and overall score. Additionally, correlational analysis was utilized to determine if significant relationships existed between principal efficacy and reading achievement.

Maxwell (1996) suggests that the data analysis of a qualitative study must be part of the overall design, not conceptually separate from the design of the study. To that end, the researcher treated the qualitative analysis as an iterative piece of the study, allowing it to influence, and be influenced by the other components of the research design. Information from the interviews and focus

groups was analyzed by categorizing and coding data that highlighted the characteristics of principal efficacy, and the belief systems for students as it related to reading achievement.

Coding helped the researcher form initial categories of information.

Within each category, an examination of several properties or subcategories that help to answer the research questions and connections to the conceptual framework, was completed. The following categories were established: (a) comments describing Bandura's four sources of efficacy, (b) comments identifying characteristics of principal efficacy, and (c) comments regarding a belief of high expectations for reading achievement. Table 2 depicts the coding categories that were used to analyze the interviews and focus groups:

Table 2: *Coding Categories*

Category		Code		
Sources of Efficacy	Mastery Experiences (ME)	Vicarious Experiences (VE)	Social Persuasion (SP)	Affective States (AS)
Characteristics of Principal Efficacy	Efficacy for Management (EM)	Efficacy for Instructional Leadership (EIL)	Efficacy for Moral Leadership (EML)	
Belief of High Expectations for Reading Achievement	High Expectations (HE)			

Ethics

Ethical consideration of this study came primarily in the form of consent from the participants. The necessary consent forms for guaranteeing confidentiality, as well as an outline of other logistics for research study participants, such as a participants release from study, were reviewed and distributed to all participants. The purpose of the study, length of interview time, and plans for using the information garnered in the interview were also reviewed with each participant.

Any recordings of interviews, field notes, observations, etc., were kept confidential and not available for public consumption. Furthermore, information from individual principal interviews and teacher focus groups were not, and will not be shared with other principals or teachers, respectively. Participants' names as well as school names were not used in any part of the dissertation, so as not to break confidentiality.

Participants entered into this research voluntarily after being given a clear description of the direction of the study. All participants were required to sign a consent form in accordance with the University of Maryland's Institutional Review Board (IRB). In addition, this study was dependent upon approval from the district. An abstract of the study will be sent to the Director of Research and Evaluation, whose office is responsible for reviewing and approving any research studies conducted in the district. Principals were given the option of withdrawing from the study at any time.

The research was conducted in the school district in which the researcher works. The researcher is a member of the Superintendent's Cabinet, or executive management team in the district.

Chapter Four: Findings

Overview

An effective principal is a necessity in successful schools. Research indicates the critical importance and link between effective principals and student achievement (Seashore-Louis, et al. 2010, Waters, Marzano and McNulty 2003; Leithwood, et al. 2004.) Additionally, Imants and DeBrabander (1996) state that a principal's perceived efficacy is certainly an important factor for improving student achievement. Not only must elementary school principals be knowledgeable of, and effectively involved in, improving a school's reading program and students' reading achievement, but as research indicates, a principal must bring a robust sense of efficacy in order to achieve organizational goals (Bandura, 1989).

The purpose of this mixed-method study was to conduct an exploratory analysis of the relationships between principal efficacy and reading achievement. The framework for the study -the Triadic Reciprocal Causation Model -provides a conceptual framework through which the construct of principal efficacy can be examined and will also support the analysis of data. Social cognitive theory helps illustrate that principals routinely operate within the three components of Bandura's triadic reciprocal causation model as their leadership practices, their own efficacy beliefs, and the accountability context of No Child Left Behind constantly impact effectiveness, and ultimately, student achievement.

A sequential explanatory strategy was used (Creswell, 2003). This strategy involves the collection and analysis of quantitative data followed by the

collection and analysis of qualitative data. Equal priority is given to the two phases and the data are integrated during the interpretive phase of the study. The primary focus is to explain quantitative results by exploring certain results in more detail or helping explain unexpected results. For example, in this study quantitative data were collected (Principal Self-Efficacy Scale) to inform the qualitative data analysis components (principal and teacher interviews and focus group discussions). The qualitative data components were also used to provide a triangulation of data collected. One expected outcome of the focus groups was to validate (or not) the principal survey results as the PSES is a self-perception of efficacy.

These data were gathered to answer the following questions:

1. Is there a relationship between principal efficacy and reading achievement?
2. What behaviors do principals in high principal efficacy / high reading achievement schools exhibit?

Subsequent sections of this chapter present the results of the Principal Self-Efficacy Scale (PSES) surveys that were administered to principals. Findings from the interviews with three principals and the three teacher focus groups are also reported. To keep the names of the principals and teacher focus groups anonymous, principals (and their corresponding teacher focus groups are referred to as principal A, B, and C, and teacher focus groups A, B, and C, respectively.

Response Rate Information of the Principal Self-Efficacy Scale (PSES) Survey

Of the 36 elementary school principals in the school district, 26 principals completed the survey, representing at 72.2% response rate. Of the administrators who completed the survey, 26.9% of the respondents were male and 73.1% of the respondents were female. The years of experience as principal ranged from 2 years to 28 years. The years of serving in the principalship at their current school ranged from 2 years to 12 years. Responding principals represented traditional Pre-K – 5th grade schools, Primary Schools (Pre-K – 2nd grades), Intermediate Schools (3rd – 5th Grades), and a Montessori charter school.

The participating principals led schools in a variety of settings. The demographic analysis of responding schools includes schools with free and reduced meals populations from 44% to 6%, and minority populations from 54% to 7% of the overall student populations.

Summary Analysis of the Principal Self-Efficacy Scale (PSES) Survey

The Principal Sense of Efficacy Scale (PSES) was developed by Tschannen-Moran & Gareis (2004). The PSES is an adapted scale of the Teacher Sense of Efficacy Scale developed by Tschannen-Moran, Woolkolk, and Hoy (2001). This 18-item scale is used to measure principals' beliefs about their capability to complete school leadership tasks (Tschannen- Moran & Gareis, 2004). The survey starts each question with the phrase, "In your current role as principal, to what extent can you..." followed by the 18 questions. The survey uses a nine point Likert response scale ranging from 1 (none at all) to 9 (a great deal).

The PSES captured three major factors referred to as subscales of principal efficacy, with each subscale comprising six survey items:

- Principals' Sense of Efficacy for Management
- Principals' Sense of Efficacy for Instructional Leadership
- Principals' Sense of Efficacy for Moral Leadership

Table 3 presents the questions designed to assess the three major factors related to principal self-efficacy:

Table 3: *Subscales of the PSES Survey*

Principal's Sense of Efficacy for:	Questions:
Management	3, 11, 12, 15, 17, 18
Instructional Leadership	1, 2, 4, 6, 7, 9
Moral Leadership	5, 8, 10, 13, 14, 16

To determine the internal consistency of the PSES survey, a Cronbach's alpha reliability test was calculated for each of the three subscales. Coefficient values ranged from a low of .284 (moral leadership) to a high of .819 (management). With the exception of the moral leadership subscale, the items within each subscale were highly correlated, with coefficient values greater than .70. Table 4 illustrates the Cronbach's alpha reliability test results for each subscale.

Table 4: *Subscale Reliability of PSES Survey*

Subscale	Cronbach's Alpha Reliability
Management	.819
Instructional Leadership	.792
Moral Leadership	.284
Total Combined Subscales	.854

The determination of the strength of the efficacy characteristics were based on a mean score analysis. Mean scores on the management efficacy subscale ranged from 5.88 to 7.88. The standard deviation ranges from 1.275 to 1.608. This set of questions references those leadership roles that are specific to the management of a school and the efficiency in which schools are run (Leithwood and Duke, 1999). Table 5 illustrates the questions, means, and standard deviations from the management subscale of the PSES.

Table 5: *Management Subscale Questions, Means, and Standard Deviations of the PSES*

Question	Mean	Standard Deviation
Handle the time demands of the job.	7.12	1.608
Maintain control of your own daily schedule.	5.88	1.558
Shape the operational policies and procedures that are necessary to manage your school.	7.15	1.434
Handle the paperwork required of the job.	6.65	1.573
Cope with the stress of the job.	7.12	1.275
Prioritize among competing demands of the job.	7.08	1.294

Mean scores on the instructional leadership efficacy subscale ranges from 7.62 to 8.42. The standard deviation ranges from .852 to 1.386. This subscale of questions references those leadership roles that emphasize the importance of principals being well versed with instructional practices and strategies that improve student achievement (Bell, 2001). Table 6 illustrates the questions, means, and standard deviations from the instructional leadership subscale of the PSES.

