

A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District

Sharon E. Pope

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Carol S. Cash, Chair  
Martha G. Blumenthal  
Ted S. Price  
Travis W. Twiford

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**ABSTRACT**

The purpose of this study was to investigate self-efficacy and organizational efficacy as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district. Bandura defined self-efficacy as “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (1997, p. 3). Organizational efficacy has been defined as “an aggregated judgment of an organization’s individual members’ assessment of their (a) collective capacities, (b) mission or purpose, and (c) sense of resilience” (Bohn, 2010, p. 233). As efficacious beliefs have reciprocal influence that can better fortify performance (Bandura, 1997), this study explored both self-efficacy and organizational efficacy to provide a bi-level depiction of assistant principal efficacy. The self-efficacy measurement was gathered through the 2006 School Administrator Efficacy Scale (SAES) survey (McCollum, Kajs, & Minter, 2006a, 2006b) and the organizational efficacy measurement was gathered through the 2010 Organizational Efficacy Scale (OES) survey (Bohn, 2010). Additionally, self-reported demographics and job preparation experiences were gathered through a participant information survey.

Beyond descriptive analyses that established benchmarking efficacy measurements for the participating school district, ANOVA analyses revealed no significant relationships in self-reported self-efficacy or organizational efficacy based upon the job preparation experiences of assistant principals. The benchmarking measurements were presented to inform school district leaders as they direct future district succession, mentoring, or professional development planning for increased efficacious leadership development and for improved human capital management results.

### **Dedication**

To my family: Jacob, Jacob, and Sadie. Thank you for your steadfast encouragement, enduring patience, and amazing self-sufficiency as I completed this journey. Also, thanks to Max—my dog—for ceaseless companionship during the many late nights.

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*“Believe you can, and you’re halfway there. ”*

Theodore Roosevelt

## **Chapter One**

### **Introduction and Literature Review**

As today’s school success is increasingly judged through publicized accountability that focuses on high-stakes performance outcomes, the job of today’s school principal has become more challenging. According to The Wallace Foundation’s report *The School Principal as Leader* (2013), “the lives of too many principals, especially new principals, are characterized by ‘churn and burn,’ as the turnover findings bear out” (p. 16). With this high principal turnover, school district leaders face the increasingly important human capital management task of preparing each future school principal for a successful and long tenure. The job preparation experiences a district provides can support the success of future school leaders in various ways. While job preparation experiences are most often designed to build necessary skill sets and knowledge, these experiences may also hold relationship to the efficacious beliefs of future school principals. This study investigated the self-efficacy and organizational efficacy as self-reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district. The study findings were presented to inform school district leaders as they direct future district succession, mentoring, or professional development planning for increased efficacious leadership development and for improved human capital management results.

#### **Overview of the Study**

This quantitative study utilized a non-experimental comparative design. Self-efficacy levels were gathered through the 2006 School Administrator Efficacy Scale (SAES) survey (McCollum, Kajs, & Minter, 2006a, 2006b) as participants self-reported self-efficacy on professional job responsibilities in accordance with the Educational Leadership Constituency Council’s (ELCC) Standards for Advanced Programs in Educational Leadership (National Policy Board for Educational Administration [NPBEA], 2002). Organizational efficacy levels were gathered through the 2010 Organizational Efficacy Scale (OES) survey (Bohn, 2010) as participants self-reported organizational efficacy on three factors as follows: (a) sense of collective capability, (b) sense of mission, future, or purpose, and (c) sense of resilience.

Additionally, self-reported demographics and job preparation experiences were gathered through a participant information survey. Beyond descriptive analyses of participants, the study included as follow: (a) the self-efficacy levels of assistant principals, (b) the organizational efficacy levels of assistant principals, (c) the differences in self-efficacy based upon job preparation experiences, and (d) the differences in organizational efficacy based upon job preparation experiences. Additional investigative analyses considered efficacy and gender, years of experience, current school level, and job preparation experiences.

### **Historical Perspective**

Today's principal is widely deemed as essential in improving student learning, closing the achievement gap, and creating school environments where continuous improvement is expected (Education Commission, 2012). The principal and the overall quality of the school are inextricably linked as the principal ranks second only to the classroom teacher in ensuring exemplary teaching and learning (Wallace Foundation, 2008). Public school success is currently measured in the form of high-stakes accountability and is imposed from multiple levels. Federal legislation including the passing of No Child Left Behind (2001) and the subsequent reauthorization of the Elementary and Secondary Education Act (United States Department of Education, 2010) have coupled with state school accreditation standards to evaluate school success. Additionally, the principal faces job performance evaluation as measured by established standards such as the 2011 Educational Leadership Constituency Council (ELCC) Educational Leadership Standards or the 2008 and 2014 Interstate School Leaders Licensure Consortium (ISLLC) Standards (National Policy Board for Educational Administration [NPBEA], 2013). For those principals employed in Virginia, job performance measurement is based on the February 2012 approved Virginia Board of Education *Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals* (Commonwealth of Virginia Department of Education, 2012). The Virginia guidelines were created in response to the 1999 Education Accountability and Quality Enhancement Act under House Bill HB2710 and Senate Bill SB1145 as approved by the Virginia General Assembly (Virginia Board of Education, 2012).

As a result of these federal and state mandates, school leader performance expectations have increased as the principal's daily job responsibilities extend far beyond the management tasks of years past. As The Wallace Foundation noted:

Traditionally, the principal resembled the middle manager suggested in William Whyte's 1950's classic *The Organization Man*—an overseer of buses, boilers and books. Today, in a rapidly changing era of standards-based reform and accountability, a different conception has emerged—one closer to the model suggested by Jim Collins' 2001 book *Good to Great*, which draws lessons from contemporary corporate life to suggest leadership that focuses with great clarity on what is essential, what needs to be done and how to get it done. (2013, p. 6)

Further amplifying the arduous expectations placed on today's principal, The Wallace Foundation (2008) report *Becoming a Leader: Preparing School Principals for Today's Schools* stated, "For too long, principals have been expected to behave as superheroes" (p. 2). This superhero metaphor is recognized in Dutro's (2011) *Review of Waiting for Superman*, which called for "heroic action, swift and sure" (p. 3) and in *Disappearing Principals* (Cushing, Kerrins & Johnstone, 2003), which opens with an intertwined principalship and superhero job description. With each use of the metaphor comes the recognition of the tremendous challenges faced by today's principal.

As principal job performance expectations have become more challenging, principal attrition rates have also increased. As early as 2002, Grogan and Andrews recognized this trend when reporting that among, "those who accept positions, there appears to be a 45% to 55% attrition rate of principals over an 8-year period of time, with the largest amount of attrition occurring during the first 3 years on the job" (p. 237). Today, this trend is still concerning as evidenced in the posed Wallace Foundation (2013) question, "How do we create a pipeline of leaders who can make a real difference for the better, especially in troubled schools?" (p. 16).

Most often, today's principalship pipeline is made up of assistant principals who are considered collectively as the next generation of school leaders with the potential to reform education. In a National Association of Secondary School Principals (NASSP) task force exploration of principal preparation, this next generation was called the "keeper of the dream" (2007, p. 46). In the NASSP report, *Changing Role of the Middle Level and High School Leader: Learning from the Past—Preparing for the Future*, recommendations included more rigorous recruitment and selection procedures, clear standards for program content, more substantive internships, and improved efforts to enhance sustainability and succession planning (2007). These recommendations are examples of human capital management efforts. The term, human

capital, represents the “people side of education reform” as school districts strive for the alignment of academic goals with school district organization and practices (Strategic Management of Human Capital [SMHC], 2009, p. 1). With over 80% of school district operating budgets devoted to human capital, the District Management Council (2013) encouraged district leaders to consider human capital management as their number one management priority. The potential benefit in this prioritization is school improvement. Making improvements in education depends on the strength of school leaders as the consortium project, *Taking Human Capital Seriously: Talented Teachers in Every Classroom, Talented Principals in Every School*, concluded that without school districts focused on human capital management from a systemic, organizational vantage point, “lasting education improvement is impossible” (SMHC, 2009, p. 1).

As districts position themselves to realize the potential school improvement that better human capital management holds, the challenge of ensuring a pool of principal candidates poised to fill vacancies begins broadly as a two-part concern of candidate quality and quantity. District leaders must have quality candidates who are prepared to meet the high expectations of today’s principalship. District leaders must also have a sufficient quantity in their candidate pool to fill principalship vacancies given the high attrition rates. Beyond holding necessary skill sets and knowledge, assistant principals holding high efficacy levels further fortify the candidate pool.

**Principal quality.** In *The Accidental Principal*, Kelly and Hess (2005) wrote, “Because preparation of principals has not kept pace with changes in the larger world of schooling, graduates of principal-preparation programs have been left ill equipped for the challenges and opportunities posed by an era of accountability” (p. 1). Attempts to improve principal candidate quality have occurred as school districts have begun implementing succession programs, mentoring programs, and university partnerships with components focused on better principal preparation (Cushing et al., 2003; Kelly & Hess, 2005; NASSP, 2007).

**Principal quantity.** In 2012, the concern for the quantity of principal candidates was reflected in the Education Commission report claiming:

The shortage is due to high retirement rates coupled with several other factors. Principal positions require an enormous amount of time and energy, and school leaders are under intense pressure, both internally and externally, to raise student achievement. Many educators say that salaries for these positions are not worth the additional stress and

workloads they entail. In fact, demographic data show that, unlike the national teacher shortage, there are plenty of credentialed school and district administrators available, but they are choosing not to use their license to move into leadership positions. (p. 1)

**Principal efficacy.** To summarize the human capital need at the leadership level, DiPaola and Tschannen-Moran stated, “if there is a shortage of aspiring principals, if many of those are perceived to be unqualified, and if half leave the position in the first eight years, something must be done to better address the immediate needs of those who actually do step up to the job” (2008, p. 225).

