

The Principalship: Preparation Programs and the Self-Efficacy of Principals

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## Dedication

This dissertation is dedicated to the memory of my mother, Rebecca Turner Pallette. She was a wonderful mom and my best friend. She taught me kindness, humor, and friendship. She was always there for me, provided me with enormous opportunities, and loved me unconditionally. She taught me how delicate life is and how truly important it is to enjoy every moment. She was the kind of mother everyone deserves, and I am blessed beyond my years to have had her as a part of my life.

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Abstract of the Dissertation

The Principalship: Preparation Programs and the Self-Efficacy of Principals

In today's society, principals are asked to lead in a new world marked by unprecedented responsibilities. The principal's knowledge and mindset play a critical role in the success of students. Principal shortages and turnover rates are at an all-time high. Faced with this knowledge, it is imperative that principals feel prepared for the roles they must undertake. Principal preparation programs, via universities, have experienced extreme scrutiny for inadequately preparing principals for their roles. Many principals feel that although they gain a large amount of theoretical background at the university level, they lack the knowledge needed to apply this theory within the roles of the principalship. School divisions are exploring ways to assist principals with transition from the theory learned at the university level to the application of skills needed for the roles of the principalship by developing principal preparation programs. Self-efficacy has been the focus of a plethora of studies that have examined people's beliefs about their capabilities to produce desired levels of performance and to exercise influence over events affecting their lives. A principal's sense of efficacy represents a judgment of his or her own capabilities with regard to structuring a particular course of action to produce desired outcomes in the school led by the principal. Previous empirical studies on the perceived self-efficacy of principals were few; a gap existed in knowledge of the perceived self-efficacy of principals that might highlight the importance of adequately preparing principals for their roles. This study provides research on the perceived self-efficacy of recently appointed principals, the differences in the perceived self-efficacy of recently appointed principals who attended various principal preparation programs

designed by their school division for various tasks within the principalship, as well as the perceived self-efficacy of recently appointed principals who attended no preparation program.

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## Chapter 1: Introduction

### *Overview*

In today's society, principals are asked to lead in a new world marked by unprecedented responsibilities, challenges, and managerial obligations. According to Hess and Kelly (2005a), principals are the front-line managers, the small-business executives, and the battlefield commanders charged with leading their teams to new levels of effectiveness. Good leaders are widely acknowledged as the cornerstones of schools; principals are the key agents for student achievement (Tschannen-Moran & Gareis, 2005). School leaders are expected to use data to drive decisions and to demonstrate results. The knowledge and mindset of principals play crucial roles in the success of students. School improvement rests to an unprecedented degree on the quality of school leadership provided by principals (Hess & Kelly).

In light of the current pressures associated with the principalship, it is not surprising that administrator shortages (Moore, 1999) and turnover rates are at an all-time high. National statistics relating to principal turnover and dwindling supplies of qualified replacements show clearly that principal turnover has reached crisis proportions (Norton, 2003). Moreover, principal preparation programs via universities are under extreme scrutiny for inadequately preparing principals for their roles. Hess and Kelly (2005a) reported that principals themselves are among the first to agree they need to be more effectively prepared for their roles. Practicing principals have reported that on-the-job experience or guidance from colleagues has been more helpful in preparing them for their current positions than their graduate school studies have been. Furthermore, principals

have asserted that typical leadership programs in graduate schools of education are out of touch with the realities of what it takes to run today's schools (Hess & Kelly, 2005a). The central problem is that most university programs present leadership theory but do not adequately prepare future principals to translate knowledge and theory into practice (Anderson, 1991). In addition, in 1999, the National Association of State Boards of Education (NASBE) stated that graduate level principal preparation programs provide notoriously inadequate foundations upon which to build a career in the principalship (NASBE). Levine's findings from his 2005 study, *Educating School Leaders*, concurred with the 1991 and 1999 findings and sought to identify the inadequacies of university graduate principal programs.

School divisions have begun implementing principal preparation programs to enhance the knowledge recently appointed principals acquire at the university level. In addition, school divisions are providing opportunities for learning that enable principals to continue to grow and learn professionally, as well as to be prepared for the challenges of their roles. Levine (2005) cited the importance of school divisions' working with universities to ensure principals have the skills needed to provide optimum leadership for students and staff alike.

At the very core of social cognitive theory are self-efficacy beliefs: people's judgments of their capabilities to organize and execute a course of action required to attain designated types of performances (Bandura, 1986, p. 391). Bandura (1997) stated that a principal's own sense of self-efficacy is the principal's determination of his or her own effectiveness at a given task or set of tasks, considering his or her own capabilities and experiences, as well as the context in which he or she is working. Principal self-

efficacy is a promising, but largely unexplored, construct for understanding principal motivation and behavior (Tschannen-Moran & Gareis, 2005). Review of the literature revealed an existing gap in knowledge of the self-efficacy of principals; conducting research with regard to this gap may assist in the knowledge of preparing principals for their ever-changing roles.

In this chapter, information regarding the purpose and significance of the study is presented. In addition, the proposed research questions and subquestions are identified. Also provided is the conceptual framework used to ground the study in research on principal leadership, the roles of principals, principal preparation via universities, principal preparation via school districts, social cognitive theory, self-efficacy, and self-efficacy for principals. Finally, an overview of the research methodology and explanation of the limitations to the study are presented.

#### *Statement of the Problem*

Principal shortages and turnover rates are at an all-time high. Increasing demands upon the work life of the principal, low salary levels, time constraints, lack of parent and community support, and lack of respect are among the reasons principals are leaving the position (Norton, 2003). Current educational experts point to the growing roles and increased responsibilities of principals, without the matching intrinsic and extrinsic rewards, as the leading cause of an insufficient pool of qualified and interested applicants to fill the large number of pending vacancies in school districts across the country (DiPaola & Tschannen-Moran, 2003).

Schools of the 21<sup>st</sup> century require principals well-versed in the art of instructional leadership, community leadership, and visionary leadership (Institute for Educational Leadership, 2005). The job of a principal has become more complex and difficult, with many duties' being identified as a major cause of poor job satisfaction (Diamantes & Rayfield, 2004). New responsibilities are added each year yet none are deleted; thus, an overwhelming feeling of pressure exists to meet the needs of parents, students, teachers, school boards, and state and federal mandates (DiPaola & Tschannen-Moran, 2003).

University principal preparation programs have experienced criticism for inadequately preparing principals for their current roles. Principals gain knowledge of theoretical background of the principalship at the university level; however, they lack knowledge of how to apply this theory within the roles of the principalship. Hess and Kelly (2005a) asserted the importance of universities' working together with school divisions to ensure application of the theory learned at the university level to the roles of principals within the school division. More than ever school divisions are exploring ways to support principals and are planning principal preparation programs to assist principals with the transition from theory to practice.

Bandura's (1986) theory of self-efficacy was developed from his theory of social cognitive theory; Bandura stated, "People who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as inefficacious. They produce their own future, rather than simply foretell it" (p. 26).

Research has defined self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events affecting

their lives. These beliefs determine how people think, feel, and motivate themselves as well as how they behave (Bandura, 1986).

Research on the self-efficacy of principals is necessary more than ever before to assist in principal preparation and retention. Tschannen-Moran and Gareis (2004) identified the need to examine and measure the self-efficacy of principals. Researchers have begun to recognize the importance of self-efficacy for principals; however, it was found that a gap still remained in the knowledge.

Tschannen-Moran and Gareis (2004) began a perplexing journey when they examined two existing survey tools developed to measure principal self-efficacy. In addition to analyzing these two survey tools, the researchers designed and validated their own survey instrument, the Principal Sense of Efficacy Scale (PSES). Their study, *Principals' Sense of Efficacy: Assessing a Promising Construct*, is explained in detail in chapter 2. The findings of their study indicated that the two existing survey tools designed to measure principal self-efficacy clearly did not meet the mark. Based on the statistical findings related to their own survey instrument, the PSES, the researchers concluded they had developed a reliable and valid survey instrument to measure self-efficacy. The authors recommended the PSES be used in further studies designed to measure the self-efficacy of principals.

This study provides information about the importance of principal leadership, examines the roles of principals, analyzes principal preparation programs via universities and school divisions, and examines social cognitive theory, self-efficacy, and the perceived self-efficacy of recently appointed principals.

*Purpose*

The purpose of this study was to close an existing knowledge gap regarding the perceived self-efficacy of recently appointed principals. The researcher gathered data indicating the perceived self-efficacy of recently appointed principals as well as differences in the perceived self-efficacy of recently appointed principals who had attended various types of principal preparation programs designed by their school divisions. The research data also reflected the perceived self-efficacy of a control group: principals who did not attend any principal preparation program at the school division level, either because such preparation programs were nonexistent or nonmandatory or because the recently appointed principals were not selected to participate in the principal preparation programs. The research further explored the differences in the perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs for various tasks within the roles of the principalship: management tasks, instructional leadership tasks, and moral leadership tasks. Inherent in these tasks are the many responsibilities performed by principals within their roles. The PSES, developed by Tschannen-Moran and Gareis, utilized these tasks to encompass the vast responsibilities of the principalship. The tasks are explained in detail in chapter 2 of this study.

School divisions currently are implementing preparation practices to enhance the knowledge that recently appointed principals have acquired at the university level and to assist in the application of skills needed for the roles of the principalship. As increased knowledge of principal self-efficacy is developed, the data will prove useful in areas such as ongoing professional development and preparation programs (Smith, Guarino, Strom,

& Reed, 2003). This research was designed to collect and analyze data that may be useful to state policymakers, professional organizations, and school divisions. Data gleaned from the study will be useful in planning principal preparation and professional development opportunities for recently appointed principals to assist in the development of principals' sense of self-efficacy.

### *Research Questions*

This study was designed to address two primary research questions related to the perceived self-efficacy of recently appointed principals. Additionally, three subquestions focus on the differences in perceived self-efficacy for specific tasks performed by recently appointed principals. The two primary research questions and the subquestions are the following:

1. What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Efficacy Scale?
2. Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based principal preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Efficacy Scale?
  - a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by their school divisions evidence a difference in perceived self-

efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?

b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program, designed and implemented by their school divisions evidence a difference in perceived self-efficacy for instructional leadership, as measured by the Principal Sense of Efficacy Scale?

c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program, designed and implemented by their school divisions evidence a difference in perceived self-efficacy for moral leadership, as measured by the Principal Sense of Efficacy Scale?

It is important to note that the PSES was developed and validated by Tschannen-Moran and Gareis in 2004. A critical review of their study and information about the validation of the survey instrument are presented in detail in chapter 2 of this document.

#### *Statement of Potential Significance*

The roles of principals require that they have vast amounts of knowledge as well as countless skills and attributes to bring about lasting school improvement (Cotton, 2003). Principal preparation programs, according to Levine (2005), are falling short of delivering principals that are prepared for their various roles. According to Hess and

Kelly (2005 b), principals are learning more from on-the-job training than from their university programs. Daresh (1997) stated that it is imperative that school divisions work closely with recently appointed principals to ground the leadership theory learned in their graduate programs and to teach principals effective strategies to implement leadership theory practices. Additionally, Levine asserted that school divisions should work with universities to ensure that practices learned in graduate school are further enhanced so that principals can continue to grow and learn.

School divisions across the country are designing and implementing principal preparation programs for recently appointed principals. Various types of principal programs exist; however, in the review of the literature, three types clearly emerged. One type of program was defined as theory-based, meaning the principal preparation program was designed to further enhance the leadership theories learned in graduate programs. Another type of program defined in the literature was skill-based, meaning the principal preparation programs were designed to further enhance skills needed on a daily basis to perform the roles of the principalship. A third type of program was defined as a combination of the two types, meaning that the program included theory-based as well as skill-based practices.

The importance of self-efficacy cannot be ignored. According to Bandura (1986), persons who have a strong sense of efficacy deploy their attention and effort to the demands of the situation and are spurred by obstacles to greater effort. Research studies are abundant on the role of self-efficacy, and there is empirical support for Bandura's theory. Bandura (1997) stated that self-efficacy can be developed through four processes:

mastery experiences, vicarious experiences, social persuasion, and emotional states.

These processes are explained in detail in chapter 2.

Bandura (1997) further stated that principals' sense of efficacy represents judgments of their capabilities to produce desired outcomes in the schools they lead. Smith, Guarino, Strom, and Reed (2003) as well as Tschannen-Moran and Gareis (2004) have conducted studies of the self-efficacy of principals. Findings from both studies indicated a gap in knowledge of the perceived self-efficacy of principals.

This study addressed the perceived self-efficacy of recently appointed principals, as well as the differences in the perceived self-efficacy of recently appointed principals who participated in various types of principal preparation programs, or no principal preparation program, designed and implemented by their school divisions. Differences in the perceived self-efficacy of recently appointed principals who participated in various types of principal preparation programs or in no program were also analyzed according to tasks within the roles of the principalship.

The importance of self-efficacy, including the self-efficacy of principals, is noted in Bandura's (1997) research. Additionally, Bandura's theory describes processes to develop self-efficacy: master experiences, vicarious experiences, social persuasion, and emotional states. School divisions planning principal preparation programs designed to enhance the knowledge base of recently appointed principals should identify the types of programs being offered to determine if current practices of the programs are aligned to Bandura's theory of self-efficacy development.

*Conceptual Framework*

As a response to B. F. Skinner's theory of behaviorism, Bandura developed social learning theory. In 1986, Bandura renamed his previously recognized social learning theory as social cognitive theory (Pajares, 2002). Bandura made this change to reflect an element he had not included in his previous theory, that of self-beliefs. The label change was necessary, according to Bandura, to distance his theory from other learning theories and to emphasize that cognition plays a critical role in people's capability to construct reality (Pajares). Bandura's social cognitive theory is explained in chapter 2 and serves as a springboard for the subsequent sections of chapter 2, which address self-efficacy in general and self-efficacy of principals specifically.

Self-efficacy is defined as people's judgments of their capabilities to organize and execute the course of action required to attain designated types of performance. Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment (Bandura, 1994).

One of the most important tenets of the self-efficacy theory is that having a strong sense of efficacy influences one's accomplishments and personal well-being. Individuals with high assurances in their capabilities approach difficult tasks as challenges to be mastered rather than threats to be avoided (Bandura, 1994). These individuals set themselves challenging goals and maintain strong commitments to the goals. They heighten and sustain their efforts in the face of failure and quickly recover their sense of efficacy after failures and setbacks (Bandura, 1994). On the other hand, individuals who doubt their capabilities tend to shy away from difficult tasks, which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to

pursue. When faced with difficult tasks, they dwell on personal deficiencies and the outcomes they may encounter, rather than concentrating on how to perform successfully (Bandura, 1986).

Researchers in various fields have documented the role of self-efficacy; however, the literature examining self-efficacy of principals is sparse and theoretical in nature. Smith, Guarino, Strom, and Reed (2003) noted the importance of the principal's self-efficacy in facilitating an effective teaching and learning environment in a school. The principal's self-efficacy represents a judgment of his or her own capabilities to structure a particular course of action to produce desired outcomes in the school the principal leads (Bandura, 1997). Self-efficacy has a significant impact on goal setting, level of aspiration, effort, adaptability, and persistence (Bandura, 1986).

Principals need to perform their roles to the best of their abilities; therefore, they must be prepared for the ever-changing responsibilities of the principalship. According to Levine (2005), university programs are falling short in preparing principals for the tasks at hand; therefore, it is essential that school divisions enhance what is taught at the university level. Bandura's (1986) theory of self-efficacy identifies four sources that serve in the development of self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional states. The research of Tschannen-Moran and Gareis (2004), which is described in detail in chapter 2, clearly indicated a need to further the knowledge base regarding principal self-efficacy. This knowledge will assist school divisions in planning preparation programs to develop recently appointed principals' sense of self-efficacy.

*Summary of the Methodology*

A causal comparative nonexperimental design was utilized in this research regarding the perceived self-efficacy of recently appointed principals; the methodology was quantitative in nature. The research utilized descriptive statistics to examine the perceived self-efficacy of recently appointed principals. Descriptive statistics also were utilized to examine the perceived self-efficacy of recently appointed principals who participated in various types of principal preparation programs provided by their school divisions as well as the perceived self-efficacy of recently appointed principals who did not participate in a principal preparation program. Inferential statistics also were utilized to examine the differences in the perceived self-efficacy of recently appointed principals who participated or did not participate in various types of principal preparation programs provided by their school divisions with regard to three tasks within the principalship. The three tasks included management tasks, instructional leadership tasks, and moral leadership tasks, as measured by the PSES.

A survey instrument was utilized to collect data to answer the two proposed primary research questions and the subquestions. The survey instrument consisted of three sections. The first two sections, which contained demographic information as well as professional development information, were developed and validated by the researcher, as explained in chapter 3. The third section of the survey, the PSES, was developed by Tschannen-Moran and Gareis in 2004. The survey, in its entirety, was developed to collect demographic and professional history data and to assess the perceived self-efficacy of recently appointed principals who may or may not have

participated in principal preparations programs designed by their school divisions, including the assessment of specific tasks relating to the principalship.

### *Delimitations*

This study included a sampling of recently appointed principals from the southeastern area of Virginia who participated in the Virginia Association of Elementary School Principals (VAESP) conference held in the fall of 2007. The conference was chosen as a source of the sample because the conference participants were deemed to be representative of elementary principals across Virginia.

The research involved designated categories of principal preparation programs as well as designated categories of tasks within the roles of the principalship. Although these categories were based on the research literature, categories are restrictive by nature and, therefore, may have constrained the results.

### *Limitations*

This study was limited to recently appointed principals, with 5 or fewer years of experience, who attended the VAESP professional conference in the fall of 2007. The study includes self-reported data and, therefore, reflects only what the respondents were willing to share. The results are valid only to the extent that the respondents understood the survey items and completed the survey accurately in reporting their perceived self-efficacy, their actual principal preparation experiences, and their perceived self-efficacy for tasks within their roles as principals.

There was a lack of data regarding the similarities and differences in the implementation of the various types of principal preparation programs provided to recently appointed principals via school divisions. Data were collected from the respondents regarding the types of preparation programs attended; however, data were not collected regarding the actual delivery of the various types. Time of year, time of day, number of days, number of hours, and length of sessions varied. These variables may or may not have contributed to the perceived self-efficacy of recently appointed principals; the lack of this type of data represents a limitation of the study.

Finally, the study did not gather data regarding the specific curricula presented during the various types of principal preparation programs. Respondents were asked to decide and to indicate whether the preparation programs in which they participated were skill-based, theory-based, or a combination of skill and theory-based, or to indicate they participated in no training. Brief descriptions were provided for each type of training; however, the interpretation of the type of training was left solely to the respondents. The results are valid only to the extent the respondents understood or interpreted the types of training accurately.

#### *Definitions of Key Terms*

For the purpose of this study, the following terms are defined:

*School divisions.* This term refers to school systems in the Commonwealth of Virginia. Most states in the United States of America refer to school systems within a certain geographical area as districts; however, in the Commonwealth of Virginia, all school systems are referred to as divisions.

*School districts.* This term refers to all school systems outside the Commonwealth of Virginia.

*Principal leadership.* This term refers to the ability of principals to function in their roles as leaders. Principal leadership is an act or instance of leading and guiding.

*Principal preparation via universities.* This term refers to the professional development, education, and administrative degrees that are offered to aspiring principals through a program of study from an institution of higher education.

*Principal preparation programs.* This term refers to the staff development opportunities offered by school divisions; these programs are designed to educate recently appointed principals in approaches that will enable them to perform the tasks of the principalship. School divisions have many titles for these programs; however, for the purpose of this study, principal preparation programs is the term utilized.

*Staff development.* This term refers to formal learning activities, often associated with professional development and in-service activities, which provide learning opportunities for principals.

*The role of principal.* This term includes the functions, jobs, or tasks that are assigned to and associated with the principalship.

*Theory-based approaches.* For this study, theory-based approaches are those approaches used by principals that involve beliefs, policies, or procedures as the basis for action. Examples of theory-based approaches include leadership theory and staff development theory.

*Skill-based approaches.* For this study, skill-based approaches are those approaches used by principals that involve specific tasks typically considered to be

management tasks. Examples of skill-based approaches include management of safety, transportation, budget, scheduling, and discipline.

*Social cognitive theory.* Pajares (2002) defined social cognitive theory as theory rooted in a view of human agency as the capacity for individuals to be agents proactively engaged in their own development, making things happen by their actions. Key to this sense of agency are the facts that, among other personal factors, (a) individuals possess self-beliefs that enable them to exercise a measure of control over their thoughts, feelings, and actions; and (b) the way in which they behave is affected by what other people think, believe, and feel (Bandura, 1986, p. 25).

*Self-efficacy.* Bandura (1997) defined self-efficacy as a belief in one's capacity to succeed at tasks. General self-efficacy is the belief in one's capacity to handle tasks in general, whereas specific self-efficacy refers to beliefs about one's ability to perform specific tasks.

*Self-efficacy of principals.* The self-efficacy of principals is defined as principals' belief in their capacity to succeed at the tasks associated with the principalship.

### *Summary*

Research has shown that the roles of principals are becoming more challenging with each passing year (Mitgang, 2003). Research also has shown the need for universities to improve their graduate programs to better prepare future principals (Levine, 2005). Levine asserted the importance of school divisions' working with universities to connect the theories learned in graduate programs to the knowledge needed by principals to fulfill their roles in school divisions. In 1999, the NASBE

reported in their study, *Principals of Change: What Principals Need to Lead Schools to Excellence*, that school divisions could address inadequate foundations by university programs by including principal preparation programs, designed by the school divisions, to assist with the transition from theory learned at the university level to the actual practice needed for the roles principals. Currently, there are many types of principal preparation programs designed by school divisions to further educate principals. These programs vary in the content provided for principals; information located in the review of the literature determined that most principal preparation programs fall into the following types: theory-based, skill-based, or a combination of theory and skill-based.

Bandura's theory of self-efficacy has been studied by many scholars, and there are empirical findings to support his theory of self-efficacy beliefs. Bandura (1997) defined self-efficacy as a belief in one's capacity to succeed at tasks. According to Bandura (1986), self-efficacy can be developed through four sources: mastery experiences, vicarious experiences, social persuasion, and emotional states. Bandura's theory predicts that people who have been exposed to these sources of self-efficacy development will have higher levels of self-efficacy (Bandura, 1986)

Bandura (1997) defined principals' self-efficacy as a judgment of their own capabilities to produce desired outcomes in the schools they lead. Current research on the self-efficacy of principals shows the need to examine and measure this phenomenon (Tschannen-Moran & Gareis, 2004). A gap was found to exist in the knowledge of the perceived self-efficacy of recently appointed principals and the potential for providing principal preparation programs that will assist in the development of principals' sense of efficacy. It is important to examine the differences in the types of principal preparation

programs designed by school divisions to prepare recently appointed principals. Principal preparation programs designed to include experiences that develop self-efficacy should be developed and implemented by school divisions to assist in principal preparation.

## Chapter 2: Review of the Literature

### *Introduction*

The principal's major task is to exercise the leadership necessary to make positive differences in student learning and to improve the quality of life of each individual within the school (Drake & Roe, 2003). The principalship has often been characterized as one of the most demanding, satisfying, and widely sought leadership positions in education; yet, the responsibilities placed upon principals are as demanding as those at other levels in administration.

A recent study by the Educational Research Service, on behalf of the National Association of Elementary School Principals (NAESP) and the National Association of Secondary School Principals (NASSP), revealed an increasing shortage of administrative candidates for leadership positions in schools (Moore, 1999). The United States Bureau of Labor Statistics projected in 2001 that approximately 40% of 93,200 principals would retire in the next 10 years. Moreover, the turnover rate for principals is in the 40% range; high turnover rates bring in new principals that are energetic but lacking in the experience of managing schools.

In addition to the problems associated with turnover rates and shortages, graduate programs for principals at the university level have fallen under extreme scrutiny. Principals need to know how to lead, manage change, and improve teaching at their schools. Although university coursework may address those leadership goals theoretically, seldom do universities prepare future principals to carry the goals into practice (Temkin, 2005). Levine (2005) declared that programs for education

administrators range from inadequate to appalling, asserting that many university programs have largely irrelevant curricula, too many part-time faculty, and low standards for admission and graduation. The result, wrote Levine, is that programs fail to prepare school leaders for their jobs. It is important to note that scholars have attacked Levine's pronouncements, some even calling his research "bunk" (Hoyle, 2007); however, due to the alarming findings reported in the research by Levine, many university programs have examined their graduate programs, if for no other reason, to deny Levine's claims.

There is growing evidence to suggest that the revolution in school organization, management, and curricular affairs may have left principals behind (Tschannen-Moran & Gareis, 2004). In a 2003 report, *Rolling Up Their Sleeves*, the nonpartisan research organization Public Agenda reported that today's school superintendents want their principals to display prowess in everything from accountability to instructional leadership and maintaining teacher quality; however, principals themselves feel underequipped for the duty (Farkas, Johnson, & Duffett, 2003). Most worrisome, perhaps, 52% of practicing principals stated that colleagues were more helpful than graduate studies in preparing them for the job, 44% of practicing principals stated that on-the-job experience was more helpful than graduate studies in preparing them for the job, and only 4% indicated that their graduate school experiences prepared them for their jobs. In addition, two thirds (67%) of the 925 principals polled by Public Agenda described leadership programs in graduate schools of education as being out of touch with what principals need to know (Farkas et al.).

To find ways to reduce shortages and turnover rates as well as provide further support and education, school districts are using new methods, such as developing

principal preparation programs, to help prepare recently appointed principals for the demands of the principalship. Although the preparation programs are mostly optional, many districts have programs in place to provide recently appointed principals with professional development to improve their success rates. In addition, many of these programs are available to qualified principal candidates seeking to further educational endeavors.

Principals are expected to serve in many capacities; they are responsible for raising student achievement, meeting instructional demands, and handling daily management tasks in schools (Hess & Kelly, 2005 b). Principals are charged with raising the level of expectations for both students and teachers. Their knowledge of motivational techniques for improving teachers' job performance is of utmost importance. One promising, but largely unexplored, avenue to understanding principal motivation and behavior is the notion of principals' sense of efficacy (Tschannen-Moran & Gareis, 2004).

Self-efficacy beliefs have received increased attention in educational research, primarily in studies of academic motivation and self-regulation (Pajares, 1996). To fully understand the preparation factors that influence the perceived self-efficacy of principals, it was necessary to examine related literature. The purpose of this literature review was twofold: (a) to assess previous research related to principal leadership, the roles of principals, principal preparation, social cognitive theory, self-efficacy, and the self-efficacy of principals; and, (b) to evaluate the context within which these topics were studied.

Literature regarding several key terms was perused in the initial review. Those terms included principal leadership, principal preparation via universities, principal preparation programs, the roles of principals, leadership training academies, staff development, theoretical approaches, skill-based approaches, social cognitive theory, self-efficacy, and self-efficacy of principals. Databases, including ALADIN, ERIC, JSTOR, LEXIS-NEXIS, and Pro-Quest, were used to locate the key terms. An initial search of those terms produced a wide variety of studies and literature on each topic. In addition, a plethora of studies on self-efficacy emerged. Further investigation of the self-efficacy topic revealed more deep-rooted theories espoused by Albert Bandura.

The literature review is organized into several sections: (a) principal leadership, (b) roles of principals, (c) principal preparation via universities, (d) principal preparation programs, (e) social cognitive theory, (f) self-efficacy, (g) and self-efficacy of principals. Each section addresses a major component of the conceptual framework.

For the first component of the literature review, principal leadership was explored through critical review of a study that examined the leadership tasks principals actually perform in their jobs. Additionally, a study on the relationship of principal leadership to student achievement was critically reviewed; the study was included to cite the many leadership responsibilities principals have in their roles. It is important to note that many other studies on principal performance and leadership were located in subsequent searches for principal leadership; however, only two representative studies were critically reviewed in the principal leadership section of this critique to lay the groundwork for the topics that follow.

Next, the literature review presents discussion of the vast roles of principals through description of the impact of school reform on the roles principals perform. One study that was critically reviewed addressed concerns about the stability of school leadership in urban schools. It is important to note that searches for information on the roles of principals produced a plethora of studies; however, this particular study was included because of its explanation of the impact of principals' changing roles on the determination of school leadership as well as principals' willingness to remain in their current positions.

The literature review also cites current research regarding principal preparation via universities through a critical review of two studies that focused on deficits in leadership training. This section was included to emphasize the need for school districts to further the education of recently appointed principals by bridging the theory learned at the university level with the next stage: implementation. Hoyle's response to studies focusing on deficits in principal training also is noted to represent the opposing research on principal preparation via universities and to ensure that bias does not exist in the presentation of the literature.

The next section of the literature review presents a thorough discussion of school district principal preparation programs through descriptions of several preparation programs that school districts provide for their recently appointed principals and through critical review of key related research studies. Again, there were vast numbers of principal preparation programs noted in the literature searches. Most programs fell into one of three categories: theory-based principal preparation programs, skill-based

principal programs, or a combination of theory- and skill-based principal preparation programs.