Table 6: *Instructional Leadership Subscale Questions, Means, and Standard Deviations of the PSES*

Question	Mean	Standard Deviation
Facilitate student learning in your school.	7.81	1.386
Generate enthusiasm for a shared vision for the school.	8.35	1.018
Manage change in your school.	7.88	.952
Create a positive learning environment in your school	8.42	.902
Raise student achievement on standardized tests	7.62	.852
Motivate teachers	7.65	1.263

Mean scores on the Moral efficacy subscale ranges from 7.65 to 8.62. The standard deviation ranges from .571 to 1.251. This subscale of questions references those leadership roles that outline the moral obligations principals faced each and every day. Principals must exercise not only their authority, but their priorities, in an ethical manner, and promote ethical behavior among all (Fullan, 2003; Tschannen-Moran & Gareis, 2004). Table 7 illustrates the questions, means, and standard deviations from the moral subscale of the PSES.

Table 7: *Moral Subscale Questions, Means, and Standard Deviations of the PSES*

Question	Mean	Standard Deviation
Promote school spirit among a large majority of the student population.	8.27	1.251
Promote a positive image of your school with the media.	7.65	1.198
Promote the prevailing values of the community in your school.	8.27	.874
Handle effectively the discipline of students in your school.	8.04	.999
Promote acceptable behavior among students	8.62	.571
Promote ethical behavior among school personnel	7.96	.916

An overall analysis of the mean scores for each subscale indicated a range of 41.0 (Management) to 48.8077 (Moral Leadership). The standard deviation ranged from 2.78595 (Moral Leadership) to a high of (6.362329), which corresponded with the lowest mean (Management). Table 8 illustrates the descriptive statistics accompanying the mean scores for each subscale of the PSES.

Table 8: *Descriptive Statistics for Mean Score Analysis of Subscales of PSES*

Subscale	N	Minimum	Maximum	Mean	Std. Deviation
Management	26	29.00	52.00	41.0000	6.36239
Instructional Leadership	26	38.00	54.00	47.7308	4.37774
Moral Leadership	26	40.00	53.00	48.8077	2.78595

Analysis of MSA reading scale scores and principal self-efficacy:

The scale scores from the 5th grade MSA reading were analyzed. The following table (9) illustrates the 26 responding schools MSA average scale scores, and the principal self-efficacy survey total score. The lowest obtainable scale score on the PSES is 18 and the highest obtainable scale score is 162. The lowest obtainable scale score on the MSA reading in 5th grade is 240 and the highest is 650.

Table 9: *MSA Average Scale Scores and the Principal Self-Efficacy Survey Total Score*

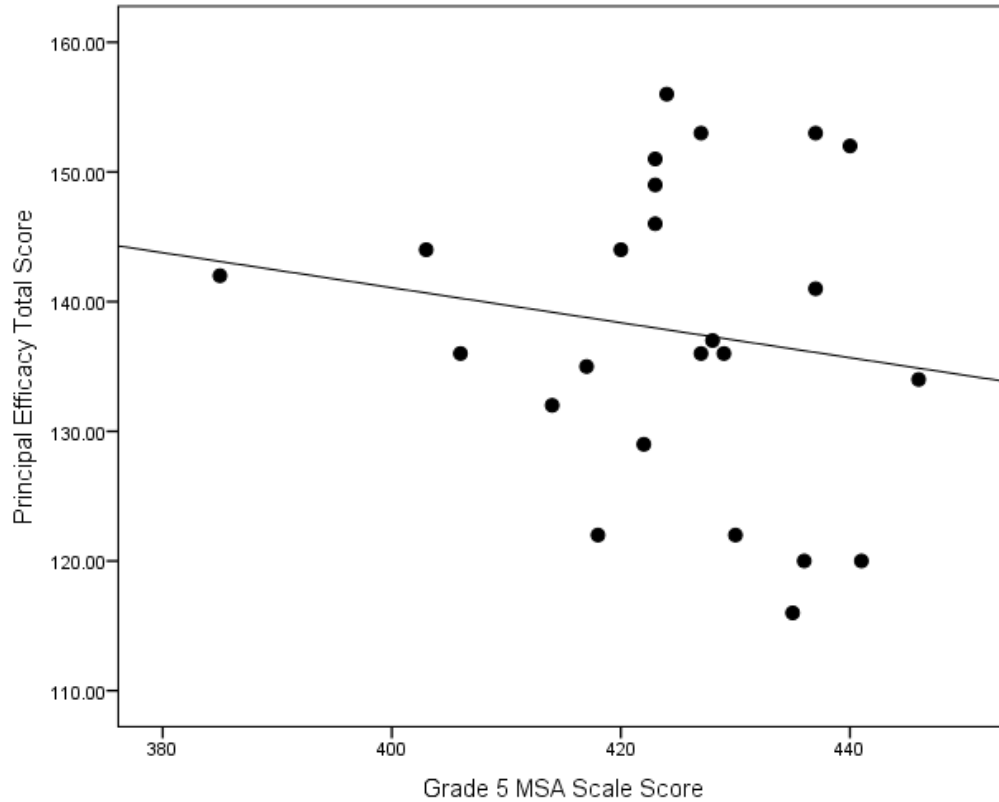
School	MSA average scale score	PSES total score
School A	440	152
School B	437	153
School C	424	156
School D	427	153
School E	446	134
School F	437	141
School G	423	151
School H	423	149
School I	423	146
School J	428	137
School K	429	136
School L	420	144
School M	427	136
School N	441	120
School O	436	120
School P	417	135
School Q	430	122
School R	422	129
School S	435	116
School T	403	144
School U	414	132
School V	406	136
School W	418	122
School X	385	142
School Y	N/A	142
School Z	N/A	128

Correlation Analysis:

A Pearson-product moment correlation was computed to identify whether a significant relationships exist between overall principal efficacy score and reading achievement. There was limited evidence of a linear relationship between overall principal self-efficacy and 5th grade MSA reading scores. Figure 5 is a

scattergram depicting the non-linear relationship between the two variables. Pearson correlation analysis yielded an $R = -.154$, $p > .05$.

Figure 5: *Scattergram of principal efficacy total score and grade 5 MSA scale score*



Consequently, minimal correlation coefficients were found between efficacy subscales and reading scores, with correlation coefficients ranging from $-.192$ for Management to $-.067$ for Instructional Leadership to $-.111$ for Moral Leadership.

Significant correlations did not exist between PSES score and reading achievement. However, there is some evidence to support broad common leadership behaviors of principals who report high levels of self-efficacy, in schools where high reading achievement exists. The following sections provide an

overview and analysis of the qualitative components of the research study by providing an overview and analysis of the principal interviews and the teacher focus group discussions.

Principal Interview Overview

Three principals were selected for interviews based on their MSA performance and survey total scores. School “A” had an MSA scale score average in reading of 440 and a PSES score of 152. School “B” had an MSA scale score average in reading of 437 and a PSES score of 153. School “C” had an MSA scale score average in reading of 424 and a PSES score of 156. The interviews took place at the principal’s school and helped to answer the research questions. The principal interviews only included the researcher and the principal. The interviews were recorded and transcribed verbatim. The researcher used a semi-structured interview format. The interview protocol is included in Appendix F. The semi-structured format allowed for clarifying questions to be asked. The information from the interviews was coded and categorized into three areas:

- 1.) Comments describing Bandura’s four sources of efficacy
- 2.) Comments identifying characteristics of principal efficacy
- 3.) Comments regarding a belief of high expectations for reading achievement

Principal Interview Schools

The following section describes the three schools at which principals were interviewed. The demographics represent the 2011-12 school year. The three

schools ranged in demographics, size, and poverty levels, with these averages similar to overall district averages. School “A” was an elementary school with 430 total students, located in a rural area of the school district. Growth occurred in this area in the late 1980’s and early 1990’s, but has since tapered off. School “A” is 51 years old. The current principal has been at this school for 8 years, with 12 years of experience as a principal. Table 10 represents the demographics of School “A.”

Table 10: *Demographics of School “A”*

Demographics	Percentage of School Population
American Indian/Alaskan Native	*
Asian	18
Black or African American	7
Hispanic	11
Native Hawaiian /Other Pacific Islander	*
Two or More Races	7
White	56
Free/Reduced Meals	≤ 5
English Language Learners	9
Special Education	7

Note. * *Fewer than 10 Students*

School “B” was an elementary school with 993 total students. School “B” is 7 years old and was built to support the growth of the area. It is the largest elementary school in the Rhodes County School District and is located along a

major interstate in an area experiencing significant growth and development. The current principal has been at this school for 5 years, with 5 years of total principal experience. Table 11 represents the demographics of school “B.”