School district job preparation experiences can benefit new leaders by providing opportunities to build skill sets and knowledge. Additionally, benefits may be further realized as Fearon, McLaughlin, and Morris (2013) recognized that the highest potential for an individual’s success occurs when:

the interplay between personal and collective forms of efficacy also helps align and agentise that efficacy at a level beyond a sense of self, or an individual employee, to produce meaningful outcomes at all levels of the social structure within an organisation (p. 249)

Recognizing that the interplay of personal and collective forms of efficacy holds the potential to increase an assistant principal’s success just as much as possessing essential skill sets and knowledge is an important underpinning of this study. This recognition highlights a fundamental element that extends beyond candidate skill sets and knowledge for success; this additional fundamental element is efficacy from both the personal and collective levels.

### **Statement of the Problem**

School district leaders committed to school improvement are faced with the human capital management task of countering high principal attrition rates with efforts to build a quality and quantity laden principal candidate pool. Research has shown “the significant contribution that principal efficacy makes to school effectiveness and (that) it is important to know what districts can do to build such efficacy” (Seashore-Louis, Leithwood, Wahlstrom, & Anderson, 2010, p. 127). While district efforts provide assistant principals with job preparation experiences intended to build skill sets and knowledge needed for future success as principals, additional benefits may be realized if those provided job preparation experiences also hold relationship to

high levels of principal candidate self and organizational efficacious beliefs. Previously, relationships among these variables have not been studied.

## **Review of Literature**

The literature search process for this study included accessing the Virginia Polytechnic University Libraries interlibrary loan services and databases as well as public Internet search engines to research keywords in various combinations. Keywords searched were as follows: assistant principal, self-efficacy, organizational efficacy, job preparation experiences, and human capital management. No search limits were applied to restrict publication year, origin of source, school levels or school leader levels. Over 180 sources were reviewed and reduced through topic relevance and most current findings to the sources referenced within this study.

## **Community of Scholars**

Researchers focused in the 1970s on the efficacy construct and then expanded to consider teacher and student efficacy, but it was not until the 1980s that school leader efficacy became a focus.

**School leader self-efficacy scholars.** The prominent researchers referenced in this study who recurrently examined the topic of school leader self-efficacy are Bandura (1978, 1986, 1993, 1995, 1997, 2000, 2001, 2002, 2006), McCollum et al., (2006a, 2006b), Seashore-Louis et al., (2010), and Tschannen-Moran and Gareis (2004, 2007). Less prominent researchers of school leader self-efficacy who are referenced in this study as well as frequently referenced in other studies include: Dimmock and Hattie (1996), Imants and DeBradbander (1996), Lyons and Murphy (1994), Osterman and Sullivan (1996), and Smith et al., (2006). Within these studies, researchers examined various aspects of self-efficacy, and general recurrent conclusions were that self-efficacy is a meaningful construct for study that is solidly associated with positive educational outcomes in the school setting, yet it has been found to be a challenging construct to measure with few experimental or longitudinal study designs.

Researchers (Bell 2011; Edison, 1992; Finley, 2013; Richman, 2011; Singletary-Dixon, 2011) who explicitly focused on assistant principals are more limited and their work more recent. These empirical studies conducted between 1992 and 2013 were exclusive to assistant principals' self-efficacy and conducted using quantitative, qualitative, and mixed methodologies. These

studies examined quantitatively the relationships of self-efficacy to university programs, self-efficacy to job performance standards, and self-efficacy to described administrator work tasks were examined. Qualitatively, self-efficacy interactions, connections, or misalignments between the organizational socialization of new administrators, their perceptions of self-efficacy, and subsequent role identity development were examined.

Within these five studies of assistant principals, researchers examined various aspects of self-efficacy, and general recurrent conclusions were that self-efficacy, while a challenging construct to measure, is an influencing factor in the work of school leaders. Yet, as Goulais (2008) assessed, “There is a notable lack of attention to vice principal concepts of self-efficacy in the literature” (p. 32).

**School leader collective efficacy scholars.** Within education, forms of collective efficacy were frequently examined in empirical studies conducted between 2001 and 2007 and focused primarily on teachers and students (Goddard, 2001, 2002; Goddard, Hoy & Hoy, 2000; Goddard, Sweetland, & Hoy, 2000; Hoy, Smith & Sweetland, 2002; Ross & Gray, 2006; Tasa, Taggar, & Seijts, 2007; and Tasa & Whyte, 2005). Beyond the research focused on schools and teachers, at the school district level, Leithwood et al., (2007) studied group collective efficacy in school leader and in district leaders.

Within these collective efficacy studies, researchers examined various aspects of collective efficacy and general recurrent conclusions were that collective efficacy is solidly associated with positive outcomes in the education setting. Collective efficacy serves as a predictor of group behavior, a predictor of performance outcomes, a predictor of group or team performance, and a predictor of decision-making tendencies. For these reasons, collective efficacy is a meaningful construct for study, yet has also been found to be a challenging construct to measure with few experimental or longitudinal studies.

**Synthesis of scholars review.** The researchers of school leader efficacy have compiled a body of research that spans over 30 years and has included exploration of the theoretical framework, validation of the construct, as well as empirical research establishing various operational definitions. Whether researchers took a quantitative, qualitative, or mixed-methods approach to studying efficacy, designs were disproportionately non-experimental and findings based on descriptive and inferential analyses. Regardless of the research design, the reviewed studies consistently supported that efficacy is an influencer in school leader success with limited

research showing that efficacy is malleable and can be increase in school leaders.

### **Significance of the Study**

Efficacy has been a widely studied construct. In 1996, Osterman and Sullivan tallied extensive research on efficacy that “yielded nearly 7000 entries in psychology with an additional 700 in education” (p. 688), and research has continued to amass since. From Bandura’s initial self-efficacy work, research has expanded to include collective and group efficacy with the most recent research focused on organizational efficacy.

To provide a concise construct summary as related to this study, this review of efficacy has been narrowed in focus to efficacy in the workplace, efficacy in education, efficacy in school leaders, and efficacy in assistant principals. Additionally, a second summary of influencing factors on efficacy has been presented to illustrate how job preparation experiences hold relationship to efficacy through the mastery experiences, vicarious learning, social persuasion and the emotional arousal they can offer. These summaries are pertinent to this study as it investigated self-efficacy and organizational efficacy as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district.

**Efficacy in the workplace.** Bandura and Locke (2003) evaluated a large body of evidence, including nine meta-analyses, as they examined self-efficacy and work-related performance in both laboratory and field studies. They concluded that self-efficacy is a powerful determinant of job performance. Additionally, Hannah, Avolio, Luthans, and Harms (2008) summarized 12 research studies of managerial efficacy, leader self-efficacy, transformational leadership efficacy, and agentic leadership efficacy spanning from 1989 to 2006 with each study finding significant, positive correlations of self-efficacy to work performance in an array of work fields. More recently, Lunenburg (2011) presented in *Self-Efficacy in the Workplace: Implications for Motivation and Performance* a proven record of self-efficacy application in the workplace with multiple researchers cited who further established the knowledge base and proven record of application. In Lunenburg’s summary, the efficacy beliefs of employees were shown to repeatedly and significantly contribute to their levels of motivation and performance.

Beyond the numerous studies reiterating the benefits to an individual’s performance that self-efficacy brings in the workplace, the more limited studies of organizational efficacy benefits were also reviewed. Patras and Klest (2013), in studying collective efficacy within an

organization, recognized a “large body of research that suggests perceived collective efficacy is an important predictor of group behavior and outcomes for organizational tasks” (p. 97) with organizations including schools demonstrating high levels of collective efficacy and better group performance. Other researchers (Petitta & Borgogni, 2011; Ross & Gray, 2006; Tasa & Whyte, 2005) have examined forms of collective efficacy for relationship to problem solving, group decisions making, motivation, and organizational commitment. Yet, there remains a lack of research that singularly isolates organizational efficacy from other forms of collective efficacy research, as recognized by the earlier calls of researchers (Bandura, 1993, 1995, 1997; Petitta & Borgogni, 2011) for further focused study on collective efficacies. Bohn’s (2010) OES survey instrument with its established reliability and validity was well timed in providing the first isolated measurement of organizational efficacy from a population representing 27 U. S. companies. While research on the organizational efficacy subdomain is limited, it is a form of collective efficacy, which has been repeatedly proven to be an important predictor of worker performance, group performance, decision-making, and organizational commitment.

In conclusion, self-efficacy research and forms of collective efficacy have been researched in the workplace and have been proven to be important predictors of successful worker performance.

**Efficacy in education.** School organizations have been described as complex entities (Adams & Forsyth, 2006), and studies of efficacy in education have been conducted on self-efficacy and collective efficacy at the student, teacher, and district levels. In the 1970s, associations between high teacher efficacy and student outcomes such as achievement gains, implementation of new programs, classroom management, and varied instructional strategies were examined and established. Over 40 years later, within today’s high-stakes education arena, efficacy study remains an important consideration. Leithwood, Strauss, and Anderson (2007) connected building-level leaders’ collective efficacy as a critical link joining district leadership and organizational conditions to school conditions and student learning. Pujol (2013) recognized “the current climate of strict accountability and pressure to improve student performance” and summarized that “the district has an important role to play in the improvement of schools and the building of collective efficacy among teachers and principals” (p. 67).

Forms of collective efficacy measurements within school systems are well-suited measurements. Bandura (1997, 2000) suggested that the suitability of measures depends

ultimately on the nature of the organization's activities, levels of system interdependence, and accomplishments. The relevance of measuring collective efficacy within an organization depends on how tightly woven the subsystems are to each other. Some systems have low system interdependency defined as, "members of the group need to coordinate their efforts and support one another, but the group's level of attainment is the sum total of the outcomes produced independently" (Bandura, 1997, p. 469). Some systems have high system interdependency defined as, "members must work in concert to achieve group outcomes" (Bandura, 1997, p. 469).

In today's environment of high stakes accountability in education, educators are realizing the achievement benefits when a school or district functions as a system with high interdependency. As students are promoted from one grade level to the next and from one school building to the next, their failures can no longer be dismissed as the shortcomings of the previous teacher or previous school. Likewise, teachers can no longer shut their classroom doors and focus only on their areas of instruction. Whether a single student, a single teacher, or a single school, the efforts of each must support the others in order to demonstrate top performance for the sake of the school district's overall success.