Social cognitive theory has been defined as a learning theory and a springboard for the study of self-efficacy. The theory is briefly explained with regard to its relationship to self-efficacy, which is addressed in this review. Skinner's theory of behaviorism also is discussed briefly as a springboard for Bandura's theories.

Finally, self-efficacy, in general, and the self-efficacy of principals, in particular, are examined; related research studies on these topics are critically reviewed. These topics provide a conceptual framework for the identification of principals' self-efficacy beliefs.

It is important to note that self-efficacy in itself is a broad concept. Marilyn Gist, Frank Pajares, Terence Mitchell, Karen Taylor, and Nancy Betz are all authors who have studied and conducted research on Bandura's self-efficacy beliefs. The numbers of research studies on self-efficacy are numerous, and the studies report a wide range of interpretation. The theory of self-efficacy has been utilized to study many topics, such as (a) career decision making, (b) sales performance, (c) pain tolerance at birth, (d) leadership, (e) organizational behavior, and (f) human resource management. The self-efficacy conceptual framework of this review focuses on Bandura's self-efficacy beliefs, as his research on the development of self-efficacy is closely related to the concepts of principal self-efficacy and principal preparation programs, as indicated by this review.

### *Principal Leadership*

In recent decades, research on effective schools and the current call for school reform has pointed to the principal as a key person in the quest to create excellent schools (Anderson, 1991). Virtually all research on effective schools has identified principal leadership as critical for instructional improvement in the classroom and vital to the overall success of a school (Anderson). Schools of the 21<sup>st</sup> century require a principal well-versed in the art of instructional leadership, community leadership, and visionary leadership (Institute for Educational Leadership, 2005). Educational leaders are architects; principals put into place the environmental conditions that motivate teachers and students alike (Jackson & McDermott, 2009).

In a fairly recent study, *The Principal, Keystone of a High Achieving School: Attracting and Keeping the Leaders We Need*, the Educational Research Service (2000) concluded that researchers, policymakers, and educational practitioners agree: Good principals are the keystone of good schools. A report from the Selection Committee on Equal Educational Opportunity of the United States Senate captured the importance of the men and women who occupy the pivotal position of school principal:

In many ways the school principal is the most important and influential individual in any school. It is his [or her] leadership that sets the tone of the school, the climate for learning, the level of professionalism and morale of teachers, and the degree of concern for what students may or may not become. If a school is a vibrant, innovative, child-centered place; if it has a reputation for excellence; if it has a reputation for excellence in teaching; if students are performing to the best

of their ability, one can always point to the principal's leadership as the key to success. (Weldy, 1979, p. 2)

What implications do recent developments in public education, such as the standards movement and accountability, have for school leadership? The preponderance of literature on this topic verified that the job of the principal as a school leader has become far more complex than at any time in the nation's history (Thompson, 2001).

Nevertheless, what is new or changing for the principal as a leader? The principal must serve as an instructional leader; have knowledge of current best practices; plan for distributed leadership; initiate shared decision making; abide by federal, state, and judicial requirements; communicate; and lead complex change (Thompson, 2001). In *What is a Professional Learning Community?* DuFour (2004) explained the importance of the vision principals must possess and impart to staff members to ensure that students are learning, not merely being taught. The principal must set the stage for staff to become totally involved, share responsibilities, and assist in making decisions within the school to ensure common vision and ultimately student success. Principals must encourage teachers to maintain collaboration with peers and assist teachers in focusing on results. When staff members feel empowered to make decisions, share in leadership roles, and collaborate for student success, student achievement is in the forefront (DuFour). As school leaders, principals must facilitate group goal attainment by establishing and maintaining an environment favorable to group performance.

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).

Principals must develop practices that will increase involvement of parents and other citizens in support of student learning and school improvement. Now, more than ever, principals are being held accountable for student achievement. The prime responsibility of all education leaders is to foster learning that engages students intellectually, socially, and emotionally. Sustainable leadership extends beyond temporary gains in achievement scores to create lasting, meaningful improvements in learning (Hargreaves & Fink, 2004).

To better understand what it takes to lead schools in challenging times, a team of researchers at the University of Washington, with support from the Wallace Foundation, set out to address the leadership roles of school principals in their study: *Making Sense of Leading Schools: A Study of the School Principalship*. This qualitative study, which used structured interviews and case study research strategies, sought to answer three interrelated questions: (a) Do principals play certain core roles regardless of the types of schools they lead? (b) How do these roles vary across various school settings? and (c) Do current training programs adequately address the demands of the job? (Portin, Schneider, DeArmond, & Gundlach, 2003). The study, designed to address the problem of the challenges of school leadership, sought to define the roles of principals, explain how the roles vary, and determine whether or not training programs adequately address the demand of the job.

For the study, respondents in 21 schools were interviewed. The schools agreeing to participate included 10 elementary schools, 3 middle schools, 6 high schools, and 2

schools serving kindergarten through the 12<sup>th</sup> grade. The participant schools were categorized as traditional public schools, independent schools, or charter or magnet schools. In selecting the schools, a purposeful sampling strategy was utilized; however, it is important to note that the sites were identified through the researcher's personal contacts with various professional and personal associations. Therefore it is important to note that generalizations from the study are based on data associated with 21 principals who were not randomly selected.

The researchers visited the schools to collect data; they interviewed the principals regarding their roles, the ways in which their roles varied, and the training they had completed for their leadership roles. Afterwards, the researchers prepared case studies of the results. During the interviews, the respondents were asked about their methods of distributing leadership, their management responsibilities, their maintenance of instructional quality, and the ways in which they identified and solved problems. The researchers also interviewed assistant principals, division heads, teacher leaders, and other perceived leaders in the schools. The researchers used the same set of core questions for each interview to ensure consistency and validity. When each interview was completed, the researcher prepared an individual case summary detailing the interview session. After the researchers completed their individual case summaries at each school, they divided the 21 schools among themselves and prepared a case report for each school, which included two sections.

The first section of each case report contained a set of descriptive data that focused on the demographics of the school, identified leadership functions that were reported to be present at the school, described the individuals who performed each of the

leadership roles within the school, and examined the principal's preparation for his or her role. The second section of the case report included a narrative depicting the overall leadership at the school based upon data from the case studies. Each researcher wrote summaries of the schools they visited, as well as the schools they did not visit. This process allowed the researchers to become more conversant on a broader range of schools; however, the process presents a limitation to the study as the researchers' summary of the interview data and the notes taken from other interviewers might have been interpreted differently from the way in which the original interviewer recorded the information. Finally, the researchers prepared four large spreadsheets to consolidate the individual case reports; they used these spreadsheets to formulate the results of the study. The study was restricted exclusively to examination of the daily roles performed by the principals, not the effectiveness of the principals in these roles.

The findings from the study highlighted one challenge for principals above others: The core function of the principal's job is diagnosing his or her particular school's needs and, given the resources and talents available, deciding how to meet those needs (Portin et al., 2003). The interviewed principals recognized the vast requirements of being a school leader. They reported that amid the complicated array of actions and talents required of the principal, they are expected to understand the school's goals, commitments, context, and resources.

As reported by the respondents, the principal's main role is assessing what the school needs and then delivering what is required to address the needs. The respondents described this continuous assessment of the needs of the school and the delivery of resources to meet the needs as the core aspects of principal leadership.

The study's respondents confirmed that experience, or on-the-job training, proved to be the best preparation for their leadership roles. Twenty-one principals generally characterized traditional principal preparation programs as either skill-based programs or theory-based programs that were disconnected from what it really means to be a leader of a school. It is important to note that novice principals seemed to note closer connections between the tasks they faced on the job and their training than did principals who had more experience in their positions (Portin et al., 2003).

Based upon the school visits and interviews, the study team drew five major conclusions. First, the core of the principal's job is diagnosing his or her particular school's needs and deciding how to meet these needs. Second, regardless of the school type, schools need leadership in the seven critical areas, which were identified as being present in all 21 schools: instructional leadership, cultural leadership, managerial leadership, human resource leadership, strategic leadership, external development leadership, and micropolitical leadership. Third, principals are responsible for ensuring that leadership happens in all seven critical areas, but they do not need to be the ones providing it. Fourth, governance matters, and a school's governance structure affects the ways key leadership functions are performed. Fifth, principals learn by doing; however trained, most principals believe they learned the skills they need on the job.

The study (Portin et al., 2003) also reported four implications from the research for policymakers and colleges of education. First, district leaders should ensure that the authority and freedom of action they give principals matches the responsibilities they demand from them. Second, states and school districts should prioritize effective leadership, rather than simply classroom experience, as the best indicator of potential

effectiveness as a principal. Third, colleges of education should include complex tasks such as diagnosis and planning in their principal preparation programs; preparation should continue even after principals begin working in schools. Fourth, districts should place principals in jobs in which their strengths match the needs of the schools.

Although this study reported trends among principals in 21 schools, the results should be interpreted with caution. The connection between the schools and the researchers through professional and personal contacts indicated that true purposeful sampling techniques were not in place for the identification of the schools that participated in the study. The study addressed the many leadership roles for which principals are responsible; however, the study did not address the effectiveness of the principals in their roles. Finally, the generalizations based upon the study should be accepted with caution. The generalizations were developed by the researchers after studying the recorded responses from the respondents and were not, in some instances, recommendations from the respondents themselves. These generalizations may or may not serve to improve school leadership.

The aforementioned study by Portin et al. (2003) sought to address specifically what principals do in their leadership roles. It is clear that principals have a wide variety of tasks they must complete each day, month, and school year. Such tasks include, but are not limited to assuring the quality of instruction, modeling teaching practices, supervising curriculum, assuring quality resources, tending to the operations and culture of schools, conducting interviews, hiring personnel, developing leadership capacity, providing professional development, promoting vision, representing the school and the community, and maximizing resources (Hess & Kelly, 2005a). The expectations for principals are not

decreasing, but in fact they are increasing each year. How then are principals expected to complete each of their daily tasks and address the ultimate goal of student achievement?

The study that follows sought to address such a problem.

In the book *School Leadership that Works*, Marzano, Waters, and McNulty (2005) acknowledged that inquiries into research-based practices on leadership represent a current trend in education; furthermore, demands for school leadership that translate into enhanced student achievement are prevalent. To examine these central demands, Marzano et al. conducted a quantitative meta-analysis that synthesized research on school leadership spanning 35 years. The authors' basic claims from the study were that the research over 35 years provided strong guidance on specific leadership behaviors for school administrators and that those behaviors were found to have well-documented effects on student achievement.

The studies used for the meta-analysis met the following criteria: (a) they involved kindergarten through 12<sup>th</sup>-grade students, (b) they included schools in the United States, (c) they directly or indirectly examined the relationship between the leadership of the building principal and student academic achievement, (d) they included schools where academic achievement was measured by a standardized achievement test or a state test, and (e) they included effect sizes that were reported or could be computed as correlation coefficients (Marzano et al., 2005). Although the authors acknowledged they could have chosen a single research study to examine the impact of leadership on student achievement, they chose a meta-analysis to avoid what they described as "uncontrolled error," which they believed would influence the outcome.

The 69 studies in the meta-analysis involved 2,802 schools, approximately 1.4 million students, and 14,000 teachers. Each study used either a convenience sample or a purposeful sample. Convenience samples exist when studies include all the schools in a given district, whereas purposeful samples exist when studies use schools that have been singled out as high-performing schools within a district or state, using a criterion-related assessment of student achievement, and compared to schools identified as low performing (Marzano et al., 2005). The typical study in the meta-analysis used a type of questionnaire asking teachers about their perceptions of the principal's leadership behaviors. The average score for the teachers' responses within each school was then correlated with the average achievement of students in that school. The unit of analysis in the study was the school; a single summary score representing the average achievement of the students was generated for each school, as well as one or more summary scores representing the average perceptions of teachers regarding general leadership behavior and one or more specific leadership behaviors of the principals (Marzano et al.).

For each of the studies analyzed by the authors, a correlation between general leadership and student achievement was either computed or taken directly from the study findings. Sixty-nine correlations, each representing the relationship between general leadership behavior and student academic achievement, were extracted; the average correlation was .25. The authors of the study noted that reducing the finding of a meta-analysis to a single correlation is at best an oversimplification of the findings. Having noted the caution, however, the authors still reported the average correlation because it is the most commonly used statistic for discussing meta-analytic findings in educational research (Marzano et al., 2005). The authors considered an average correlation of .25 to

be a compelling finding, one that should stir school leaders to seek ways to improve their leadership skills. They noted that at least one of the studies included in their meta-analysis reported a much weaker relationship between principal leadership and student achievement, asserting that the weaker relationship could have been due to several factors, including the way the correlation was calculated.

In the report of the meta-analysis research conducted by Marzano et al. (2005), the authors described in detail the .25 correlation between principal leadership and student achievement. The authors hypothesized about possible effects if the principal's leadership ability were raised from the 50<sup>th</sup> percentile to the 99<sup>th</sup> percentile. One way to improve leadership ability, the authors noted, would be to have principals attend powerful leadership training. Based upon the .25 correlation, the authors were able to predict that average student achievement would rise to the 72<sup>nd</sup> percentile over time.

In their meta-analysis, Marzano et al. (2005) examined 69 studies in search of specific behaviors related to principal leadership. As a result, the researchers identified 21 categories of behaviors that were considered to be responsibilities. The researchers noted that their results did not represent new findings; however, they asserted that the responsibilities provide insight into the nature of school leadership. The 21 categories of behaviors or responsibilities of school principals identified by the researchers included the following: (a) affirmation; (b) service as a change agent; (c) contingent rewards; (d) communication; (e) culture; (f) discipline; (g) flexibility; (h) focus; (i) ideals; (j) input; (k) intellectual stimulation; (l) involvement in curriculum, instruction, and assessment; (m) knowledge of curriculum; (n) monitoring; (o) optimizing; (p) order; (q) outreach; (r) relationships; (s) resources; (t) situational awareness; and (u) visibility. The

responsibilities were deemed to be standard operating procedures for effective principals. The variety in these responsibilities was enormous. The quantification of the relationship of each responsibility to student achievement produced interesting correlations; however, a confidence interval significant at the .05 level was deemed appropriate to determine the most useful information (Marzano et al.). The researchers asserted that their findings represented the first time in the history of leadership that a set of research-based competencies could be connected to school leadership.

After conducting their meta-analysis, Marzano et al. (2005) surmised that principals can have a profound effect on the achievement of students in their schools. The studies included in the meta-analysis, however, reported different-sized correlations between principal leadership and student achievement. Some of the correlations were large and positive, whereas others were small and negative. The authors attempted to explain these differences through the use of moderator variables such as study quality and level of schooling; however, the explanations did not produce any straightforward answers. Overall, the study provided guidance for experienced and aspiring administrators (Marzano et al.).

Many educators agree that today's principals cannot lead schools alone (Burniske & Barlow, 2003). To address the aforementioned tasks, some principals rely on distributed leadership, a leadership model whereby principals rely on faculty members as experts in their own rights; faculty members are sources of knowledge, experience, and wisdom. The distributed leadership approach allows principals as well as faculty members opportunities to share common visions aligned to meaningful and attainable goals for student achievement. Principals and staff members share leadership roles,

instructional experiences, and tasks within the school to ensure goals are accomplished. It is important to note that distributed leadership is just one style of leadership that some principals choose to implement to accomplish goals. There are others, including shared decision making and professional learning communities. Whichever leadership style principals choose to utilize and implement, principals are ultimately responsible for student achievement as well as the many tasks that fall within the principalship.

Never before has the bar been set so high for America's public education system in efforts to ensure that every child achieves success. The ultimate responsibility for student achievement rests with the school leadership. Headline after headline and study after study have proclaimed that the nation faces an acute shortage of candidates for the principalship, a shortage that almost certainly will worsen unless more individuals are prepared to enter the dwindling job pool (Mitgang, 2003).

A recurring theme in the literature is that the leadership provided by principals plays a vital role in the school improvement process; however, the research also points to principal shortages and high turnover rates. To seek a more precise representation of the current labor market for principals and to assist in the search for productive policies and practices, The Wallace Foundation (2005) commissioned three distinct research projects. The first research project was an analysis by RAND Education of existing data on the national supply and career paths of principals. This analysis included data from the U.S. Department of Education's Schools and Staffing Survey, as well as data from the monthly Current Population Survey that is conducted by the Bureau of Labor Statistics (Gates, Ringle, Santibanez, Ross, & Chung, 2003).

The second research project commissioned by the Wallace Foundation was an analysis by the Center on Reinventing Public Education at the University of Washington, drawing on a survey of 83 school districts and supplemented by the Common Core of Data from the National Center on Education Statistics. The analysis examined the dimensions and implications of the labor market for principals: supply and demand factors for principal candidates, districts experiencing the most difficulty finding principals, description of the quality and quantity of applicant pools in selected districts and regions, the extent to which applicants match current educational demands, and the ways in which policies and practices affect the flow of candidates to schools that need them (Roza, Celio, Harvey, & Wishorn, 2003).

The third research project, conducted by a research team at the University at Albany (SUNY), entailed an examination of the attributes and career paths of New York State principals as well as implications for policy. Data for the project were gathered through review of 30 years of statewide personnel information and other statistical sources concerning career paths and qualifications of prospective and current principals (Papa, Lankford, & Wyckoff, 2002).

The three research projects sought to answer basic questions about the current labor market for the principalship: (a) Is there, in fact, a nationwide shortage of certified candidates? (b) Are certain types of districts finding it more difficult than others to attract certified candidates and, if so, why? (c) What are the personal and professional characteristics and career paths of people entering the principalship? and (d) How are state policies, local conditions, hiring practices, and job incentives affecting the ability of

districts to attract a broader and potentially more able pool of candidates for the principalship? (Mitgang, 2003).

Despite the findings of other researchers regarding principal shortages, the three aforementioned research projects all arrived at three similar findings. The first finding determined there were qualified candidates ready to undertake principalships and that there was no statistical evidence of a nationwide shortage of certified candidates for the principalship. The second finding reported that districts and individual schools perceived as having the most challenging working conditions, those with large concentrations of impoverished or minority students as well as lower per-pupil expenditures and lower salaries, find it hardest to attract principals. The third finding indicated that hiring practices and common search criteria are compounding the problems of districts in attracting enough principal candidates capable of meeting heightened expectations for academic performance (Mitgang, 2003).

Evidence from the three research studies provided another way to analyze the current problems in the labor market for principals. These studies suggest that policies and practices aimed solely at adding more certified candidates to the pipeline overlook the core challenges underlying the difficulty many districts are having in attracting and retaining high quality school leaders (Wallace Foundation, 2005). These challenges include inadequate incentives to draw high-quality leaders to the neediest schools with the most difficult working conditions, counterproductive hiring practices, and regulatory hurdles. The major finding of these studies is comparable to that of other studies included in this review of the literature: There is a shrinking pool of optimum candidates for the principalship. It is important to note that different researchers seem to disagree on the

reason there are shortages, high turnover rates, or shrinking pools of candidates; however, the research in the literature does acknowledge that shortages of qualified candidates exist.

The Wallace Foundation (2005) report concluded with the following policy implications offered to promote further conversation and policy review:

1. Strategies focused solely on adding more certified people to the principalship pool, such as opening or expanding training programs will not, in and of themselves, solve the school leadership challenge.

2. Policies aimed at assuring adequate supplies of principal candidates should focus to a greater extent on creating better conditions for leaders and providing incentives.

3. Common district hiring practices and state policies need to be reviewed so that the policies can be more flexible and more closely aligned with the increased expectations for school leadership.

The three reports pointed to a need for superintendents and school boards to pay closer attention to the hiring practices of human resource departments to ensure that those practices are in closer synch with the changing demands of school leadership (The Wallace Foundation, 2005). The results of the study should be accepted with caution as the limitations were not reported for the process of merging the results of the three studies.

National statistics regarding principal turnover and dwindling supplies of qualified replacements show clearly that the rate of principal turnover has reached crisis proportions (Norton, 2003). Studies on school effectiveness, school climate, and student

achievement all reveal one commonality: the fact that positive happenings in schools depend to a great extent on the quality of school leadership. Such research findings indicate that retaining quality principals must be a priority. A study completed for the National Association of Elementary School Principals (NAESP) reported a turnover rate for elementary school principals of 42% during the preceding 10-year period (Educational Research Service, 1998). A similar study for the National Association of Secondary School Principals (NASSP) revealed a 50% turnover of high school principals during the 1990s, noting that such losses would likely increase during the following decades.

Potter (2001) asserted that it takes a principal 3 to 5 years of on-the-job experience to gain the knowledge and skills needed to be an effective leader. School systems that develop preparation programs designed to enhance recently appointed principals' knowledge and skills are investing in their principals' futures and ultimately in their students' futures. Retention of quality principals, according to the study by Marzano et al. (2005), will increase student achievement. The studies critiqued thus far in the review of the literature have served to lay the foundation for the need for strong principal leadership within school divisions and for practices to be put in place to retain quality principals.

### *The Roles of Principals*

Over the past 30 years, the principalship has been the subject of hundreds of studies. The central role of the principal has been viewed as building manager, administrator, politician, change agent, boundary spanner, or instructional leader (Smith

& Andrews, 1989). According to Fullan (1997), research had shown that the role requirements of principals changed during the 20<sup>th</sup> century. Principals are responsible for professional development, student health, safety, after-school activities, federal and state testing requirements, daily phone calls, and reports (Quinn, 2003). Principals face increasing complexity in the role, including duties as curriculum coordinators, transportation managers, health care providers, personnel directors, disciplinarians, conflict resolution specialists, social workers, and lawyers. Quinn noted that professors, researchers, and educational policymakers all agree that the role of the principal is becoming more complex with each passing day.

Good principals are widely acknowledged as the cornerstones of good schools; without a principal's leadership, efforts to raise student achievement in a school are unlikely to succeed (Tschannen-Moran & Gareis, 2005). The principal is the key agent at the school level. The principal sets the tone and direction for the school, initiates change, provides expertise, marshals resources, and unifies partners (Tschannen-Moran & Gareis). The job is complex and demanding, requiring depth of professional knowledge, an array of skills, and particular beliefs or dispositions about how and why to act (Council of Chief State School Officers, 1996).

In 2004, Tschannen-Moran and Gareis conducted a study entitled *Principals' Sense of Efficacy: Assessing a Promising Construct*. The study, which is critically reviewed in this chapter, utilized a survey tool that was developed by the authors. Tschannen-Moran and Gareis subdivided principals' roles into three categories: management tasks, instructional leadership tasks, and moral leadership tasks. The three categories emerged during the extensive development of the authors' survey instrument,

the Principal Sense of Efficacy Scale (PSES), which was designed to measure the self-efficacy of principals. The three types of tasks, which include the many roles of principals, are described in the subheadings that follow.

### *Management Tasks*

Tschannen-Moran and Gareis (2004) described management tasks of the principalship in terms of the abilities needed to be effective in the job, including the abilities to manage the time demands, to handle the required paperwork, to maintain control of the daily schedule, to prioritize among competing demands, to cope with job-related stress, and to shape the operational policies and procedures necessary to manage the school. These tasks must be completed each day by principals.

Being an effective building manager was once sufficient to be considered an effective principal (DiPaola & Tschannen-Moran, 2003). Although traditional responsibilities of the principalship, such as ensuring a safe environment, managing the budget, and maintaining discipline, are still important, other responsibilities are relevant for principals. Principals must conquer a vast array of additional responsibilities, such as instructional tasks and moral leadership tasks. The dynamics of the management roles, as well as the need to accomplish the other tasks, make the management component of the principalship even more difficult (DiPaola & Tschannen-Moran).

### *Instructional Leadership Tasks*

Tschannen-Moran and Gareis (2004) described the instructional leadership tasks of the principalship as including the ability to motivate teachers, generate enthusiasm for a shared vision, manage change, create a positive learning environment, facilitate student learning, and raise student achievement.

The academic standards movement has amplified the call for improved instruction. The NAESP (2001) asserted that principals are essential in helping students reach standards. No longer can principals be simply administrators and managers; they must be leaders in improving instruction and student achievement. Principals must be forces that create collaboration and cohesion around school learning goals as well as the commitment to achieve those goals (NAESP). The direct responsibility for improving instruction and learning rests with principals (Smith & Andrews, 1989). Effective principals are actively involved in all aspects of the instructional program; they set expectations for continuous improvement, model desired behaviors, participate in in-service training with teachers, and consistently give priority to instructional concerns (Smith & Andrews).

#### *Moral Leadership*

Tschannen-Moran and Gareis (2004) described the moral leadership tasks of the principalship as the ability to promote acceptable behavior among students, promote school spirit among a large majority of the student population, handle effectively the discipline of students in the school, promote a positive image of the school with the media, promote the prevailing values of the community in the school, and promote ethical behavior among school personnel.

Fullan (1997) wrote that the role of the principal had evolved through many stages, beginning with manager and administrator and moving to instructional leader and transformational leader, asserting that subsequently it should be seen as moral change agent or visionary leader. Fullan proposed combining the moral purpose of leadership

with the disposition and skills of effective change agents to conceptualize the principalship.

Oberman's study (1999), *The Impact of Chicago's School Reform on Principal Role and Turnover*, addressed concerns about the stability of school leadership in urban schools. Oberman investigated the changing roles of principals as well as their willingness to remain in their current positions. In addition, Oberman collected data to determine how principals responded to the imposed changes in their roles.

Oberman (1999) gathered data from three sources: (a) an examination of Chicago Public Schools personnel records, (b) an analysis of selected items from a 1992 principal study, and (c) an in-depth interview process that spanned 1 year and used a random sample of 157 principals. A strength of the study lay in its use of the triangulation process to link evidence from three sources in a search for themes related to principals' roles and turnover rates.

The findings of Oberman's (1999) study indicated that school reform does have an impact on the roles of principals. The study described the changing role of the principal; however, it failed to provide strong evidence to support Oberman's hypothesis that the principal turnover rate is completely independent of school reform effects. Although Oberman identified how school reform impacts the roles of principals, the findings should be interpreted with caution because the study was descriptive in nature; therefore, the cause-and-effect statements are inconclusive.

Understanding that good principals are key to effective schools is a growing concept among policymakers. Many policies that set expectations for principals are ad hoc, disjointed, and sometimes contradictory, in large part because states do not have

clear, consistent definitions of what principals need to know and be able to do (National Association of State Boards of Education, 1999). There is some evidence to suggest that establishing high standards for entering the principalship may actually attract more, rather than fewer, candidates to the field. One of the most promising sets of standards for school leaders has been devised by the Interstate School Leaders Licensure Consortium (ISLLC). These standards, based upon current research and the best thinking of practitioners and policymakers, have been adopted by 30 states and are endorsed by almost a dozen of the nation's education associations (National Association of State Boards of Education). Both the NAESP and the NASSP also have derived competencies that closely parallel those of ISLLC. The six ISLLC standards are highlighted in the text that follows:

Standard 1: An educational leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders.

Standard 2: An educational leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Standard 3: An educational leader promotes the success of every student by ensuring management of the organization, operation, and resources for safe, efficient, and effective learning environment.

Standard 4: An educational leader promotes the success of every student by collaborating with faculties and community members, responding to diverse community interests and needs, and mobilizing community resources.

Standard 5: An educational leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.

Standard 6: An educational leader promotes the success of every student by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (Council of Chief State School Officers, 2008).

The New Leaders for New Schools leadership program and the ISLLC are two national efforts aimed at standardizing the preparation of future school leaders based in the practices of effective principals (Institute for Educational Leadership, 2005). Principal preparation programs, via universities, strive to keep these standards as well as the NAESP and the NASSP competencies in the forefront when planning graduate programs designed to prepare future leaders.

Regardless of how the numerous roles of principals are defined, one theme continues to emerge: Principal training is necessary and should not end with an individual's initial appointment to the principalship or with the completion of a probationary period (Quinn, 2003). The changing role of the principalship requires principals to maintain a lifelong learning posture.

### *Principal Preparation via Universities*

Within the last decade, university programs have fallen under scrutiny for failing to adequately prepare principals for their roles. Schools need leaders who are ready to address the demands of education from the minute they step into their roles as principals. Federal law demands that students make measurable academic progress; therefore, principals must be prepared by being exposed to quality curriculum. Winters (2005)

noted that curricula at schools of education are often outdated and lacking in academic rigor, at times using materials that are decades older than the students.

The need for improved university programs is being recognized. Daresh reported in 1997 that the Danforth Foundation had launched a major initiative to support innovative principal preparation programs, the University Council for Educational Administration (UCEA) had sponsored a review of the ways in which school administrators were being prepared across the nation, the National Policy Board for Educational Administration had been created, and states across the nation had engaged in efforts to strengthen the standards designed to verify the quality of training received by aspiring administrative candidates. Further, Daresh noted that the NASSP and the NAESP had designed new programs to help identify, recruit, and better prepare future principals.