Table 11: *Demographics of School “B”*

Demographics	Percentage of School Population
American Indian/Alaskan Native	*
Asian	*
Black or African American	≤ 5
Hispanic	10
Native Hawaiian or Other Pacific Islander	*
Two or More Races	≤ 5
White	82
Free/Reduced Meals	23
English Language Learners	8
Special Education	7

Note. * *Fewer than 10 Students*

School “C” was an elementary school with 437 students. Once an overcrowded school of almost 900 students due to significant growth in the 1990’s, school “C” now has diminished enrollment and is considered a “small” school in the district. Located on the outskirts in the suburbs of the largest city in the district, school “C” is 35 years old. The principal of school “C” has been

there for 2 years, with 5 years of total principal experience. Table 12 represents the demographics of school “C.”

Table 12: *Demographics of School “C”*

Demographics	Percentage of School Population
American Indian/Alaskan Native	*
Asian	6
Black or African American	9
Hispanic	10
Native Hawaiian or Other Pacific Islander	*
Two or More Races	≤5
White	70
Free/Reduced Meals	14
English Language Learners	≤5
Special Education	12

Note. * *Fewer than 10 Students*

Analysis of Principal Interview Responses

This section provides an overview of the principal interview responses, including summary examples of the responses from principals and how they were categorized for this analysis, as it relates to the research questions posed.

When asked about the personal and professional experiences they have had with regards to instruction in reading, all three principals interviewed concluded that they benefited little from undergraduate work or required courses

for certification, and more from teaching experiences, working in different schools and in different positions, and other related professional development opportunities to sharpen their understanding of reading instruction. Principal “A” commented,

I also worked with Reading Recovery with Jane Doe at Happy Valley Elementary. I worked with her and I learned a lot—probably the most I learned about reading was when I was AP at Happy Valley. They were doing some things there that I really had no exposure to before that time. I saw a lot of value in it.

In addition, when asked about coursework or professional development opportunities that had a significant impact on their understanding of reading instruction, each principal interviewed revealed that large, systemic professional development opportunities had little impact. It was shared that school based trainings that they participated in, typically with a reading specialist and a team of teachers, had the most significant impact on their own professional development. Principal “C” reiterated this consensus among the three principals about the power of professional development that happens at the school level by stating,

Any professional development that is done within my building—I attend professional development with my staff members probably 98% of the time. It would only be an emergency that I’m not there and that sends consistence throughout leadership. So what they’re getting, I’m getting. If I’m not receiving, then I’m helping to deliver.

When asked about the structures and conditions at their schools as it relates to reading instruction and to what principals attribute their students’ high achievement and success, all three principals discussed their teachers’ instructional abilities and the high expectations each had for achievement. Each principal mentioned the phrase “professional learning community,” when they

talked about a condition that exists at their school to support reading. Data, and constantly monitoring where students are in terms of achievement with reading was also a common piece in place in all three schools.

Two of the three principals interviewed did not consider themselves to be “highly knowledgeable” when it comes to reading acquisition and instruction. They reported that their teachers are the experts, along with their reading specialists, and that while they felt they had to be knowledgeable so that they could provide feedback to their teachers, they were more interested in making sure that they were helping to facilitate this expertise that they wanted their teachers and staffs to possess and creating the conditions for that to happen. Principal “B” shared it this way,

I humbly say “no” because I don’t believe I need to be the smartest person in the room about everything. I know a little bit about a lot, and I know what I know a lot about. Reading instruction is not what I know a lot about. Now compared to a first-year teacher I do, but when you have low turnover and this teacher’s taught third grade as long as I’ve known them, I would expect that teacher to know a lot more about reading acquisition than I would with a third grader. I would expect my reading specialist to know a lot more than I know, so I don’t consider myself an expert. I consider the success attributed to the other things I described. There’s a mutual trust. We have kid talks three times a year, where you’ve seen what they look like, and teachers know that they have to be ready for them. They want to be ready for them because it’s the time to present what you’ve succeeded with as a teacher.

Principal “C” thought of herself as being “highly knowledgeable” due to the significant training she had received in a variety of reading intervention and professional development positions she had held.

All three principals considered themselves to be highly knowledgeable, or very close to it, with successful strategies that promote adult learning. They each

reported that this was a critical part of their job as it connected back to what was revealed earlier about creating conditions, such as professional learning communities, where adults felt trusted to be responsible for their own learning and that it didn't always have to be the principal who was in charge of delivering that learning, but experts on staff. Principal "B" stated,

In terms of creating an atmosphere and culture within the school which is what needs to be brought to the professional development, I do consider myself highly knowledgeable.

Principal "C" added to this notion by stating,

My years as a teacher specialist provided a lot of training, coaching and mentoring. With that, I feel like I do understand the adult learner very well. When I create professional development or time for learning with folks, I really do try to make those connections to how it's going to affect students and me as the teacher in the classroom. I then make those connections for them so they can understand that importance and validate what they bring to the table and we move on from there. One of my favorite quotes is, "Success is never final and failure is never fatal." Action is never optional. That factor is part of what caps the connections between the adults—and we have some struggle more than others—especially those who had many years of no professional development or no type of leadership maybe similar to my style. Has that been something that we've worked on? Yes.

When discussing goals that have been established at their schools with regards to expectations for reading achievement, all three principals noted the importance of the school leadership teams driving the creation of goals and how they will be monitored. All responses included a reference to data and the importance of having teachers involved in the monitoring of student data as a means to make adjustments to instruction. Another point of discussion by each principal in their responses to this question was the importance of collaboration and teamwork so that everyone understood the goals clearly and could contribute

to them. In addition, as it relates to high expectations, each principal shared that their schools' goals related to reading achievement were always higher than goals established by the county.

All three principals reported being “hands on” and involved in the learning that was happening in their classrooms. From participating in school wide and grade level professional development, to meeting with students individually to discuss their progress in reading, to informally observing in classrooms to co-teaching lessons with teachers, each principal stressed the importance of being connected to their teachers and what is happening in classrooms as it related to reading instruction. Principal “B” said,

I have frequent walk-throughs and observations that are formal and informal. While doing kid talks and discussing students, it's the type of feedback and questions that I might ask or another administrator might ask. We have weekly student support teamings, so participating in those and adding comments to those. Even participating in the weekly professional development and giving comments to those and participating.

Principal “C” added,

I love the time in the classroom, but it is part of the challenge. When I can be in classrooms, the more I like it. When I'm in classrooms, it's often for viewing purposes. It might be to do some kid watching; it might be to do some teacher watching; or, it might be to work directly with children. They are used to it now, and I try to ask questions or things like that. I think that's teaching. I am modeling for the teacher how he/she tends to expand, and oftentimes the teacher will come back and say, “Help me to understand why you did that.” Or they might say, “The fact that you're doing that helped me to see it this way.” Either way is fine with me, in fact that's my favorite thing to do because I feel like I can be “hands on” with the kids

When asked about ways in which principals contribute to a positive learning environment as it relates to reading achievement, each principal went through a list of school wide reading incentives and family activities that have

supported the reading program. They also each honed in on the “positive environment” piece of that question and talked about their own responsibility for creating that kind of environment so that teachers and students can be successful.

Principal “B” stated,

I think the environment of the school is reflective of the principal and administration, so it’s kind of like having a class. You’ve got to create that safe, nurturing environment, you have to know your students—in this case, it’s knowing the staff—you have to motivate them in a positive and encouraging way and have rigor (which means the expectations of what we think we can do for students). Everything as a teacher just translates to being a principal.

Summary of Principal Interview Results

Analysis of the interviews revealed evidence that there are certain common behaviors among principals in schools where principals have rated themselves highly as it relates to their own efficacy and high reading achievement exists. The interviews revealed remarkably similar themes and responses from each of the three principals. Common behaviors as described by principals included: building trust, creating conditions for teachers to be successful, developing learning communities, utilizing data, monitoring student progress, looking to teachers to be experts in reading instruction, having high expectations for reading achievement, having high expectations for teachers teaching reading, communicating clear goals for reading instruction. Table 13, 14, and 15 include summary examples of the responses from principals and how they were categorized for this analysis.