As research has shown, whether at the individual or collective level, the research body has repeatedly supported that efficacy in education is an influencing factor in performance outcomes. No discovered studies isolating the collective form of efficacy known as organizational efficacy have been conducted in the education setting, but given Bandura's suitability recommendations and the system interdependency required for school system success today, this form of collective efficacy measurement is relevant in this setting.

**Efficacy in school leaders.** Specific to the self-efficacy of school leaders, McCollum and Kajs (2007) posed a definition "aligned with the definition of self-efficacy given by Bandura (1986), a school administrator's efficacy is founded on self-referent judgments of his/her 'capabilities to organize and execute courses of action required' (p. 396) for effective school leadership and reaching desired school results" (p. 31).

Researchers have examined principals' sense of efficacy and the ability to influence the quality of teaching and learning (Imants & DeBradbander, 1996; Lyons & Murphy, 1994; Seashore-Louis et al., 2010; Smith, Guarino, Strom, & Reed, 2006). The University of Toronto and University of Minnesota formed a team of researchers and between 2004 and 2009 conducted a study of educational leadership larger than any previously conducted. Using both

qualitative and quantitative data from teachers, schools, district leaders, and community stakeholders across nine U. S. states, 45 districts, and 122 schools, state test results were used to determine achievement. Results of this study showed strong district conditions and leadership together explained approximately 19% of the variation in student achievement across districts when districts are effective at developing a sense of collective efficacy among principals about their work (Leithwood, 2013).

Further, regarding principals' sense of efficacy and leadership skills, Lyons and Murphy (1994) summarized that an efficacious school leader when confronted with problems did not interpret an inability to solve the problems immediately as failure, but rather accepted the new challenges, regulated personal expectations to correspond to conditions, typically remained confident and calm, and kept a sense of humor, even in difficult situations. Likewise, Osterman and Sullivan (1996) viewed self-efficacy as a valuable indicator of success; they summarized that principals with a strong sense of self-efficacy were found to be "persistent in their pursuit of long-range goals, but were also more willing to modify their intermediate goals and strategies to respond to contextual conditions" (p. 667). These principals viewed change as a slow process, but also remained steadfast in their efforts to achieve their goals. Also, these efficacious leaders were pragmatic in that they adapted their strategies to their present context and did not waste time trying unsuccessful strategies (Osterman & Sullivan, 1996). As these examples highlight, the research body has supported the benefits of efficacy in school leaders.

**Efficacy in assistant principals.** Early research on school leader efficacy focused on principals. When assistant principals were included in studies, the data were not disaggregated to isolate assistant principal self-efficacy levels, yet there is value in studying this subgroup as assistant principals most often assume principalships. Researchers have viewed the assistant principal position as the most appropriate and most typical training ground for the principalship as well as the possible "launching point for revisioning school leadership" (Marshall & Hooley, 2006, p. ix). Hausman, Nebeker, and McCreary (2002) recognized that capturing the self-efficacy levels of assistant principals would reveal the degree to which these individuals perceive their own potential for success in the principalship position.

Research studies reviewed, which examined the relationship of (a) assistant principals, (b) principalship readiness or aspirations, and (c) efficacy were as follows:

- Edison (1992) who quantitatively examined, using the 1982 Self-Efficacy Scale

- (SES), the self-efficacy of career and non-career assistant principals in the Detroit School System;
- Bell (2011) who quantitatively examined, using the SAES survey (McCollum et al., 2006a, 2006b), the self-efficacy of high school assistant principals in Connecticut as measured against the ELCC Standards;
  - Richman (2011) who through a mixed-methods approach quantitatively examined, using the 2004 Principal Sense of Efficacy Survey (PSES), the self-efficacy levels before and after staff development of assistant principals in elementary, Title I schools in the Phoenix, Arizona metropolitan area. The assistant principals were reported as “on their way to becoming principals” (p. ii);
  - Singletary-Dixon (2011) who quantitatively examined, using the researcher’s self-created Assistant Principals’ Professional Leadership in Education (APPLE) survey, the self-efficacy of assistant principals in the New York City Public School System including those with “elevated aspirations to move into the principalship” (p. 114); and
  - Finley (2013) who qualitatively examined six African American high school assistant principals in the New York City Public School System including their sense of self-efficacy and “desire to become a school principal” (p. 1).

As indicated, the studies of assistant principal efficacy have been limited to the examination of participant perceptions of their own potential leadership success or participant aspirations to work at the principalship level. As such, these studies focused on assistant principal self-efficacy and none included a bi-level depiction of efficacy; more specifically, they did not include the study of assistant principal organizational efficacy.

**Efficacy influence through job preparation experiences.** Factors that influence efficacy have been examined through numerous empirical studies and theoretically explained by Bandura (1997).

**Empirical studies.** Researchers have considered training and experience factors that build efficacy through non-experimental, experimental or quasi-experimental research designs. McCormick (1999) found leader self-efficacy increased after 15 weeks of leadership training with participants exhibiting initial low efficacy benefiting the most. Shea and Howell (1999) found that self-efficacy and subsequent performance was enhanced by leader attempts to

persuade individuals that they possess the ability to perform a task. McCormick, Tanguma, and Lopex-Forment (2002) examined leader self-efficacy levels, the number of leadership experiences participants had in the past, and how often participants had attempted to assume leadership opportunities. They found that leader self-efficacy was positively correlated to prior leadership experience and with attempted leadership opportunities. Researchers (Dvir, Eden, Avolio, & Shamir, 2002) tested the impact of transformational leadership training on efficacy and found that both efficacy increased and performance levels were significantly higher than those participants not receiving transformational leadership training. More recently, Hannah (2006) studied leadership efficacy in the areas of leader emergence, engagement, and performance when tested over 38 weeks in an experimental design. Results showed that leadership efficacy “is malleable and can be developed through targeted leadership development” (Hannah, 2006, p. 5). Tschannen-Moran and Gareis (2007) surveyed 558 principals in Virginia and determined antecedents as aligned with Bandura (1997) with findings that showed principals’ mastery experiences as the most important sources of self-efficacy beliefs. Additionally, other factors including support of the superintendent, district office, resources, and facilities, as well as preparation for the position of principal showed strong correlations with principal self-efficacy (Tschannen-Moran & Gareis, 2007). Hannah, Avolio, Luthans, and Harms reiterated the findings of earlier researchers when summarizing that efficacy levels can be increased as:

a series of interventions lasting over 5 weeks, (Hannah, 2006) raised levels of generalized leader efficacy through mastery experiences, social persuasion, and guided reflection; that in turn predicted motivation to lead (Chan & Drasgow, 2001), transformational leadership (Bass, 1985) and performance over a 34-week span. (Hannah et al., 2008, p. 686)

Through these empirical studies, efficacy was shown as cultivatable in leaders and with this potential, practitioners can move beyond conceptualizing efficacy to the operationalization of efficacy development through intentional job preparation experiences for improved leader efficacy and ultimately improved leader performance.

***Theoretical explanation.*** As this study included the examination of efficacy based upon job preparation experiences, four specific job preparation experiences available to assistant principal participants in the participating district were included for study as follows: (a) serving

as a part-time teacher and part-time administrator (administrative aide), (b) serving as a full-time administrator while employed under a teaching contract (administrative intern), (c) serving as a principal during summer school sessions (summer school administrator), and (d) serving as a 12-month assistant principal while participating in the district succession program, which included additional trainings and job experiences (associate principal).

These four job preparation experiences align with Bandura's (1997) theoretical sources of efficacy, which are mastery experiences, vicarious learning, social persuasion, and emotional arousal.

***Mastery experience.*** Of the four efficacy developing factors, Bandura (1997) states that the most powerful antecedents to the creation of efficacy beliefs are mastery experiences based on performance accomplishments. He states:

Mastery experiences that provide striking testimony to one's capacity to effect personal changes can also produce a transformational restructuring of efficacy beliefs that is manifested across diverse realms of functioning. Such personal triumphs serve as transforming experiences. What generalizes is the belief that one can mobilize whatever effort it takes to succeed in different undertakings. (Bandura, 1997, p. 53)

So, as Hannah et al. (2008) reasoned, it “logically follows that the more diverse the domain in which leaders build efficacy beliefs, the more likely they will be able to activate their efficacy, and will be more adaptable and effective within and across these domains” (p. 675).

The job preparation experiences in this study held potential relationship to efficacy levels as assistant principals had opportunities that offered mastery experiences across an array of tasks specific to the principalship position.

***Vicarious learning.*** Leader efficacy may be developed through vicarious learning experiences in which individuals “observe competent and relevant models successfully performing similar tasks” (Hannah et al., 2008, p. 686). Researchers recognize the degree of influence that vicarious observations have is influenced by the amount of similarity between the model and the observer in areas that are relevant to the task, as well as the similarity of the task observed and the task later faced by the observer (Bandura, 1997; Hannah et al., 2008; Stajkovic & Luthans, 1998).

The job preparation experiences in this study held potential relationship to efficacy levels as assistant principals had opportunities for vicarious learning by observing other administrators,

in the same setting and facing the same influencing factors, having success in carrying out tasks specific to the principalship.

***Social persuasion.*** Bandura (1997) recommended persuasion and positive feedback as a third factor in developing leader efficacy. While Mellor, Barclay, Bulger, and Kath (2006) showed that persuasion raised leader efficacy and willingness to take on leadership roles, the impact of persuasion has varied based on perceived credibility, expertness, and consensus of the one giving the feedback.

The job preparation experiences in this study offered potential relationship to efficacy levels as assistant principals had opportunities to receive levels of verbal and social persuasion from colleagues and school community members.

***Emotional arousal.*** A fourth factor in developing self-efficacy is emotional arousal (Bandura, 1997). The participant can perceive this efficacy-building factor as either positive or negative. Some find indicators of arousal to be energizing, while others may see them as signs of vulnerability or stress (Bandura, 1997).