More than 40% of the nation's principals, and an even higher percentage of superintendents, can be expected to leave their jobs over the next decade (Levine, 2005). This piece of data represents a statement of a problem that led to perhaps the most riveting study on university programs to date, conducted in 2005 by Arthur Levine, President of Teachers College at Columbia University. The study, *Educating School Leaders*, provided a critical examination of leadership programs across the country. The 4-year study involved examination of data from schools of education nationwide and offered insight into the ways the programs operate, as well as the incentives that drive them. Furthermore, the study ascertained the perceptions of deans, faculty, alumni, and principals regarding the performance of the programs through several ministudies (Levine).

Levine's (2005) 4-year research involved a number of smaller studies. In one study, the Dean Survey, all the heads of U.S. education schools and departments, deans, chairs, and directors were surveyed regarding their schools' demographics and practices as well as their personal experiences and attitudes regarding their own education schools and education schools collectively (Levine). This data collection yielded a 53% response rate.

The Faculty Survey, another ministudy, surveyed a representative sample of 5,469 education school faculty members regarding their work as well as their experiences and attitudes regarding their own education school and education schools in general (Levine, 2005). This data collection yielded a 40% response rate.

In 1995 and again in 2000, the Alumni Survey, yet another study within Levine's 4-year study, queried a representative sample of 15,468 education school alumni, who had received baccalaureate-to-doctorate-level degrees, regarding their careers, their experiences in the schools that had awarded the degrees, and their attitudes toward education schools in general (Levine, 2005). This survey yielded a 34% response rate.

Finally, 1800 principals were surveyed regarding their own education, the education of the people they had hired, and their attitudes toward education schools in general. This survey, the Principal Survey, yielded a 41% response rate. It is important to note that the Faculty, Principal, and Alumni Surveys involved randomly chosen samples of the population, whereas the Dean Survey included all education school heads. The faculty and alumni samples were stratified by Carnegie type, region of the country, and institutional size. The Carnegie classifications included the following: baccalaureate general college, baccalaureate liberal arts college, masters-granting college or university,

and doctoral-extensive university. The Principal Survey was stratified by geographic region and school type. The responses were either representative or, when necessary, weighted to be representative of the relevant population (Levine, 2005).

Levine's (2005) study also included site visits to gather data for case studies of 28 schools and departments of education. Teams of academics and journalists conducted site visits at each school for the purpose of delving beyond the survey data to paint a more in-depth portrait of the education school. The teams spent several days on each campus. Program quality was judged using nine criteria: purpose, curricular coherence, curricular balance, faculty composition, admissions, degrees, research, finances, and assessment. Particular attention was given to programs in teacher education, educational administration, and research preparation.

The studies found the overall quality of educational administration programs in the United States to be poor. Four phenomena observed during the 4-year study were particularly troubling. First, there was a rise in the number of institutions offering off-campus educational administration programs. In theory, such programs are desirable but they are often lower in quality than their campus counterparts. Second, master's programs and weaker research-intensive universities were pressing to award doctoral degrees in educational administration. Third, competition for students among educational administration programs was driving down the program quality. Finally, states and school districts, as well as universities were fueling a downward spiral. Almost all public school districts (96%) were awarding salary increases for teachers who earned advanced degrees and credits beyond a master's degree. This type of incentive system creates unmotivated students seeking the easiest way possible to earn credits. In conclusion, the field of

educational administration was not deemed successful based on the nine criteria set forth. It is important to note that Levine did observe programs in the study that were successful in meeting one or more of the nine criteria.

Levine's (2005) findings indicated that university-based educational administration programs reflected curricular disarray, low admission and graduation standards, weak faculty, inadequate clinical instruction, inappropriate degrees, and poor research. In addition, Levine noted that improvement in the condition of the nation's school leadership programs will require joint action by education schools and their leadership programs, the universities that house them, school districts, and states. Specifically, Levine suggested that universities should eliminate the incentives that favor low-quality programs, set and enforce minimum standards of quality, and redesign educational leadership programs. Levine concluded that the majority of programs ranged from inadequate to appalling, even at some of the country's leading universities (p. 23). Based on the conclusions and findings of the 4-year study, Levine recommended changing incentives for teachers accumulating college credits, setting and enforcing minimum standards of quality for education administration programs, and redesigning educational administration programs.

In summary, Levine (2005) used the Carnegie Foundation classifications to identify different types of schools of education. The study employed the typology throughout as a vehicle for capturing the commonality and diversity among the nation's schools of education. Two cautions should be noted: (a) the classes should be viewed as composites, meaning no school of education in any of the six categories can be expected to mirror all of the characteristics of the schools in its class, and (b) neither the strengths

nor weaknesses discovered in the course of Levine's research regarding a specific class of education schools can be ascribed to any particular school within the class (Levine).

A second study on principal preparation via the university level, *Learning to Lead? What Gets Taught in Principal Preparation Programs*, examined the content of instruction offered in preparation programs across the nation. Researchers Hess and Kelly (2005b), as did Levine (2005), wanted to examine university programs to determine whether or not graduates were trained for their unprecedented responsibilities, challenges, and managerial opportunities.

In 2004, the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) listed 496 administrator preparation programs. Hess and Kelly's (2005b) study drew its sample from three categories of these programs: influential elite programs, large programs that train the most candidates, and more typical programs. The sampling strategy was designed to avoid the criticisms that had been made in previous studies regarding syllabi that included only elite preparation programs. The sampling strategy also allowed the researchers to determine whether practice varied between elite and nonelite as well as large and small programs. The pool of elite programs included 21 ranked by *U.S News & World Report* in 2004 as the nation's top administrative schools (Hess & Kelly). Large programs included 20 educational leadership preparation programs that awarded the largest number of M.Ed. degrees as reported by IPEDS in 2003. The third group included 20 programs that were randomly drawn from the remaining IPEDS institutions (Hess & Kelly).

From this initial group of 61 programs, 56 qualified for analysis. The 21 elite programs yielded a total of 19 schools that qualified for the survey; one program was

excluded because it did not have a principal preparation program and the second was excluded because it operated an unorthodox accelerated licensure track that did not have courses with syllabi. The 20 largest programs yielded 17 programs eligible for analysis; one program was incorrectly included in the IPEDS rankings, a second was dropped because its M.Ed. in educational leadership did not lead to licensure or certification, and a third program was excluded because it offered only nontraditional certification.

From the sample of 56 eligible programs, 31 programs were deemed eligible for the study by nature of the fact that at least four core course syllabi could be collected, thereby permitting systematic coding for a total of 210 syllabi. The syllabi represented a total of 2,424 course weeks (Hess & Kelly, 2005b). The researchers presumed that the university syllabi generally reflected the content and perspective of the courses being taught. Ultimately, the study relied on the notion that syllabi are similar to blueprints in that they reveal structure and design, even if they do not fully reflect what real-life instruction looks like (Hess & Kelly).

The purpose of the initial review of data was to examine the amount of attention focused on each of various areas of leadership, which were coded by referring to the syllabi. The areas included managing for results, managing personnel, technical knowledge, external leadership, norms and values, leadership and school culture, managing classroom instruction, and techniques for developing surveys.

The findings revealed surprising similarities across the various types of programs. Only 2% of the 2,424 course weeks addressed accountability within the context of school management or school improvement. Less than 5% included instruction on managing school improvement via data, technology, or empirical research (Hess & Kelly, 2005b).

Just over one tenth (11%) of the course weeks included any contextual reference to statistics, data, or empirical research; similarly, 11% dealt with instructional management issues such as curriculum development, pedagogy, classroom management, or learning theory. Of 360 (15%) course weeks devoted to personnel management, just 12 (3%) weeks mentioned teacher dismissal and none mentioned teacher compensation. Just 11% of the weeks devoted to personnel management addressed the recruitment, selection, or hiring of new teachers. Less than half (42%) of the courses on technical knowledge of school law, school finance, and facilities entailed a final assessment to ensure that students had mastered the content. Only 1% of course weeks dealt with school public relations or small business skills; less than 1% addressed parental or school board relations (Hess & Kelly). Hess and Kelly (2005b) also reported that university programs commonly assigned the same authors for students to read, including Deal, Peterson, Odden, Sergiovanni, Elmore, and Fullan.

Hess and Kelly (2005b) concluded that university programs are considerably consistent in the curricula offered to their students. The evidence indicated that preparation had not kept pace with changes in the larger world of schooling, leaving graduates of principal preparation programs ill equipped for the challenges and opportunities imposed by an era of accountability (Hess & Kelly). Although there was some evidence that a small part of administrator preparation addressed norms and values, the real issue that emerged was the narrow-mindedness reflected in today's universities' instructional focus (Hess & Kelly).

The review of the literature located scholars who attacked theories such as those of Levine and Hess and Kelly. John Hoyle is one such scholar who adamantly disagreed

with Levine's study and called into question the validity and reliability of the results. Hoyle has been called America's leading reformer in administrator preparation (Mullen, 2007). In 1983, Hoyle wrote the American Association of School Administrator (AASA) Guidelines. These guidelines were unofficially used by most states, becoming the benchmark for every set of standards since that time (Mullen). *Skills for Successful 21<sup>st</sup> Century School Leaders*, authored by Hoyle, English, & Steffy in 1998, emerged from those guidelines, and professors began assessing degree programs with regard to standards and what skills should be taught. The AASA guidelines have informed the latest guidelines for administrator programs and have incorporated the ISLLS standards as well. Hoyle assisted in shaping those standards for administrator preparation programs.

Hoyle (2007) adamantly disagreed with Levine's research and asserted that university preparation or school principals and superintendents have never been better. Positive support of reforms in leadership preparation by both practicing administrators and professors has continued to grow in the research literature (Hoyle & Oates, 2000), Hoyle responded to Levine's study by noting that Levine's research concluded with a sweeping attack of all leadership preparation programs; however, Hoyle noted that no active professor of educational administration was selected for participation in the survey. Hoyle further noted that Levine called for greater scrutiny in evaluation preparation programs to improve their quality and impact on preparing leaders who can improve public education. According to Hoyle, the findings of Levine's study were on target in attacking weak admission requirements and inadequate institutional support to hire quality faculty to teach the numbers of students admitted; however, Hoyle indicated that the most irresponsible comment by Levin was his choice of words in labeling all

leadership programs as inadequate to appalling. This comment, according to Hoyle, revealed ignorance about recent reforms in the field of administrator preparation and inadequate application of survey research methodologies. The results of Levine's survey, according to Hoyle, failed to meet the canons of good survey research and the standard demanded by students in most graduate leadership programs. The response rates were extremely low for alumni, faculty, and principals, as noted in the previous review of Levine's study. Such possible methodological abuses threaten the integrity of the findings they frame (Hoyle). Although Levine's study reported that more than 80% of college deans perceived their leadership programs to be good or excellent, Levine reported that preparation programs were dumbed down by low admission criteria, irrelevant course work, unskilled faculty members, and incoherent curricula. Hoyle further denounced Levine's study by responding to his recommendations; Hoyle did not find credence in any of Levine's study findings or recommendations.

In 2007, Hoyle noted that the critics of principal preparation programs, such as Levine, managed to gain public attention with their research studies that consisted of unreliable tactics at best; however, Hoyle further noted that the criticism had had limited impact on professors who dedicate their careers to producing school leaders with the scholarship, skills, and integrity to improve schooling for all children and youth.

Research to prove the value of leadership preparation programs was nonexistent, or at least not reported, in the literature. Nevertheless, survey research, blended with qualitative interview data seeking perceptions of the impact of these leadership programs, is extremely valuable in conducting formative evaluation and taking corrective action for program improvement (Mullen, 2004). Hoyle (2005) noted that criticism of leadership

preparation programs is healthy to the extent that workable solutions are linked to the criticism. Research studies report conflicting results on the effectiveness of principal preparation programs; however, both types of studies, for and against principal preparation programs, have served as a springboard for universities to examine their principal preparation practices.

The vital question that remains regarding principal preparation via the university level is whether or not universities are adequately preparing the nation's future leaders. Hess and Kelly (2005a) and Levine (2005) conducted studies that left the question unanswered for the education community. Levine asserted that joint action by education schools and school districts must be enacted for school leaders to be prepared for their roles. A review of principal preparation programs via school districts is analyzed in depth in the next section of this chapter.

### *Principal Preparation Programs*

Developing a capable cadre of men and women to serve as America's elementary and secondary school leaders is extremely important (Anderson, 1991). School practitioners often voice concern about the preservice training of school principals, contending that university programs do not adequately prepare aspiring administrators for the complexity of the principalship (Anderson). Another criticism of preparation programs for aspiring administrators is that insufficient time is spent on curriculum and instruction. Lumsden (1992), in her article, "Prospects in Principal Preparation," stated that many principals enter the field with limited knowledge of effective teaching, staff development, and organizational change. Many current principals are products of older,

traditional school leadership programs that have been deemed by many to be ineffective in preparing school leaders (Anderson). Barth (2001) stated that since the 1970s, the importance of principals had become more evident among educators; therefore, Barth posed the question: How are principals being prepared for the crucial and overwhelming jobs the principalship presents? Furthermore, Barth asked the question: How are principals expected to sustain and extend their learning once they enter the principalship? The researcher concluded that professional development for principals needed to be changed to meet the demands of the job.

The 21<sup>st</sup>-century principal is faced with increased levels of accountability, expanded roles of responsibility, and increased demands from politicians and stakeholders. Concurrently, school divisions are tasked with finding quality administrative candidates who have the requisite abilities to lead in a time of change. The combination of these two issues has created a profession under stress that requires immediate and effective solutions (DiPaola & Tschannen-Moran, 2003; Robertson, 2007).

The Wallace Foundation (2005) reported that when educational leadership is discussed in political and policy circles, the discussion tends to be in terms of searching for superheroes. The Wallace Foundation further asserted that although very high expectations are placed on principals, the training that is provided to them is neither adequate in helping them to meet the challenges of today nor sufficient in addressing the conditions that impede a principal's success. The urgency has never been greater to gather facts about what is necessary not only to attract quality principals but also to adequately train and support principals (Wallace Foundation).

Lashway (2003) found through his research that principals experience an enormous level of stress in their first year as they strive to fit into a new environment while balancing job demands and new reform agendas. Lashway suggested that principals' stress could be eased through formal induction programs, including leadership academies that provide instructional, administrative, and emotional support.

Although the research literature was extensive regarding the adequacies versus inadequacies of university preparation programs for aspiring administrators, this review focused on descriptions of the preparation programs that school districts provide to prepare recently appointed principals for leadership roles. This focus served to provide background information on the specific types of principal preparation programs offered by school districts to ultimately determine if the types of preparation programs offered make a difference in the self-efficacy of recently appointed principals.

Several studies and leading educators have suggested that school divisions may not invest sufficient time, energy, and money to identify, train, select, induct, and evaluate principals (Anderson, 1991). As troubling as this assessment may sound, *School Management Digest* has documented that many divisions are willing to make the necessary investments to groom, hire, and retain the most capable principals (Anderson). Division-based programs are focusing on bridging the gap between theory and practice and making preparation more relevant to the real work of schools by cultivating reflection as a leadership strategy (Fenwick, 2000). The operational demands that principals face, such as school safety, buses, paperwork, discipline, and mediating adult interrelationships, have not gone away; however, many of the roles for principals are changing with regard to instructional leadership, distributed leadership, shared decision

making, high-stakes environments, and federal and state requirements (Thompson, 2001). School divisions are increasingly aware of the demands placed on school leaders and are implementing preparation practices to provide support that will increase principals' knowledge and skill levels. Principals need continuous professional development opportunities to support their efforts toward school improvement and to revitalize their commitment to creating and sustaining positive professional learning communities (Fenwick & Pierce, 2002).

States that understand their commitment to providing principals with the tools they need to succeed should devise systems of support for recently appointed principals. Formal induction programs or preparation programs, designed to prepare principals throughout the first few years of their entrance into the principalship, will contribute greatly toward easing the burdens of new entrants. Preparation programs usually include orientation regarding official and implicit policies and procedures, consistent contact with experienced principals as well as contact with other novice principals, time for new principals to reflect upon their work, and formative feedback on performance (National Association of State Boards of Education, 1999, p. 26).

It is important to note that school divisions use varied titles to refer to the preparation programs available to principals. Staff development, academies, cohorts, leadership training, theory-based training, skill-based training, and system approaches are some of the titles for preparation programs uncovered in this literature review. Many school districts develop their own training programs based on data indicating the districts' needs; therefore, the content of such programs can encompass a wide variety of themes and topics. The term principal preparation program is used throughout this review

to identify any type of division training delivered to recently appointed principals to better prepare them for their roles.

The specific purpose of this section of the literature review was to identify and describe principal preparation programs offered to recently appointed principals. All of the principal preparation programs examined and cited, regardless of the title, referred to the practices used by school districts to educate and prepare principals for their leadership roles. In some cases, the principal preparation programs also were offered to qualified aspiring principals. The programs selected for inclusion in this review were chosen because they were located during searches for information regarding district principal preparation programs. They are not presented in order of importance as the purpose of this review was not to determine their quality. The principal preparation programs were included in the review to explain the contents of the programs developed by school divisions. It is important to note that the searches for principal preparation programs revealed a great deal of information concerning programs in place for recently appointed principals; however, only several examples of principal preparation programs were described to convey the typical contents of such preparation programs.

In a Virginia study, *The Principalship at a Crossroads: A Study of the Conditions and Concerns of Principals*, DiPaola and Tschannen-Moran (2003) investigated the characteristics of principals as well as the challenges confronting them. Questionnaires were mailed to 4,237 principals who were members of the VASSP or the VAESP; respondents were given the option to return the questionnaire through the mail or to complete the questionnaire online. A total of 1,666 surveys were returned, 1,406 by mail and 260 electronically. The researchers utilized descriptive statistics to analyze the data.

With regard to instructional leadership, principals identified the most significant problems as (a) the need to increase student achievement on standardized tests and the Virginia Standards of Learning (SOL) tests (92.5%), (b) effective use of instructional time (92%), (c) analysis of classroom practices (91%), (d) faculty and staff development (91%), (e) curriculum alignment with the SOL (91%), and (f) improvement of staff morale (90%) (DiPaola & Tschannen-Moran, 2003). Principals reported the need for assistance in some of these areas. The top five areas in which principals desired professional development were identified as (a) special education law (75%), (b) data-driven decision making (72%), (c) assessment using multiple criteria (72%), (d) strategies for increasing student achievement on standardized testing (74%), and (e) strategies for faculty and staff development (71%). As reported in the findings, the need for professional development with regard to instructional leadership proficiencies was evident in four of the five areas presented (DiPaola & Tschannen-Moran).

The research of DiPaola and Tschannen-Moran (2003) provided insight into the professional development needs of principals; however, the study was limited. Survey respondents were all members of the same professional groups; therefore, the participants were not randomly selected. This lack of random selection represents a threat to the external validity of the study. In addition, assistant principals were included in the study; therefore, the findings included the views of these assistant principals with regard to professional development. The results of the study should be accepted with caution; the study reported that principals themselves identified the need for professional development or adequate preparation to assist them in growing and learning in their profession.

In Cotton's (2003) study, *The Instructional Leadership Proficiencies of Elementary Principals: A Study of Preparation and Continuing Professional Development Needs*, the researcher conducted a descriptive study of practicing principals' perceptions regarding their own preparation as well as the need for continued professional development to produce instructional leaders. The purpose of the study was to investigate the perceived importance of identified instructional leadership proficiencies as well as the principals' perceived need for professional development related to the proficiencies. Cotton utilized a survey instrument that was designed to determine the most valuable professional development delivery modalities for each task as perceived by practicing administrators. In addition, the survey elicited views of practicing principals regarding their participation in professional development.

The participants in the study were part of a random stratified and proportional sample of elementary principals employed in the Commonwealth of Virginia during the 2001-2002 school year. A random stratified sampling was utilized to ensure representation from each of the eight geographic regions in Virginia. Proportional random sampling was also used to ensure that the proportion of principals from each group in the sample was similar to the actual population (Cotton, 2003). The total sample included 330 participants. A sample of this size provided a 95% confidence level and a +/-5% margin of error (Cotton).

Descriptive statistics were employed to answer the research questions in the study. On the survey, respondents rated the importance of 27 identified instructional leadership proficiencies. Respondents also rated their perceived need for professional development related to each of the 27 proficiencies. Finally, the respondents were asked

to offer their opinions regarding the most valuable source of professional development for each of the key instructional leadership activities.

Demographic information about the respondents was also collected (Cotton, 2003). Two thirds of the respondents were between the ages of 41 and 55; over half of them were females. The largest subgroups of principals were relatively new to the profession; 41.5% indicated they had 5 or fewer years of experience in the principalship. Respondents reported between 6 and 10 years of experience as classroom teachers; they were employed in school divisions with various-sized student populations.

The findings from the survey indicated that principals perceived each key task area to be important to their roles as instructional leaders (Cotton, 2003). Respondents were asked to rate the need for professional development in each of the key tasks, as well; they rated the areas from less than a *moderate-need* level to a *high-need* level. Inconsistent results were revealed regarding the value of professional development sources; the sources of professional development reported to be the most valuable varied according to the key tasks.

The workshop method was identified as the most valuable source of professional development by more principals than was college or university work for each of the task areas. Cotton (2003) noted that the most common form of professional development for principals typically is the workshop method; therefore, principals may have designated workshops as being most effective because that type of professional development was a commonly used avenue with school divisions. Because of this phenomenon, this finding should be cautiously interpreted. In addition, a considerable number of principals preferred on-the-job training as a means of professional development.

The results of Cotton's (2003) study can be utilized by school districts as they plan their system-sponsored principal preparation programs. School systems that consult the research in planning programs will be a step ahead of their counterparts. Furthermore, the delivery methods for the preparation programs should be designed so that principals will want to participate.

The Norfolk Public Schools system, located in Norfolk, Virginia, has demonstrated understanding of the importance of successful leadership. The system also has realized that the goal of school leaders is to increase student achievement. To answer the need for strong leadership, school system personnel developed a leadership academy designed to build the leadership capacity of administrators in Norfolk Public Schools. Foundation of the academy stemmed from a desire by central office administrators to develop principals who could lead Norfolk Public Schools in becoming a world class organization. The academy's goal was to provide principals with rich experiences to build their leadership capacity and ultimately enhance their ability to lead public schools in Norfolk (Norfolk Public Schools, 2006).

The central office administrators in Norfolk acknowledged that schools with innovative and skillful leaders are better prepared to provide students with meaningful, effective learning experiences than are schools without such leaders. The school district administrators thought it was essential to provide school leaders with professional development experiences to prepare them for the challenges of the principalship (Norfolk Public Schools, 2006). The leadership academy was developed to ensure a competent leadership force within their division.

In forming the leadership academy, the district entered a partnership with the Greater Norfolk Corporation to provide assistance and expertise in the area of leadership development within the Norfolk school division. The Greater Norfolk Corporation was made up of 120 area businesses, including banks, insurance agencies, retail stores, publishing companies, law firms, and other professions. Joint meetings were held with the Superintendent of Norfolk Public Schools, administrators from the central office, and representatives from the Greater Norfolk Corporation to explore the benefits of the partnership between the school system and the corporation. Based upon the exploration meetings, it was determined that basic leadership skills and foundational knowledge, from a business perspective, should be the focus of the partnership program between the corporation and the school system (Norfolk Public Schools, 2006). The description of the leadership academy is theoretical in nature.

Norfolk Public Schools, along with the Greater Norfolk Corporation, used group data provided by the Center for Creative Leadership as well as survey data from the academy participants to plan the individual academy leadership sessions. Following assessment of the current school leaders with regard to their strengths and areas for growth, the partnership designed the leadership academy with the following goals in mind: (a) to provide school leaders with development opportunities to build on their leadership strengths, (b) to develop plans to address areas of individual growth, (c) to provide participants with professional development experiences that engage them in meaningful learning experiences, (d) to prepare leaders for the challenges of leading their schools' instructional programs, (e) to develop partnerships with local business leaders to provide principals with a perspective different from their own regarding principles of

effective leadership, (f) to support principal leaders in developing skills that are critical to their successes, (g) to create a cohort group of school leaders who can grow and learn together, and (h) to offer support to school leaders as they face the challenges of school administration.

Norfolk Public Schools central office administrators expected all academy participants to understand the goals of the academy, participate in all the academy sessions, complete outside readings and assignments to prepare for upcoming sessions, participate in workshop activities, and strive to increase their leadership capacity. In other words, once a candidate began participation in the academy, the candidate was expected to participate and learn from the experiences offered at the academy sessions.

The academy participants, in conjunction with a cohort group of educational leaders in training at the Center for Creative Leadership in Greensboro, North Carolina, participated in leadership assessments, which were scored. The results were given to each candidate, and the data from the assessments were shared during a 90-minute, one-on-one coaching session conducted by the Center's trained staff. The participants were engaged in small- and whole-group sessions regarding nine leadership competencies deemed essential for effective leadership.

Norfolk's Leadership Academy was open to principals, assistant principals, and central office administrators; it was required that each candidate fall into one of these three categories. Candidates applied by filling out an application; they were accepted as space allowed. The Senior Director, who was an individual employed by Norfolk Public Schools, attended all training sessions to monitor the skill development. In addition, the

Director provided resources for skill application once participants were back on their jobs, if needed (Norfolk Public Schools, 2006).

As a result of the leadership training academies, Norfolk gained a pool of qualified future principals from the assistant principals participating in the academies. In addition, the principals who participated in the academy reported greater insight regarding their leadership strengths as well as strategies to tackle school challenges. The principals reported feelings of pride in their leadership abilities; they also reported gaining a network of peers on whom they could depend for support and guidance.

The Norfolk Public Schools partnership with the Greater Norfolk Corporation was a unique approach to leadership development. The proactive design assisted the school system in filling leadership gaps. In addition, the academy utilized business leadership skills and knowledge, applying those skills to educational situations. The academy offered preparatory training and development opportunities to principals in the division.

The Norfolk Public Schools' academy represents one important preparation approach for ensuring successful school principals. The overall purpose of Norfolk's preparation program was to increase leadership capacity. The program used data from the division as well as area business leaders to assist in principal preparation and was deemed successful based on the increased mean scores of participants completing self-assessments. In addition, Norfolk Public Schools reported that increasingly greater numbers of assistant principals attended each year, thereby increasing the number of candidates prepared for the principalship. Leaders who attended the academy reported great insight into their leadership strengths and weaknesses, new strategies to handle

challenges, a feeling of pride and support, a new network of peers, and a greater level of willingness to discuss challenges with other administrators.

Virginia Beach City Public Schools, located in Virginia Beach, Virginia, also implemented a preparation program called the Future's Project Academy (Virginia Beach City Public Schools, 2006). Aspiring administrators as well as administrators already serving as principals or assistant principals were given the opportunity to apply for acceptance into the academy.

The Future's Project Academy was developed after the superintendent initiated a roundtable discussion to address leadership development within the division. Feedback from the initial roundtable discussion resulted in five recommendations to support future and current school leaders: (a) review current literature on school system preparation programs, (b) employ a systems approach to training leaders within the school system, (c) select an advisory council for the academy, (d) research best practices, and (e) tailor a program to the specific needs of the school system. The Future's Project Academy also developed to be theory-based and skill-based in nature.

Because Virginia Beach City Public Schools valued continuous learning for all employees, the school system particularly wanted to provide future leaders as well as current leaders with leadership skills that would impact their jobs. An advisory committee, consisting of 15 members, was initially selected; they continued to serve as the selection committee for the project. The committee reviewed all applications for admission to the academy and continually analyzed the success of the program using various types of school system data (Virginia Beach City Public Schools, 2006).

When representatives from central office began planning the directive for the Future's Project Academy, they asked themselves crucial questions about what was needed by future leaders as well as current school leaders to be successful in their roles. In addition, the central office staff asked principals and assistant principals to participate in an assessment designed to identify areas of potential need regarding leadership development for the division. The assessment from the principals already serving in their roles yielded the following areas as key components of need: (a) communication, (b) time management, (c) curriculum and instruction, (d) financial management, (e) human relations, and (f) professionalism. Interestingly, the assistant principals who completed the assessment determined areas of needs different from those indicated by the principals. Assistant principals indicated the following areas of need: special education, school law, discipline, and organization.

The central office staff, specifically members of the office of organizational development, examined the assessment results and began to plan academy sessions to meet the needs of the participants. Their ultimate goal was to have a program in place to prepare emerging leaders as well as current leaders to be able to guide the school system into the future.

Before applying to the Future's Project Academy in Virginia Beach, candidates were required to participate in the Gallup Principal Insight and Discover Your Strengths E-learning Component Survey, a Web-based assessment designed to reveal candidates' leadership strengths. Upon completion of this survey, candidates signed up for a class to receive feedback from their Web-based assessments; afterwards, candidates could apply to participate in the leadership academy. The Future's Project Academy operated as a

cohort system in that candidates were placed in groups or teams according to level of experience. Future leaders, current assistant principals, and current principals were grouped in separate cohorts especially designed for their levels of experience.