Table 13: *Sources of Efficacy*

Sources of Efficacy	Summary Principal Responses
Mastery Experiences	<ul style="list-style-type: none"> • “Kid Talks” for reviewing data • Taking time to celebrate successes • Reviewing progress with goals • Soliciting feedback from stakeholders
Vicarious Experiences	<ul style="list-style-type: none"> • Professional learning communities • Learning from experts in the building • Informal observations
Social Perception	<ul style="list-style-type: none"> • Supporting each other • Teamwork and collaboration • Building teachers’ capacity in reading instruction
Affective States	<ul style="list-style-type: none"> • Trust building • Encouraging risk-taking with instructional strategies • Creating a positive environment • Motivate and encourage

Table 14: *Characteristics of Principal Efficacy*

Subscale of PSES	Summary Principal Responses
Efficacy for Management	<ul style="list-style-type: none"> • School structures in place to support quality reading instruction • Keep reading achievement among top priorities of job • Finding time to work with teams of teachers and students regarding reading achievement
Efficacy for Instructional Leadership	<ul style="list-style-type: none"> • Create shared goals for reading achievement • Motivate and encourage staff • Facilitate professional development for staff • Create a positive learning environment for teachers and students
Efficacy for Moral Leadership	<ul style="list-style-type: none"> • Promote school-wide reading incentives and family activities • Establish conditions for learning to occur

Table 15: *High Expectations for Reading Achievement – Summary Principal Responses*

Belief of High Expectations for Reading Achievement
<hr/> <ul style="list-style-type: none"> • High expectations for teachers with reading achievement goals • High expectations for students with reading achievement • Reinforcing expectations through data monitoring • Reinforcing expectations through individual student meetings and goal setting • High expectations for school community (families) related to reading achievement <hr/>

Teacher Focus Groups Overview

This section provides an overview of the teacher focus group discussions, including an overview description of the teachers participating in the focus group and a summary of the responses from teachers that describe common principal leadership characteristics in schools, as it relates to principals with high self-efficacy in schools with high reading achievement. This analysis further examines the second research question posed in the study. The teacher focus groups are identified as school A, B, and C, which also match the principals interviewed in the previous section.

Focus Group Participant Information

The three groups of teacher focus groups were held in the same schools where the principals identified for interview in this study worked. This was based on their MSA performance and their principals PSES survey total scores. School “A” had an MSA scale score average in reading of 440 and a PSES score of 152. School “B” had an MSA scale score average in reading of 437 and a PSES score of 153. School “C” had an MSA scale score average in reading of 424 and a

PSES score of 156. The interviews took place at the focus group's school and provided valuable insight into answering the research question related to behaviors principals exhibit in schools with high reading achievement where principals perceive themselves to have high efficacy. The teacher focus group discussions included the researcher, the participating teachers from each school and a staff member from the office of research and accountability from the school district. The focus group discussions were recorded and transcribed verbatim. The researcher used a semi-structured interview format. The interview protocol is included in Appendix G. The semi-structured format allowed for clarifying questions to be asked.

Each teacher focus group consisted of a mixture of teachers, ranging in years of experience and position. The following tables illustrate this information.

Table 16: *Focus Group Participant Information*

Participant Identification	School	Position	Years of Experience
A	A	Elementary Teacher	7
B	A	Reading Intervention Teacher	15
C	A	Special Education Teacher	16
D	A	Reading Specialist	11
E	A	Elementary Teacher	5
F	A	Elementary Teacher	34
G	B	Reading Specialist	14
H	B	Elementary Teacher	15
I	B	Elementary Teacher	5
J	B	Elementary Teacher	5
K	C	Elementary Teacher	5
L	C	Special Education Teacher	7
M	C	Elementary Teacher	8
N	C	Reading Specialist	25
O	C	Elementary Teacher	9
P	C	Elementary Teacher	18

Analysis of Teacher Focus Group Results

When asked about the expectations for reading achievement and how they are communicated in their schools, all three teacher focus groups described the high expectations they have for reading achievement in their schools. Participants from two of the schools (A and C) shared that this is communicated and emphasized on a regular basis by their principals with the work they do daily to promote these expectations within their schools. While school B did not

explicitly point to their principal as the point person for the culture of high expectations for reading, they did indicate it was the principal who empowered them and their reading specialists with the professional development to achieve the high expectations established. A teacher from School B stated,

Our principal doesn't micromanage – he's confident in our team of teachers. He doesn't feel the need to go out there and learn everything there is to know about new trends in reading instruction. He feels confident that we have staff in the building that are going to take the lead with that and can help us promote the adult learning as a whole school culture.

In addition, all three focus group schools pointed to strong home/school communication about the expectations. From information in newsletters, to information nights at the school and coffee chats, contests and incentives – all three focus groups illustrated their school's emphasis on communicating the expectations for reading achievement and the importance of reading with their school communities.

Another common theme that was captured in the focus group discussions from all three schools was that of structures and conditions within the schools that promote high reading achievement. The focus group schools described language arts schedules and blocks of time that are “off limits” to changes in the schedule. As a teacher at School B described it, “Nothing can interfere with our language arts time – so we never have scheduling issues in our school.”

In addition to protecting instructional time during the day in reading, teachers in all three schools also talked in detail about structures for students requiring reading intervention and catching students up who were behind. Systematic approaches to analyzing reading data were described and prescriptive

intervention programs detailed in each of the three schools. Also clearly evident was each principal's expectation that classroom teachers worked collaboratively with reading intervention teachers and/or reading specialists (those providing the intervention), so that a team approach to increasing reading achievement was utilized and teachers were collaborating on the needs of students.

In the focus groups, teachers' responses about goals for reading achievement mirrored their responses about expectations for reading achievement. All three schools talked about a common understanding of what the reading goals were, that they were developed collaboratively through analysis of achievement data, and were clearly articulated not only to the teaching staff, but to the school community. While reference was given individual school goals and targets, the common thread in this discussion was that each school focus group pointed to their principal as the person who continually kept the goals out in front of everyone, encouraging them, celebrating their accomplishments, and gently nudging them onward. A teacher at school C, made the following comments to illustrate this example,

She holds everybody accountable. I feel like I'm accountable to the kids, to the parents, to the school and my team. I want to do well because my principal is that presence – you feel like you want to rise and step up to the plate and meet that need. You want to meet that sense of urgency she brings to our goals.

In terms of experiences and opportunities for professional development related to reading achievement, schools reported a variety of learning opportunities that utilized the strengths of different staff members. Team collaboration, formalized in-service training on school and/or system initiatives,

as well as individual support were all mentioned as available and effective. Teachers in the focus groups reported that the most beneficial professional development was that which was done with a small group or grade level of teachers or that which was provided individually, as it could be differentiated to meet the specific needs of the teachers.

In school A and B, teachers reported that while their principal did not deliver the professional development related to reading, they participated in or were a part of, almost all of it. In school C, the principal had a strong set of experiences related to reading instruction and continued to partner with her reading specialist in delivering much of the professional development in reading, although not all of it.

In all three schools, teachers commented on the empowerment they felt to be responsible for their own learning. In addition, each focus group commented on the way in which their principal would seek out those in their buildings who had expertise and could deliver the professional development to their colleagues. A common theme of building the capacity of the staff to be instructional leaders was evident in the analysis of the focus groups. A teacher from school A commented,

She is really good at promoting teacher leaders. I would venture to say that just about everybody in this school is a teacher leader. I'm not kidding about that. That's sort of unusual, you know? Everybody seems to have strengths somewhere and she really promotes that. When teachers have ownership like this, it's huge.

A teacher from school B shared a similar comment with regards to her principal's approach to building teacher leaders,

He recognizes when there is that sort of expert among us and allows that person to be the expert and to take the reins and do whatever is necessary.

Teachers in all three schools participating in the focus group discussion indicated high levels of collective knowledge of reading instruction. Teachers felt strongly about the abilities of their peers and their success in meeting their goals. All three focus groups mentioned the school system's multi-year focus on reading instruction and staffing support to elementary schools in the form of reading specialist and targeted reading intervention positions as contributors to this indication of high levels of collective knowledge. However, all three schools also reflected on how their individual schools' principals helped to create the conditions for learning communities and cultures of high expectations for reading achievement in their schools as an even stronger contributor toward their self-assessment of collective efficacy.

When asked to consider whether their principal had greater strengths in reading instruction or with strategies that promote adult learning, the schools had mixed responses. School A and B unanimously chose strategies that promote adult learning. As indicated prior, staff noted their principals' ability to find leaders from within to take on the majority of responsibilities for professional development in reading instruction for teachers. While noting that that their principals fully participated and demonstrated a working knowledge of all that was expected, the indicated their principals' strengths were more closely aligned with creating the conditions and mobilizing the expertise of others to make reading achievement gains happen in their buildings.

By contrast, teachers at School C could not say which skill set their principal had the greatest strength, but that she was strong in both. Teachers in School C reiterated that because of their principal's background in reading instruction and her continued, outward passion for the subject area that her strengths fell evenly between the two areas.

When specifically asked about the leadership characteristics teachers felt their principal possesses that directly contribute to their schools' success with reading achievement, four themes emerged from the responses of the teacher focus groups. These four themes were trust, empowerment, expectations, and collaboration. The first and most often mentioned is trust. Teachers in all three groups articulated the importance and impact that the perceived trust from their principal had on their success with student achievement. A teacher at school A shared her thoughts on her principals' trust in staff, by stating,

She has trust in us to make our own decisions. I think we all know that she trusts our professional opinion on what to do and how to go about doing it. I think I can speak for everybody – we don't feel we have to following a script or if the manual says be on page 59 on Tuesday, we know we can use our own professional opinion to do what we need to do. If we need to change gears because you thought about something and realized you could have done it a different way or made it better, then we felt free to do so – even if it wasn't in the plan book for that day.