The job preparation experiences in this study offered potential relationship to efficacy levels as assistant principals had opportunities to be in emotionally charged situations as well as observe other administrators in these situations. Within these experiences, came the opportunities to process the situation and potentially increase leader efficacy levels for facing similar future situations.

## **Purpose of the Study**

The purpose of this study was to investigate self-efficacy and organizational efficacy as reported by assistant principals for relationships based upon job preparation experiences in one K-12 public school district. Bandura defined self-efficacy as “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (1997, p. 3). Organizational efficacy has been defined as:

A generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities it encounters... It exists as an aggregated judgment of an organization’s individual members’ assessment of their (a) collective capacities, (b) mission or purpose, and (c) sense of resilience. (Bohn, 2010, p. 233)

Study findings better informed the school district leaders of assistant principal reported

self-efficacy and organizational efficacy through benchmarking measurements and based upon job preparation experiences within the district. These findings could guide school district leaders when directing future district succession, mentoring, or professional development planning for increased efficacious leadership development and for improved human capital management results.

### **Justification of the Study**

Within the complexities of school leadership, it is becoming more impossible to identify a trait or strategy that is essential for preparing future school leaders and is beneficial across the gamut of school settings, but efficacy is one overarching attribute that holds potential to predict overall performance success. Bandura & Locke (2003) emphasized the highly applicable and comprehensive nature of efficacy in meeting today's leadership challenges. Hannah et al. concurred with Bandura's (1997) claim when summarizing that "central to leadership and its development... efficacy is the most pervasive among the mechanisms of agency and provides a foundation for all other facets of agency to operate" (Hannah, et al., 2008, p. 669). Simply summarized, leaders with high efficacy hold greater potential for performance success, and efficacy in leaders is malleable and can be increased through training experiences.

**Justification of self-efficacy study.** Bandura (1978) found that self-efficacy predicted positive performance in 92% of assessed cases studied. Stajkovic and Luthans (1998), in a meta-analysis of 114 studies, calculated the relationship between self-efficacy and work related performance; their conclusions reported a "28% increase in performance due to self-efficacy" (p. 252). Additionally, factors that influence efficacy levels have been examined through numerous empirical studies and theoretically explained with researchers such as Bandura (1997) and Hannah (2006) proving efficacy is malleable and can be developed through leadership training.

Four of the five assistant principal efficacy studies reviewed were published between 2011 and 2013. Of the five reviewed studies, two (Edison, 1992; Singletary-Dixon, 2011) were conducted within K-12 public school districts as they exclusively sampled assistant principals. This study of assistant principals across K-12 levels within a single public school district served as the third study found to date that focused on this population. Additionally, none of the previous five assistant principal self-efficacy studies reviewed were conducted in the southeastern region of the United States.

For the following reasons, the self-efficacy portion of this study was justified (a) as high self-efficacy has been proven to increase work performance success, (b) as self-efficacy has been proven to be malleable and can be developed through leadership training, (c) as there has been limited research on assistant principal self-efficacy, and (d) as a way to provide a benchmarking measurement of assistant principal self-efficacy to the participating school district. This study has been represented visually on the spectrum of assistant principal self-efficacy research reviewed in Figure 1.1.

Summary of Assistant Principal Self-Efficacy Research  
 Construct–Efficacy  
 Domain–Self-Efficacy  
 Context–Education  
 Population–Assistant Principals

Location	K-12 Levels	Study Year	Study Type	Measurement Instrument(s)
Illinois	K–12	1992	Quantitative	SES–Survey
Connecticut	9–12	2011	Quantitative	SAES–Survey
New York	K–12	2011	Quantitative	APPLE–Survey
Arizona	K–5	2011	Mixed-Methods	PSES–Survey Interview
New York	9–12	2013	Qualitative	Interview
Virginia– <i>This Study</i>	K–12	2014	Quantitative	SAES–Survey

*Figure 1.1.* Summary of assistant principal self-efficacy research including this study. Figure summarizing reviewed assistant principal self-efficacy research including this study by location, K-12 levels, study year, study type, and measurement instrument(s).

**Justification of organizational efficacy study.** Beyond self-efficacy, studies of collective efficacy have been conducted in various settings. The research of Goddard (2001, 2002) and Goddard, Hoy, and Hoy (2000) centered on collective efficacy with findings “positively and significantly related to differences among schools in student achievement” (Goddard, 2001, p. 467). Limited research (Eck & Goodwin, 2010; Leithwood, 2008; Leithwood, Strauss & Anderson, 2007; Pujol, 2013) has captured district level collective efficacy measurements. As justification for further research, repeated calls (Goddard, 2001; Bandura 1993, 1995, 1997) have been made for further systematic study of the measurement and effects

of collective efficacy including Lord and Emrich (2001) who found in a comprehensive review of cognitive science and leadership the need for further research on leadership efficacy forms. Further, Pujol (2013) reminded readers that school district collective efficacy study “has only been hinted at” (p. 106) by researchers.

As organizational efficacy is a subdomain of collective efficacy, Bandura (1997) assured of its importance when stating, “an organization’s beliefs about its efficacy to produce results is undoubtedly an important feature of its operative culture” (p. 476). As Bohn (2010) posed, do organization members believe in their organization’s (a) sense of collective capability when considering, “*Can we work together to accomplish the goal?*” (p. 234), (b) sense of mission, future, or purpose when considering, “*Do we know where we’re going?*” (p. 234), and (c) sense of resilience when considering, “*Can we ‘stay the course’ in the presence of obstacles?*” (p. 234). Those concerned with human capital management during times of change should consider:

the value of using organizational efficacy as an overarching construct to assess organizations is that it brings together.... perceptions of the entire organization concerning the organization’s capacity to control outcomes. Thus, assessment of organizational efficacy may be the most important assessment an organization can undertake prior to change implementation to increase the chance for success. (Bohn, 2010, p. 247)

For the following reasons, the organizational efficacy portion of this study was justified (a) as there was limited study of the specific form of collective efficacy known as organizational efficacy, (b) as there was no organizational efficacy study previously conducted within public education, and (c) as a way to provide a benchmarking measurement of assistant principal organizational efficacy to the participating school district. This study has been represented visually on the spectrum of collective and organizational efficacy research reviewed in Figure 1.2.

Summary of Collective and Organizational Efficacy Research  
 Construct–Efficacy  
 Domain–Collective Efficacy  
 Subdomain–Organizational Efficacy  
 Context–Education unless *Noted*

Self-Efficacy	Collective Efficacy	Collective and Organizational Efficacy	Organizational Efficacy
	Goddard, Sweetland, & Hoy (2000) Goddard (2001), (2002) Hoy, Smith, & Sweetland (2002) Tasa & Whyte (2005) Ross & Gray (2006) Leithwood, Strauss & Anderson (2007) Tasa, Taggar, & Seijts (2007) Leithwood (2008) Eck & Goodwin (2010)		
	Leithwood (2013)	Petitta & Borgogni (2011) <i>Banking</i>  Fearon, McLaughlin, & Morris (2013) <i>Retail Management</i>  Pujol (2013)	Bohn (2010) <i>Business</i>
Pope (2015)			Pope (2015)

*Figure 1.2.* Summary of collective and organizational efficacy research including this study. Figure summarizing review of collective and organizational efficacy research including this study by researcher(s), year, and context.

**Justification of efficacy and job preparation experience study.** This study provided leaders of the participating school district leaders with findings that reported assistant principal efficacy in relationship to district directed job preparation experiences. The participating school district provided input to customize the participant information survey instrument. As the job preparation experiences selected for this study contained efficacy building factors through

opportunities for mastery experiences, vicarious learning, social learning, and emotional arousal, a study of efficacy based upon job preparation experiences was justified.

The findings were presented to the participating school district leaders and include the following: (a) an aggregated benchmarking measurement of reported self-efficacy based on six national school administrator job performance standards, (b) an aggregated benchmarking measurement of reported organizational efficacy based on the three factors, (c) a summary of relationships between participant job preparation experiences and self-efficacy, (d) a summary of relationships between participant job preparation experiences and organizational efficacy.

### **Research Questions**

This study examined the following research questions:

- 1) What are the self-efficacy levels of assistant principals?
- 2) What are the organizational efficacy levels of assistant principals?
- 3) Is there a difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?
- 4) Is there a difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?

### **Theoretical Framework**

**The theoretical history.** The theoretical study of the efficacy construct and its potential influence in the work setting has been examined from the levels of self-efficacy, collective efficacy, and organizational efficacy types. The theoretical study of the interaction of these efficacy types on engagement in the work setting has also been examined.

**Self-efficacy.** As summarized from Pajares (2002), the self-efficacy construct is credited as beginning with psychologists' study of self early in the 20<sup>th</sup> century. In the 1920s through the 1940s, the work of Pavlov and Skinner redirected focus to the cause and effect theories of stimulus and response (Pajares, 2002). In 1943, Maslow's theory of motivation presented the hierarchy of needs with the component of self-actualization refocusing scholars on the idea of self (Pajares, 2002). In the 1970s and 1980s, cognitive theories focused on mental tasking, problem solving, information processing, and schema building, which took prominence over the study of self (Pajares, 2002). During this same period, Bandura's work in social cognitive theory

was setting the foundation for his future work in self-efficacy. Bandura and Walters (1963) broadened the social learning theory with the principles of observational learning and vicarious reinforcement. From there, Bandura further considered the element of self-beliefs, which was not previously a part of social learning theory (Pajares, 2002). Bandura's (1977) work in self-efficacy theory solidified, and today remains a cornerstone in the theoretical development of the construct.

***Collective efficacy.*** Collective efficacy is credited as beginning with the early behaviorist studies of Watson, Tolman and Skinner with Bandura expanding their theoretical work to consider the internal and external influences on individual actions through the development of social cognitive theory and efficacy (Steele, 2008).