The Future's Project Academy was designed to provide participants with the knowledge and practical applications necessary to be effective in administrative positions. The project included seven sessions, six of which were led by division training teams; the remaining session was presented by an outside consulting firm. The six sessions led by teams from within the school system were developed by various departments within the school system and were designed to provide administrators with the knowledge needed to handle the varied responsibilities within their roles (Virginia Beach City Public Schools, 2006). After each session, participants were asked to complete an evaluation of the session to determine the session's effectiveness. The feedback was used to adjust the material presented at the sessions for the next cohort.

The Future's Project Academy of Virginia Beach City Public Schools was designed as a systems approach to prepare future administrators as well as administrators already serving as principals. A systems approach entails analysis of problems and synthesis of solutions. In the analysis phase, a given situation is examined to identify the forces affecting the situation. The analysis is constructed to determine the knowledge and skill most useful in handling each situation; the situation is viewed as a system composed of interconnected parts related to other systems (Kristindottir, 2001).

The Future's Project Academy sessions provided principals with hands-on experiences, roundtable discussion, and workshops that imparted the knowledge and resources needed by leaders to be competent in their positions. The academy focused on

skills and needs of administrators. Academy participants reported feeling better prepared for their roles after completion of the sessions. Likewise, central office staff found that principals not only reported being better prepared for daily challenges, but they also demonstrated the ability to verbalize greater knowledge about the inner workings of the school system (Virginia Beach City Public Schools, 2006).

The two aforementioned school divisions used data from within their own divisions to plan, organize, and prepare training programs for their principals. In addition, the two school divisions continued to use self-assessment of participants as well as session evaluations completed by the participants to gather data on the successes of the programs. Sessions were tweaked and fine tuned based on the feedback of the participants. Searches for programs such as the two cited revealed multiple preparation programs, including the following: the Indiana Principal Leadership Academy (IPLA), Indiana Department of Education; the School Leadership Executive Institute (SLEI), South Carolina Department of Education; and the School Leadership Program, Tuscaloosa City School System and University of Alabama-Tuscaloosa (Virginia Professional Development Program for School Leaders, 2006). Each of these programs followed its own design; the programs are described in subsequent paragraphs.

The Indiana Principal Leadership Academy (IPLA) was a nationally recognized model for professional development of public school leaders (Virginia Professional Development Programs for School Leaders, 2006). Principals and assistant principals that had demonstrated a potential for professional growth could apply for the academy; it was required that candidates be employed by the Indiana Public Schools System. Central office administrators reviewed the applications and selected candidates to participate in

the 2-year program. Care was taken to select a group of candidates that constituted equal representation from K-12 programs and from rural, suburban, and urban settings; gender and ethnic representation was also considered. As of 2008, over 200 principals and assistant principals as well as 18 facilitators had attended the academy (IPLA Annual Report, 2008).

The goals of the IPLA were stated as follows: Principals will become (a) leaders of instruction, (b) efficient managers, (c) team players with strengths in communication and leadership, (d) role models of personal and professional improvement, and (e) key change agents in improvement; the content was theory-based. The coursework for the IPLA was taught primarily by practicing administrators; in addition, contracted educational specialists presented relevant, research-based theories and practices. Exposure to in-depth application of administrative themes was included, such as teaching for learning, climate and culture, leadership and management for continuous improvement, and communication (Virginia Professional Development Programs for School Leaders, 2006).

The core values belief of the IPLA was that individuals learn best when actually engaged in their own learning. The declared indicator of IPLA's progress toward its mission was that participants would demonstrate the competence to apply IPLA curriculum standard skills in the areas of leadership, teaching and learning, culture, and communication. In the spirit of IPLA's core values, the approach to measuring the acquisition of skills related to the IPLA curricular standards was grounded in performance assessment and incorporated individual reflection, participation in professional learning communities, and gathering feedback from various stakeholders.

Performance assessments were utilized to convey clear expectations to participants and establish criteria that could be understood by the participants. As of 2008, no results of the performance assessments had been published in the annual reports; however, it was noted that the funders of the IPLA continually reviewed assessments of participants' learning, which were more summative in nature, to determine future funding (IPLA Annual Report, 2008). These summative reports were not published.

The School Leadership Executive Institute (SLEI) was an initiative designed to provide participants with the insights, knowledge, and competencies needed to lead South Carolina schools to success (Virginia Professional Development Programs for School Leaders, 2006). Together with the Center for Creative Leadership (CCL), the South Carolina Department of Education developed and implemented a 2-year institute for principals. Each cohort comprised 25 to 30 principals from diverse backgrounds and schools. To be eligible to apply for the SLEI, candidates were required to be currently employed and to have completed the Principal Induction Program, a 2-year mandatory program for new principals.

The goals of the SLEI were stated as follows: Principals will learn how to (a) improve student achievement; (b) use self-reflection and self-analysis techniques that will challenge them to reflect carefully about their own beliefs and values; (c) approach problems creatively; (d) develop strategies for including others in leadership; (e) communicate effectively; (f) align school programs with local, state, and federal policies; and (g) use multiple sources for evaluation tools. The curriculum focused on assisting principals in three skill areas: leadership, management, and educational best practices. The curriculum focused on combination of theory-based and skill-based practices. The

courses were taught by internal staff as well as experts in the area of best practices (Virginia Professional Development Programs for School Leaders, 2006). At the time of this writing, requests for program evaluation data had gone unanswered and could not be located on line through e-Lead or through the school division's Web site.

The School Leadership Program, a joint effort of the Tuscaloosa City School System and the University of Alabama, strove to recruit, train, and mentor individuals in acquiring the knowledge and skills necessary to acquire principalships in the district (Virginia Professional Development Programs for School Leaders, 2006). Each candidate was required to have 3 years of teaching experience and hold a master's degree in an instructional area before submitting an application. It was also required that each candidate receive a recommendation from his or her building-level principal.

One goal of the School Leadership Program was to increase the pool of qualified persons for jobs at specific underrepresented grade-level structures by training individuals for the principalship. Another goal was to ensure that school system personnel were aware that graduates of the School Leadership Program had contributed to an increase in the pool of qualified principal candidates. The curriculum was a combination of theory and skill-based. Participants in the School Leadership Program were provided with two mentors, one from the school system and one from the University of Alabama-Tuscaloosa, as well as an advisor from the school system. The curriculum was focused on training aspiring leaders. At the time of this writing, criteria were being finalized to measure the effectiveness of the program.

In the search for preparation programs, several programs were located that had been designed with the premise that they could be tailored to fit any school system. One

such program was developed by the National Institute for School Leadership (National Institute for School Leadership [NISL], 2006). The purpose of this organization was to help school districts prepare principals to be outstanding instructional leaders in high-performing, standards-based schools. The philosophy of their preparation program was based on the premise that principals in today's society need to be able to produce strong gains in student achievement in an environment of unprecedented accountability.

According to the NISL, principals need to know how to enhance the quality of literacy and mathematics teaching, think strategically, build staff teams, share responsibility for leading schools, communicate effectively to gain the support of staff and parents, build strong professional development programs, implement instructional systems, and manage schools for results. The NISL developed the curriculum for a training program to help principals apply learned information to real-life experiences in their schools; the curriculum was a combination of theory-based and skill-based.

The NISL training model involved school system leadership teams' participating in the training at the institute and then, in turn, returning to their school systems to train their local principals on the leadership techniques (NISL, 2006). The multiyear NISL preparation program was based on the premise that all school leaders can benefit from the same types of preparation training because all school leaders have similar leadership needs; the program included both theoretical training and training in specific skills as well as information about concepts that impact school leaders in any district. Because this was a basic training program designed to address leadership across the board, the program did not address specific locality issues and needs.

To determine the success of the NISL program, the Consortium for Policy Research in Education (CPRE) conducted an independent research study of the influence of NISL on principals' leadership knowledge and practices. The CPRE collected data from principals to understand the challenges that principals faced and the ways in which NISL was influencing their efforts to lead schools (NISL, 2006). This information was used not only to determine the success of the design but also to adjust or revamp the preparation training program in the future.

To measure the success of the NISL program, the CPRE measured student achievement data in 2006 from schools whose principals participated in the NISL program. Based upon 2006 disaggregated, standardized student achievement test scores, the CPRS reported that schools whose principals participated in the NISL program raised student achievement at a faster rate than did schools in the comparison group: schools whose principals did not attend the NISL program. In schools whose principals participated in the NISL training, 61% of the students met state standards; student achievement gaps with regard to ethnicity and income were reported to improve 64% and 71% respectively. It is important to note that these results should be accepted with caution as the NISI Web site did not report the entire study and subsequent data. Scores prior to the year 2006 were mentioned but not posted; therefore, it was difficult to determine the actual growth of the student scores for the schools whose principals participated in the NISL training. In addition, the Web site did not report any data regarding the control group; the number of schools in the control group and their student achievement scores before and during the study were not mentioned except for the assertion that the NISI principals' schools performed better.

The education profession has moved toward the development of explicit standards centered on performance in school settings. Initially, the national Policy Board for Educational Administration identified 21 key proficiencies for principals, and the NAESP provided its own set of essential competencies. Recently, the ISLLC developed standards for school leaders that are closely linked to the goal of improved student learning and that reflect the responsibilities of principals (NISL, 2006). School districts should consider these standards when planning principal preparation programs.

The roles of principals are becoming ever more complex. Although on-the-job training is valuable, experience can often be a harsh teacher. Preparation programs need to respond to the realities of school leadership. Principals' preparation must be well planned, focused on student achievement, and supportive of reflective practice. The programs need to include opportunities for principals and aspiring principals to work, discuss, and solve problems with colleagues (Drake & Roe, 2003). Participants from the Norfolk Public Schools Leadership Academy (2006) reported feeling more secure in their ability to reach out to other colleagues after working closely with peers during the academy program. Preparation programs need to be designed so that principals are not only prepared for basic administrative responsibilities but also capable of bringing their buildings to life (Portin et al., 2003).

In the study by Portin et al. (2003), *Making Sense of Leading Schools: A Study of the School Principalship*, which was critiqued earlier in this review, preparation was addressed in the following research question: How do current training programs adequately address the demands of the job? As noted earlier, the respondents to the survey indicated that experience or on-the-job training proved to be the best preparation

for their leadership roles. The respondents further expressed the opinion that their preparation for the principalship should have continued beyond college- or university-level training into their in-school work experience.

The respondents interviewed in the study by Portin et al. (2003) suggested that preparation programs designed for principals should include collections of experiences and opportunities beyond the credentialing programs offered in graduate schools. The respondents cited the following as key elements that should be included in preparation programs for school leaders: (a) how to address change in the culture of a school; (b) how to address change in people's attitudes; (c) how to integrate technology successfully in the classroom; (d) how to manage change; (e) how to resolve conflicts; (f) how to deal with unhappy or angry parents; (g) how to ensure that the needs of all children are being met; (h) how to build a focus around learning for all concerned; (i) how to manage conflicts arising over resource competition; and, (j) how to attract, support, and retain the highest quality teachers.

Developing successful preparation programs for principal leadership takes time. In fact, all of the leadership preparation programs mentioned in this review were implemented as early as 2005; however, the programs are still continually being developed, fine tuned, and revamped to meet the ever-changing pace of education. Many of the programs, to date, do not have stringent program evaluation systems in place. The one principal preparation program, NISI, that reported a formal study conducted on its effectiveness, did not adequately report the results so that the reader could accept the findings and conclusions without a sense of caution. In addition, the measure of effectiveness was based only on student achievement; other variables that may have

contributed to increased student achievement were not reported. The changing roles of principals, as well as the increasing demands of student accountability, contribute to the principal preparation programs' continually analyzing best practices for successful school leadership. Although principal preparation programs are continually being developed and reviewed for optimum results, to date there has not been a wealth of reported research on the effectiveness of such programs.

As indicated in this review, school divisions implement different types of preparation programs to prepare school leaders. Principals benefit from preparation programs that examine best practices, provide coaching support, encourage risk taking designed to improve student learning, cultivate team relationships, and provide quality time for reflection and renewal. The principals should complete principal preparation experiences with a renewed sense of faith in the transformative power of schools in children's lives (Fenwick & Pierce, 2002). Division leaders developing preparation programs for recently appointed principals face many challenges as they plan for leadership development. School divisions that fail to support principals may find their leadership becoming increasingly irrelevant (Lashway, 1999).

Many principals receive in-service training from their school districts to assist them in performing their roles as school leaders. Once principals are provided with such training from their school districts, the responsibility to perform the many roles of the principalship rests with the principals. The ultimate goal of student achievement must be first and foremost; however, all the other responsibilities of the principalship, whether on a daily, weekly, or yearly basis, fall to the principal, as well. After participating in principal preparation programs, do principals believe they are better prepared to lead their

schools? If so, what is to be said about principals who receive little or no preparation training from their school districts? To date, preparation programs designed by school divisions encompass a variety of materials, some based on district need and some based on theory. The question remains: Do preparation programs provided to recently appointed principals make a difference in the quality of leadership and their self-efficacy beliefs?

Self-efficacy, the belief in one's ability to perform a task, as well as the self-efficacy of principals may or may not be influenced by preparation programs. Bandura (1986) stated that self-efficacy is developed through different processes: mastery experiences, vicarious experiences, social persuasion, and emotional states. School districts planning principal preparation programs should develop programs with Bandura's process for developing self-efficacy at the forefront of the planning stages. This literature review continues by briefly exploring social cognitive theory and then critically examining the concept of self-efficacy.

### *Social Cognitive Theory*

Behaviorism originated with the work of John B. Watson. Watson claimed that psychology is not concerned with the mind or with human consciousness; instead psychology is concerned with behavior. Behaviorism today is associated with B. F. Skinner, who made his reputation by testing Watson's theories. Skinner's studies led him to reject Watson's almost exclusive emphasis on reflexes and conditioning. Skinner argued that although people respond to their environment, they also operate on the environment to produce certain consequences. Skinner sought to understand behavior as a function of environment histories of reinforcing consequences. Skinner asserted that

positive reinforcement is more effective than punishment at changing and establishing behavior. One of the distinctive aspects of Skinner's theory is that it attempts to provide behavioral explanations for a broad range of cognitive phenomena. In short, behaviorism is based on the notion that behavior is learned and is strongly influenced by environmental factors (Bandura, 2000).

Albert Bandura developed a social learning theory to help explain problems he saw with Skinner's behaviorism theory. Bandura conducted studies in the 1960s and 1970s that led him to believe behavior is not simply a reaction to environmental stimuli; he surmised that behavior can be learned from watching a model perform the behavior and that behavior subsequently can be copied. He believed that learning can be cognitive as well. Bandura found behaviorism too simplistic for the phenomena he first researched and offered a new explanation: Environment causes behavior, but behavior causes environment as well. Bandura labeled this concept reciprocal determinism, meaning that an individual's actions and the actions of the world around him or her are intertwined (Pajeres, 2002).

Social cognitive theory began as a social learning theory. In 1963, Bandura and Walters wrote *Social Learning and Personality Development* (as cited in Pajeres, 2002). The publication served to broaden the concept of learning theories by including principles of observational learning and vicarious reinforcement (Pajeres). In 1970, however, Bandura became dissatisfied with his own learning theory; he returned to his research and in 1977 identified an element that was not included in the original theory: self-beliefs. Bandura continued the research and in 1986 changed the name of the theory from social learning theory to social cognitive theory. Also in 1986, Bandura authored another

publication, *Social Foundations of Thought and Action: A Social Cognitive Theory*. The purpose of the label change for the theory was to distance the theory from prevalent learning theories of the day and to emphasize that cognition plays a critical role in people's capability to construct reality, self-regulate, encode information, and perform behaviors (Bandura, 1986).

Bandura's (1986) new social cognitive theory viewed human functioning as the product of a dynamic interplay of personal, behavioral, and environmental influences. This view became the foundation for Bandura's conception of reciprocal determinism: that interactions resulting in triadic reciprocity are created by personal factors in the form of (a) cognition, affect, and biological events; (b) behavior; and (c) environmental influences. Bandura wrote,

In this triadic reciprocal determinism, the term reciprocal refers to the mutual action between causal factors. The term determinism is used to signify the production of effects by certain factors, rather than in the doctrinal sense of actions being completely determined by a prior sequence of events independent of the individual. (p. 23)

Key to this sense of agency is the fact that, among other personal factors, individuals possess self-beliefs that enable them to exercise a measure of control over their thoughts, feelings, and actions (Bandura, 1986). Individuals are viewed both as products and as producers of their own environments and of their social systems:

Social cognitive theory states that factors such as economic conditions, socioeconomic status, and educational and familial structures do not affect human behavior directly; instead they affect it to the degree that they influence people's

aspirations, self-efficacy beliefs, personal standards, emotional states, and other self-regulated influences. This social cognitive view of human and collective functioning had a profound influence on psychological thinking and theorizing during the last 2 decades of the 20<sup>th</sup> century and the early years of the new millennium (Pajares, 2002, p. 3)

Of all the thoughts that affect human functioning, at the very core of social cognitive theory are self-efficacy beliefs: “people’s judgments of their capabilities to organize and execute a course of action required to attain designated types of performances” (Bandura, 1986, p. 391). This study was designed to enhance the knowledge in the area of principal self-efficacy; it will be useful in reporting perceived levels of self-efficacy of newly appointed principals.

### *Self-Efficacy*

Bandura (1986) stated that self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment (p. 391). Unless people believe their actions can produce the outcomes they desire, they will have little incentive to act in the face of difficulties. Much empirical evidence now supports Bandura’s contention that self-efficacy beliefs touch virtually every aspect of people’s lives, whether they think in a productive or self-debilitating manner or in a pessimistic or optimistic manner, including the extent to which they motivate themselves and persevere in the face of adversities, their vulnerability to stress and depression, and the life choices they make (Pajares, 2002).

Self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance to exercise influence over events affecting their lives. Such beliefs determine how people think, feel, and motivate themselves as well as how they behave. The beliefs produce diverse effects through four major processes: cognitive, motivational, affective, and selection processes (Bandura, 1994)

Bandura (1994) described cognitive processes as thinking processes that involve acquisition, organization, and use of information. Motivational processes include the level of motivation that is reflected in one's choice of course of action, intensity and persistence of effort. Affective processes are processes that regulate emotional states and elicit emotional reactions. And finally, selection processes are processes that include the level of selection reflected in one's choice of activities or environments.

If an individual has a strong sense of efficacy, his or her accomplishments and personal sense of well-being are influenced. Individuals with high assurances of their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided (Bandura, 1994). Such individuals set challenging goals for themselves and maintain strong commitments to the goals. They heighten and sustain their efforts in the face of failure and quickly recover their sense of efficacy after failures and setbacks (Bandura, 2000). On the other hand, individuals who doubt their capabilities shy away from difficult tasks, which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to pursue. When faced with difficult tasks, they dwell on personal deficiencies and on the outcomes they might encounter rather than ways in which they might perform successfully (Bandura, 1994).

Human functioning is influenced by many factors. The success or failure that people experience as they engage the myriad tasks that constitute their lives naturally influence the many decisions they must make (Pajares, 2002). The knowledge and skills they possess certainly play critical roles in what they choose to do and not do. People interpret the results of their attainments, however, just as they make judgments about the quality of knowledge and skills they possess. Bandura's (1997) key contention with regard to the role of self-efficacy beliefs is that people's levels of motivation, affective states, and actions are based more on what they believe than on what is objectively true. For this reason, how people behave can often be better predicted by the beliefs they hold about their capabilities than by what they are actually capable of accomplishing, for these self-efficacy perceptions help determine what individuals do with the knowledge and skills they have. This phenomenon helps explain why people's behaviors are sometimes disjoined from their actual capabilities and why their behavior may differ widely even when they share similar knowledge and skill. People's accomplishments are generally better predicted by their self-efficacy beliefs than by their previous attainments, knowledge, or skills; however, no amount of confidence or self-appreciation can produce success when requisite skills and knowledge are absent (Pajares).

Bandura (1994) explained that an individual's beliefs about his or her own efficacy can be developed through four main sources of influence. First, the most effective way is through mastery experiences, as success builds a strong belief in one's personal efficacy. Failures undermine self-efficacy, especially if the failures occur before a sense of efficacy is firmly established. A resilient sense of efficacy requires experience in overcoming obstacles through perseverant effort. Once people become convinced they

have the ability to succeed, they persevere in the face of adversity and quickly rebound from setbacks.

Second, experiences provided through vicarious experiences increase self-efficacy. Seeing other individuals succeed raises the observer's beliefs and leads to feelings of personal capability in mastering comparable activities. The impact of modeling on perceived self-efficacy is strongly influenced by perceived similarity to the models (Bandura, 1994). Modeling does more than provide a social standard against which people judge their own capabilities. People seek proficient models that possess the competencies to which they aspire. Through their behavior and expressed way of thinking, competent models transmit knowledge and teach observers effective skills and strategies for managing environmental demands. Acquisition of skills and strategies raises perceived self-efficacy.

Third, social persuasion strengthens an individual's belief that succeeding is possible. Individuals who are persuaded verbally that they possess the capabilities to master activities are more likely to achieve the goal. Persuasion boosts perceived self-efficacy and the notion that if people try hard enough, they can succeed; social persuasion promotes development of skill and sense of personal efficacy (Bandura, 1994). Successful efficacy builders do more than convey positive appraisals. In addition to raising people's beliefs in their capabilities, efficacy builders structure situations for people in ways that bring success and avoid prematurely placing them in situations in which they are likely to fail. They measure success in terms of self-improvement rather than triumph over others.

Finally, self-efficacy can be developed through people's emotional states. The sheer intensity of emotional and physical reactions is not as important as the way in which the reactions are perceived and interpreted. People who have a high sense of efficacy are likely to view their state of affective arousal as an energizing facilitator of performance, whereas those who are beset by self-doubts regard their arousal as a debilitator (Bandura, 1994).

Perceived self-efficacy is an individual's belief in his or her personal capabilities to exercise control over functioning and over events that affect his or her life. Self-efficacy perceptions affect life choices, levels of motivation, quality of functioning, resilience to adversity, and vulnerability to stress and depression (Bandura, 1994). Perceived self-efficacy changes from infancy to adulthood depending on the types of experiences an individual undergoes (Bandura).

During the past decade, self-efficacy beliefs have received increasing attention in educational research, primarily in studies of academic motivation and self-regulation (Pajares, 2000). To understand the role that expectancy beliefs play in academic settings, researchers have investigated the relationship between these beliefs and various academic performances as well as relationships among the beliefs themselves (Pajares, 1996). It is important to note that there have been problems related to assessment in self-efficacy research. Bandura (1997) stated that efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the critical task being assessed and the domain of functioning being analyzed. Bandura further stated that these cautions often have gone unheeded in educational research, resulting in self-efficacy assessments that reflect global or generalized attitudes about capabilities bearing slight or no resemblance to the critical

task with which they are compared. Efficacy beliefs vary in level, strength, and generality, and these dimensions prove important in determining appropriate measurement (Bandura).

Bandura (1986) stated that reasonably precise judgments of capability matched to a specific outcome afford the greatest prediction and offer the best explanation of behavioral outcomes; these are the sorts of judgments that individuals call on when confronted with behavioral tasks. In other words, capabilities assessed and capabilities tested should be similar capabilities (Pajares, 1996). When the cautions are heeded, and when the capabilities are closely matched, there are ample reasons to believe that self-efficacy is a powerful motivation construct that works well to predict academic self-beliefs and performances at varying levels. This construct works best when it adheres to theoretical guidelines and procedures regarding specificity and correspondence (Pajares).

In their study, *Self-Efficacy and Skill Development: Influence of Task Strategies and Attributions*, Schunk and Gunn (1999) examined how task strategies and acknowledgment of success during mathematics learning influenced children's self-efficacy and skills. The purpose of the research was to test predictions of the self-efficacy model. Children who needed practice in division skills received training and practiced solving problems. The study had two objectives. One objective was to determine how children's use of task strategies influenced their self-efficacy and skills. A second objective was to determine how children's self-efficacy and skills were influenced by attribution of their task successes and how task strategies influenced attributions (Schunk & Gunn).

Schunk and Gunn's (1999) study included 50 children from two different elementary schools. The children's range of ages was from 9 years, 3 months to 10 years, 9 months ( $M = 10.0$  years). There were 28 boys and 22 girls, all from predominantly middle-class homes. The children's teachers were shown the division test prior to the selection of the children, and the teachers identified children they believed would not be able to solve more than 25% of the problems. These children were administered the pretest individually by one or two female adult testers.

At the beginning of the study, a pretest was administered. The children were introduced to a scale that measured the children's certainty for completing the division problems. The children received training on the scale and judged their own capabilities to solve the division problems. Next, the children were given a division skills test that included 18 division problems with different levels of difficulty. The measure of skill was determined by how many problems the children answered correctly.

For the next step in the study, the children participated in four 40-minute training sessions, during which they received different levels of training on division. During the training sessions, the children's use of task strategies was determined by having the children verbalize how they were solving division problems. A female proctor provided directions to the children. After the last training session, the children were asked to think about their work during the four training sessions and to indicate how much they believed each factor of the training helped them solve the division problems. This process was completed to gather the children's attributions for their problem solving.

The next day, the children were given posttests. The self-efficacy and division-skill instruments and procedures were similar to those of the pretest except that a parallel

form of the skill test was used to eliminate possible problem familiarity. The same tester administered the pretests and posttests to the children.

The data from the study were analyzed using hierarchical multiple regression techniques. Variables were added to each regression equation in predetermined steps based on the following temporal order: pretest efficacy, pretest skill, effective task strategies, attributions, and posttest efficacy (Schunk & Gunn, 1999). No causal reciprocity was assumed between the attribution variables. It is important to note that the results of this study should be viewed with some caution. When multiple regression is employed with a small total sample size and a large number of predictors, the regression coefficients can be unstable from one sample to another, especially when independent variables are intercorrelated (Schunk & Gunn).

The study by Schunk and Gunn (1999) concluded that students who believe they can effectively employ task strategies should experience higher self-efficacy for performing well than those who doubt their capabilities to cognitively process task information. Self-efficacy is validated when students employ strategies while working on the tasks and observe their successes in solving problems.

Effective use of task strategies had a much greater effect on skill development than on changes in self-efficacy (Schunk & Gunn, 1999). The study supported the idea that although self-efficacy is influenced by task performances, it is not a mere reflection of them. This study also supported the notion that perceptions of capabilities affect subsequent skillful performance. Self-efficacy is validated when students employ strategies while working on the tasks and observe their successes in solving problems. The research study demonstrated that attributional feedback linking children's learning

with attributions had an important effect (Schunk & Gunn). The researchers concluded that teachers who deliver attributional feedback during classroom learning may help to develop students' skills and self-efficacy in applying them.

The purpose of Bouffard-Bouchard's (1989) study, *The Influence of Self-Efficacy on Performance in a Cognitive Task*, was to investigate the influence of self-efficacy judgments on cognitive performance when subjects have equivalent knowledge and experience in the performance domain. This study permitted examination of the specific effect of different levels of perceived self-efficacy on performance in an academic task.

The study began with a verbal concept-formation task that consisted of a pretest with a sample of 54 college students. The task consisted of seven problems, each comprising six different sentences. In each sentence, the same target word was replaced by a nonsense word. The task objective was to discover the single meaningful word that adequately replaced the nonsense word. To control for between-student differences in vocabulary, target words were selected from a list of commonly used French-Canadian terms (Bouffard-Bouchard, 1989).

Sixty-four college students volunteered to participate in the study, 42 females and 22 males. Each student was randomly assigned to one of two experimental conditions. For the first condition, students were given 3 minutes per problem to execute three problems. The students were asked to rate on a scale of 0 to 10 how certain they were of the correct answers. They received positive or negative feedback based upon their responses. The second condition of the study was designed to verify the success of the experimental induction by measuring the students' perceived self-efficacy on four problems of varying difficulty. The students were asked whether or not they believed

they would succeed in solving the problems; then they were assessed on their level of confidence. Students were given a problem and were required to answer two questions for each problem to indicate whether or not they believed they would succeed and how confident they were. Students placed their answers in envelopes and sealed them. Students were then given a 20-minute period to solve problems orally.

Performance was assessed by using the following indicators: (a) persistence, the number of problems that a student worked on until finding a correct or incorrect response; (b) success, the number of correct responses; (c) optimization of the problem-solving process, the number of trial words needed to attain each success; and (d) level of certainty of the correctness of responses.

It was necessary to verify the success of the experimental manipulation to rule out differences in competencies among the students. To do this, the researcher evaluated requisite skills that existed in both groups of students. Separate two-by-two analyses of variance were performed with group and gender as independent variables to assess group differences in perceptions of self-efficacy and competence and to assess the impact of self-efficacy judgments on performance outcomes (Bouffard-Bouchard, 1989).

Four indicators were used to examine the impact of self-efficacy judgments on performance. A significant main effect of group,  $F(1, 62) = 24.985, p < .0001$ , was found for the number of problems completed. No main effect of gender or interactions between group and gender were evident. The group identified by the data as possessing higher self-efficacy completed a significantly greater number of problems ( $M = 3.81$ ) than did the low self-efficacy group ( $M = 2.64$ ). Analyses were performed on the number of

correct responses. The analysis did not reveal any other significant main or interaction effects (Bouffard-Bouchard, 1989).