Another teacher at school B reiterated this same notion of trust in the following comments,

I think she believes in us. She trusts us to do what we need to do and knows we will seek out people in this school who have expertise who can help us. Whatever we need to do – we can be risk-takers. She lets us do what we need to do to make the students successful.

The ability of the principal to empower others was another leadership behavior repeatedly described by the three participating groups as directly contributing to their schools' success with reading achievement. It is clear that principals rely heavily on teacher leadership and expertise to become highly effective teachers of reading, support their colleagues through the delivery of professional development and to sustain the culture of high expectations for reading achievement. Throughout the focus group discussion, example after example was shared describing ways in which these three principals tapped into the talent of the staff and mobilized them to address needs and move the students' reading achievement forward.

Attention to expectations for teachers, students, and the school community at large were strewn throughout the responses from all three focus groups as a leadership behavior their principal exhibited on a consistent basis. Teachers in these schools clearly understand that their principals have high expectations for reading achievement, high expectations for what teachers should know and be able to accomplish as it relates to reading achievement, and high expectations for the school community to support what is happening at school. Teachers talked about the school system's goals as the baseline of achievement and expected to far surpass county averages and results.

Another heavily discussed leadership behavior from principals, related to expectations that teachers shared was the constant monitoring of student achievement data. "Kid-talks," data review teams, data-bases for capturing achievement data, intervention teamings, and regrouping of students to better

meet instructional needs were several of the oft-mentioned strategies teachers shared that their principals facilitate. A teacher at school A commented,

Our school seems data driven in a good way in the sense that we look at it as a school, we look at it in teams, and we look at it individually. So when we're looking at data and reading intervention, it's not just who needs intervention but how we can get these kids on the fence from basic to proficient and then the kids on the fence from proficient to advanced. We're always thinking of interventions as more than just the neediest kids, in my opinion.

Teachers revealed that because of their principals' focus and monitoring of achievement data, they in turn have become more skilled, and more likely to take the initiative to continually monitor it themselves.

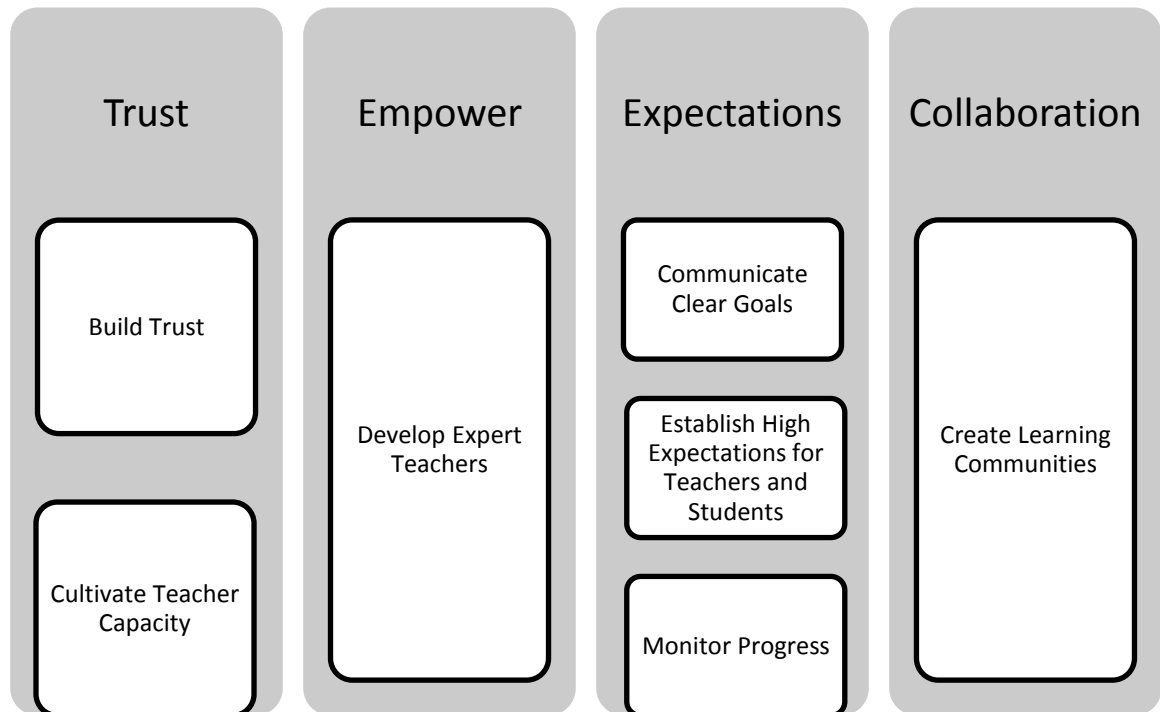
Finally, the concept and culture of collaboration amongst staff was mentioned throughout the three focus group discussions by teachers as another leadership behavior from their principal that directly contributes to their schools' success with reading achievement. Teachers described structures and schedules that their principals created, facilitated, promoted and insisted upon that put people together to learn from one another. There were many comments about the importance of collaboration from the teachers in these three schools. The following comment from a teacher in school A is exemplary of the comments from the focus groups that highlight the benefits of a structure her principal provided that required teachers to work together on a regular basis; she said,

Team talks definitely help the team members work together to look at which students might need to move to an intervention and which students can come out of intervention. We usually do that during what we call "professional learning" time. Professional development for as long as I've been here has been about reading instruction, so we're collaborating all the time.

Summary of Teacher Focus Group Results

Analysis of the focus groups of teachers revealed evidence that there are certain common behaviors among principals in schools where principals have rated themselves highly as it relates to their own efficacy and high reading achievement exists. The interviews validated many of the same behaviors principals identified. Common behaviors as described by teachers included the four larger themes of trust, empowerment, expectations, and collaboration. The following figure (6) represents the commonalities between key leadership behaviors described by principals in individual interviews and teachers in the focus group discussions.

Figure 6: *Common leadership behaviors*



Summary

This chapter presented the findings from the data that were collected to investigate the relationship between elementary principal self-efficacy and 5th grade reading achievement. The perceptions of principals were obtained from the completion of the Principals' Sense of Efficacy Scale (PSES), developed by Tshannen-Moran & Gareis (2004) and a semi-structured interview. The perceptions of teachers were obtained by conducting a focus group discussion. The interview with principals and focus group discussions with teachers provided more in-depth information about the behaviors principals in high principal efficacy / high reading achievement schools exhibit.

Chapter 5: Discussion, Conclusions, and Implications

Overview

This mixed-method study examined the relationship between principal self-efficacy and 5th grade reading achievement in a large mid-Atlantic school district. The researcher used Bandura's self-efficacy construct to provide perspective for examining the complexities of human beliefs in a variety of task and context specific situations (Bandura, 1997; Luthans & Peterson, 2002). According to Bandura, an individual's behavior is more concisely predicted by the beliefs a person holds regarding their own capabilities rather than what they are actually capable of accomplishing (Bandura, 1977). Preparing students to be college or career ready in the 21st century starts with the foundational skills they acquire in elementary school. Elementary school principals must work to ensure that, not only do they have a belief in their own abilities to provide this foundation, but that their school improvement efforts are reflected in the results of their students' achievement.

Hipp & Bredeson (1995), Hoy & Woolfolk (1993) and Moore & Esselman (1992), have all contributed research that demonstrates the ways in which effective principal leadership directly impacts teacher self-efficacy beliefs. Much of the literature on educational leadership examines behaviors or characteristics that contribute to teacher or collective efficacy, student achievement and positive school outcomes (Blase & Blase, 1999; Liethwood & Riehl, 2003; Marzano, Waters, & McNulty, 2005). However, there have been relatively few studies that

specifically examined the relationship of principal self-efficacy and reading achievement. (Smith, Guarino, Strom, and Adams, 2006).

The following section includes the purpose of the study, research questions, methodology, conclusions of the study, and implications from the results.

Purpose of the Study

The purpose of this mixed-method study was to conduct an exploratory analysis of the relationships between principal efficacy and reading achievement and to identify and describe the leadership behaviors of principals with high self-efficacy in schools with high reading achievement. The relationship between principal self-efficacy and high reading achievement were studied using the Principal Sense of Efficacy Scale (Tschannen-Moran & Gareis, 2004) and a correlational analysis of subscales of the survey and student achievement data.