***Organizational efficacy.*** The consideration of different efficacy types and the interactions of these efficacy types were examined when Fearon et al. (2013) studied self, collective, and organizational efficacy in the retail business setting as related to work engagement. The resulting theoretical discussion emphasized Bandura's nature of interactional agency and social exchange, and encouraged an "operationalisation of key measures and constructs, including individual, collective and organisational forms of efficacy" (Fearon et al., 2013, p. 253). Fearon et al. (2013) presented Figure 1.3 (p. 246) as a model to illustrate the engagement of employees in terms of efficacy and interaction levels.

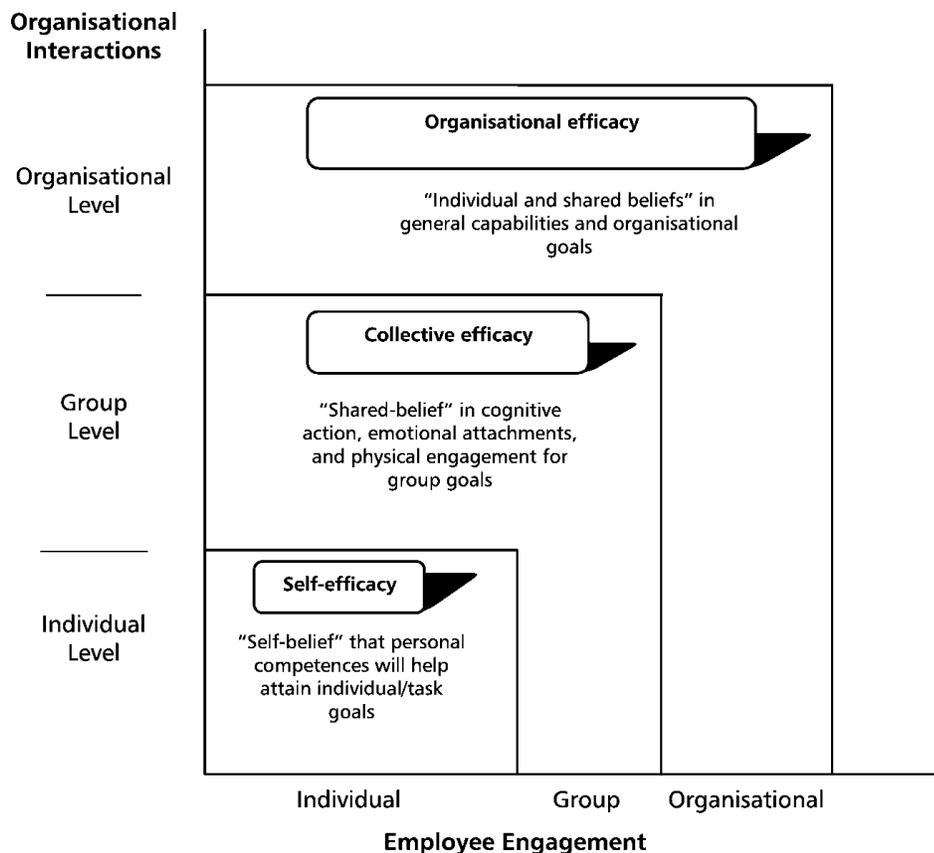


Figure 1.3. Conceptualizing engagement in terms of efficacy and interaction.

Note: From "Conceptualising work engagement," by Fearon, C., McLaughlin, H., & Morris, L., 2013, *European Journal of Training and Development*, 37(3), 244-256. Reprinted with permission (see Appendix A).

For this study, the efficacy levels on Figure 1.3 aptly parallel the levels of system interdependence found in the public school system. The efficacy levels on the framework model were suited to this study as follows: Individual Level represents the self-efficacy as reported by individual assistant principals as they engage in their work as defined by nationally recognized job performance standards; Group Level represents the collective or group efficacy as assistant principals engage in school level work with colleagues to meet school wide goals; and Organizational Level represents efficacy beliefs that extend beyond the self and collective levels to encapsulate the general beliefs the assistant principals hold in the school district's overall capacity for success.

**The construct's underpinning.** Today's self-efficacy construct stems from two basic precepts. The first is "the belief that one's actions can contribute to the attainment of desired goals" and the second is "the belief that one holds the personal capacity (i. e., knowledge, skills, resources) to successfully implement those actions" (Anderson, 2011, p. 4). Bandura claimed:

People's beliefs in their efficacy have diverse effects. Such beliefs influence the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize. (1997, p. 3)

While the self-efficacy domain falls under the efficacy construct, so does the collective efficacy domain with the defined terms of group and organizational efficacies positioned as subdomains under the collective efficacy domain. These forms of efficacy share many theoretical assumptions (Bandura, 1997).

Generally, the all-encompassing efficacy construct has been examined for potential inclusion under the two prominent theoretical frameworks of attribution theory and social cognitive theory.

**Attribution theory.** Covington (1984) posed that self-efficacy increases as one's successes increase, and success can lead to greater efforts to accomplish and persevere through difficult assignments. Achievement on tasks increases self-efficacy, which in turn leads to greater future success. If the optimism of the observer anticipating future success stems from mastery self-thoughts such as (a) *I had the ability last time, so I will be able to succeed again* or (b) *I exerted enough effort to succeed last time, so I will be able to again*, the attribution theorists would recognize the efficacy. Self-efficacy can also be increased through vicarious experiences (Bandura, 1986). Seeing the successful actions of others in their field can influence personal beliefs that they too can master similar tasks. If the optimism of the observer anticipating future success stems from self-thoughts such as (a) *I can have the same luck*, or (b) *I have the same abilities*, or (c) *I can put forth the same effort* as the others in the field who were observed, then attribution theorists would recognize the efficacy. The attribution framework focuses on how the causal judgments of effort and task difficulty influence performance. Critics, including Bandura (1997), of this theory take issue that only two dimensions of causality are considered and that

analytical procedure is narrowed to Weiner's (1974) categories of (a) effort, (b) ability, (c) level of task difficulty, or (d) luck. Weiner (1974) defined attribution as a three-stage process in which behavior is observed, behavior is determined to be deliberate, and behavior is attributed to internal or external causes. Under this theory, early self-efficacy measurement instruments were built on hypothetical scenarios or vignettes and were rooted in attribution theory; they yielded poor validity results. This design approach has been criticized as ineffective in assessing self-efficacy as it only can offer "performance situations contain(ing) constellations of factors that convey efficacy information" (Bandura, 1997, p. 85).

***Social cognitive theory.*** More researchers hold social cognitive theory as the appropriate theoretical framework for self-efficacy and organizational efficacy. This theory favors a more dynamic and integrative approach to the judgment process rather than the limited categorical one taken by attribution theorists. Human agency, or action, is motivated from four sources: mastery experience, vicarious experience, social persuasion, and emotional arousal states. Bandura's analytical methods revealed which factors people use, how heavily they weight and combine them, and the resulting amount of variance accounted for by these factors and their interactions (Bandura, 1997). The interaction of both internal and external factors in the leadership context is "at the heart of the theoretical rationale explaining the relationship observed between principals' sense of efficacy and their performance, use of power, and coping strategies" (Tschannen-Moran & Gareis, 2004, p. 582). Osterman and Sullivan (1996) also recognized, "external and internal factors interact to influence leadership behavior" (p. 661). A review of triadic reciprocal causation found the influence of internal and external factors and applied to this study as in previous research where "principals' behavior is influenced by their internal thoughts and beliefs, but these beliefs are shaped by elements—including other individuals—in the environment" (Tschannen-Moran & Gareis, 2004, p. 582).

Like self-efficacy, group and organizational efficacies both fall under the collective efficacy subdomain, which falls under the efficacy construct. These efficacy forms stem from the social cognitive research of Bandura (1997). Because individuals rarely function in isolation today, the consideration of all efficacy types exemplifies what Bandura called emergent interactive or interactional agency (Bandura 2001, 2002). It is not the personal competence or abilities as much as the extent to which there is self-belief that these can work together positively to benefit the agentised efforts of employees, managers, or other stakeholders (Van Vuuren, De

Jong & Seydel, 2008). Decker claimed that prior to Bohn's organizational efficacy work, many had:

long pondered the employee perspective of efficacy for its impact upon organizational effectiveness. In reality, all that remained after each study was individual self-efficacy levels without anything to bridge the gap to organizational results. A scale for examining the confidence within an organization is most sufficient for determining the reasons for varying levels of organizational output, not only on a product basis but also on a human performance perspective. (2010, p. 253)

Under the framework of social cognitive theory, the magnitude of the relational influence between (a) internal self-efficacy and (b) external group and organizational collective efficacies is realized. Simply, both the internal and external efficacies predict performance and carry reciprocal influence on the other.

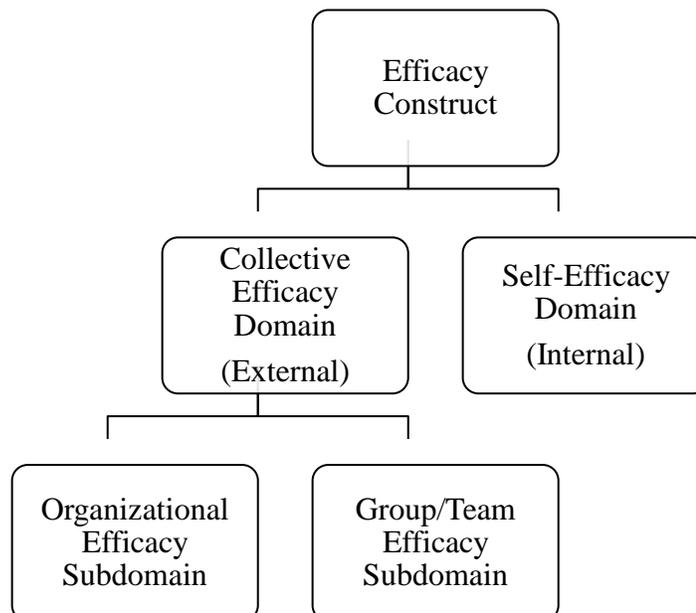
### **Conceptual Framework**

When considering the construct of efficacy, Goddard (2001) stressed the importance of researchers being clear about the use of the term in studies. The terms self, collective, group, team, and organizational are descriptors of different aspects of the efficacy construct. Bandura (1997) defined the inward looking self-efficacy as "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3) and the outward looking collective efficacy as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (p. 477). The collective efficacy domain is further distinguished with "closely related constructs such as group and team efficacies" (Hannah et al., 2008, p. 683). Further, organizational efficacy requires its members to judge the likelihood of overall organizational success considering all factors that extend beyond the capabilities of its members such as the economic and political landscapes. Organizational efficacy is defined as:

a generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities it encounters... It exists as an aggregated judgment of an organization's individual members' assessment of their (a) collective capacities, (b) mission or purpose, and (c) sense of resilience. (Bohn, 2010, p. 233)

This study considers the self-efficacy domain and the organizational efficacy subdomain

as positioned on the conceptual framework in Figure 1.4.