The researcher also examined the relationship between perceived self-efficacy and performance within each group. A Pearson product moment correlation revealed that within the high self-efficacy group, there was a strong positive association between perception of self-efficacy and problem success,  $r(31) = .63, p < .001$ ; however, perception of self-efficacy was not related to the number of problems completed,  $r(31) = .11, p > .05$ , or to the number of trail words,  $r(31) = .07, p > .05$ . Within the low self-efficacy group, there was no relation between perceived self-efficacy and problem completion, problem success, or the number of trail words necessary for successful performance (Bouffard-Bouchard, 1989).

The results of the study revealed that perceived self-efficacy was related both to task persistence and to ability to evaluate the correctness of responses (Bouffard-Bouchard, 1989). Concerning persistence in performance, the findings were consistent with those reported in earlier studies with younger students and different tasks. The results of the study extended previous findings on the relation between perceived self-efficacy and performance on different types of tasks (Bouffard-Bouchard).

According to Bandura (1994), those who enter adulthood poorly equipped with skills and plagued by self-doubts will find many aspects of their adult life stressful and depressing. There are a number of ways in which self-efficacy beliefs can contribute to career development and success in vocational pursuits. In preparatory phases, people's perceived self-efficacy partly determines how well they develop the basic cognitive, self-management, and interpersonal skills on which occupational careers are founded.

Development of coping capabilities and skills in managing one's motivation, emotional states, and thought processes increases perceived self-efficacy: the higher the sense of self-efficacy the better the occupational functioning.

### *Self Efficacy of Principals*

In accountability models such as those set forth by No Child Left Behind (NCLB), the principal is positioned at the center of a school's efforts to facilitate student learning. With this in mind, it is important to understand the value of the principal's perceived self-efficacy in facilitating an effective teaching and learning environment in his or her school (Smith, Guarino, Strom, & Reed, 2003). What principals do is a direct consequence of what and how they think. Principals' sense of efficacy represents a judgment of their own capabilities with regard to structuring particular courses of action to produce desired outcomes in the schools they lead (Bandura, 1997). Self-efficacy has a significant impact on goal setting, level of aspiration, effort, adaptability, and persistence (Bandura, 1986).

Although empirical studies of principals' sense of efficacy were limited, the results were intriguing. Self-efficacy beliefs were found to be excellent predictors of behavior (Tschannen-Moran & Gareis, 2004). According to Osterman and Sullivan (1994), principals with a strong sense of self-efficacy are persistent in pursuing their contextual conditions; they are steadfast in their efforts to achieve their goals. Confronted with problems, high-efficacy principals do not interpret their inability to solve the problems immediately as failure. They regulate their personal expectations to correspond to conditions, typically remaining confident and calm even in difficult situations. Lyons

and Murphy (1994) noted that principals with higher self-efficacy are more likely to use internally-based personal power, such as expert, information, and referent power, when carrying out their roles. According to these researchers, low-efficacy principals have been found to perceive an inability to control the environment and tend to be less likely to identify appropriate strategies or modify unsuccessful ones. When challenged, they are more likely to blame others. They do not see opportunities, develop support, or adapt. They are quicker to call themselves failures and demonstrate anxiety, stress, and frustration (Lyons & Murphy).

The study of principals' efficacy beliefs had been hampered in the past by the lack of reliable and valid instruments to capture the construct. To address the need for a valid and reliable instrument, Tschannen-Moran and Gareis (2004) conducted a study entitled *Principals' Sense of Efficacy: Assessing a Promising Construct*. Three ministudies were conducted in the search for a reasonably valid and reliable measure to assess principals' sense of self-efficacy.

In the first ministudy, a series of vignettes adapted from a measure developed in Australia by Dimmock and Hattie (1996) were utilized to measure principals' self-efficacy. The vignettes were adapted to represent the situations principals face within the context of American education. For each of the nine vignettes, ten possible responses were offered, ranging from *totally not confident* to *totally confident*. The sample for the first study included 104 high school principals and assistant principals from public high schools in Ohio (Tschannen-Moran & Gareis, 2004). The respondents were primarily male (85%) and White (95%). The participating schools constituted a fair representation of schools throughout the state. Using standardized statewide scales with a mean of zero,

the mean school socioeconomic status (SES) rating of the sample was -.01, and on an urban to rural continuum, the mean for the sample was -0.03. The average school size for the state was 785 and the average for the sample was 727. Of the 149 schools invited to participate, only 97 agreed to do so, representing a response rate of 65%. A researcher visited each of the participating schools and administered the principal efficacy surveys.

A factor analysis using principal axis factoring with varimax rotation was used to analyze the data (Tschannen-Moran & Gareis, 2004, p. 577). The results were disappointing to the researchers: The communalities were quite low, ranging from .21 to .44; only four of the nine items reached a minimally acceptable level of .40. Although the Cronbach's alpha reliability statistic for the nine-item instrument was .77, the item-total correlations were low, ranging from .34 to .61. The researchers concluded that this instrument was insufficient to prove useful for further studies. This conclusion should be accepted with caution due to the response rate. Although one might assume random selection of the sample, the poor representation of females and other ethnic groups in the study is suspect.

In the second ministudy, another measure of principals' efficacy was tested; it was based on an adaptation of the Goddard measure of collective teacher efficacy. The 22 items on the measure were designed to assess analysis of task as well as personal capability. Participants responded along a 6-point rating scale: 1 = *strongly disagree* and 6 = *strongly agree*. The respondent group in this study included the same Ohio school principals from the first study as well as 53 middle school principals and assistant principals from Virginia. The process for selecting the sample of participants was similar to the process used in the first study.

A factor analysis using principal axis factoring with varimax rotation was used to analyze the data (Tschannen-Moran & Gareis, 2004). Communalities ranged from .21 to .65 with eight falling below .40. Seven factors emerged to explain 65.85% of the variance; however, the three strongest factors explained only 42% of the variance. Tschannen-Moran and Gareis reported that the Cronbach's alpha indicating reliability for the 22 items was .79. The researchers, once again, found this instrument to be an unreliable measure of principals' sense of efficacy; therefore, the results should be accepted with caution. More respondents were included in this ministudy; however, the random selection process remains suspect.

Following the first two studies, the researchers developed their own measure of principals' self-efficacy, the Principal Sense of Efficacy Scale (PSES). The PSES was developed as an adaptation of the Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001). The TSES sought to capture teachers' assessment of both their level of competence and the difficulty of the task. In the initial development of the PSES survey instrument, 50 items were generated to assess various aspects of principals' work. These 50 items were based largely on the professional standards articulated by the Interstate School Leaders Licensure Consortium (ISLLC) (Tschannen-Moran & Gareis, 2004). The 50 items were then submitted for review to a panel of experts that included three professors of education and one superintendent. The survey instrument was then field tested with 10 former principals to check for the clarity of directions and the appropriateness of the items and the response scale and to collect any other observations or feedback the principals were willing to offer. In addition to the 50 items on the survey instrument from the third study, participants were asked to respond to

21 questions concerning aspects of their schools, preparation, and personal characteristics. Each principal was asked to indicate the level of his or her school, the context of the school, the approximate proportion of students receiving free or reduced-price lunches, and the predominant racial composition of the community in which the school was located. In addition, each principal was asked to rate the quality of the school facilities, resource support, and support from the superintendent, central office staff, teachers, support staff, parents, and students. Personal characteristics requested on the survey included gender, race, number of years as a school administrator, number of years at the current school assignment, and the quality of formal preparation for the principalship. The respondent was also asked to indicate whether he or she would become a principal if given the chance to begin a career anew (Tschannen-Moran & Gareis).

After development and field testing of the PSES, the authors needed to determine the replicability and reliability of the PSES. The PSES was distributed via mail to 1,925 principals in public elementary, middle, and high schools in Virginia that were listed on the Department of Education Web site. After 2 weeks, reminder postcards were mailed to the entire sample, thanking them for their participation and encouraging those who had not returned the survey to do so. The response rate for the survey was 28%. The sample for the study constituted 544 principals from public schools across Virginia. The sample was evenly divided between male and female participants, 50% each. A large majority (86%) of respondents were Caucasian, 13% were African American, and 1% were identified as other. The authors attributed the low response rate to the length of the survey as well as the timing of the survey, which corresponded with accountability measures' being administered within the state (Tschannen-Moran & Gareis, 2004). The response

rate could pose a limitation to the study in the form of response bias; a true representation of the population may not have responded due to the timing of the survey. No data were included by the authors of the study regarding the reason the surveys were distributed during state accountability assessments. The authors reported that the demographic information provided by the respondents regarding gender and ethnicity were representative of the principals in Virginia, based on the response rate of a previous study conducted 2 years earlier, which included 49% males, 51% females, as well as 83% Caucasian, 16% African American, and 1% other. The authors did not identify the comparison study.

Once the data were analyzed from the responses to the PSES, a factor analysis of the 50 items reduced the survey to 18 items that resulted in the emergence of three subscales. The first subscale included six items related to the self-efficacy of principals in handling the management aspects of the job. The second subscale included six items related to the self-efficacy of principals for instructional aspects of the job. The third factor included six items related to self-efficacy for moral leadership.

Bandura (2000) explained that an individual's beliefs about his or her own efficacy can be developed through four primary sources of influence: mastery experiences, vicarious experiences, social persuasion, and emotional states. Bandura made numerous recommendations for the construction of self-efficacy measures; the researcher stated that efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the critical task being assessed and the domain of functioning being analyzed. Efficacy levels vary in level, strength, and generality; these dimensions prove important in determining appropriate measures. Tschannen-Moran and

Gareis (2004) stated that self-efficacy beliefs are context specific and should assess the range of behaviors necessary to succeed at a given task in the predicted context. Self-efficacy measures should examine both level and strength of efficacy beliefs. Level refers to task difficulty and a range of tasks at varying degrees. Strength should be assessed by asking respondents to identify a point along a continuum of beliefs rather than indicate an all-or-none response.

Tschannen-Moran and Gareis (2004) examined the construct validity of the PSES by testing the correlation of the PSES with other constructs to determine whether or not the anticipated relationships emerged. Work alienation and principals' trust in teachers and clients were utilized as constructs (Tschannen-Moran & Gareis). These types of constructs were used because alienation was presumed to be conceptually distant and negatively related to principals' sense of efficacy (Tschannen-Moran & Gareis). Work alienation was defined as the extent to which individuals fail to experience intrinsic pride or meaning in their work (Forsyth & Hoy, 1978). Principals' sense of efficacy was significantly negatively related to work alienation and positively correlated to both trust in teachers and to trust in students and parents.

Procedures to ensure content validity, reliability, and construct validity for the PSES resulted in the survey instrument's becoming a questionnaire consisting of 18 questions, each of which began with the following stem: "In your current role as principal, to what extent can you..." The answer to each of the questions was classified according to one of three subcategories of self-efficacy: efficacy for management, efficacy for instructional leadership, or efficacy for moral leadership. These three subcategories are explained in detail in chapter 3. The strategy employed by the authors

to capture the context-specific nature of self-efficacy beliefs was to embed the context of each question within the directions and the sentence stem for the item. This strategy proved to be reasonably successful in making the instrument context specific without sacrificing the ability to make comparisons across contexts (Tschannen-Moran & Gareis, 2004).

The PSES subsequently included a 9-point rating scale with the following response options: *a great deal*, *quite a bit*, *some degree*, *very little*, and *none at all*. The responses were scored as follows: 1 point was assigned to items rated *none at all*, 3 points to items rated *very little*, 5 points to items rated *some degree*, 7 points to items rated *quite a bit*, and 9 points to items rated *a great deal*. A scale score was calculated for each of the three subcategories of self-efficacy—self-efficacy for management aspects of the job, self-efficacy for instructional aspects of the job, and self-efficacy for moral leadership of the job—by summing the points from the six questions that corresponded with each subcategory. The sum for each subcategory indicated the level of self-efficacy for that area as perceived by the recently appointed principals.

Based upon the findings from the third study, which outlined the development, field testing, and research for the PSES instrument, Tschannen-Moran and Gareis (2004) recommended further testing of the instrument, especially in light of the low response rate. The authors noted that of the three instruments examined, the PSES was the most promising; however, they also suggested that future studies include factor analysis to explore whether or not the factor structure is stable across studies in other populations. The authors also noted that the construct validity of the instrument could be used in conjunction with an established measure of leadership functioning that assesses both task

and relationship dimensions of leadership. At the time of this writing, there had been no documentation in the research of the PSES's being utilized for further studies on principals' sense of self-efficacy.

The results of the third study should be accepted with caution because of the low response rate. The researchers attributed the low response rate to the length and timing of the survey, which was distributed to principals at the same time that the state accountability measure was being conducted.

In discussing the validity and reliability of the instruments used in the three studies, the researchers reported that the third instrument was the most successful; however, the researchers reported that the instrument needed further investigation because of the low response rate. Tschannen-Moran and Gareis (2004) also suggested that future studies include factor analysis to explore whether or not the factor structure found in their study would be stable across studies of different populations.

Clearly it is not sufficient simply to hire capable principals; the principals themselves also must believe they can successfully meet the challenges of the task at hand (Tschannen-Moran & Gareis, 2004, p. 582). Nonbelief in one's efficacy may retard development of the very subskills upon which more complex performances depend (Bandura, 1986). Bandura further asserted that if self-efficacy is lacking, people tend to behave ineffectually, even though they know what to do. In contrast, people who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as inefficacious. With the school principal's role being increasingly defined in terms of academic achievement, a principal's sense of efficacy plays a critical role in meeting the expectations and demands of the position.

Principals' efficacy beliefs not only influence the level of effort and persistence they put forth in daily work but also determine their resilience in the face of setbacks (Tschannen-Moran & Gareis, 2004). Hiring and retaining the most capable principals is no longer merely enough; principals must believe they can meet the challenges of the tasks at hand. Bandura (2000) asserted that when people are faced with obstacles, setbacks, and failures, individuals who doubt their capabilities slacken their efforts, give up, or settle for mediocre solutions. On the other hand, those with a strong belief in their capabilities redouble their efforts to master the challenges. According to Tschannen-Moran and Gareis, the role of principals is increasingly defined in terms of academic achievement and success as measured by high-stakes assessment results. They further stated that principals' sense of self-efficacy plays an important role in meeting the demands of the position.

Bandura's (1997) theory of triadic reciprocal causation explains the relationship observed between principals' sense of efficacy and their performance, their use of power, and their coping strategies. Triadic reciprocal causation focuses attention on the interaction between internal and external factors at work within a leadership context. Principals' behavior is influenced by their internal thoughts and beliefs, but these beliefs are shaped by elements in the environment (Tschannen-Moran & Gareis, 2004).

Developing the self-efficacy of principals should be an important objective for those responsible for improving the quality of leadership in school divisions. Social cognitive theory includes implications for the preparation and professional development of school principals to equip them with important capabilities and a resilient sense of efficacy; that sense of efficacy will enable them to further enhance novice principals'

task-specific efficacy (Gist & Mitchell, 1992). Although mastery experiences are the most powerful efficacy-changing forces, they may be the most difficult to deliver to low-efficacy principals. School divisions providing preparation programs for newly appointed principals should develop programs that will provide opportunities for mastery experiences. Research on principal preparation indicates that skill-based programs designed to teach principals specific tasks typically considered to be management tasks are more closely aligned with the mastery experiences of Bandura's theory.

Brief and Aldag (1981) proposed a model of self in work organizations that addressed the role self-beliefs play in task performance. Ellis and Taylor (1983) found that task-specific self-esteem predicted key motivational and behavioral variables in the job search process. Barling and Beattie (1983) showed that self-efficacy perceptions were strongly correlated to sales performance among life insurance agents. Similarly, Taylor, Locke, Lee, and Gist (1984) reported that self-efficacy was directly related to research productivity among university faculty members. These correlational studies indicated a need for further examination of self-efficacy and the links between self-efficacy and task performance in organizational settings (Gist, 1987).

High-stakes testing and NCLB have highlighted schools' accountability for the outcomes of the education they provide. Key to this accountability are school principals, who are ultimately accountable for student achievement. Smith, Guarino, Strom, and Adams addressed this concern in a 2003 exploratory study, *Effective Teaching and Learning Environments and Principal Self-Efficacy*, which involved research of principals' self-efficacy beliefs for facilitating effective instructional environments at their schools. The study sought to address three research topics: the relationship between

principal self-efficacy beliefs and various demographic factors; differences between perceived beliefs and actual practices of principals; and outcome expectancy for principals to facilitate effective teaching and learning at their respective schools.

School superintendents were queried via e-mail regarding their interest in having principals from their school systems involved in the study. Those agreeing to have their schools' principals participate in the study were mailed survey packets for their principals. Survey participants were provided with envelopes to ensure anonymity. Each system returned their surveys in one packet. Completed surveys were returned by 284 principals from 12 states; represented in this study were 74 elementary schools, 30 middle schools, and 31 high schools. Of the respondents, 66% were male and 34% female; 83% were Caucasian, 14% African American, and 3% other. The majority of the respondents (54%) were principals of rural schools, whereas 17% were principals of suburban schools and 25% urban schools. The researchers used the Principal Self-Efficacy Survey; the survey was divided into three main sections. The first section was a 14-item inventory assessing principal self-efficacy in two domains: instructional leadership and management skills. Confirmatory factor analysis of this section of the survey yielded acceptable high goodness-of-fit indices ( $> .99$ ) for both the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) (Smith, Guarino, Strom, & Reed, 2003). The population discrepancy measure used in the study was the Root Mean Square Error of Approximation (RMSEA). The RMSEA achieved a value of .049 indicating a close fit between the sample coefficients and the estimated population coefficients. The correlation between the two factors was .69, demonstrating discriminant validity. Internal

consistency was also measured using Cronbach's alpha; resultant coefficients were .86 and .74 for instructional leadership and management practices, respectively.

The second portion of the Principal Self-Efficacy Survey contained eight items related to the amount of time principals spend during a week on typical activities. These questions also generated a two-factor solution with instructional leadership and management practices representing the latent constructs.

The last section of the Principal Self-Efficacy Survey asked principals to rate their beliefs regarding the effectiveness of their efforts to facilitate effective instruction in their schools. The choice options for this item were designed to correlate with productive engagement, grievance or protest, stress, and apathy.

Four separate stepwise regression analyses were conducted to identify the most important variable in predicting each of the four criterion variables: self-efficacy in instructional leadership, self-efficacy in management, reported time devoted to instructional leadership, and reported time devoted to management.

The first stepwise regression analysis, predicting self-efficacy in instructional leadership, yielded  $R^2 = .145$ ,  $p < .001$ . Variables that were significant in the equation were gender, free or reduced-price lunch, and the number of students. The second stepwise regression analysis, predicting self-efficacy in management, yielded  $R^2 = .196$ ,  $p = .017$ . The only variable that reached significance was free or reduced-price lunch. The third stepwise regression analysis, predicting reported time devoted to instructional leadership, yielded  $R^2 = .156$ ,  $p < .001$ . Variables that were significant in this equation were gender and free or reduced-price lunch. The fourth stepwise regression analysis,

reported time devoted to management, yielded  $R^2 = .051$ ,  $p = .002$ . The variable that was significant in this equation was number of years as a principal.

To determine whether or not significant differences existed between the percentage of time principals reported in instructional and management practices, a one-way within-subjects analysis of variance (ANOVA) was conducted. A significant difference was found: principals reported spending significantly more time on management practices ( $M = 2.14$ ,  $SD = .162$ ) than on instructional practices ( $M = 1.83$ ,  $SD = .61$ ).

The final question on the Principal Self-Efficacy Survey asked respondents to select the one best answer that described the expected outcome of their efforts to facilitate an effective teaching and learning environment at their school. Only two respondents indicated that time spent in improving teaching and learning at their schools made little difference and left them feeling discouraged and depressed, whereas 226 (80%) indicated that their efforts were generally productive and worthwhile. The remaining 56 respondents (20%) indicated a belief in their ability to improve teaching and learning in their schools but contended that their efforts to do so were hampered by policy or other impediments (Smith, Guarino, Strom, & Reed, 2003).

The 226 participants in the study reported active engagement in facilitating positive outcome expectancies for teaching and learning at their schools. Although 56 respondents reported having the ability to facilitate effective teaching and learning, they indicated that external variables hindered their efforts. Only two principals reported having serious doubts about their ability to create the desired outcomes. The overwhelmingly positive response to the outcome expectancy or actions provided strong

evidence that principals participating in this study were having their self-efficacy beliefs reinforced through the attainment to some degree of valued outcomes relative to improving teaching and learning at their schools. Given the central role of principals as change agents in current school accountability models, this finding represents good news indeed (Smith, Guarino, Strom & Reed, 2003).

The aforementioned study presents a basis for the notion that self-efficacy beliefs of principals relate to their daily practices. The understanding of how principals are prepared for those daily practices is critical to school divisions as they plan principal preparation programs designed to enhance knowledge acquired at the university level. As noted, Bandura's (1998) theory of self-efficacy describes four sources for developing self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional states. School systems implementing principal preparation programs, specifically programs designed to enhance self-efficacy, provide recently appointed principals with the strategies necessary to perform their roles while enhancing their self-efficacy. One type of principal preparation program that mirrors Bandura's theory of developing self-efficacy is the skill-based preparation program.

Research on self-efficacy has supported the existence of high correlations between efficacy perceptions and subsequent performance (Gist, 1987). Further research on the perceived self-efficacy of principals will enlighten school divisions and guide them in developing preparation programs to enhance the effectiveness of principals. Tschannen-Moran and Gareis (2004) reported a gap in knowledge regarding the perceived self-efficacy of principals. This study was designed to narrow the gap.

*Summary*

According to Bandura (1986), the concept of self-efficacy, initially developed and used as a clinical tool, was being investigated by many researchers who argued that perceived self-efficacy predicts performance in such diverse areas as assertiveness training, adherence to an exercise program, athletics, pain tolerance and control, phobias, smoking cessation, and sales performance (Pajares, 1996). Bandura asserted that among the types of thoughts that affect people's actions, none is more central or pervasive than individuals' judgments of their own capabilities to deal effectively with various realities. Self-efficacy theorists need to chart directions to guide subsequent research and practice and adopt research strategies to provide practical, relevant, and theoretical insights (Pajares).

The research on the ever-changing role of the principalship was abundant, continuing to document the vast responsibilities of the principal (Hess & Kelly, 2005a). In addition to these extensive responsibilities, principals are being held accountable for the laws of NCLB, which mandate that every student achieve. Principals are expected to produce outcomes; however, researchers such as Levine (2005) have argued that principals are fulfilling their roles but are underprepared when they leave their graduate school programs. Hess and Kelly stated that school divisions have a responsibility to ensure that learning does not stop at the university level and to implement programs designed to further university-level knowledge, which is typically theoretical in nature.

Bandura (1997) asserted that self-efficacy can be developed through four sources: mastery experiences, vicarious experiences, social persuasion, and emotional states.

School divisions need to utilize Bandura's research to plan and implement principal preparation programs that provide opportunities for newly appointed principals to further develop self-efficacy. Current research on principal preparation programs has indicated that programs that teach skill-based practices are following Bandura's theory of self-efficacy development.

Research regarding self-efficacy of principals is more necessary than ever before (Smith, Guarino, Strom, & Reed, 2003). As more knowledge is developed in this area, research findings may prove to be useful with regard to principal certification, ongoing professional development or preparation programs, and licensure of school administrators (Smith, Guarino, Strom, & Reed). Professional staff development or preparation programs grounded in social cognitive theory focus on placing principals in real-world scenarios and providing them with opportunities for successful completion of activities that strive to enhance self-efficacy.

Pajares (2000) reported that the research of nearly 2 decades revealed that self-efficacy beliefs are strong determinants and predictors of academic accomplishments. How principals perform can be better predicted by their beliefs about their own capabilities than by what they are actually capable of accomplishing (Bandura, 1997). Research in this educational area has supported Bandura's claim that self-efficacy beliefs play an influential role in human development (Pajares, 1996). The research on the perceived self-efficacy of principals who had participated in principal preparation programs designed by school districts was relatively small; thus, a gap between what was known and what should be investigated was noted. Following Bandura's theory of self-efficacy, principal preparation programs designed to enhance the self-efficacy of recently

appointed principals should include processes to support the development of principals' sense of efficacy. Principal preparation programs should closely mirror the four processes people undergo to enhance self-efficacy: mastery experiences, vicarious experiences, social persuasion, and emotional states. Although the types of preparation programs outlined in this chapter are beneficial, one might expect to see a difference in the self-efficacy of principals who participate in programs designed to implement processes designed to enhance self-efficacy.

The self-efficacy of principals is a perplexing phenomenon. This research was designed to describe the perceived self-efficacy of recently appointed principals, including principals that had attended and those that had not attended various types of principal preparation programs designed by their school divisions. The perceived self-efficacy of both groups of recently appointed principals for various tasks within the principalship also were reported.

## Chapter 3: Design of the Study

### *Overview of Methodology*

This study was a quantitative investigation of the perceived self-efficacy of recently appointed principals as well as the influence of principal preparation programs, via school divisions, on the perceived self-efficacy of recently appointed principals; a causal comparative nonexperimental design was used. The primary purpose of the study was to determine the perceived self-efficacy of recently appointed principals and to determine whether or not differences existed in the perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs provided by school divisions. The principal preparation programs were described as skill based, theory based, or a combination of skill based and theory based. The term recently appointed principals refers to principals with 5 or fewer years of experience on the job.

The researcher further examined the self-efficacy of a control group consisting of recently appointed principals who had not participated in a principal preparation program, either because no such formal principal preparation program existed, because the principal preparation program was not a mandatory component of the principalship, or as was the case in some school divisions, because the recently appointed principal was not selected to participate.

The researcher also queried recently appointed principals who attended various types of principal preparation programs to determine if differences were evidenced in their perceived self-efficacy for management tasks, instructional leadership tasks, and

moral leadership tasks, as defined by the Principal Sense of Efficacy Scale (PSES), a survey instrument developed by Tschannen-Moran and Gareis (2004).

A survey instrument was utilized to collect data to answer the proposed research questions. Results of the survey were analyzed using descriptive statistics to determine the perceived self-efficacy of recently appointed principals. Inferential statistics were utilized to determine differences in the perceived self-efficacy of recently appointed principals who participated in one of three types of principal preparation programs provided by their school divisions as well as those who participated in no principal preparation program. Finally, the researcher utilized inferential statistics to determine if recently appointed principals who participated in various types of principal preparation programs evidenced differences in perceived self-efficacy for management tasks, instructional leadership tasks, or moral leadership tasks, as defined by the PSES.

The survey consisted of three subsections: demographics, history of professional development, and the PSES. Demographic and history of professional development data were gathered from the recently appointed principals and analyzed to ensure the data adequately represented school divisions across the Commonwealth of Virginia and to analyze variables that may have impacted the internal validity of the study. To determine the appropriate sample size, a power analysis designed specifically for ANOVAs was conducted using a Web-based program, Raosoft Sample Size Calculator, designed for such determinations (Raosoft, 2006).

*Statement of the Research Questions*

This study utilized a causal comparative nonexperimental design and addressed two primary research questions related to the perceived self-efficacy of recently appointed principals. The study also addressed three subquestions about the perceived self-efficacy of recently appointed principals with regard to certain types of tasks associated with the principalship.

The primary research questions addressed the perceived self-efficacy of recently appointed principals and the differences in the perceived self-efficacy of recently appointed principals who attended one of three types of principal preparation programs as well as those who did not participate in any type of preparation program.

The three subquestions examined differences in perceived self-efficacy for management tasks, instructional leadership tasks, and moral leadership tasks, as defined by the PSES, in recently appointed principals.

Following are the two primary research questions and the three subquestions that were answered in this study:

1. What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Efficacy Scale?
2. Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based principal preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Efficacy Scale?

- a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?
- b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for instructional leadership, as measured by the Principal Sense of Efficacy Scale?
- c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for moral leadership, as measured by the Principal Sense of Efficacy Scale?

### *Research Design*

In this study, a causal comparative nonexperimental design was utilized. Data were analyzed using descriptive statistics to examine the perceived self-efficacy of

recently appointed principals. As noted by Fraenkel and Wallen (2003), descriptive research is used to describe existing conditions.

Inferential statistics were used to analyze the differences in the perceived self-efficacy of recently appointed principals who had attended various types of principal preparation programs or no principal preparation program. Inferential statistics also were used to analyze the differences in the perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs or no principal preparation program for tasks within the principalship. According to Fraenkel and Wallen (2003), inferential statistics allow the researcher to make inferences about a population based on findings from a sample.

A survey instrument was utilized to collect data to answer the primary research questions as well as the subquestions. The survey instrument contained three subsections: demographics, history of professional development, and the PSES. Researchers use surveys to study the characteristics of populations by assessing the opinions, perceptions, and attitudes of individuals. Salkind (2000) wrote, "Survey research allows the researcher to get a broad picture of whatever is being studied and if sampling is done properly, generalization to much larger populations" (p. 23).