The study also used qualitative data (three principal interviews and three teacher focus groups) as a non-directive method for obtaining information about principals' leadership behaviors. Using a protocol for semi-structured interviews and focus group discussions, the researcher prepared a series of questions to guide each process.

Research Questions

Prior to beginning the research, the following research questions were generated to provide the parameters and structure for data collection and analysis:

1. Is there a relationship between principal efficacy and reading achievement?

2. What behaviors do principals in high principal efficacy / high reading achievement schools exhibit?

Methodology

This study used both qualitative and quantitative approaches to collect and analyze data to answer the research questions. This mixed-method approach utilized a sequential explanatory design in which a quantitative survey was administered first to inform the qualitative component of the study. The qualitative component of the study included interviews with principals and teacher focus groups from three schools. The Principal Sense of Efficacy Scale (Tschannen-Moran & Gareis, 2004), was administered to elementary principals in the district. The PSES is an adapted scale of the Teacher Sense of Efficacy Scale developed by Tschanne-Moran and Woolkolk and Hoy (2001). This 18-item scale is used to measure principals' beliefs about their capability to complete school leadership tasks (Tschannen- Moran & Gareis, 2004). The PSES captures three major factors referred to as subscales of principal efficacy, with each subscale comprising six survey items:

- Principals' Sense of Efficacy for Management
- Principals' Sense of Efficacy for Instructional Leadership
- Principals' Sense of Efficacy for Moral Leadership

The qualitative component of the study included individual principal interviews with three principals and teacher focus group discussions with three groups of teachers. A semi-structured interview approach allowed the researcher to develop questions about principal efficacy and the sources of efficacy,

leadership behaviors, and expectations for reading achievement. Utilizing a semi-structured approach also allowed the researcher to ask follow-up and/or probing questions to gain additional information from the initial responses in both the principal interviews and the teacher focus groups.

Summary and Conclusions of Findings

The following section summarizes the answers to the research questions posed in this study.

1. Is there a relationship between principal efficacy and reading achievement?

There was limited evidence to suggest that principal self-efficacy and reading achievement are correlated. Pearson correlation analysis yielded an $R = -.154$, $P > .05$. Additionally, correlation coefficients were extremely small for the three subscales of the survey (management, instructional leadership, and moral leadership).

The limitations and delimitations of the study should be considered as a possible factor in this outcome. The study was based upon schools identified by principals' self-assessment of efficacy levels. The findings of the study were based in part on the self-reflection of individual principals. In addition, the researcher currently serves as the deputy superintendent in the district where the research was being completed. This could have impacted the way in which principals responded to the initial survey, with some responding overly modest, some overly confident, etc. In addition, the sample was limited to those willing to

complete the survey in the district. A larger sample across several districts has the potential to yield greater variance in the results.

The quantitative analysis suggests that there is not a connection between principal self-efficacy, as measured by the PSES survey, and 5th grade MSA reading results. However, there is some qualitative evidence to support broad common leadership behaviors of principals who report high levels of self-efficacy, in schools where high reading achievement exists. These behaviors are summarized in answering the second research question:

2. What behaviors do principals in high principal efficacy / high reading achievement schools exhibit?

While it is difficult to extrapolate specific behaviors of principals, broader themes of behaviors emerged. Analysis of the focus groups of teachers revealed evidence that there are certain common themes as it is related to the behaviors among principals in schools where principals have rated themselves highly as it relates to their own efficacy and high reading achievement exists. The teacher focus group responses confirmed the same behaviors principals identified. Common behaviors as described by teachers included the four larger themes of trust, empowerment, expectations, and collaboration.

Principals and teachers both spoke to the importance of trusting in one another and taking the time to build a sense of trust in one another across the entire school. This was the “gate-keeper” behavior that the other themes were built upon. It is important to note that the sense of trust so often referenced in the principal interviews and teacher focus groups was referenced in a way that was

reciprocal in nature – in that it flowed back and forth from principal to teachers and from teachers to their principal. This trust in one another to deliver high quality reading instruction and meet expectations for all students, led to teachers taking the initiative to take on leadership roles, be responsible for building their individual and collective capacities related to reading instruction, supported the conditions for effective collaboration to occur, and helped maintain the commonly understood high expectations there were for reading instruction and reading achievement.

Based on the principal interviews and teacher focus group discussions, the researcher arrived at the following conclusions regarding leadership behaviors of principals with high self-efficacy and high 5th grade reading achievement:

- Trust was significantly referenced as a major contributor to school reading achievement success. All of the principals interviewed referenced the importance of building trusting, professional relationships in their schools. This was validated in teacher focus group responses and the trust between principal and teachers is reciprocal. Trust appears to be the “gate-keeper” behavior that strengthens the other identified leadership behaviors.
- High expectations for teachers delivering reading instruction and student reading achievement are evident in schools where principals have high self-efficacy and high reading achievement of 5th grade students exists. A large component of this level of expectation is that teachers were expected to know exactly where individual students are performing and how instruction should be planned to meet their individual needs in reading.

Both principals and teachers discussed the significant importance of being able to monitor student achievement data on a regular basis.

- Principals with high self-efficacy in schools where reading achievement is high have nurtured, developed and empowered teacher leaders. Principals in these schools look to the experts on their staffs to lead – and they expect staff to be responsible for building their instructional knowledge through work they do individually and collectively.

- A high level of collaboration and teamwork is evident in schools where high principal self-efficacy and high reading achievement exists. Principals and teachers both described structures and schedules that were created, facilitated, promoted and insisted upon in these schools that deliberately put people together to learn from one another.

Links to Existing Literature

This study concluded that principals with a strong sense of efficacy demonstrate common leadership behaviors. The study corroborated the work of Hipp and Bredeson (1995), and Osterman and Sullivan (1996), as it relates to assessing the effects of principal efficacy on behaviors and attributes of principals, as well as the impact of efficacy on leadership behavior and characteristics and their implications for student achievement. (Tschannen-Moran & Gareis, 2005).

The leadership behaviors of trust, high expectations, empowerment and collaboration are behaviors with clear links to existing literature. As indicated in previous research (Hord, 1997, 2000, 2004, Huffman and Hipp, 2003) trust has

been identified as an essential element to the development of the professional learning community. Trust leads to the conditions that “enable teachers’ voices to be heard, and that provide opportunities for open discussions about the impact of programmatic changes on teachers’ work” (Mawhinney, Haas, and Wood, 2005). These studies point to the realization that through trust building, a staff is able to strengthen its collective capacity. This research corroborated the importance of trust, as well as the impact trust has on other leadership behaviors identified in the qualitative piece of the study.

The results of the qualitative component of the study also align with recent research that found that principal leadership practices perceived by both teachers and principals, as well as the concept of shared leadership, to be essential to supporting instruction (Louis, et. al., 2010). The growing body of recent research about principal leadership continues to highlight the importance of shared leadership and empowerment by principals and the notion of developing learning communities so that school staffs have a collegial environment to learn from one another, build their individual capacities, and improve outcomes for students. The results of this study support the research that has found that student learning improves when there is a high degree of professional community among teachers. It is within this community that teachers and staff collaborate and begin to assume collective responsibility for student achievement (Newmann and Wehlage, 1995).

Within this theme of “empowerment,” another clear link to the research base was the notion of principals not having to be the “experts” in all things instruction – that they could rely on teachers to be leaders and solve problems.

Principals don't interpret their inability to solve problems immediately as a failure. Principals with a strong sense of efficacy aren't afraid to be seen as vulnerable, or through a teacher's eye – "human," which adds to their ability to build trust and develop collegial, professional relationships. A strong sense of efficacy allows principals to gather feedback, solicit suggestions, and share in decision-making (Osterman & Sullivan, 1996; Lyons & Murphy, 1994; Tschannen-Moran & Gareis, 2005).

Drawing similar conclusion of studies conducted by Crawford & Torgesen (2006), Mackey, Pitcher & Decman (2006), and Hallinger, Bickman, & Davis (1996), this study found that principals who had high expectations for reading achievement were able to transfer those same expectations to their staff and school communities by creating a common understanding, or vision for student achievement. Processes and strategies described in the above mentioned research base, were also evident in this research study, including:

- Creating and facilitating conditions in the school conducive to building teacher capacity and student achievement in reading, in particular opportunities for collaboration and learning from one another
- Using student achievement data to guide instructional decisions and constantly monitor student progress

Recommendations for Practice

Principals' judgment of their capabilities to impact student achievement has been demonstrated to affect their behavior and attitudes (Tschannen-Moran & Gareis, 2005). Given the increasing demands for student achievement in the context of No Child Left Behind, and impending changes schools face with new curriculum, assessment, and accountability measures on the immediate horizon, the demands for improved student achievement will continue to climb. It remains critical for school principals to be effective in facilitating the improvement of achievement in reading for all students in their charge.