*Figure 1.4.* The efficacy construct, domains, and subdomains. Figure summarizing reviewed efficacy construct, domains, and subdomains as relevant to this study.

### Definition of Terms

To direct this work, the following terms were used as defined:

*Assistant principal.* Any person currently employed by the participating school in a school leadership position excluding the position of principal. In this study, the use of the term assistant principal was considered synonymous with associate principal, vice principal, and resource teacher.

*Administrative aide.* A school leadership job preparation experience that is available within the participating school district and most often offered from the school level, which allows a contracted teacher to learn and to carry out basic school leader management duties during a set time in the school schedule. Duties may include managing transportation, processing discipline, or general supervision.

*Administrative intern.* A school leadership job preparation experience that is available within the participating school district most often offered from the school level, which allows a contracted teacher to learn and carry out basic school leader management duties with no assigned teaching schedule. Duties may include all tasks carried out by an assistant principal.

*Associate principal.* A school leadership job preparation experience that is available within the participating school district most often offered from the district level, which allows a contracted assistant principal to learn and carry out the basic school leader management duties of the principal. The contract length is extended to a 12-month position and duties may include all tasks carried out by the principal such as annual budget completion, master schedule completion, and school improvement planning. This position was created as part of district succession planning to prepare principalship candidates.

*Collective efficacy.* “A group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments” (Bandura, 1997, p. 477).

*Efficacy.* “Peoples’ beliefs and confidence to execute actions to attain a specific goal” (McCullum et al., 2006a, p. 105).

*ELCC standards.* Standards developed through the NPBEA and the ELCC for advancing preparation of educational leaders. The standards set program goals and objectives focused on knowledge, skills, and attributes required of candidates to lead and manage an educational enterprise centered on teaching and learning (NPBEA, 2002). The ELCC Standards (see Appendix B) were revised in 2011 (NPBEA, 2013).

*ISLLC standards.* Standards developed through the Council of Chief State School Officers (CCSSO) in collaboration with the NPBEA to help strengthen preparation programs in school leadership. The ISLLC Standards were revised in 2008 (NPBEA, 2013) and 2014 (CCSSO, 2014).

*Job preparation experiences.* School leadership job preparation experiences, offered within the participating school district, from the school level or from the district level. Each experience provides efficacy-building potential through mastery experiences, vicarious experiences, social persuasion, and emotional arousal. School level job preparation experiences studied were as follows: administrative aide and administrative intern. District level job preparation experiences were as follows: summer school administrator and associate principal.

*Leadership efficacy.* “Leaders’ (followers’) beliefs in their perceived capabilities to organize the positive psychological capabilities, motivation, means, collective resources, and courses of action required to attain effective, sustainable performance across their various leadership roles, demands, and contexts” (Hannah et al., 2008, p. 670).

*Organizational efficacy.* “A generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities it encounters... It exists as an aggregated judgment of an organization’s individual members’ assessment of their (a) collective capacities, (b) mission or purpose, and (c) sense of resilience” (Bohn, 2010, p. 233).

*Organizational Efficacy Scale (OES) survey.* A 17-item survey displaying high validity with existing efficacy instruments and high reliability for a three-factor focus. The OES survey instrument is based in efficacy theory and centers on sense of collective capability, sense of mission, future, or purpose, and sense of resilience (Bohn, 2010).

*Principal Self-Efficacy Survey (PSES).* A 23-item survey designed to measure “(a) principal self-efficacy for instructional effectiveness and management, (b) percentage of time spent in instructional effectiveness versus management, and (c) the outcome expectancy for efforts relative to facilitating an effective teaching and learning environment at their school” (Smith et al., 2006, p. 506). Smith, Guarino, Strom, and Adams developed this instrument in 2006 (McCollum et al., 2006b).

*Principal Sense of Efficacy Scale (PSES).* Originally, a 50-item rating scale later reduced to 18 items that is designed to measure principals’ work in management, instructional leadership, and moral leadership. This instrument is based on the ISLLC standards and was developed by Tschannen-Moran and Gareis in 2004 (Tschannen-Moran & Gareis, 2004).

*School Administrator Efficacy Scale (SAES) survey.* A 49-item Likert scale used to assess eight dimensions of school administrator self-efficacy: (a) instructional leadership and staff development, (b) school climate development, (c) community collaboration, (d) data-based decision making aligned with legal and ethical principles, (e) resource and facility management, (f) use of community resources, (g) communication in a diverse environment, and (h) development of school vision. This instrument is based on the ELCC Standards and was developed by McCollum, Kajs, and Minter (McCollum et al., 2006a, 2006b). The items based in these standards support the content and face validity of the scale and help ensure that the many facets of a school administrator’s position are addressed (National Council, 2007).

*Self-efficacy:* Perceived “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3).

*Sense of collective capability.* Defined as “how we work together to accomplish the goal” (Bohn, 2010, p. 234).

*Sense of mission, future, or purpose.* Defined as “how we know where we are going” (Bohn, 2010, p. 234).

*Sense of resilience.* Defined as “how we ‘stay the course’ in the presence of obstacles” (Bohn, 2010, p. 234).

*Summer school administrator.* A school leadership job preparation experience that is available within the participating school district most often offered from the district level, which allows an employee holding a Virginia administrative licensure endorsement and currently not employed in a position of principal, associate principal or assistant principal to serve under contract as the summer school administrator. Duties include all tasks carried out by a principal including transportation, facilities management, budget, scheduling, staffing, and discipline.

## **Limitations**

**Internal validity.** According to McMillan and Schumacher (2006), the three primary threats to internal validity are history, selection, and subject effects. This study involved a cross-sectional data collection method. With this method, events or unrelated incidents that might impact participants over time or affect attrition rates over multiple administrations were not an issue. In terms of selection, this study utilized non-random, convenience sampling strategy. Participation in the study was voluntary, and assistant principals who elect to respond may have been more motivated or invested; therefore, their responses may be different from those administrators who chose not to respond. Finally, in regard to subject effects, it is possible that since self-report measures were being utilized, some participants may not have responded honestly and may have felt a need to report highly favorable responses on the survey or questionnaire. While subject effects are inherent in survey research, attempts to limit or reduce such effects were included as surveys were given online and no specific identification of participants was required.

**External validity.** McMillan and Schumacher (2006) also highlight issues surrounding external validity in terms of researchers’ abilities to generalize the results of the study to people or environments outside the study. Population external validity, which refers to the characteristics of the population sampled, was of concern in this study design. This investigation focused on assistant principals, associate principals, and resource teachers in one K-12 public school district in Virginia who were not randomly selected and, thus, generalizability to assistant

principals in other locations is limited. It is noted that like two previous assistant principal self-efficacy studies, this study examined self-efficacy levels in assistant principals across the K-12 spectrum as well as provided an initial study in organizational efficacy within education. This bi-level efficacy design and the utilization of three survey instruments allowed for a more multi-faceted database for analyses than had been gathered in previous studies.

The methodology chapter provides an account of the conditions for conducting this study, but the reader ultimately determines whether the results are generalizable to a specific environment or context.

**Reliability.** As Bell (2011) noted, “reliability in survey research refers to the degree to which a particular instrument or measure of a construct would provide the same results over repeated applications to random members of the same population” (p. 81). Furthermore, reliability is a purported strength of survey research (Bell, 2011). This study includes the conceptual framework, the instruments utilized, data collection, and analyses information, should another researcher elect to replicate this study. Copies of the survey instruments are provided in Appendices B, C, and D.

This study is limited in that data collected were as follows: (a) assistant principal self-reported, perceived capabilities to perform the job of the principalship, (b) assistant principal self-reported, perceived capabilities of the organization’s future success, and (c) assistant principal self-reported job preparation experiences. Further limitations include that selected survey instruments did not allow open-ended responses, which confines participant responses. Including additional or extended efficacy measurement instruments or allowing participant open-ended responses could further strengthen this study. This study was not designed as a longitudinal study in which data collection on assistant principals would continue through their work in a future principalship position, nor did it contain pre job preparation experience and post job preparation experience efficacy measurements. As the study is a comparative study, causation could not be determined, but beyond descriptive analyses, inferential analyses examined variance to determine significance of relationships between two types of efficacy and job preparation experiences.

## **Research Review by Domains**

**Measuring self-efficacy.** Within education, a variety of measurement instruments have

been created and used by researchers to measure efficacy. Bandura (2001) made a number of recommendations for self-efficacy measurement instruments that Tschannen-Moran and Gareis (2004) summarized as follows:

Because self-efficacy beliefs are context specific, measures 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 the efficacy beliefs. Levels refer to task difficulty and a range of tasks at varying degrees of difficulty should be used to tap efficacy beliefs. The strength of efficacy beliefs should be assessed by asking respondents to identify a point along a continuum of beliefs rather than an “all or none” or “yes–no” format. (p. 575)

Tschannen-Moran and Gareis (2004) credited Hillman (1986) as attempting the earliest measure of principals’ efficacy beliefs, which was aligned with attribution theory. The instrument was not embraced or replicated due in part to the cumbersome forced choice response and also due in part to a shift by theorists away from considering self-efficacy within the attribution theoretical framework. Imants and DeBradbander (1996) attempted another measure that did not demonstrate longstanding validity. Also, Dimmock and Hattie (1996) used a vignette design of situations in six leadership areas as follows: school development planning; teaching, learning and curriculum; managing staff; budgeting; managing parents; and managing the environment. This approach was also found to be problematic and without reliability.