Limitations of the study were threefold. First, data were self-reported by the respondents, via the survey instrument, and therefore reflected only the information the respondents were willing to share. The results are only valid to the extent that the respondents understood the survey items and completed the survey accurately in reporting their perceived self-efficacy, their actual preparation experiences, and their perceived self-efficacy for tasks within their roles as principals.

Second, respondents were not surveyed regarding the similarities and differences in implementation of the various types of principal preparation programs. Data were collected from the respondents regarding the various types of preparation programs attended; however, data were not collected regarding the delivery and implementation of the various types of programs. Preparation programs for recently appointed principals were implemented via the school divisions; time of year, time of day, number of days, number of hours, and length of sessions varied. These variables may or may not have contributed to the perceived self-efficacy of recently appointed principals and, therefore, constitute a limitation of the study.

Finally, respondents were not surveyed to collect data regarding the specific curricula presented during the various types of principal preparation programs. Respondents were asked to categorize their preparation programs according to four types: skill based, theory based, combination of skill and theory based, or no training. Descriptions were provided for each type of principal preparation program; however, the interpretation of the type of training was left solely up to the respondents. The results are valid only to the extent the respondents understood or interpreted the types of training.

The researcher attempted to control existing threats to the internal validity of the study. According to Fraenkel and Wallen (2003), researchers should control for threats to internal validity by standardizing the conditions under which the study occurs, obtaining more information related to the respondents and using the information in analyzing and interpreting the results, and choosing the appropriate research design. After extensively reviewing scholarly information regarding research designs, the researcher selected a casual comparative nonexperimental design for the study.

The researcher attempted to control the threats to the internal validity of the study by considering subject characteristics, which included age of the respondent, gender, and number of years of service as an assistant principal prior to being appointed to the principalship. To control for validity threats regarding age and gender, the researcher obtained more information about the respondents via the demographics section of the survey and tested the variables to assess the comparability of the groups.

The respondents reported various numbers of years in the assistant principalship prior to becoming principals. This variable was noted by the researcher as one that may or may not affect the self-efficacy of recently appointed principals. To control for the threat to validity with regard to this variable, the researcher obtained more information from the respondents, via the history of professional development section of the survey, regarding the number of years of service as an assistant principal prior to being appointed to the principalship and tested the variable to gauge the comparability of the groups.

### *Research Procedures*

#### *Population and Sample*

The principals surveyed for the study were a sample of recently appointed principals in the southeastern region of the Commonwealth of Virginia that attended the fall 2007 conference of the Virginia Association of Elementary School Principals (VAESP). A convenience sample was utilized to gather a moderate amount of data from a larger number of principals who attended the conference. The population was defined as all recently appointed principals in the southeastern region of the Commonwealth of Virginia during the 2007-2008 school year.

Although no formal data were available, the executive director of VAESP, Dr. Tom Shortt, reported via personal communication that information regarding conference participants over the previous 5 years indicated the typical conference attendees included principals and assistant principals with 1 to 15 years of experience as building administrators. The director further stated that the recently appointed principals were certified by the Virginia Department of Education as principals and were generally from geographic regions throughout the Commonwealth of Virginia. Attendees represented a cultural and economic mix typical of the citizens of Virginia; they were from urban, suburban, and rural school divisions throughout the Commonwealth of Virginia (T. Shortt, personal communication, October 12, 2006). Dr. Shortt did not provide exact numbers of the attendees who participated in the VAESP conference over the previous 5 years.

To obtain the data, the researcher surveyed all participants who attended the fall 2007 conference of the VAESP. Permission was requested from the conference administrators as well as Executive Director Shortt of the VAESP. Surveys were printed on bright yellow paper and mailed to Dr. Shortt prior to the conference; members of Dr. Shortt's staff placed a survey in each participant's registration packet. This method of delivery to the respondents was preferred by Dr. Shortt and his administrative staff.

To explain the inclusion of the survey in the registration packet, Dr. Shortt read a statement provided by the researcher at the opening session of the fall 2007 VAESP conference. The statement described the purpose of the study, explained the survey process, noted the process for gathering and analyzing the data and the process for asking questions regarding the study and survey, and explained how and where the respondents

should submit surveys once they were completed. Reminders to complete the survey were announced at each breakout session during the conference and at the closing session. Participants were continually reminded to complete the surveys and return them to the prearranged location at the conference registration table. The researcher collected the completed surveys at the prearranged location each afternoon throughout the two day conference.

The target population of interest for the study consisted of recently appointed principals with 5 or fewer years of experience in the Commonwealth of Virginia. The accessible sampling frame included all recently appointed principals having 5 or fewer years of experience and attending the fall conference of the VAESP. Based on the communication with the executive director of the VAESP, there appeared to be no systematic bias in the accessible population or the conference attendees with regard to the target population.

The sample of recently appointed principals was a convenience sample. Fraenkel and Wallen (2003) explained that a convenience sample is a group of individuals who are available for study. The obvious benefits of convenience samples include the fact that respondents are readily available for participation in the study and, in this case, that data were collected in a short timeframe; however, researchers must be mindful of biases that might exist with a convenience sample. It was anticipated that the limitations in using a convenience sample would be offset by the advantages associated with having a larger response rate. The sampling procedure was expected to gather a moderate amount of data from the principals who attended the fall VAESP conference. According to the Raosoft

Sample Size Calculator designed specifically for ANOVAs, the sample size needed for the study was 84, with a confidence level of .80.

Conference participants were informed that participation in the study was voluntary and that the data collected would be utilized for research purposes only. A survey cover letter was used not only to explain to participants that their choice to participate was strictly voluntary but also to assure them that the names of individual participants and the corresponding school districts would not be revealed (Appendix A).

Following the fall 2007 VAESP conference, surveys were reviewed by the researcher and separated into two groups: respondents who qualified for the sample and respondents who did not qualify for the sample. Respondents' surveys qualified for inclusion in the sample of the study when the respondents reported they were recently appointed principals with 5 or fewer years of experience. Respondents' surveys were disqualified from the sample if they reported more than 5 years of experience in the principalship. Random assignment of the respondents did not exist because the recently appointed principals with 5 or fewer years of experience automatically fell into one of four groups: respondents who had participated in skill-based principal preparation programs, respondents who had participated in theory-based principal preparation programs, respondents who had participated in a combination of skill- and theory-based principal preparation programs, and respondents who had not participated in any principal preparation program.

To increase the reliability of the results and to gather further data, the survey was distributed a second time to all recently appointed principals in a large urban school district in the southeastern region of Virginia during the fall of 2008-2009 school year.

The second data collection utilized the same survey instrument that was distributed for the first data collection, which took place at the fall of 2007 VAESP conference in Williamsburg, VA. The second data collection is described in detail in chapter 4 of this study.

### *Instrumentation*

The research entailed the use of the three-section survey instrument. The first section, the Demographic Cover Page, asked the respondent to answer a set of demographic questions regarding gender, ethnicity, age, years as a principal, location of school, size of the school in which the principal served, school percentage of students receiving free or reduced-price lunch, and whether or not the school at which the principal was employed made Adequate Yearly Progress (AYP) standards as defined by the No Child Left Behind Act (Appendix B).

The second section of the survey, History of Professional Development, asked the respondent questions regarding professional development experiences; the respondent was asked to indicate (a) type of institution where graduate degree was obtained, (b) year degree was obtained, (c) number of years of total teaching experiences prior to becoming a principal, (d) subject areas taught, (e) other positions held in the school division, (f) number of years as assistant principal, and (g) whether or not the respondent had participated in a principal preparation program designed by the school division after being appointed to the principalship. Furthermore, when the respondent indicated participation in a principal preparation program designed and implemented by the school division, this section of the survey asked the respondent to categorize the type of principal preparation program attended and indicate whether attendance was mandatory

or optional. Based on the review of literature presented in chapter 2, the types of principal preparation programs were categorized into three groups: skill based, theory based, or a combination of skill based and theory based (Appendix C).

The third section of the survey instrument, the PSES, was developed by Tschannen-Moran and Gareis (2004) and documented in their study, *Principals' Sense of Efficacy: Assessing a Promising Construct* (Appendix D). Their research, which is critically reviewed in chapter 2, consisted of three individual studies in the search for a reasonably valid and reliable measure to capture principals' sense of self-efficacy.

The first and second ministudies, respectively, examined an adaptation of an existing measure of principal sense of efficacy developed by Dimmock and Hattie (1996) and a measure of principal self-efficacy based on the Goddard, Hoy, and Woolfolk (2000) teacher efficacy scale. These ministudies are detailed in chapter 2; however, upon conclusion of these studies, Tschannen-Moran and Gareis (2004) concluded that the instruments were of insufficient stability and reliability to prove useful for future studies.

Following the first two studies, the researchers developed and tested a new measure of principals' sense of self-efficacy, the PSES, which was utilized as the third section of the survey for this study.

*Content validity.* The PSES was developed as an adaptation of the Teacher Sense of Efficacy Scale (TSES) presented by Tschannen-Moran and Hoy (2001). The TSES sought to ascertain teachers' assessment of both their level of competence and their perception of difficulty of the task. In the initial development of the PSES survey instrument, 50 items were generated to assess various aspects of principals' work. These 50 items were based largely on the professional standards articulated by the Interstate

School Leaders Licensure Consortium (ISLLC) (Tschannen-Moran & Gareis, 2004). The 50 items were then submitted for review to a panel of experts that included three professors of education and one superintendent. The survey instrument was then field tested with 10 former principals to check for clarity of the directions and appropriateness of the items and the response scale and to gather any other observations or feedback the principals were willing to offer. In addition to the 50 items on the survey instrument from the third study, participants were asked to respond to 21 questions concerning aspects of their schools, preparation, and personal characteristics. Each principal was asked to indicate the level of his or her school, the context of the school, the approximate proportion of students receiving free or reduced-price lunch, and the predominant racial composition of the community in which the school was located. In addition, the principal was asked to rate the quality of the facilities, resource support, and support from the superintendent, central office staff, teachers, support staff, parents, and students. Personal characteristics included gender, race, number of years as a school administrator, number of years at the current school assignment, perceived quality of his or her formal preparation for the principalship, and whether or not the respondent would become a principal if given the chance to begin his or her career again (Tschannen-Moran & Gareis).

*Reliability.* After development and field testing of the PSES, the authors needed to determine the replicability and reliability of the instrument. The PSES was distributed via mail to 1,925 principals in public elementary, middle, and high schools in Virginia that were listed on the Department of Education Web site. After 2 weeks, reminder postcards were mailed to the entire sample, thanking them for their participation and encouraging

those who had not returned the survey to do so. The response rate for the survey was 28%. The sample of the study included 544 principals from public schools across Virginia. The sample was evenly divided between male and female participants, 50% each. A large majority (86%) of respondents were Caucasian, 13% African American, and 1% identified as other. The authors attributed the low response rate to the length of the survey as well as the timing of the survey, which corresponded with accountability measures' being administered within the state (Tschannen-Moran & Gareis, 2004). The timing factor could pose a limitation to the study in the form of response bias; a true representation of the population may not have responded due to the timing of the survey. No data were included by the authors of the study indicating why the surveys were distributed during state accountability assessments. The authors reported that the demographic information provided by the respondents with regard to gender and ethnicity were representative of the principals in Virginia based on the characteristics of respondents in a study conducted 2 years earlier: 49% males, 51% females, 83% Caucasian, 16% African American, and 1% other. The authors did not identify the comparison study.

Once the data from the responses on the PSES were analyzed, a factor analysis of the 50 items reduced the survey to 18 items that resulted in the emergence of three subscales. The first subscale included six items that related to self-efficacy of principals to handle the management aspects of the job. The second subscale included six items that related to self-efficacy of principals for instructional aspects of the job. The third factor included six items that related to self-efficacy for moral leadership. These data are presented in Table 1.

Table 1. *Factor Loading Results From the PSES*

PSES	Factor 1	Factor 2	Factor 3
Efficacy for management			
Handle the time demands of the job	.82	.11	.11
Handle the paperwork required of the job	.73	.14	.19
Maintain control of daily schedule	.70	.20	.22
Prioritize among competing demands of the job	.63	.27	.26
Cope with the stress of the job	.57	.21	.19
Shape the operational policies and procedures that are necessary to manage your school	.53	.15	.30
Efficacy for instructional leadership			
Motivate teachers	.15	.81	.20
Generate enthusiasm for a shared vision for the school	.15	.79	.18
Manage change in your school	.25	.67	.19
Create a positive learning environment in your school	.17	.64	.29
Facilitate student learning in your school	.22	.62	.21
Raise student achievement on standardized tests	.17	.45	.32
Efficacy for moral leadership			
Promote acceptable behavior among students	.20	.26	.78
Promote school spirit among a large majority of the students	.21	.17	.59
Handle effectively the discipline of students in your school	.21	.25	.56
Promote a positive image of your school with the media	.36	.22	.51
Promote the prevailing values of the community in your school	.38	.29	.43
Promote ethical behavior among school personnel	.21	.17	.59

*Note:*  $N = 544$ ; Factor 1: Eigenvalue = 7.4; cumulative percent of variance explained = 41.12; Factor 2: Eigenvalue = 1.9; Cumulative percent of variance explained = 51.84; and Factor 3: Eigenvalue = 1.4; Cumulative percent of variance explained = 59.64

To determine the reliability of the PSES for this sample, a Cronbach's alpha coefficient was calculated; the result for internal consistency with all 18 items in the analysis was a coefficient of .91. Each of the three subscales reported by Tschannen-Moran and Gareis (2004) also reflected high reliability: .86 for efficacy for instructional leadership, .87 for efficacy for management, and .83 for efficacy for moral leadership.

*Construct validity.* Bandura (2000) explained that an individual's beliefs about his or her own efficacy can be developed through four main sources of influence: mastery experiences, vicarious experiences, social persuasion, and emotional states. Bandura (2000) made numerous recommendations regarding the construction of self-efficacy measures. According to Bandura, efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the critical task being assessed and the domain of functioning being analyzed. Efficacy levels vary in level, strength, and generality and these dimensions prove to be important in determining appropriate measures. Tschannen-Moran and Gareis (2004) described self-efficacy beliefs as context specific, asserting that they should assess the range of behaviors necessary to succeed at a given task in the predicted context. Self-efficacy measures should examine both level and strength of efficacy beliefs. Level refers to task difficulty and a range of tasks at varying degrees. Strength should be assessed by asking respondents to identify a point along a continuum of beliefs rather than indicate an all-or-none response.

Tschannen-Moran and Gareis (2004) examined the construct validity of the PSES by testing the correlation of the PSES with other constructs to determine if anticipated relationships emerged; the constructs of work alienation and principals' trust in teachers and clients were utilized. Alienation was presumed to be conceptually distant and

negatively related to principals' sense of efficacy (Tschannen-Moran & Gareis). Work alienation was defined as the extent to which individuals fail to experience intrinsic pride or meaning in their work (Forsyth & Hoy, 1978). Principals' sense of efficacy was significantly negatively related to work alienation and positively correlated to both trust in teachers ( $r = .42, p < .01$ ) and trust in students and parents ( $r = .47, p < .01$ ). This information is depicted in Table 2.

Table 2. *Construct Validity for the PSES*

	2	3	4	5	6	7
Principal sense of efficacy (PSE)	.79**	.86**	.85**	-.45**	.42**	.47**
PSE for instruction (2)		.46**	.58**	.41**	.44**	.39**
PSE for management (3)			.58**	.37**	.27**	.33**
PSE for moral leadership (4)				.37**	.37**	.49**
Work alienation (5)					.37**	.44**
Principal trust in teachers (6)						.48**
Principal trust in parents and students (7)						

*Note:*  $N = 544$ , \* $p < .05$ , and \*\* $p < .01$ . Correlations between principal sense of efficacy and validity variables.

Based upon the procedures to ensure content validity, reliability, and construct validity for the PSES, the survey instrument became a questionnaire consisting of 18 questions, each of which began with the following stem: "In your current role as principal, to what extent can you. . ." The answer to each of the questions was classified according to one of three subcategories of self-efficacy: efficacy for management,

efficacy for instructional leadership, or efficacy for moral leadership. These three subcategories are explained in detail in chapter 2. The strategy employed by the authors to capture the context-specific nature of self-efficacy beliefs was to embed the context for the questions within the directions and the sentence stem for each item. This strategy proved to be reasonably successful in making the instrument context specific without sacrificing the ability to make comparisons across contexts (Tschannen-Moran & Gareis, 2004). Table 3 depicts the items that contribute to each of the subcategories.

Table 3. *Items of the Principal Sense of Efficacy Scale That Contribute to the Subcategories*

Principal efficacy aspects	Items
Efficacy for management	3. Handle the time demands of the job
	11. Maintain control of your own daily schedule
	12. Shape the operational policies and procedures that are necessary to manage your school
	15. Handle the paperwork required of the job
	17. Cope with the stress of the job
	18. Prioritize among competing demands of the job
Efficacy for instructional leadership	1. Facilitate student learning in your school
	2. Generate enthusiasm for a shared vision for the school
	4. Manage change in your school
	6. Create a positive learning environment in your school
	7. Raise student achievement standardized tests
	9. Motivate teachers
Efficacy for moral leadership	5. Promote school spirit among a large majority of the student population
	8. Promote a positive image of your school with the media
	10. Promote the prevailing values of the community in your school
	13. Handle effectively the discipline of students in your school
	14. Promote acceptable behavior among students
	16. Promote ethical behavior among school personnel

The PSES subsequently included a 9-point rating scale with the following response options: *a great deal, quite a bit, some degree, very little, and none at all*. The

responses were scored as follows: one point was assigned to items rated *none at all*, 3 points to items rated *very little*, 5 points to items rated *some degree*, 7 points to items rated *quite a bit*, and 9 points to items rated *a great deal*. A scale score was calculated for each of the three subcategories of self-efficacy—self-efficacy for management aspects of the job, self-efficacy for instructional aspects of the job, and self-efficacy for moral leadership of the job—by summing the points from the six questions that corresponded with each subcategory. The sum for each subcategory indicated the level of self-efficacy for each area as perceived by the recently appointed principals.

Based upon the findings from their third study, which outlined the development, field testing, and research on the PSES instrument, Tschannen-Moran and Gareis (2004) recommended further testing of the instrument, especially in light of the low response rate. The authors of the study noted that of the three instruments examined, the PSES was the most promising; however, the authors also suggested that future studies include factor analysis to determine the stability of the factor structure across studies of other populations. The authors also noted that the construct validity of the instrument could be studied in conjunction with an established measure of leadership functioning that assesses both task and relationship dimensions of leadership. To date, there has been no documentation in the research of the PSES's being utilized for further studies on principals' sense of self-efficacy.

Following discovery and further analysis of the PSES developed by Tschannen-Moran and Gareis (2004), the researcher of this study utilized the 18-item PSES as one component of the survey distributed to respondents. Blanket permission to use the PSES in scholarly research was granted in the authors' article, *Principals' Sense of Efficacy:*

*Assessing a Promising Construct.* The authors noted that the survey instrument was copyrighted; however, there were no copyright restrictions on the instrument for use in scholarly research and for nonprofit educational purposes.

To determine the reliability and validity of two sections of the total survey instrument, the demographic and professional development history components of the survey, which were developed by the researcher, were field tested with graduate students at The George Washington University. The students were enrolled in a graduate class that consisted of teachers and administrators; the class of 17 graduate students participated in the field test of the two components of the survey developed by the researcher. The demographic and professional development sections of the survey were completed in accordance with the directions provided by the researcher. During the validation session, the researcher was available to answer any clarifying questions regarding the survey components or the directions provided for completion of the survey. The researcher did not receive any questions regarding the field test, and the two sections of the survey were completed correctly. No corrections, deletions, or edits were made to the survey based on the results of the field test. Development of the demographic and professional development sections was completed by the researcher in approximately 3 months. Based upon the success of the field test experience, the demographic section and the professional development section were included with the PSES to complete a three-section survey that was distributed to conference participants at the 2007 fall VAESP conference.

*Measurement of Research Variables*

The independent variable for this study comprised the four levels of principal preparation programs described in the second research question: skill-based principal preparation, theory-based principal preparation, combination of skill- and theory-based preparation, and no principal preparation. The researcher selected these aspects as independent variables based upon review of the literature and application of inductive reasoning. This process involved reviewing the content base of principal preparation programs offered for recently appointed principals across the country. The four levels of training were those that were reported multiple times. Respondents were provided with descriptions of the preparation programs via the survey instrument and were asked to categorize their training according to the descriptions.

The dependent variables consisted of the three subscales of tasks associated with the role of the principalship as presented in the PSES: efficacy for management tasks, efficacy for instructional tasks, and efficacy for moral leadership tasks.

*Data Collection*

The researcher collected data on the perceived self-efficacy of recently appointed principals by surveying principals who attended the fall 2007 VAESP conference. Permission was granted from Dr. Tom Shortt, executive director, to survey the attendees. Surveys printed on bright yellow paper were mailed to Dr. Shortt prior to the conference. Members of Dr. Shortt's staff inserted surveys in all conference attendees' registration packets.

Dr. Shortt informed conference attendees about the inclusion of surveys in the registration packets by reading a statement at the opening session of the conference. The

statement described the purpose of the study, explained the survey process, noted the process for gathering and analyzing the data, and explained how and where the respondents should submit the completed surveys. Likewise, conference attendees were notified that the researcher was in attendance at the conference and was available for questions. Participants were continually reminded to complete the surveys, place them in the white envelopes provided, and return the completed surveys to the box located at the conference registration table. The registration table was attended by members of the conference committee. The researcher collected the completed surveys each afternoon during the conference. All collection procedures adhered to criteria specified by the Institutional Review Board of The George Washington University.

#### *Data Security*

Completed surveys were placed in sealed white envelopes by the respondents and placed in a collection box, which was located at the registration table at the conference. An employee of the VAESP continually monitored the registration table; the surveys were never left unattended. The researcher collected the envelopes at the end of each day of the conference. The collected surveys were opened by the researcher and sorted into two categories: (a) those completed by recently appointed principals with 5 or fewer years of experience and (b) those completed by principals or other personnel with more than 5 years of experience in their positions.

The researcher converted the survey responses to data files and completed data entry procedures. SPSS, version 11.5, was utilized for the data entry process. A second check of the data was completed by an assistant who verified the data entered into SPSS against the survey data to ensure accuracy. The data files were placed on a memory key

and were stored in a locked file cabinet. The individual principal surveys were destroyed at the end of the study; the data files will remain in a locked file cabinet for 10 years. The data obtained in this research study will remain private and be used for research purposes only.

### *Analysis Procedures*

This study utilized a causal comparative nonexperimental design. Descriptive and inferential statistics were utilized to answer the research questions. Quantitative data were obtained through the three sections of the survey instrument: the demographic section and the professional development history section, which were developed by the researcher, and the PSES, developed by Tschannen-Moran and Gareis (2004).

Inclusion of the demographic and professional development sections provided data that allowed for a more rigorous study. Data from the two sections were instrumental in controlling for extraneous sources of variance to better understand the unique relationships among the primary study variables. The respondent's age, gender, and number of years as an assistant principal prior to being appointed to the principalship were three variables that were tested to gauge comparability of the groups.

Descriptive statistics were utilized to answer the first research question. The mean, median, and standard deviation of the composite score of the perceived self-efficacy of recently appointed principals was reported. Furthermore, the mean, median, and standard deviation of the perceived self-efficacy of recently appointed principals for each of the three subscales of tasks within the PSES were reported: moral leadership, instructional leadership, and management tasks.

1. What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Efficacy Scale?

Utilizing inferential statistics, one-way, fixed-effects ANOVAs were conducted to measure the data gathered through the PSES to answer the second primary research questions and the three subquestions:

2. Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based principal preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Efficacy Scale?

a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?

b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for instructional leadership, as measured by the Principal Sense of Efficacy Scale?

c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for moral leadership, as measured by the Principal Sense of Efficacy Scale?

A one-way, fixed-effects ANOVA allowed the data to be used to test for differences in the means for perceived self-efficacy among the four levels of the independent variable. Likewise, the data were used to test the differences in the means of the three subcategories or tasks.

The statistical assumptions for an ANOVA were assessed, thereby providing for reliable results. The assumption of normality was assessed based upon the number of respondents. The sample size was sufficient to satisfy assumption. The assumption of independence was indicated by no obvious dependency between observations. The assumption of equality of variance was assessed using the Levene.

The ANOVA was calculated to ascertain whether or not differences in the means were significant. A strength-of-association test were conducted and reported as two values: eta squared and omega squared. These values indicated how much of the variance of the dependent variable was accounted for by the independent variable.

Significant ANOVAs indicate a real difference among means and necessitate conducting further statistical tests to determine which means show significance and differences. Multiple comparison or post hoc tests were conducted; the researcher utilized the Games Howell to control for Type 1 errors.

All statistical computations were performed using the statistical software, SPSS, Version 11 for Windows. An assistant was asked to verify that data entry and analysis were free of errors.

#### *Human Participants and Ethics Precautions*

Potential risks associated with participation in this study were extremely limited. Prior to the start of the study, approval from the Office of Human Research Institutional Review Board of The George Washington University was obtained; the study was conducted as described. An informed consent form for participation was developed and approved by the University. This form identified the purpose, procedures, possible risks, and benefits associated with the study; it also assured participants of confidentiality and anonymity with regard to the researcher's use and reporting of collected data. The form explained to the participants their right to withdraw from the study at any time. Every effort was made to report data accurately for the research purposes stated in this document.

#### *Summary*

This study was designed to collect data regarding the perceived self-efficacy of recently appointed principals as well as differences in the perceived self-efficacy of recently appointed principals who participated in various types of principal preparation programs designed and implemented by their school divisions. In addition, the study was designed to determine differences in the perceived self-efficacy of recently appointed principals who attended or did not attend various types of principal preparation programs

for tasks within the role of the principalship: efficacy for management, efficacy for instructional leadership, and efficacy for moral leadership.

To gather this information, a survey instrument was distributed at the fall 2007 conference of VAESP. The survey included three components: the PSES developed by Tschannen-Moran and Gareis (2004) as well as two sections to gather demographic information and professional development information, respectively; these two sections were developed and validated by the researcher. A review of the literature, presented in chapter 2, details the validity of the survey items.

## Chapter 4: Results

### *Findings of the Study*

The purpose of this study was to determine the perceived self-efficacy of recently appointed principals and to determine if differences existed in the perceived self-efficacy of recently appointed principals who attended various principal preparation programs provided by school divisions. Principal preparation programs were described as skill based, theory based, or a combination of skill based and theory based; the perceived self-efficacy of recently appointed principals who did not attend any principal preparation program was also analyzed. The perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs also were examined with regard to the three subgroups of self-efficacy: efficacy for management tasks, efficacy for instructional leadership tasks, and efficacy for moral leadership tasks, as defined by the PSES.

This chapter reports the findings of the research questions as captured by the survey instrument. The exploration occurred through the following research questions:

1. What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Efficacy Scale?
2. Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based principal preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Efficacy Scale?

- a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?
- b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for instructional leadership tasks, as measured by the Principal Sense of Efficacy Scale?
- c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in perceived self-efficacy for moral leadership tasks, as measured by the Principal Sense of Efficacy Scale?

*Description of the Sample*

The population consisted of a sample of recently appointed principals from the southeastern region of the Commonwealth of Virginia attending the Virginia Association of Elementary School Principals (VAESP) conference during the fall of the 2007-2008 school year. To gather data for the study, the researcher used a convenience sample,

which was defined as all recently appointed principals in the southeastern region of the Commonwealth of Virginia during the 2007-2008 school year. In an effort to address the research questions of the study, the researcher surveyed the recently appointed principals to gather data regarding their perceived levels of self-efficacy.

There were 152 attendees at the fall 2007 VAESP conference. The survey was distributed to all conference participants via their registration packets. At the opening session and at each breakout session, participants were reminded to complete and return the surveys to a box located at the conference registration table. By the end of the conference, 28 surveys had been completed and returned. Of the 28 surveys returned, 22 met the requirement of being completed by recently appointed principals: those with 1 to 5 years of experience in the principalship. The response rate for the data collection at the conference was 18.4% for total surveys and 14.5% for qualifying surveys, that is, surveys received from recently appointed principals having 5 or fewer years experience in the principalship.

Numerous efforts were employed during the conference by the officials of the VAESP, as well as the executive director, to encourage participants to complete the surveys located in their registration packets. The executive director informed conference attendees about the inclusion of surveys in the registration packets at the opening general session. Likewise, the survey was mentioned at breakout sessions. Participants were continually shown the survey and reminded to complete and return the surveys to the box located at the conference registration table. The surveys were the only documents included in the registration packet that were photocopied on bright yellow paper. Conference officials repeatedly announced that the researcher was present at the

conference to answer any questions or clarify information or directions regarding the survey. Conference attendees did not approach the researcher to ask questions or request further clarifying information. No evidence was noted regarding the reasons that participants did not participate in the survey.