School system leaders who support, nurture, and develop existing and future school principals face an incredibly important task. Having increased awareness of principals' sense of efficacy will better help district leaders plan and provide professional development for both existing and aspiring principals. School districts must ensure that strong mentors and professional development opportunities exist for current and future leaders in building a strong sense of self-efficacy. In particular, it will be important to consider opportunities that can have a direct and significant impact on the development of a principal's self-efficacy, including:

- Mastery experiences that allow for the interpreted result of an individual's actions and/or completion of a task. Mastery experiences have the greatest potential for raising self-efficacy beliefs. Putting current and aspiring principals on system committees, providing leadership opportunities and other experiences that allow principals to take on new learning and

experience success are a few examples of ways in which principals can develop their sense of efficacy.

- Vicarious learning opportunities, which allow individuals to learn by observing others' actions as well as the consequences of these actions. Purposefully designed shadowing and observation of effective principals by existing or aspiring principals, as well as thoughtful pairing of principals and assistant principals with a variety of experiences and backgrounds can support these opportunities.
- Opportunities for social persuasion. This is a source of efficacy derived from social messages an individual receives from others. Social persuasion can allow an individual to overcome doubt when others are encouraging or expressing belief in their ability. A strong mentor program allows for the mentor to serve in a leadership coaching role – the kind of role that can support an existing or aspiring principal through motivation, encouragement, and support.

In addition, it is recommended that principals be given the opportunities to become more familiar with the concepts of not just principal self-efficacy, but teacher efficacy and collective teacher efficacy. When interviewing principals for this study, it was apparent that principals were not as familiar with efficacy when probed further during the semi-structured interviews. Each of these concepts provides opportunities and promise for improved student achievement.

Implications for Policy

The findings of this study have several policy implications. The study of principal efficacy is a complex construct. In order to develop and cultivate a strong group of educational leaders in our nation, it is important that state and local boards of education, as well as the United States Department of Education, examine policies, regulations and requirements for administrative certification to consider the construct of efficacy. In addition, colleges and universities should also reform principal induction and preparation programs to include current research on efficacy, as well as create and implement the kinds of experiences, like those recommended for practice, that provide current and perspective principals with the kinds of experiences that positively impact their sense of efficacy.

Research regarding the impact of principal leadership on student learning indicates that while principals cannot be expected to be master teachers themselves in all content areas, they must have a certain level of understanding of instructional practices and strategies that improve student achievement (Bell, 2001). Successes and failures of reading programs in schools rely on a principal's support of literacy in schools (Zipperer, Worley, Sisson, & Said, 2002). Policy makers at all levels, as well as colleges and universities must consider the strong implications this research has on preparation and induction programs for the elementary principal. New principals must have the opportunity to develop their understanding of reading instruction. While it was clear from this study that the principal does not need to be the "expert" on reading instruction in their building,

a basic understanding must exist in order to facilitate and evaluate the instructional program and be able to support the goals and expectations for reading achievement.

Recommendations for Future Research

Several areas for future research have been recommended as a result of the findings of this study. As noted in chapter one, the findings of the qualitative component of the study are limited to contextual circumstances of a relatively small number of elementary schools in which the interviews and focus group discussions were conducted. In addition, the researcher is currently the Deputy Superintendent in the district where principal interviews and teacher focus groups took place. A suggestion for future study as a result of these considerations would be to utilize a much larger sample size. Having a larger research sample across several school districts could result in greater variance in the results, limit the chances for “professional desirability” in the responses from participants as they would be disconnected from the researcher, and help to make the conclusions more generalizable.

Principals’ judgment of their capabilities to impact student achievement has been demonstrated to affect their behavior and attitudes (Tschannen-Moran & Gareis, 2005). This study has identified common behaviors in principals who have high self-efficacy as it relates to their students’ achievement in reading. However, exactly how to promote and develop strong self-efficacy beliefs in principals is an area that requires further study. We can recognize the leadership behaviors of principals with high self-efficacy – but we need to learn more about

how they develop this sense of efficacy. While noted in the recommendations for practice, it is imperative for district leaders need to know which sources of efficacy seem to have the greatest impact on a principal's level of self-efficacy and specifically how to create and structure opportunities for existing and future instructional leaders.

Within the realm of the source of efficacy that is "social persuasion," important information could be gleaned by examining the kinds of conversations that occur to develop efficacy. Clearly it is one thing to have a coach or mentor constantly praising and providing positive feedback, but how is candor and constructive criticism received by principals or aspiring principals? What is an effective balance, and how does this balance between encouragement and support and honest conversations about performance, actions, and/or results develop or impact their sense of efficacy? Further study in this arena would drill down not only to the source of efficacy, but would provide insight upon the balance of feedback required to positively impact self-efficacy.

Research in the areas of school contextual variables that impact the development of efficacy would also be beneficial. Variables such as school demographics, poverty rates, and teachers' level of experience should all be considered for further study to support the research base for better understanding principal efficacy.

Finally, qualitative data suggested that principals did not need to be "experts" in reading instruction. However, it was important for principals to be knowledgeable enough to be able to provide feedback and direction for their staff.

Since the study did not analyze what principals actually knew about reading, further study on specific reading knowledge of principals that rate themselves as highly efficacious would add clarification to their self-confidence. Examining what principals understand about reading instruction may provide valuable data as to how principals develop their own sense of efficacy and effectively lead their schools.

Summary

Research indicates the critical importance of an effective principal to ensure successful schools. This research highlights and affirms the link between principals and student achievement. (Seashore-Louis, et al. 2010, Waters, Marzano and McNulty 2003; Leithwood, et al. 2004). Given the increasing complexities and demands upon the role of the principal, the position becomes less desirable to applicants and vacancies are more difficult to fill. School districts must work diligently to identify and support future school leaders who are ready to take on the complex, ever-changing, and challenging role of principal. More importantly to the immediate future, school districts must also support and develop the principals who preside over schools today. With the impending demands of the common core curriculum, new assessments, and changing technologies – all impacting instructional expectations, we cannot lose sight of the impact of efficacy. It is no longer good enough for districts to simply hire and retain those who appear to be the most capable principals. Districts must find and cultivate principals who truly believe they can be successful, even in the face of the most difficult challenges (Davis, et al. 2005).

Principals who have a strong sense of efficacy can impact student achievement. While this study produced limited quantitative evidence to suggest that principal self-efficacy and reading achievement are correlated, other research data have proven that self-efficacy are powerful predictors of student achievement (Bandura, 1997; Goddard, Hoy, & Woolfolk Hoy, 2004; Pajares, 1996). This study did, however, provide rich examples of leadership behaviors that principals with high self-efficacy and high reading achievement demonstrated in their schools. The research reviewed as a part of this study indicates that these leadership behaviors lead to high student achievement in reading and across content areas.

Education has entered into a time of significant changes to curriculum, instruction, and assessment. And while the mechanisms or formulas used to measure results may also be changing to adjust to these curricular and assessment changes – the ever-present demands of accountability for student achievement remain, adding yet another layer of complexity to a principal's job. In addition to changes to curriculum and instruction, recent economic conditions in our country have forced school districts to cut positions and figure out ways to do more with less. With so many challenging conditions as a reality in our schools today, developing principal efficacy and the leadership behaviors that accompany highly efficacious principals, may be one of our best solutions. The time for action is always now.

Appendix A: SURVEY CONSENT LETTER FOR PRINCIPALS

Letter of Invitation to Elementary Principal Survey Participants

Dear Principal,

The purpose of this e-mail is to invite you to participate in a study about principal efficacy and reading achievement. This research has been approved by XXPS. The purpose of this research project is to examine and analyze the relationship between principal efficacy and student achievement in reading.

There are two parts to this study. The first part is for all elementary administrators to take a short survey – The Principal Self-Efficacy Scale (PSES). This survey consists of 18 questions that participants are asked to respond to using a scaled response. The survey should take no more than 15 minutes to complete and can be found on the following Survey Monkey link:

<http://www.surveymonkey.com/XXXXXXXXXXXXXXXXXXXXXXXXXXXX>

In the second part of the study, I will invite teachers and administrators from only three of the thirty-six schools surveyed to be interviewed separately to further examine sources of efficacy, characteristics of principals with high efficacy, and perceptions regarding principals with high efficacy as it relates to collective teacher efficacy and reading achievement. If your school is selected for the second part of the study, I will send you a letter inviting you and approximately 6 – 10 interested staff to meet with me to conduct the principal interview and the separate teacher focus groups.

Your participation in this study is voluntary, and you may decide not to continue at any time. Only the members of my dissertation committee and I will have access to the information obtained directly from the survey. Approval of the Institutional Review Board (IRB) for research involving human subjects at the University of Maryland will be secured before collecting any data. In addition to IRB approval, authorization to conduct the study within the school system will be obtained from the XXPS Office of Research and Accountability. The results of the study will be provided in the form of an executive summary and made available to XXPS and all participants upon request.