In the research reviewed that was specific to school leaders and self-efficacy, the two instruments with repeated use were the 2004 PSES (Tschannen-Moran & Gareis, 2004) and the 2006 SAES (McCollum et al., 2006a, 2006b) survey, which were both designed specifically to determine the self-efficacy of school administrators. Both the PSES and the SAES surveys have shown strong validity and reliability results. The primary difference found was that the PSES measures three factors and the SAES survey measures eight factors of self-efficacy (McCollum, Kajs, & Minter, 2006a, 2006b; Tschannen-Moran & Gareis, 2004). The eight factors better satisfy Bandura’s concern that measurements of self-efficacy must hold a dynamic integrative approach and examine the interaction of many internal and external factors. McCollum and Kajs (2007) claimed that school administrator candidates’ and practicing principals’ efficacy are both measurable using the SAES survey. McCollum, Kajs, and Minter concluded that:

The findings regarded the construct validity and reliability of the SAES are consistent with and a significant addition to past findings... With these new findings, researchers and practitioners can confidently rely on the validity and reliability of the SAES in their work. (2006b, p. 52)

Furthermore, the SAES (McCollum et al., 2006a, 2006b) survey measurements of self-efficacy are operationalized through the established ELCC Standards, which align with the ISLLC standards (Murphy, 2005). These performance standards provide a framework to measure defined actions and expected capabilities of assistant principals as they consider their future work as principals.

The 1996 ISLLC Standards were adopted by 43 states and they, as well as the ELCC Standards, continue through revisions to serve as a current roadmap for administrator preparation. They define specific knowledge, skills, and dispositions related to key themes in the development of school principals and superintendents (NPBEA, 2002). As the ISLLC Standards were revised in 2008 (NPBEA, 2013) and 2014 (CCSSO, 2014), and the ELCC Standards were revised in 2011, both reflect the current voices of the national education associations who collectively authored them for the purpose of conveying how to effectively improve education. It is against these national standards, or from the state and district standards derived from these national standards, that principal job performance is currently judged.

**Measuring organizational efficacy.** As Fearon et al., (2013) recognized, the measuring of individual, group and organizational efficacy is challenging. Bandura (2000) recommended two methods for the measurement of the collective efficacy domain. The first method aggregated the individual efficacy scores of the group members to perform certain tasks. The second method aggregated group members' perceptions of the group's ability to perform certain tasks. In capturing organizational efficacy, this study aligns to Bandura's second method as it was designed to collect and aggregate the perceptions of the assistant principal respondents on the school districts' capabilities, direction, and resilience with the school district serving as the organizational group.

Bandura (2006) described the importance of specificity when measuring efficacy, "The 'one measure fits all' approach usually has limited explanatory and predictive value because most of the items in an all-purpose test may have little or no relevance to the domain of functioning" (p. 307). The OES (Bohn, 2010) survey instrument is based in efficacy theory and

centers on sense of collective capability, sense of mission, future, or purpose, and sense of resilience. It is specifically designed to measure organizational efficacy, but is fitted to business. To be better fitted to this study, the OES survey was adapted to the education setting.

Regarding validity and reliability, when creating the OES (Bohn, 2010) survey, the first portion of Bohn's study included employees of seven organizations to test divergent and convergent validity of the OES survey with existing efficacy instruments. The second portion of Bohn's study combined 22 organizations (N=886) to validate the OES survey instrument statistically. The final determination included 17 items displaying high validity with existing efficacy instruments and high reliability for a three-factor focus (Bohn, 2010).

While acknowledging the work of prominent researchers including Dufour and Marzano, Pujol (2013) summarized, "while research has begun to identify the district as a major force in large-scale school improvement resulting in increased collective efficacy and improved student achievement, there is little research about collective efficacy as a district construct as opposed to an individual school construct" (p. 75). This review found no previous studies of organizational efficacy in assistant principals.

### **Research Review of Efficacy Study Concerns**

Three concerns when studying efficacy recurrently surfaced during the literature review. They were as follows:

**Efficacy construct measurement.** Research supports efficacy as a highly influential construct with proven relationships in various settings to variables including work performance, work engagement, program implementation, classroom management, and student achievement. However, measuring the construct has proven difficult. Early study results revealed elusive and persistent construct measurement problems "hampered by the lack of a reliable and valid instrument to capture the construct" (Tschannen-Moran & Gareis, 2004, p. 575). Further development of efficacy measurement instruments, with established validity and reliability, would be beneficial in giving more measurement options to future researchers studying the construct.

**Efficacy limited research.** While efficacy has been widely studied, in the area of school leaders, studies are more limited. In this study, of the school leader efficacy studies reviewed, only three had study designs that were experimental. These three studies did compare the

longitudinally self-efficacy or collective efficacy levels to work output measures or as rated by other employees with reported relationship results (Anderson, Krajewski, Goffin & Jackson, 2008; Hannah et al., 2008; Tasa et al., 2007). In the non-experimental studies, researchers focused on reporting descriptive data findings and on reporting correlation or variance findings through inferential data analyses. More efficacy studies that are experimental or longitudinal in design would be beneficial to future researchers studying the construct.

**Efficacy negative effect.** Scholars have considered how high self-efficacy could hinder the effectiveness and development of some leaders (Bandura, 1997; Machida & Schaubroeck, 2011; Shipman & Mumford, 2011). Leaders must be aware of their own deficiencies as they guide tasks such as planning and vision setting (Shipman & Mumford, 2011). Beyond awareness, leaders must manage their self-efficacy to optimize their own leadership development (Machida & Schaubroeck, 2011). With this third issue and the concern of human capital management, future research to determine optimal efficacy levels for continued leader development and career success would be beneficial to future researchers studying the construct.

### **Research Review and Study Design Application**

A recurring issue in the studies reviewed was the struggle researchers had in measuring the efficacy construct as they attempted a variety of instruments and worked under the two theoretical frameworks of attribution theory and social cognitive theory. The difficulties in measuring efficacy that some researchers encountered resulted when they designed studies that only considered a limited influence (internal *or* external) approach or a limited context (situational vignettes) approach. Their struggles, together with the juxtaposing successes of the researchers who designed a multiple influences (internal *and* external) and non-contextual (factors, standards-based) approach, provide valuable guidance in the measurement of self-efficacy for future research.

As the measurement of organizational efficacy is a burgeoning subdomain within the efficacy construct, the difficulties and successes of previous researchers were not available for review. As the subdomain of organizational efficacy and the domain of self-efficacy both fall under the efficacy construct, this study applied a research design that attempted to avoid concerns caused when using a single or limited efficacy measurement. This design used two efficacy measurement instruments with previously established reliability and validity to capture

internal and external efficacy measurements. Further, the design ensured operationalized application of self-efficacy through six established measurement standards and application of organizational efficacy through three established measurement factors.

A second applicable design consideration from the studies reviewed was the importance of keeping at the forefront the understanding of Bandura's (1997) theory of triadic reciprocal causation when exploring any inferential relationships between efficacy and influencing factors. Bandura's theory focuses attention on the interaction between internal and external factors at work as it recognizes that a person's overall efficacy beliefs are "products of reciprocal causation" (Wood & Bandura, 1989, p. 374). The theory's premise is that behavior is influenced by internal beliefs and thoughts, but that behavior is also shaped by elements in the environment. This study took a bi-level design approach, measuring both self-efficacy and organizational efficacy to capture both internal and external efficacy beliefs; the research reviewed had not captured these two efficacy measurements within the same study.

### **Summary of the Literature Review**

To address the problem of establishing a quality and quantity laden pool of principal candidates, who will be better positioned to meet the expectations of today's principalship, school districts should select school leaders who have the skill set and knowledge required, but who also have high self-efficacy and organizational efficacy levels. As efficacious school leaders are motivated to engage in the behaviors that will help them perform well in the workplace, they positively influence teaching and learning. Seashore-Louis et al., (2010) summarized:

One of the most powerful ways in which districts influence teaching and learning is through the contribution they make to feelings of professional efficacy on the part of school principals. Evidence justifying this claim is provided by quantitative and qualitative studies. Principal efficacy provides a crucial link between district initiatives, school conditions, and student learning. (p. 127)

### **Organization of the Study**

This study is organized into five chapters. Chapter One contains the introduction and literature review including: (a) overview of the study, (b) historical perspective, (c) statement of the problem, (d) review of literature, (e) community of scholars, (f) significance of the study, (g)

purpose of the study, (h) justification of the study, (i) research questions, (j) theoretical framework, (k) conceptual framework, (l) definition of terms, (m) limitations, (n) research review by domains, (o) research review of efficacy study concerns, (p) research review and study design applications, (q) summary of the literature review, and (r) organization of the study overview. Chapter Two contains the methodology including: (a) purpose of the study, (b) research questions, (c) research design and justification, (d) dependent and independent variables, (e) data analyses techniques, (f) sample selection, (g) data collection and gathering procedures, (h) instrument design and validation, (i) data treatment, (j) data management, (k) timeline, and (l) methodology summary. Chapter Three contains the results of the study including: (a) purpose of study review, (b) descriptive data analysis of respondents, (c) reported data findings, (d) additional data findings, and (e) summary of analyses. Chapter Four contains the summary and conclusions including: (a) the introduction, (b) summary of findings and related literature, (c) implications for future practice, (d) recommendations for future studies, and (e) reflections.

## **Chapter Two**

### **Methodology**

This study methodology aligns to the initial work of Bandura as he defined the efficacy construct under the social cognitive theory and recognized that experiences can determine efficacy levels. The study methodology includes: (a) purpose of the study, (b) research questions, (c) research design and justification, (d) dependent and independent variables (e) data analyses techniques, (f) sample selection, (g) data collection and gathering procedures, (h) instrument design and validation, (i) data treatment, (j) data management, (k) timeline, and (l) methodology summary.