To gain further data and to increase the reliability of the results, the survey was distributed a second time to all recently appointed principals in a large urban school district in the southeastern region of Virginia during the fall of the 2008-2009 school year. A second collection of data was utilized to increase the number of observations in the data set and to increase the reliability of the results. The second data collection utilized the same survey instrument that was distributed for the first data collection, which took place at the fall 2007 VAESP conference in Williamsburg, Virginia.

The target population of interest remained the same throughout the second data collection: all recently appointed principals in the Commonwealth of Virginia. The accessible population of the second data collection was all recently appointed principals employed in a large urban school division in the southeastern region of Virginia during the fall of the 2008-2009 school year.

During the second data collection process, the survey was distributed to 15 principals in a large urban school division who met the criterion of being recently appointed principals that is, having 1 to 5 years of experience in the principalship. Each of the 15 principals was mailed the survey instrument and was requested to return the completed survey to the researcher via mail, using the preaddressed stamped envelope provided. Participants were informed that participation in the study was strictly voluntary and that the data collected would be utilized for research purposes only. A survey cover

letter was used, not only to explain to participants that their choice to participate in the survey was strictly voluntary but also to reassure the participants that the names of individual participants and the corresponding school districts would not be revealed (See Appendix E). There were no features on the survey by which the researcher could identify the 15 individual principals. All 15 surveys were completed and submitted to the researcher, representing a 100% response rate for the second data collection. The surveys were all returned within 2 weeks of the mailing; therefore, no reminder notices were sent to the 15 principals.

The total number of surveys distributed between the two data collection sessions was 167; 43 surveys were returned, of which 37 met the criterion of being completed by recently appointed principals having 1 to 5 years of experience in the principalship, thereby representing a response rate of 22%. Efforts to gain survey responses during the first data collection, which took place during the fall 2007 VAESP conference, were numerous, including announcements by the opening speaker, announcements during each breakout session, and the division director's displaying the survey during one of the addresses to the principals in attendance. Despite numerous efforts by the staff of the VAESP conference, the sample size remained low. The second data collection yielded a 100% response rate from recently appointed principals in a large urban school division, who met the criterion of being recently appointed principals with 1 to 5 years of experience. The overall response rate between the two data collection sessions remained low at 22%. Of the 37 surveys that met the criterion, responses were completed for all 42 items.

The survey contained three subsections to be completed by the respondent; the first part consisted of a demographic section, the second part consisted of a professional development history section, and the third part consisted of the PSES. The demographic section gathered personal but nonidentifying information from the respondents, including gender, ethnicity, year of birth, number of years in the principalship, description of school location, number of students attending the school, number of students qualifying for free or reduced-lunch, and school performance data.

Data regarding key demographic characteristics gathered through the surveys collected from participants at the fall 2007 VAESP conference ( $n = 22$ ) are noted in Table 4. Data regarding key demographic characteristics ascertained through the fall 2008 second data collection process involving recently appointed principals from the large urban school division ( $n = 15$ ) are noted in Table 5. Likewise, the key demographic characteristics are reported for the total sample ( $N = 37$ ) in Table 6. Key demographic characteristics were gathered from attendees at the fall 2007 VAESP conference to determine participants for the study: recently appointed principals with 5 or fewer years of experience in the principalship. Demographic characteristics of age, number of years as an assistant principal, and gender were analyzed for the entire sample to control for threats to the internal validity of the study. In addition, demographic characteristics were gathered from the entire sample to further describe the recently appointed principals; they are discussed in chapter 5: grade levels housed in building, number of teachers supervised, student population, percentage of free and reduced lunch, Adequate Yearly Progress Accreditation status, and test performance of the student population.

Table 4. *Demographic Characteristics of the Sample From Fall 2007 VAESP Conference*

Demographic characteristic	<i>n</i>	%
<b>Gender</b>		
Male	11	50
Female	11	50
<b>Age</b>		
31-40	6	27
41-50	10	46
51-60	6	27
61-70	0	0
<b>Years in the principalship</b>		
1	1	4
2	4	18
3	5	23
4	7	32
5	5	23
<b>Grade levels in building</b>		
Elementary	17	77
Secondary	4	18
Not reported	1	0
<b>Number of teachers in building</b>		
0-25	3	14
26-50	13	59
51-75	4	18
76-100	0	0
101-125	0	0
126-150	1	5
Not reported	1	5

(continued)

Table 4 (continued)

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Student population		
0-250	0	0
251-500	10	46
501-750	7	32
751-1000	3	14
1001-1250	0	0
1250-1500	0	0
1501-1750	1	4
Not reported	1	4
Percentage of Free and Reduced		
Lunch		
0-25	7	32
26-50	8	36
51-75	3	14
76-100	3	14
Not reported	1	4
AYP accreditation		
Yes	15	68
No	6	27
Not reported	1	4
Test performance		
Passed 100% of SOLs	17	77
Passed 75% of SOLs	3	14
Passed 50% of SOLs	1	4
Passed no SOLs	0	0
Not reported	1	4

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Table 5. *Demographic Characteristics of the Sample From the Fall 2008 Recently Appointed Principals*

Demographic characteristic	<i>n</i>	%
<b>Gender</b>		
Male	8	53
Female	7	47
<b>Age</b>		
31-40	2	13
41-50	5	33
51-60	7	47
61-70	1	6
<b>Years in the principalship</b>		
1	3	4
2	3	18
3	4	23
4	2	32
5	3	23
<b>Grade levels in building</b>		
Elementary	9	60
Secondary	6	40
Not reported	0	0
<b>Number of teachers in building</b>		
0-25	0	0
26-50	5	33
51-75	5	33
76-100	2	13
101-125	1	7
126-150	2	13
Not reported	0	0

(continued)

Table 5 (continued)

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Student population		
0-250	0	0
251-500	3	20
501-750	5	33
751-1000	1	7
1001-1250	2	13
1251-1500	1	7
1501-1750	2	13
1751-2000	1	7
Not reported	0	0
Percentage of Free and Reduced		
Lunch		
0-25	6	40
26-50	5	33
51-75	3	20
76-100	1	7
Not reported	0	0
AYP accreditation		
Yes	13	87
No	2	13
Not reported	0	0
Test performance		
Passed 100% of SOLs	14	93
Passed 75% of SOLs	1	7
Passed 50% of SOLs	0	0
Passed no SOLs	0	0
Not reported	0	0

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Table 6. *Demographic Characteristics of the Total Sample*

Demographic characteristic	<i>n</i>	%
<b>Gender</b>		
Male	19	51
Female	18	49
<b>Age</b>		
31-40	8	22
41-50	15	41
51-60	13	35
61-70	1	2
<b>Years in the principalship</b>		
1	4	11
2	7	19
3	9	24
4	9	24
5	8	22
<b>Grade levels in building</b>		
Elementary	26	70
Secondary	10	27
Not reported	1	3
<b>Number of teachers in building</b>		
0-25	3	8
26-50	18	49
51-75	9	24
76-100	2	5
101-125	1	3
126-150	3	8
Not reported	1	3

(continued)

Table 6 (continued)

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Student population		
0-250	0	0
251-500	13	35
501-750	12	32
751-1000	4	11
1001-1250	2	5
1251-1500	1	3
1501-1750	3	8
1751-2000	1	3
Not reported	1	3
Percentage of Free and Reduced Lunch		
0-25	13	35
26-50	13	35
51-75	6	16
76-100	4	11
Not reported	1	3
AYP accreditation		
Yes	28	76
No	1	22
Not reported	1	3
Test performance		
Passed 100% of SOLs	31	84
Passed 75% of SOLs	4	11
Passed 50% of SOLs	1	3
Passed no SOLs	0	0
Not reported	1	3

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The professional development history section gathered information from each respondent regarding the type of institution from which graduate degrees were obtained, graduation requirements, year of graduation, number of years of teaching experience, subject areas taught, positions held in school systems, years of service as assistant principal, and information on principal preparation programs attended by the respondent. Collected data regarding the principal preparation programs included indication of whether attendance was mandatory or optional and the category of each principal preparation program: skill based, theory based, a combination of skill and theory based, or no training.

Information about key professional development characteristics was collected from attendees at the fall 2007 VAESP conference and from recently appointed principals employed in a large urban school division in southeastern Virginia in the fall of 2008. Categories of principal preparation programs were analyzed with inferential statistics to determine differences in the perceived self-efficacy of recently appointed principals. The variable of number of years as assistant principal was analyzed to control for threats to the internal validity of the study. The results related to professional development are reported for the fall 2007 VAESP conference respondents ( $n = 22$ ) (Table 7), fall 2008 recently appointed principals ( $n = 15$ ) (Table 8), and the total number of respondents for the study ( $N = 37$ ) (Table 9).

Table 7. *Professional Development Characteristics Reported by Fall 2007 VAESP Respondents*

Professional characteristic	<i>n</i>	%
Type of preparation		
Skill based	4	18
Theory based	5	23
Combination of skill based and theory based	5	23
No preparation	8	36
Years as assistant principal		
1-5	11	50
6-10	11	50
11-15	0	0
Level at which teaching experience occurred		
Elementary	13	59
Secondary	7	32
Both	2	9

Table 8. *Professional Development Characteristics Reported by Fall 2008 Recently Appointed Principal Respondents*

Professional characteristic	n	%
Type of preparation		
Skill based	2	13
Theory based	0	0
Combination of skill based and theory based	11	74
No preparation	2	13
Years as assistant principal		
1-5	7	47
6-10	6	40
11-15	2	13
Level at which teaching experience occurred		
Elementary	10	67
Secondary	5	33
Both	0	0

Table 9. *Professional Development Characteristics Reported by Total Sample*

Professional characteristic	<i>n</i>	%
Type of preparation		
Skill based	6	16
Theory based	5	14
Combination of skill based and theory based	16	43
No preparation	10	27
Years as assistant principal		
1-5	18	49
6-10	17	46
11-15	2	5
Level at which teaching experience occurred		
Elementary	23	16
Secondary	12	11
Both	2	5

The level at which the teaching experience occurred also was gathered from the entire sample to describe the level at which the recently appointed principals' teaching experiences occurred. Data regarding the responsibilities performed when assigned as assistant principals was also gathered from the total sample of recently appointed principals and reported in Appendix F. This data was not utilized for this study but was noted.

The third and final section of the survey contained the 18-item PSES.

SPSS, Version 11.5, was utilized in calculating the mean, median, and standard deviation for the composite mean score of the 18 items on the PSES to answer the first research question. In addition, the mean, median, and standard deviation were calculated

for the composite mean scores of the subcategories of perceived self-efficacy of recently appointed principals: efficacy for management tasks, efficacy for instructional leadership, and efficacy for moral leadership, as defined by the PSES. Use of the 18-item PSES was not documented in the research uncovered in the literature review for this study, with the exception of the research on the development process for the instrument. Tschannen-Moran and Gareis (2004) developed the PSES using factor analysis and Cronbach's alpha of internal consistency with regard to the 18 items. Cronbach's alpha reported the internal consistency for all 18 items as .91. Each of the three subscales reported by Tschannen-Moran and Gareis also reflected high reliability: .86 for efficacy related to instruction, .87 related to efficacy for management, and .83 related to efficacy for moral leadership.

For this study, interpretation of the 18-item score was based on a 9-point scale; higher composite scores indicated higher levels of perceived self-efficacy. In contrast, lower composite scores indicated lower levels of perceived self-efficacy. The 18 aspects noted on the survey were each rated between 1 and 9 by the recently appointed principals. Mean scores rather than total scores were utilized, so that scores could be interpreted using the original response scale.

Cronbach's alpha statistic was used to compute reliability estimates with the sample of 37 newly appointed principals. Streiner and Norman (1989) reported that the alpha coefficient should be above .70 but not much higher than .90. Cronbach's alpha reliability coefficients for the PSES are depicted in Table 10.

Table 10. *Internal Consistency (Cronbach's Alpha) Reliability Coefficients of the PSES for the Sample*

Scale	Alpha reliability	Items
Total Composite score	.83	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,13, 14, 15, 16, 17, 18
Management tasks	.85	3, 11, 12, 15, 17, 18
Instructional leadership	.76	1, 2, 4, 6, 7, 9
Moral leadership	.84	5, 8, 10, 13, 14, 16

*N=37*

The SPSS was used to calculate the differences in the mean scores for the overall perceived self-efficacy of newly appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based principal preparation programs, or no principal preparation program designed and implemented by their school divisions and for efficacy with regard to the three types of tasks measured by the PSES. The three tasks are explained in detail in chapter 3.

#### *Presentation of the Data: Research Questions*

Descriptive and inferential statistics were utilized to answer the research questions for this study. To answer the first research question, descriptive statistics were used to calculate and report the mean, median, and standard deviation for the composite mean score on the PSES. The mean, median, and standard deviation for each of the three subgroups of tasks were also calculated and reported: efficacy for management, efficacy for instructional leadership, and efficacy for moral leadership.

To answer the second research question and the three subquestions, inferential statistics were utilized. One-way fixed-effects ANOVAs were calculated using SPSS to determine if there was a difference in the perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs designed by their school divisions and to determine if there was a difference in perceived self-efficacy for management tasks, instructional leadership tasks, and moral leadership tasks as outlined in the PSES.

*Research question 1: What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Self-Efficacy Scale?*

Using SPSS, the mean, median, and standard deviation were calculated for the composite mean scores to determine the perceived self-efficacy of recently appointed principals ( $N = 37$ ). Perceived self-efficacy composite mean scores ranged from 7 to 9. The mean was 8 ( $M = 8$ ), the median was 8 ( $m = 8$ ), and the standard deviation was .58 ( $SD = .58$ ).

The mean, median, and standard deviation were also calculated for each of the three subgroups of tasks as defined by the PSES. These data are reported in Table 11.

Table 11. *Means, Medians, and Standard Deviations for Three Subgroups of Tasks as Defined by the PSES*

Subgroup	Mean	Median	Standard deviation
Management tasks	7.56	8	1.10
Instructional leadership	8.27	8.33	.60
Moral leadership	8.15	8.16	.54

*The response score anchors: 1=\_\_\_\_\_ 9=\_\_\_\_\_.*

*Research question 2: Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Self-Efficacy Scale?*

A one-way, fixed-effects ANOVA was used to determine if there were differences between the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program. The results of the ANOVA indicated that there was a significant difference, at the .05 level, in the means of the response scores of the groups:  $F(3, 33) = 3.522, p = .025$ . Calculations of eta squared and omega squared indicated that between 17% and 24% of the variability in the scores for the perceived self-efficacy of recently appointed principals was accounted for by the differences in the types of preparation programs.

Post hoc tests were conducted to determine the differences in perceived self-efficacy among principals who attended different types of preparation programs. The results of the Games-Howell pairwise comparisons indicated there was significantly lower perceived self-efficacy in recently appointed principals who attended combined skill- and theory-based preparation programs ( $n = 16$ ) ( $M = 7.85$ ) ( $SD = .48$ ) and who attended no principal preparation program ( $n = 10$ ) ( $M = 7.87$ ) ( $SD = .73$ ) compared to a higher perceived self-efficacy of recently appointed principals who attended theory-based preparation programs ( $n = 5$ ) ( $M = 7.95$ ) ( $SD = .28$ ) or skill-based preparation programs ( $n = 6$ ) ( $M = 8.63$ ) ( $SD = .30$ ).

For the ANOVA, random selection was not possible; however, there was no obvious dependency between the scores. The assumption of normality was not met; however, the ANOVA was robust for the assumption of normality. Weinberg and Abramowitz (2008) asserted that violations of the assumption of normality do not affect, or only minimally affect, the validity of the ANOVA. That is, the ANOVA has been shown to produce correct results even when the data are not normally distributed in the population. The assumption of the equality of variance was violated as indicated by the Levene's Test for Equality of Variances. The assumptions for the ANOVAS were the same for the remainder of the ANOVAS described in chapter 4; therefore, in the remainder of the research questions that followed, the assumptions were referred to and the results of the Levene were reported for each research question.

The result of the Levene's Test was  $F = 3.351$ , indicating significance. Due to this violation, the results of the ANOVA are suspect; however, the Games-Howell was utilized as a statistical test that does not rely on the equality of variance assumption.

*Research question 2a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?*

A one-way, fixed-effects ANOVA was used to determine if there were differences between the perceived self-efficacy of recently appointed principals for management tasks, as measured by the PSES. The results of the ANOVA indicated that there was a significant difference, at the .05 level, in the mean responses of the groups:  $F(3, 33) =$

2.963,  $p = .046$ . Calculations of eta squared and omega squared indicated that between 14% and 21% of the variability in the scores for the perceived self-efficacy of recently appointed principals for management tasks was accounted for by the differences in the types of preparation programs.

Post hoc tests were conducted to determine the differences in perceived self-efficacy for management tasks among principals who attended different types of preparation programs. The results of the Games-Howell pairwise comparisons indicated there was significantly lower perceived self-efficacy for management tasks in newly appointed principals who attended no principal preparation training ( $n = 10$ ) ( $M = 7.08$ ) ( $SD = 1.51$ ) than for those who attended a combination of skill-based and theory-based preparation training ( $n = 16$ ) ( $M = 7.38$ ) ( $SD = .74$ ), theory-based preparation training ( $n = 5$ ) ( $M = 7.93$ ) ( $SD = 1.11$ ), or skill-based preparation training ( $n = 6$ ) ( $M = 8.55$ ) ( $SD = .43$ ).

The assumptions for the ANOVA were the same as indicated in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F=2.07$ , indicating significance. Due to this violation, the results of the ANOVA are suspect; however, the Games-Howell was utilized as a statistical test that does not rely on the equality of variance assumption.

The results of the statistical analysis indicated there was a difference in the perceived self-efficacy for management tasks of newly appointed principals who attended skill-based, theory-based, combined skill- and theory-based preparation programs, or no preparation program. The study found the the perceived self-efficacy for management

tasks of recently appointed principals who attended no principal preparation training to be lower than the perceived self-efficacy of recently appointed principals who attended a combination of skill- and theory-based preparation programs, theory-based preparation programs, or skill-based preparation programs.

*Research question 2b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for instructional leadership tasks, as measured by the Principal Sense of Efficacy?*

A one-way, fixed-effects ANOVA was used to determine if there were differences between the perceived self-efficacy for instructional leadership tasks of recently appointed principals, as measured by the PSES. The results of the ANOVA indicated that there was no difference, at the .05 level, in the mean responses of the groups:  $F(3, 33) = 2.878, p = .051$ . Calculations of eta squared and omega squared indicated that between 0% and 20% of the variability was accounted for in the response scores.

Post hoc tests were conducted to determine differences in the perceived self-efficacy for instructional leadership tasks among recently appointed principals who attended different types of preparation programs. The results of the Ryan-Einot-Gabriel-Welsch F pairwise comparisons indicated there was no significant difference in the perceived self-efficacy of recently appointed principals for instructional leadership tasks.

The assumptions for the ANOVA were detailed in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F2.073$ , indicating no significance. Due

to this violation, the results of the ANOVA are suspect; however, the Ryan-Einot-Gabriel-Welsch F was utilized as a statistical test that does not rely on the equality of variance assumption.

*Research question 2c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for moral leadership, as measured by the Principal Sense of Efficacy Scale?*

A one-way, fixed-effects ANOVA was used to determine if there were differences between the perceived self-efficacy for moral leadership tasks, as measured by the PSES. The results of the ANOVA indicated that there was no difference, at the .05 level, in the mean responses of the groups:  $F(3, 33) = 2.142, p = .114$ . Calculations of eta squared and omega squared indicated that between 0% and 16% of the variability in the perceived self-efficacy of recently appointed principals was accounted for by the differences in the types of preparation programs the principals had previously attended.

Post hoc tests were conducted to determine the differences in perceived self-efficacy for moral leadership tasks among principals who attended different types of preparation programs. The results of the Ryan-Einot-Gabriel-Welsch F pairwise comparisons indicated there was no significant difference in the perceived self-efficacy of recently appointed principals for moral leadership tasks.

The assumptions for the ANOVA were detailed in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F = .717$ , indicating no significance. Due

to this violation, the results of the ANOVA are suspect; however, the Ryan-Einot-Gabriel-Welsch F was utilized as a statistical test that does not rely on the equality of variance assumption.

Upon analysis of the data for the two research questions and three subquestions, and due to the low sample size, the researcher utilized the Mann-Whitney nonparametric test to analyze the results from the study in another manner. The Mann-Whitney indicated the same results as the ANOVAs.

To control for threats to the internal validity, the researcher utilized one way, fixed-effects ANOVAs on age, years of experience in the current position, and years as assistant principal, to determine if there were differences in the perceived self-efficacy of recently appointed principal when demographic characteristics were considered. The researcher also utilized the Chi Square Test of Independence, to determine if differences existed in the perceived self-efficacy of recently appointed principals due to gender.

A one way, fixed-effect ANOVA was used to determine if there were differences between the perceived self-efficacy of recently appointed principals when the age of the respondent was considered. The results of the ANOVA indicated that there was no difference, at the .05 level, in the mean responses of the groups:  $F(3, 29) = 1.159, p = .342$ . Calculations of eta squared and omega squared indicated that between 1% and 10% of the variability in the perceived self-efficacy of recently appointed principals was accounted for by types of preparation programs attended.

Post hoc tests were conducted to determine the differences in perceived self-efficacy for age among principals who attended different types of preparation programs. The results of the Ryan-Einot-Gabriel-Welsch F pairwise comparisons indicated there

was no significant difference in the perceived self-efficacy of recently appointed principals for moral leadership tasks.

The assumptions for the ANOVA were detailed in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F = 1.509$ , indicating no significance. Due to this violation, the results of the ANOVA are suspect; however, the Ryan-Einot-Gabriel-Welsch F was utilized as a statistical test that does not rely on the equality of variance assumption.

A one way, fixed-effect ANOVA was used to determine if there were differences between the perceived self-efficacy of recently appointed principals when the years of experience in the current position was considered. The results of the ANOVA indicated that there was no difference, at the .05 level, in the mean responses of the groups:  $F(3,33) = 3.19, p = .812$ . Calculations of eta squared and omega squared indicated that between 2% and 8% of the variability in the perceived self-efficacy of recently appointed principals was accounted for by types of preparation programs attended.

Post hoc tests were conducted to determine the differences in perceived self-efficacy for years experience in the current position among recently appointed principals who attended different types of preparation programs. The results of the Ryan-Einot-Gabriel-Welsch F pairwise comparisons indicated there was no significant difference in the perceived self-efficacy of recently appointed principals for moral leadership tasks.

The assumptions for the ANOVA were detailed in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F = .303$ , indicating no significance. Due

to this violation, the results of the ANOVA are suspect; however, the Ryan-Einot-Gabriel-Welsch F was utilized as a statistical test that does not rely on the equality of variance assumption.

A one way, fixed-effect ANOVA was used to determine if there were differences between the perceived self-efficacy of recently appointed principals when years as an assistant principal were considered. The results of the ANOVA indicated that there was no difference, at the .05 level, in the mean responses of the groups:  $F(3, 32) = .856, p = .474$ . Calculations of eta squared and omega squared indicated that between 1% and 7% of the variability in the perceived self-efficacy of recently appointed principals was accounted for by types of preparation programs attended.

Post hoc tests were conducted to determine the differences in perceived self-efficacy for years as an assistant principal among recently appointed principals who attended different types of preparation programs. The results of the Ryan-Einot-Gabriel-Welsch F pairwise comparisons indicated there was no significant difference in the perceived self-efficacy of recently appointed principals for years as an assistant principal.

The assumptions for the ANOVA were detailed in research question two. The assumption of equality of variance was evaluated using Levene's Test for Equality of Variances. The result for the Levene's Test was  $F = 3.489$ , indicating no significance. Due to this violation, the results of the ANOVA are suspect; however, the Ryan-Einot-Gabriel-Welsch F was utilized as a statistical test that does not rely on the equality of variance assumption.

The Chi Square Test of Independence was utilized to determine if differences existed in the perceived self-efficacy of recently appointed principals due to gender. The

results of the Chi Square indicated that there was no difference, at the .05 level, in the mean responses of the group:  $F(3) = 1.090, p = .779$ .

Expected values were calculated based on gender and the different types of training. The Chi Square met the assumption of sample size The assumption of independence was also met. The categories of the Chi Square were all mutually exclusive.

### *Summary*

The purpose of this study was to determine the perceived self-efficacy of recently appointed principals and to determine whether or not there are differences in the perceived self-efficacy of recently appointed principals who attend various principal preparation programs provided by school divisions. Each principal preparation program was described as skill based, theory based, or a combination of skill based and theory based. The study also calculated the perceived self-efficacy of recently appointed principals who attended no principal preparation program. The study further investigated the self-efficacy of recently appointed principals through the examination of three subgroups of self-efficacy, as defined by the PSES. This topic was explored through the research questions depicted at the beginning of chapter 4.

The survey was completed by 37 recently appointed principals, reflecting a response rate of 22%, based upon a combination of two data collection processes. The first data collection occurred during the fall 2007 VAESP conference; the second data collection occurred during the fall 2008 school year. Both data collection processes

yielded data from recently appointed principals, with 5 or fewer years of experience in the principalship. The sample included recently appointed principals in the southeastern region of Virginia. Findings indicated that there was a difference in the perceived self-efficacy of principals as measured by the PSES. In addition, significant difference was noted in the perceived self-efficacy of recently appointed principals who attended skill-based, theory-based, a combination of skill- and theory-based, or no principal preparation program designed and implemented by their school divisions, as measured by the PSES. Significant difference also was noted in the perceived self-efficacy for management tasks among recently appointed principals who attended skill-based, theory-based, a combination of skill- and theory-based, or no principal preparation program designed and implemented by their school divisions, as measured by the PSES. There was no significance noted in the perceived self-efficacy for instructional leadership tasks or moral leadership tasks among recently appointed principals who attended skill-based, theory-based, a combination of skill- and theory-based, or no principal preparation program designed and implemented by their school divisions, as measured by the PSES.

## Chapter 5: Interpretations, Conclusions, and Recommendations

*Introduction*

The purpose of this study was to determine the perceived self-efficacy of recently appointed principals as well as differences in the perceived self-efficacy of recently appointed principals who attended various types of principal preparation programs designed by their school divisions. The study further determined the perceived self-efficacy of recently appointed principals who attended various types of preparation programs through the examination of three subgroups of self-efficacy, as defined by the Principal Scale of Self-Efficacy (PSES): efficacy for management tasks, efficacy for instructional leadership tasks, and efficacy for moral leadership tasks. To accomplish this goal, the researcher focused on the perceived self-efficacy of recently appointed principals, principal preparation programs, and tasks within the roles of the principalship, as derived and synthesized from the existing literature.

According to a report published by the Educational Research Service (ERS) (2000), *The Principal, Keystone of a High-Achieving School: Attracting and Keeping the Leaders We Need*, the widespread shortage of qualified principals has depleted the instructional leadership of the nation's schools and is seriously affecting efforts in whole-school academic improvement. Over the past decade, the demands of the principalship have become increasingly more complex (Fullan, 1997). The role of the principal has changed dramatically (Fernadino, 2008), and the demands placed on principals are such that very few qualified people are willing to assume these responsibilities. The report from the ERS asserted that principals need to be educationally savvy, good managers,

interested in using and applying research to improve the school, skilled in conflict resolution and mediation, and child advocates. According to Ferrnadino, the principal is the cornerstone of a school's success and improvement.

University principal preparation programs have undergone extreme scrutiny because of inadequate preparation of principals for their roles. According to Hess and Kelly (2005a), principals gain theoretical knowledge about the principalship at the university level; however, lack of knowledge exists regarding how to apply the theory within the roles of the principalship.

School divisions have begun to provide staff development in the form of principal preparation programs for newly appointed principals; these programs are designed to meet the demands of the principalship and to further enhance knowledge gained in college and university educational administration courses. Levine (2005) cited the importance of school divisions' working to ensure that principals have the skills needed to provide optimum leadership.

The foundation for this study resulted from examination of the existing literature with regard to social cognitive theory, self-efficacy, and the self-efficacy of principals. Social cognitive theory, which began as a social learning theory, was developed by Bandura in response to Skinner's theory of behaviorism. Bandura suggested that not only does the environment cause behavior but behavior also causes environment. He labeled this concept reciprocal determinism, meaning that an individual's actions and the actions of the world around him or her are intertwined.

Bandura (1986) asserted that self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment (p. 391). Self-efficacy is

defined as people's beliefs about their capabilities to produce designated levels of performance to exercise influence over events affecting their lives. Bandura (1994) explained that an individual's beliefs about his or her own efficacy can be developed through four primary sources of influences: mastery experiences, vicarious experiences, social persuasion, and emotional states. The role of self-efficacy beliefs in effective leadership has been found to influence analytic strategies, direction-setting, and subsequent organizational performance of managers (Wood & Bandura, 1989).