Thank you in advance for your participation and prompt response. If you have any questions, please feel free to contact me at 301-696-6860 or e-mail me at slock91463@comcast.net. Thank you for your participation.

Sincerely,
Steven Lockard
Doctoral Candidate
University of Maryland

Appendix B: INTERVIEW CONSENT LETTER FOR PRINCIPALS

Letter of Invitation to Elementary Principal Interview Participants

Dear Principal,

Thank you for previously taking the Principal Self-Efficacy Scale (PSES) survey. The purpose of this letter is to invite you to participate in a second part of this study. I have selected three schools from the survey schools to participate in interviews to obtain more in-depth information about sources of efficacy, characteristics of principals with high efficacy, and perceptions regarding principals with high efficacy as it relates to collective teacher efficacy and reading achievement.

Questions will be asked to learn more about how you:

- facilitate student learning in your school
- motivate teachers
- generate enthusiasm for a shared vision for your school
- create a positive learning environment in your school
- raise student achievement on standardized tests
- manage change in your school

The interviews will be about an hour in length. The interviews will be audio taped. The data will be analyzed in terms of themes and patterns that relate to the research questions. If there are patterns that are identified by role or responsibility in a school, the discussion will not attribute responses to any one specific person or school. Only the members of my dissertation committee and I will have access to the records of information obtained directly from the interviews. Your participation in this study is voluntary, and you may decide not to continue at any time.

Approval of the Institutional Review Board (IRB) for research involving human subjects at the University of Maryland will be secured before collecting any data. In addition to IRB approval, authorization to conduct the study within the school system will be obtained from the XXPS Office of Research and Accountability. The results of the study will be provided in the form of an executive summary and made available to the school system and the participants upon request.

Thank you in advance for your participation and prompt response. If you have any questions, please feel free to contact me at 301-696-6860, or e-mail me at slock91463@comcast.net.

Sincerely,
Steven Lockard
Doctoral Candidate
University of Maryland

Appendix C: INTERVIEW CONSENT LETTER FOR TEACHERS

Letter of Invitation to Elementary Teacher Interview Participants

Dear Teacher,

The purpose of this letter is to invite you to participate in a study regarding principal efficacy and student achievement in reading. I have selected three schools from an initial survey of thirty-six schools to participate in interviews to obtain more in-depth information about characteristics of principals with high efficacy and perceptions regarding principals with high efficacy as it relates to collective teacher efficacy and reading achievement. I would like to conduct this portion of the study in your school because your school had high reading achievement scores as assessed using the Maryland School Assessment (MSA)

Questions will be asked in a focus group setting of 6 – 10 teachers from your school to learn more about your perceptions of how your principal:

- facilitates student learning in your school as it relates to reading achievement
- impacts collective teacher efficacy
- generates enthusiasm for a shared vision for your school
- creates conditions for effective reading instruction
- raises student achievement in reading on standardized tests
- manages change in your school

The interviews will be about an hour in length. The interviews will be audio taped. The data will be analyzed in terms of themes and patterns that relate to the research questions. If there are patterns that are identified by role or responsibility in a school, the discussion will not attribute responses to any one specific person or school. Only the members of my dissertation committee and I will have access to the records of information obtained directly from the interviews. Your participation in this study is voluntary, and you may decide not to continue at any time.

Approval of the Institutional Review Board (IRB) for research involving human subjects at the University of Maryland will be secured before collecting any data. In addition to IRB approval, authorization to conduct the study within the school system will be obtained from the XXPS Office of Research and Accountability. The results of the study will be provided in the form of an executive summary and made available to the school system and the participants upon request.

Thank you in advance for your participation and prompt response. If you have any questions, please feel free to contact me at 301-696-6860, or e-mail me at slock91463@comcast.net.

Sincerely,
Steven Lockard
Doctoral Candidate
University of Maryland

Appendix D: Principal Self-Efficacy Scale - Tshannen-Moran & Gareis (2004).

Principal Questionnaire

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for principals in their school activities.

Directions: Please indicate your opinion about each of the questions below by marking one of the nine responses in the columns on the right side. The scale of responses ranges from "None at all" (1) to "A Great Deal" (9), with "Some Degree" (5) representing the mid-point between these low and high extremes. You may choose any of the nine possible responses, since each represents a degree on the continuum. Your answers are confidential.

Please respond to each of the questions by considering the combination of your *current* ability, resources, and opportunity to do each of the following in your present position.

"In your current role as principal, to what extent can you..."	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal				
1. facilitate student learning in your school?	1	2	3	4	5	6	7	8	9
2. generate enthusiasm for a shared vision for the school?	1	2	3	4	5	6	7	8	9
3. handle the time demands of the job?	1	2	3	4	5	6	7	8	9
4. manage change in your school?	1	2	3	4	5	6	7	8	9
5. promote school spirit among a large majority of the student population?	1	2	3	4	5	6	7	8	9
6. create a positive learning environment in your school?	1	2	3	4	5	6	7	8	9
7. raise student achievement on standardized tests?	1	2	3	4	5	6	7	8	9
8. promote a positive image of your school with the media?	1	2	3	4	5	6	7	8	9
9. motivate teachers?	1	2	3	4	5	6	7	8	9
10. promote the prevailing values of the community in your school?	1	2	3	4	5	6	7	8	9
11. maintain control of your own daily schedule?	1	2	3	4	5	6	7	8	9
12. shape the operational policies and procedures that are necessary to manage your school?	1	2	3	4	5	6	7	8	9
13. handle effectively the discipline of students in your school?	1	2	3	4	5	6	7	8	9
14. promote acceptable behavior among students?	1	2	3	4	5	6	7	8	9
15. handle the paperwork required of the job?	1	2	3	4	5	6	7	8	9
16. promote ethical behavior among school personnel?	1	2	3	4	5	6	7	8	9
17. cope with the stress of the job?	1	2	3	4	5	6	7	8	9
18. prioritize among competing demands of the job?	1	2	3	4	5	6	7	8	9

Appendix E – Teacher Focus Group Interview Protocol

1. What are the expectations for students with regards to reading achievement in this school?
 - a. How are these expectations communicated?
2. Is the make-up of this teaching staff mostly veteran, mostly new (1 – 5 years' experience), or a fairly balanced mix of both?
3. Describe the structures and conditions in your school that you believe promote high reading achievement.
4. What leadership characteristics do you believe your principal possesses that contributes to your schools' success with reading achievement?
5. Which leadership characteristic that you have discussed do you feel has the largest impact? Why?
6. What goal(s) does this school have when it comes to reading achievement?
7. What experiences and opportunities are there for professional development in this school focused on reading instruction / improvement with regards to reading achievement?
 - a. Of these opportunities and experiences, which do you feel benefit you the most with regards to supporting high reading achievement?
 - b. Why?
8. To what degree do you believe the teaching staff considers themselves to be collectively knowledgeable when it comes to reading instruction and reading achievement?
9. Which area do you consider your administrator to have the greater strength: reading instruction, or strategies that promote adult learning?
10. What do you believe are constraints that potentially limit reading achievement in this school?
 - a. Of those you discussed, what strategies or action plans have been established to address them?
 - b. Have you seen any impact as a result of these strategies?
11. In what other ways that we haven't discussed do you believe reading achievement is positively impacted by your principal in this school?

Appendix F – Principal Interview Protocol

1. How many years' experience do you have as an elementary school principal?
2. What personal and professional experiences have you had with regards to instruction in reading?
3. What coursework or professional development opportunities have had a significant impact to your understanding of reading instruction?
4. Talk about the structures and conditions at this school as it relates to the importance of quality reading instruction? To what do you attribute your students' high achievement in reading?
5. Do you consider yourself to be highly knowledgeable with regards to reading acquisition and instruction?
 - a. If you answered "No" to this question, to what do you contribute your schools' success with reading achievement?
6. Do you consider yourself to be highly knowledgeable with regards to successful strategies to promote adult learning?
 - a. If you answered "No" to this question, to what do you contribute your schools' success with reading achievement?
7. What goal(s) have been established with regards to expectations for reading achievement?
 - a. Who sets the goals?
 - b. Do you think teachers have the same goal? Why or why not?
 - c. How do you know if the school is achieving the goal(s)?
 - d. What kinds of things make it difficult for teachers to achieve these goals?
8. Please describe the work you do with teachers that is focused on improving reading instruction?
9. In what ways do you believe you have contributed to a positive learning environment, as it relates to reading achievement, in this school?
10. In what other ways that we haven't discussed do you believe reading achievement is positively impacted in this school?

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