A principal's sense of efficacy is a judgment of his or her own capabilities to structure a particular course of action to produce desired outcomes in the school he or she leads (Bandura, 1997). It is a principal's self-perceived capability to perform the cognitive and behavioral functions necessary to regulate group processes in relation to goal achievement (Tschannen-Moral & Gareis, 2004). Bandura (2000) explained that when principals are faced with 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 double their efforts to master the challenge (p. 120).

Although there was a great deal of discussion in the literature regarding principal shortages and turnover rates, the role of the principal, self-efficacy, self-efficacy of principals, and principal preparation programs, little empirical research existed regarding the self-efficacy of principals who attended various principal preparations programs designed and implemented by school divisions to prepare principals for the vast roles they play in management tasks, instructional leadership tasks, and moral leadership tasks. A gap existed in the knowledge regarding the importance of adequately preparing principals for their varied roles.

This study was a quantitative assessment of the perceived self-efficacy of recently appointed principals. In addition, the study was designed to determine the perceived overall self-efficacy of recently appointed principals who attended various types of preparation programs as well as their perceived self-efficacy for management tasks, instructional leadership tasks, and moral leadership tasks, as defined by the PSES.

The sample consisted of respondents from two data collection procedures. The first data collection occurred at the fall 2007 VAESP conference in Williamsburg, Virginia. Surveys were distributed to all participants at the conference. The total number of surveys gathered at the conference was 28, with 22 meeting the criteria of being submitted by recently appointed principals with 5 or fewer years of experience. The response rate for the data collection was 14.5%. The second data collection utilized the same survey instrument, which was distributed during the fall of 2008 to 15 recently appointed principals employed in a large urban school division in the southeastern region of Virginia. All 15 surveys were returned. A total of 167 surveys were distributed during the two data collection sessions; 43 surveys were returned, of which 37 met the criterion of being completed by recently appointed principals, each having between 1 and 5 years of experience in the principalship.

Demographic characteristics and professional history data were reported by the respondents; the data are presented in chapter 4, for each data collection separately and for the entire sample. Of the recently appointed principals, 70% were from elementary schools; 27% were from secondary schools. A small percentage (8%) of the recently appointed principals led schools with 25 or fewer teachers; XX% led schools of 26 to 50 teachers; 24%, schools with 51 to 75 teachers; 5%, schools with 76 to 100 teachers; 3%,

schools with 101 to 125 teachers; and 8%, schools with 126 to 150 teachers. One respondent did not answer the question regarding the number of teachers. With regard to student population, 35% of the respondents reported serving a population of 250 to 500 students; 32% reported serving 501 to 750 students; 11% reported 751 to 1000 students; 5% reported 1001 to 1250 students; 3% reported 1251 to 1500 students; 8% reported 1501 to 1750 students; and 3% reported serving 1751 to 2000 students. Again, one respondent did not respond to the question.

More than a third (35%) of the respondents reported that 0 to 25% of their students were eligible for free or reduced-price lunch; the same percentage (35%) of respondents reported that 26% to 50% of their students qualified for the free or reduced-price lunch program; 16% of the respondents reported 51% to 75% eligibility; and 11% reported 76% to 100% eligibility. Finally, 76% of the respondents reported that their schools met the Adequate Yearly Progress (AYP) requirements for accreditation according to the federal guidelines for NCLB, and 22% reported that their schools did not meet the AYP requirements for accreditation.

The study included self-reported data by the respondents, and therefore reflected only what the respondents were willing to share. The results are valid only to the extent that the respondents understood the survey items and completed the survey accurately in reporting their perceived self-efficacy, their actual principal preparation experiences, and their perceived self-efficacy for tasks within their roles as principals.

Further, the study was developed to advance research and practice with regard to principal preparation programs by providing a clearer understanding of the perceived self-efficacy of principals who attended various types of principal preparation programs

designed and implemented by school divisions and providing empirical evidence regarding the influence of the various types of principal preparation programs on the perceived self-efficacy of recently appointed principals. This goal was accomplished through the investigation of two research questions and three subquestions.

The critical findings of the study revealed that principal preparation programs designed to teach theory exclusively or to teach skills exclusively most strongly reflected a difference in the perceived self-efficacy of recently appointed principals in general as well as efficacy for management tasks. Principal preparation programs whose focus included a combination of theory and skills reflected a lower perceived self-efficacy of recently appointed principals in general or for management tasks. In addition, recently appointed principals who did not attend any principal preparation program reflected a lower perceived self-efficacy in general as well as lower efficacy for management tasks. Recently appointed principals did not reflect a significant difference in perceived self-efficacy for instructional leadership tasks or for moral leadership tasks, regardless of the type of principal preparation training or lack of training during the first 5 years of the principalship.

### *Summary of Results*

*Research Question 1: What is the perceived self-efficacy of recently appointed principals, as measured by the Principal Sense of Efficacy Scale?*

The mean, median, and standard deviation were calculated for principals' responses to determine the perceived self-efficacy of newly appointed principals. Self-efficacy scores ranged from to 6.78 to 9. The mean was 8 ( $M = 8$ ), the median was 8.11

( $m = 8.1$ ), and the standard deviation was .58 ( $SD = .58$ ). In addition, the mean, median, and standard deviation for the perceived self-efficacy for three types of tasks were also calculated; these data are reported in Table 11.

*Research question 2: Is there a difference in the perceived self-efficacy of recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by their school divisions, as measured by the Principal Sense of Self-Efficacy Scale?*

Differences were found in the perceived self-efficacy of recently appointed principals who attended different types of preparation programs. The results indicated there was significantly lower perceived self-efficacy in recently appointed principals who attended a combination of skill- and theory-based preparation programs ( $n = 16$ ;  $M = 7.85$ ) or those who attended no principal preparation program ( $n = 10$ ;  $M = 7.87$ ) compared to a higher sense of perceived self-efficacy of recently appointed principals who attended theory-based preparation programs ( $n = 5$ ;  $M = 7.95$ ) or skill-based programs ( $n = 6$ ;  $M = 8.63$ ).

*Research question 2a. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for management tasks, as measured by the Principal Sense of Efficacy Scale?*

Differences were found in the perceived self-efficacy of recently appointed principals for management tasks among principals who attended various types of

preparation programs. The results indicated there was significantly lower perceived self-efficacy for management tasks in recently appointed principals who attended no principal preparation training ( $n = 10$ ;  $M = 7.08$ ) or who attended a combination of skill-based and theory-based preparation training ( $n = 16$ ;  $M = 7.38$ ) compared to those who attended theory-based preparation training ( $n = 5$ ;  $M = 7.93$ ) or skill-based preparation training ( $n = 6$ ;  $M = 8.55$ ).

*Research question 2b. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for instructional leadership tasks, as measured by the Principal Sense of Efficacy?*

No differences were found in the perceived self-efficacy of recently appointed principals for instructional leadership tasks, regardless of the type of principal preparation training. In addition, no differences in the perceived self-efficacy were found for instructional leadership tasks when no training occurred.

*Research question 2c. Do recently appointed principals who attended skill-based preparation programs, theory-based preparation programs, a combination of skill-based and theory-based preparation programs, or no principal preparation program designed and implemented by school divisions evidence a difference in the perceived self-efficacy for moral leadership, as measured by the Principal Sense of Efficacy Scale?*

No differences were found in the perceived self-efficacy of recently appointed principals for moral leadership tasks, regardless of the type of principal preparation

training. In addition, no differences in the perceived self-efficacy were found for moral leadership tasks when no training occurred.

To control for internal validity, the researcher analyzed data regarding the following variables: age, gender, and years as assistant principal. No differences were found in the perceived self-efficacy of recently appointed principals stratified by age, gender, or years as assistant principal.

### *Interpretation of Findings*

The perceived self-efficacy of recently appointed principals was reported utilizing the composite mean ( $M = 8$ ), median ( $m = 8.11$ ), and standard deviation ( $SD = .58$ ). The perceived levels of self-efficacy for management tasks, instructional leadership tasks, and moral leadership tasks were also reported utilizing the mean, median, and standard deviation; these data are depicted in Table 11.

Significant difference was noted in the perceived self-efficacy of recently appointed principals; there was significantly lower perceived self-efficacy in recently appointed principals who attended a combination of skill- and theory-based preparation programs ( $n = 16$ ;  $M = 7.85$ ) or who attended no principal preparation program ( $n = 10$ ;  $M = 7.87$ ) compared to the perceived self-efficacy of recently appointed principals who attended theory-based preparation programs ( $n = 5$ ;  $M = 7.95$ ) or skill-based principal preparation programs ( $n = 6$ ;  $M = 8.63$ ).

Significant difference was noted in the perceived self-efficacy of recently appointed principals for management tasks; comparisons indicated there was significantly lower perceived self-efficacy for management tasks in recently appointed principals who

attended no principal preparation training ( $n = 10$ ;  $M = 7.08$ ) compared to those who attended a combination of skill-based and theory-based preparation training ( $n = 16$ ;  $M = 7.38$ ), theory-based preparation training ( $n = 5$ ;  $M = 7.93$ ), or skill-based preparation training ( $n = 6$ ;  $M = 8.55$ ).

The conceptual framework for this study, social cognitive theory, was developed by Bandura (1986); this theory included an element that his previous social learning theory did not: self-beliefs. Bandura emphasized that cognition plays a critical role in people's capability to construct reality (Pajares, 2002). Bandura's theory of self-efficacy is defined as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance. Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment (Bandura, 1994). Bandura further explained that an individual's beliefs about his or her own efficacy can be developed through four primary sources of influences: mastery experiences, vicarious experiences, social persuasion, and emotional states.

Levine (2005) suggested that principal training should continue long after principals leave graduate-level classes. According to Levine, school districts should bridge the knowledge learned at the graduate level to application in the school district. Lashway (2003) suggested that principals' stress can be eased through formal induction programs, including academies or preparation programs that provide instructional, administrative, and emotional support.

*Principal Preparation Programs That Indicated Significant Differences*

Recently appointed principals who participated in principal preparation programs designed to reinforce theory-based practices or skill-based practices reflected a higher overall sense of perceived self-efficacy.

Bandura (1994) asserted that the most effective way to develop an individual's beliefs about his or her own efficacy is through mastery experiences, as success builds a strong belief in one's personal efficacy. Failures undermine self-efficacy, especially if the failures occur before a sense of efficacy is firmly established. A resilient sense of efficacy requires experience in overcoming obstacles through perseverant effort. Once people become convinced they have the ability to succeed, they persevere in the face of adversity and quickly rebound from setbacks. Research on principal preparation programs has indicated that programs designed to teach or reinforce skill-based tasks are more closely aligned with Bandura's theory with regard to mastery experiences.

*Principal Preparation Programs That Did Not Indicate Significant Differences*

Recently appointed principals who participated in principal preparation programs designed to reinforce a combination of theory- and skill-based practices as well as those who participated in no principal preparation program indicated an overall lower sense of perceived self-efficacy.

*Aspects of Principal Preparation Programs Related to Efficacy for Management Tasks, Instructional Leadership Tasks, and Moral Leadership Tasks*

Recently appointed principals who participated in principal preparation programs designed to reinforce theory-based practices or skill-based practices indicated a higher sense of perceived self-efficacy for management tasks. Conversely, recently appointed

principals who participated in a combination of theory-based and skill-based principal preparation programs and those who attended no principal preparation training indicated a lower sense perceived self-efficacy for management. There were no differences noted in the perceived self-efficacy of recently appointed principals for instructional tasks or moral leadership tasks, regardless of the type of principal preparation training.

#### *Critical Findings of the Study*

The critical findings of the study indicated that principal preparation programs designed to teach theory exclusively or designed to teach skills exclusively reflected to a greater extent a difference in the perceived overall self-efficacy of recently appointed principals as well as their efficacy for management tasks. Principal preparation programs whose focus was to teach a combination of theory and skill were associated with lower perceived overall self-efficacy of recently appointed principals as well as lower efficacy for management tasks. In addition, recently appointed principals who attended no principal preparation program reflected lower perceived overall self-efficacy and lower efficacy for management tasks. Recently appointed principals did not reflect significant differences in perceived self-efficacy for instructional leadership tasks or for moral leadership tasks regardless of the type of principal preparation training or lack of training during their first 5 years in the principalship.

It is important to note that the Cronbach's alpha for the PSES reported by the researcher of this study included two areas that were noticeably less reliable than the Cronbach's alpha for the PSES reported by Tschannen-Moran and Gareis (2005). This inconsistency cannot be explained by the researcher but difference existed in the results(?).

It is also important to note that the researcher was not able to manipulate the types of principal preparation training; each respondent naturally fell into one group of training based on his or her prior experiences. To offset this potential threat, the researcher evaluated the differences between variables: age, years of experience in the current position, years as an assistant principal, and gender. The results, reported in chapter 4, show nonsignificance; the results were not viable with regard to the perceived self-efficacy of recently appointed principals. There may be other variables not tested that could indicate significance and thus a difference in the perceived self-efficacy of recently appointed principals.

With the limited sampling of recently appointed principals achieved through the two data collection attempts, caution should be observed in generalizing the results; however, the findings of the study provide some clarity with regard to the concept of principal preparation programs and have implications for recently appointed principals, school divisions, and policymakers.

### *Implications for Practice*

#### *Implications for Self-Efficacy of Recently Appointed Principals and Principal Preparation Programs Designed and Implemented by School Divisions*

This study revealed differences in the self-efficacy of recently appointed principals who attended various types of principal preparation programs designed and implemented by school divisions; specifically, principal preparation programs designed to reinforce or teach theory- or skill-based practices were associated with a higher sense of overall self-efficacy in recently appointed principals. Furthermore, a higher sense of

self-efficacy for management tasks was reported by recently appointed principals who attended theory- or skill-based training. The types of principal preparation programs designed and implemented by school districts should be examined and evaluated to determine processes that can further develop the perceived self-efficacy of recently appointed principals. Utilizing Bandura's approach to self-efficacy development, mastery experiences, vicarious experiences, social persuasion, and emotional states should be carefully considered by districts in preparing staff development opportunities geared toward assisting recently appointed principals.

The study findings further support arguments for changes in principal preparation programs designed and implemented by school divisions. Recently appointed principals attending a combination of theory- and skill-based training reported a lower sense of self-efficacy. Content included in these types of principal preparation programs should be closely examined to determine how theory and skill are combined to teach recently appointed principals.

Principal preparation programs exist in some school divisions but are not currently mandatory for all recently appointed principals. This study found that recently appointed principals who attended various types of principal preparation programs reported varying degrees of perceived overall self-efficacy as well as varying degrees of perceived self-efficacy for management tasks; in both situations, recently appointed principals who had received no training reported a lower sense of perceived self-efficacy.

State policymakers, professional organizations, and school districts should continue to monitor research on the perceived self-efficacy of principals and the development of principal preparation programs designed to assist recently appointed

principals in transferring theory learned at the university level to application at the school level. Bandura (1994) stated that a resilient sense of efficacy requires experience in overcoming obstacles through perseverant effort. Principal preparation programs should be designed to give principals the knowledge and skills needed to persevere.

### *Recommendation for Further Research*

This study was limited to 37 recently appointed principals employed in the southeastern region of Virginia during the 2007-2008 school year. Findings from this study revealed other areas that need further exploration. The following are recommendations for future research:

1. The perceived self-efficacy of recently appointed principals should be analyzed through additional empirical studies. Further study of aspects of the self-efficacy of recently appointed principals will be helpful in understanding more clearly how self-efficacy relates to the performance, endurance, and attrition rates of recently appointed principals.

2. The perceived self-efficacy of recently appointed principals who attend various types of principal preparation programs should receive further analysis to determine specifically how principal preparation programs should be designed and implemented by school divisions. Bandura's levels of development of self-efficacy should be included in the content of the programs.

3. A study should be conducted to assess the perceived self-efficacy of recently appointed principals who attend various types of principal preparation programs for various tasks within the principalship. The research should attempt to explain the

discrepancies among the various types of principal preparation programs and provide feedback for school divisions to assist in aligning principal preparation programs with the needs of recently appointed principals.

4. A qualitative study should be conducted, utilizing a similar sample, to provide additional richness to the data; interviews conducted with recently appointed principals might answer questions regarding the exact methodology of principal preparation programs designed and implemented by school divisions

5. A study that focuses on more specific tasks performed within the role of the principalship, rather than tasks as directed by the PSES, should be conducted to determine the perceived self-efficacy of recently appointed principals.

6. The PSES is a relatively new tool for measuring the self-efficacy of principals. Further studies using this instrument should be conducted to continue the research on the perceived self-efficacy of newly appointed principals.

### *Summary*

Levine's (2005) research indicated that the roles of principals changed dramatically between the mid-1990s and the year of his research. The job has become more complex and demanding, requiring depth of professional knowledge, an array of skills, and particular beliefs or dispositions about how and why to act (Council of Chief State School Officers, 1996). Principals need to be prepared for their roles. Principal preparation programs provided by universities are under scrutiny for inadequately preparing principals. Levine's 2005 study reported that university programs were falling short of adequately preparing principals for the plethora of tasks needed to complete their

demanding jobs. Although opponents of Levine, such as Hoyle (2007), adamantly disagreed with Levine's findings, many universities analyzed their existing programs as a result of Levine's study.

School districts have begun implementing principal preparation programs designed to bridge the knowledge learned in graduate school to application on the job. These programs enable principals to continue to grow and learn professionally. Critical review of the literature revealed that most principal preparation programs designed by school districts fell into three categories: theory based, skill based, or a combination of theory and skill based.

The very core of social cognitive theory, developed by Bandura, is self-efficacy beliefs. Self-efficacy is defined as a person's judgment of his or her capabilities to organize and execute a course of action required to attain designated types of performance (Bandura, 1986). Bandura (1997) further stated that principal self-efficacy is the principal's determination of his or her own effectiveness at a given task or set of tasks, considering his or her own capabilities and experiences, as well as the context in which he or she is working. It is a principal's self-perceived capability to perform the cognitive and behavioral functions necessary to regulate group processes in relation to goal achievement (McCormick, 2001).

Principals' behavior is influenced by their internal thoughts and beliefs, but these beliefs are shaped by elements in the environment, including other individuals (Tschannen-Moran & Gareis, 2004). Although principal self-efficacy evidently plays a role in effective school leadership practices, less is known about the kinds of context variables linked to cultivating a higher sense of efficacy (Tschannen-Moran & Gareis,

2004). Bandura proposed four sources of efficacy beliefs: mastery experiences, vicarious experiences, social persuasion, and emotional states. Mastery experiences are thought to be the most effective.

The purpose of this research study was to examine the gap that existed in knowledge of the perceived self-efficacy of recently appointed principals. The research gathered data through a survey and sought to address two primary research questions related to the perceived self-efficacy of recently appointed principals. Three subquestions focused on differences in the perceived self-efficacy with regard to specific types of tasks within the role of the principalship.

The results of the study indicated a difference in the perceived self-efficacy of recently appointed principals, as reported by the PSES, according to the type of principal preparation program in which they participated. Also revealed was a difference in the perceived self-efficacy of recently appointed principals for certain types of tasks within the role of the principalship, as defined by the PSES.

Recently appointed principals who attended theory-based principal preparation programs or skill-based principal preparation programs reported a higher sense of perceived overall self-efficacy than did recently appointed principals who attended combined theory- and skill-based principal preparation programs or those who attended no principal preparation program. Recently appointed principals also reflected a higher sense of perceived self-efficacy for management tasks when the principal preparation program they had attended was theory based or skill based. Again, a lower sense of efficacy was reflected when recently appointed principals attended a combined theory- and skill-based principal preparation or no principal preparation training. Although

beyond the scope of this study, it is possible that the content of a principal preparation program presented as a combination of theory and skill is too fragmented to make a difference in the perceived self-efficacy of recently appointed principals. Staff development curricula for the principal preparation programs were not analyzed as a component of the survey instrument for this study.

Recently appointed principals who attended various types of principal preparation programs or no type of training did not reflect differences in perceived self-efficacy for instructional leadership tasks or moral leadership tasks. Again, although beyond the scope of this study, management tasks are more closely aligned to Bandura's explanation of how principal self-efficacy is developed: through the development of mastery experiences (Bandura, 1986). Instructional leadership tasks and moral leadership tasks are more subjective and ethical in nature than management tasks, which typically lead to mastery through repetitive practice.

State policymakers, professional organizations, and school divisions should continue to utilize research focused on the development of self-efficacy of principals. It is not sufficient to hire and retain the most capable principals; in addition, principals must believe they can successfully meet the challenges of the tasks that accompany their roles (Tschannen-Moran & Gareis, 2004). Information about the factors that contribute to principals' sense of efficacy can assist in improving principal preparation programs designed by school divisions (Tschannen-Moran & Gareis). Bandura (1997) proposed four sources of efficacy beliefs: mastery experiences, vicarious experiences, verbal (social?) persuasion, and physiological experiences (emotional states?). Mastery experiences are thought to be the most resourceful (Tschannen-Moran & Gareis, 2005).

Skill-based principal preparation programs designed by school districts to further enhance the knowledge of principals mirror Bandura's development of self-efficacy through mastery experiences. School divisions developing principal preparation programs should consider evidence in the development of self-efficacy to enhance the programs being delivered to recently appointed principals.

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Appendix A – Survey Cover Letter  
The George Washington University  
The Principalship: Preparation Programs and the Self-Efficacy of Principals

October 31, 2007

Dear Participant:

As a doctoral candidate at The George Washington University, I am in the process of conducting a study entitled *The Principalship: Preparation Factors That Influence Self-Efficacy*. The study strives to answer two primary research questions, as well as three subquestions, relating to the self-efficacy of newly appointed principals. In particular, the study examines the self-efficacy of principals. In addition, the study examines the self-efficacy of principals by gathering data on the types of principal preparation programs, designed by your school division, in which you may or may not have participated. The study further investigates the self-efficacy of newly appointed principals with regard to tasks that are part of the principalship on an ongoing basis. The primary method for data collection is a survey, which consists of three sections. All three sections can be completed in approximately 20 minutes.

Your participation in this quantitative study will assist the researcher in filling a void in the research regarding the self-efficacy of principals. The data obtained from this study will be useful to school divisions and division leaders as they plan for future division-level preparation programs for newly appointed principals.

Your participation is strictly voluntary. Your survey results will be confidential. You will not be identified in any reports or publications related to this study. There will be no way to trace the survey responses to your school division. The results will be analyzed and summarized in the final chapters of my dissertation.

I look forward to your participation in this study by your completion of the survey instrument. Your responses are extremely important to the research. Please do not hesitate to contact me if you have any questions. I am attending the conference. Please contact one of the conference officials if you would like to speak to me. After the conference is over, I can be reached at (757) 427-3806 or through e-mail at [llhughes@gwu.edu](mailto:llhughes@gwu.edu). Your time and effort in helping me with this study are greatly appreciated.

Sincerely,

Lesley L. Hughes  
Doctoral Candidate  
The George Washington University

Cc: Linda K. Lemasters, EdD  
Associate Professor, GWU

Appendix B – Demographic Cover Page  
The George Washington University  
Principal Demographics  
Survey Section 1

1. What is your gender?
  - Male
  - Female
  
2. How do you identify yourself in terms of race or ethnicity? (Select all that apply)
  - Hispanic
  - American Indian
  - Black or African American
  - White
  - Asian
  - Native Hawaiian or Other Pacific Islander
  - Other \_\_\_\_\_
  
3. What is the year of your birth?
  - 19\_\_\_\_\_
  
4. How many years have you served as a principal?
  - \_\_\_\_\_
  
5. What best describes the location of your school?
  - Urban
  - Suburban
  - Small City
  - Small town
  - Rural
  
6. What grade levels are included in your school?
  - \_\_\_\_\_
  
7. How many students are in your school?
  - \_\_\_\_\_
  
  
8. What percent of your students are classified as eligible for free or reduced-price lunch?

\_\_\_\_\_

9. Does your school currently meet Adequate Yearly Progress (AYP)?

- Yes
- No

10. Which of the following best describes your school's performance last year?

- Passed all state performance standards
- Passed most state performance standards
- Passed some state performance standards
- Passed no state performance standards

11. How many teachers are in your school?

\_\_\_\_\_

12. Are you related to any other newly appointed principals (defined as principals with one to three years of experience) who may be attending this conference?

- Yes
- No

Appendix C – History of Professional Development

The George Washington University  
Professional Development  
Survey Section 2

1. From what type of institution did you receive your graduate degree in administration? Check all that apply:
  - University
  - College
  - More than one university or college
  - University/college in partnership with a school district
  
2. What year did you receive your graduate degree in administration? If you have more than one degree, please list the years you received your degrees.  
  
\_\_\_\_\_
  
3. How many years of teaching experience did you have before becoming principal? Check the appropriate answer:
  - 0-3 years
  - 4-7 years
  - 8-11 years
  - 12-15 years
  - 16-19 years
  - 20 years or more
  
4. What subject areas and grade levels have you taught? Check all that apply:
  - Elementary
  - Middle
  - Secondary
  - Special education
  - Math or Science
  - English or Language Arts
  - Social science
  - Foreign language
  - Vocational or technology
  - Physical education
  - Music, Art, Media
  - All others \_\_\_\_\_

5. Have you ever held any of the following positions in your school system in addition to being a teacher? Check all that apply:
- Central office administrator
  - Instructional specialist
  - Instructional coach
  - Support staff personnel
  - Assistant principal
6. If you served as an assistant principal, how many years did you hold this position? Please record the number of years:

\_\_\_\_\_

7. If you served as an assistant principal, list some of the responsibilities of your position. Please list in the space provided:
- \_\_\_\_\_
8. During your first 3 years as a principal, did you participate in any principal preparation programs designed by your school district? Principal preparation programs are defined as staff development geared to further prepare the newly appointed principal for their roles. Check the appropriate response:
- Yes
  - No

(If you checked yes, please complete the remainder of the questions.)  
(If you checked no, please skip to Number 11.)

9. Was the principal preparation program mandatory or optional? Check the appropriate response:
- Mandatory
  - Optional

10. Please circle the sentence which best describes the principal preparation program in which you participated that was designed by your school division to assist newly appointed principals.
- The program was based on theoretical approaches to the principalship, such as leadership theory.
  - The program was based on skill approaches to the principalship, such as safety, transportation, data collection, and budget tasks.
  - The program was a combination of theoretical approaches and skills approaches.
11. If you did not participate in a principal preparation program designed by your school division because such a program was not available, would you participate if a preparation program were in place?
- Yes
  - No
12. If you did not participate in a principal preparation program designed by your school division because you were not selected to participate at this time, would you participate if a slot becomes available?
- Yes
  - No

## Appendix D – Principal Survey of Self-Efficacy

## 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

The George Washington University  
The Principals: Preparation Programs and the Self-Efficacy of Principals

August 4, 2008

Dear Participant:

As a doctoral candidate at The George Washington University, I am in the process of conducting a study entitled *The Principals: Preparation Factors That Influence Self-Efficacy*. The study strives to answer two primary research questions, as well as three subquestions, relating to the self-efficacy of newly appointed principals. In particular, the study examines the self-efficacy of principals. In addition, the study examines the self-efficacy of principals by gathering data on the types of principal preparation programs, designed by your school division, in which you may or may not have participated. The study further investigates the self-efficacy of newly appointed principals with regard to tasks that are part of the principalship on an ongoing basis. The primary method for data collection is a survey, which consists of three sections. All three sections can be completed in approximately 20 minutes.

Your participation in this quantitative study will assist the researcher in filling a void in the research regarding the self-efficacy of principals. The data obtained from this study will be useful to school divisions and division leaders as they plan for future division level preparation programs for newly appointed principals.

Your participation is strictly voluntary. Your survey results will be confidential. You will not be identified in any reports or publications related to this study. There will be no way to trace the survey responses to your school division. The results will be analyzed and summarized in the final chapters of my dissertation. Your willingness to participate in this research is implied if you proceed with completing the survey.

I look forward to your participation in this study by your completion of the survey instrument. Your responses are extremely important to the research. Please do not hesitate to contact me if you have any questions. I am attending the conference. Please contact one of the conference officials if you would like to speak to me. After the conference is over, I can be reached at (757) 427-3806 or through e-mail at [lhughes@gwu.edu](mailto:lhughes@gwu.edu). Your time and effort in helping me with this study are greatly appreciated.

Sincerely,

Lesley L. Hughes  
Doctoral Candidate  
The George Washington University

Cc: Linda K. Lemasters, Ed.D  
Associate Professor, GWU

Appendix F – Responsibilities Performed as Assistant Principals as Reported by Recently Appointed Principals

Responsibility	Number of responses
Discipline	26
Special education	20
Monitor instruction	19
School test coordinator	13
Master schedule	7
Transportation	7
Monitor attendance	4
Monitor custodians	4
Staff development	4
Parent communication	2
School safety	2
Athletic director	1
Evaluations/Observations	1
Extended day coordinator	1
Safe school plan	1
Substitutes	1
Textbook inventory	1

28 Recently Appointed Principals responded to the open ended question, “If you served as an assistant principal, list some of the responsibilities of your position.”