#### **Purpose of the Study**

The purpose of this study was to investigate self-efficacy and organizational efficacy as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district.

#### **Research Questions**

This study was conducted to examine the following research questions:

- 1) What are the self-efficacy levels of assistant principals?
- 2) What are the organizational efficacy levels of assistant principals?
- 3) Is there a difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?
- 4) Is there a difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?

The research hypotheses for research questions three and four were as follows:

- 3) There is significant difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district.
- 4) There is significant difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district.

The null hypotheses for research questions three and four were as follows:

- 3) There is no significant difference in self-reported self-efficacy based upon job preparation experiences in one K-12 public school district.

- 4) There is no significant difference in self-reported organizational efficacy based upon job preparation experiences in one K-12 public school district.

### **Research Design and Justification**

This quantitative study utilized a non-experimental, comparative research design to examine four research questions. It utilized a cross-sectional survey data collection method. According to Creswell (2008), a cross-sectional survey method collects data at one specific point in time and can examine attitudes, beliefs or opinions. In this design, data were collected at one point in time through three measurement instruments—the SAES (McCollum et al., 2006a, 2006b) survey, OES (Bohn, 2010) survey, and the participant information survey. The SAES survey collected self-efficacy data; the OES survey collected organizational efficacy data, and the participant information survey collected demographic data. The study design utilized a survey research model. This design is appropriate when the purpose of the study is to collect, describe and evaluate information from a selected target population. The selected group of interest in this study was assistant principals in one K-12 public school district. As Creswell (2009) noted, “A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (p. 145). Utilizing a design that collected data at one point in time from a selected group was an economical method for rapid data collection; this collected data then served as a basis for comparative analysis. The researcher used the SAES (McCollum et al., 2006a, 2006b) survey, OES (Bohn, 2010) survey, and participant information survey data for descriptive and inferential analyses to answer the posed research questions.

The SAES (McCollum et al., 2006a, 2006b) survey, OES (Bohn, 2010) survey, and participant information survey data also were used for further investigative analyses that extended beyond the research questions. The investigative analyses were conducted of respondents reporting both high self-efficacy and high organizational efficacy (a) to further describe job preparation experiences and (b) to further describe selected demographic characteristics.

## Dependent and Independent Variables

There were two dependent variables examined in this study. Self-efficacy served as one dependent, response variable. Separately, organizational efficacy served as one dependent, response variable. The purpose for studying each dependent variable, as presented in the four research questions, was two-fold. First, through descriptive analyses, benchmarking efficacy measurements were provided to the participating district to answer research questions one and two. To operationalize the collected data, results for each dependent variable were considered through researcher set ranges, which aggregated for descriptive analyses purposes each dependent variable, self-efficacy and organizational efficacy, as high, moderate, or low in respondents. Secondly, through inferential analysis, self-efficacy and organizational efficacy were each examined for relationship to job preparation experiences to answer research questions three and four. To operationalize the collected data, results for each dependent variable were compared through the continuous efficacy scales provided in the SAES (McCollum et al., 2006a, 2006b) survey and OES (Bohn, 2010) survey, to the independent variable, job preparation experiences, through ANOVA analyses. The SAES survey provided continuous scale efficacy measurements on six ELCC Standards (NPBEA, 2002) and the OES survey provided continuous scale efficacy measurements on three factors.

The independent variable, job preparation experiences, had five response items in which participants could report experiences. The items were as follows: (a) administrative aide, (b) administrative intern, (c) summer school administrator, and (d) associate principal. These items were defined in the terms section. These items were each dichotomous, as participants could only report participating or not participating in the job preparation experiences. Participants could also select (e) none of the above. Descriptive analyses of the frequency of each job preparation experience item were reported. The purpose for studying the independent variable, as presented in research questions three and four, was to examine self-efficacy and organizational efficacy each for relationship to job preparation experiences. To operationalize the collected data, results for the independent variable items were compared to each of the dependent variables, self-efficacy and organizational efficacy, through ANOVA analyses.

Beyond the examination of the dependent and independent variables, as presented in the four research questions, additional investigative analyses were conducted of respondents

reporting both high self-efficacy and high organizational efficacy (a) to further describe job preparation experiences and (b) to further describe selected demographic characteristics.

First, through further descriptive analyses of the independent variable, it was of interest to investigate the reported job preparation experiences by grouping them as school offered or district offered experiences. Based on participating district practices, groups were established as follows: (a) job preparation experiences offered from the school level, which were previously defined as administrative aide and administrative intern, (b) job preparation experiences offered from the district level, which were previously defined as summer school administrator and associate principal, (c) any combination of both school level and district level offered job preparation experiences, and (d) none of the studied job preparation experiences. The combinations of the response items within these group levels further emphasized the source from which job experiences were offered to respondents and are shown in Figure 3.1.

Response Items	Group Level	Group Definition
Administrative aide	School level	Group Level 1–school level offered experience
Administrative intern	School level	Group Level 1–school level offered experience
Administrative aide & Administrative intern	School level	Group Level 1–school level offered experience
Summer school administrator	District level	Group Level 2–district level offered experience
Associate principal	District level	Group Level 2–district level offered experience
Summer school administrator & Associate principal	District level	Group Level 2–district level offered experience
Any combination of Group Level 1 AND Group Level 2	School & District levels	Group Level 3–both school level and district level offered experiences
None of the above	None	Group Level 4–no school or district level offered experiences

*Figure 3.1.* Independent variable response items grouped by sources of offered job preparation experiences. Figure summarizing the job preparation experiences response item combinations grouped by the sources of the offered job preparation experiences.

Secondly, through further inferential analyses of the independent variable, job preparation experiences, it was of interest to investigate further those respondents reporting both high self-efficacy and high organizational efficacy as related to gender, years of experience, and current school level.

### **Data Analyses Techniques**

The online web-based surveying product that is provided through Virginia Tech and accessible at survey.vt.edu was used to collect study data. The three selected data collection instruments were combined into one multiple-page input. Survey.vt.edu allowed results to be exported to programs that were used during the analysis process. These programs, Microsoft Excel® and IBM SPSS®, were utilized for data analyses.

To answer research question one, this study determined the self-reported self-efficacy of participants to provide an internal depiction of assistant principal efficacy. Participant self-reported self-efficacy responses on the SAES (McCollum et al., 2006a, 2006b) survey were aggregated for descriptive purposes and were reported through researcher set ranges that described internal efficacy as high, moderate, or low in respondents.

To answer research question two, this study determined self-reported organizational efficacy of participants to provide an external depiction of assistant principal efficacy. Participant self-reported organizational efficacy responses on the OES (Bohn, 2010) survey were aggregated for descriptive purposes and were reported through researcher set ranges that described external efficacy as high, moderate, or low in respondents.

**Descriptive statistics.** For research questions one and two, descriptive analyses reported frequencies and percentages, means, standard deviations, and ranges for aggregated benchmarking measurements of the survey respondents.

**Frequencies and percentages.** On the participant information survey, items two through eight were presented in order to collect information that was used to describe the sample. From this survey, frequencies and percentages were presented to report gender, age group, path to licensure, career aspirations, years of experience, current school level, and job preparation experiences. Frequencies and percentages were also presented to report survey participant self-efficacy levels from the SAES (McCollum et al., 2006a, 2006b) survey as high, moderate, or low. Likewise, frequencies and percentages were presented to report survey participant

organizational efficacy levels from the OES (Bohn, 2010) survey as high, moderate, or low. Findings were presented in tables with brief accompanying narratives as needed and organized following the order of the survey items.

**Mean.** Mean is a common measure of average as it reports statistical distribution when measuring central tendency. The participant SAES (McCollum et al., 2006a, 2006b) survey mean scores for ELCC Standards one through six were reported as part of the descriptive statistical analyses. Likewise, the participant OES (Bohn, 2010) survey mean scores for factors one through three were reported as part of the descriptive statistical analyses.

**Standard deviation.** Standard deviation is a common measure of variability as it reports how tightly scores are clustered around the mean. The standard deviation of the sample is an estimate of the population. The participant SAES (McCollum et al., 2006a, 2006b) survey standard deviations for each ELCC Standard one through six were reported as part of the descriptive statistical analyses. Likewise, the participant OES (Bohn, 2010) survey standard deviations for factors one through three were reported as part of the descriptive statistical analyses.

**Range.** Range is a common measure of variability as it reports the difference between the maximum value and the minimum value reported. The possible ranges for responses were used to establish high, moderate, and low efficacy categories for the SAES (McCollum et al., 2006a, 2006b) survey and OES (Bohn, 2010) survey for more standardized reporting of results. This was beneficial as the SAES survey has a Likert scale of seven points with two anchor descriptors, and the OES survey has a Likert scale of six points with six anchor descriptors. These established ranges were reported as part of the descriptive statistical analyses.

**Aggregated benchmarking results.** To provide the participating school district with benchmarking self-efficacy and organizational efficacy measurements, an aggregation strategy was used with both the self-efficacy and organizational efficacy variables. For the self-efficacy portion, this study replicated the aggregated approach used by Bell (2011). For the organizational efficacy portion of this study, an aggregated individual perception of collective capabilities was also appropriate as the most logical unit of measurement since it is the perceptions of the individuals in an organization that combine to assess the collective perception of organizational efficacy (Bandura, 2000). These aggregated benchmarking results were reported as part of the descriptive statistical analyses.

**Aggregated SAES survey results.** Respondents were to select for each survey item one point on a seven point Likert scale, with only two anchors (1=“Not at all true of me” to 7=“Completely true of me”), that best reflected how true the statement was of them. As two anchors do not allow for rich descriptions of results, this study replicated Bell’s (2011) study in characterizing responses as high, moderate, and low. Responses of 6 or 7 were characterized as reports of high self-efficacy, responses of 3, 4, or 5 were characterized as reports of moderate self-efficacy, and responses of 1 or 2 on the seven point Likert scale were characterized as reports of low self-efficacy (Bell, 2011).

The total score range on the SAES (McCollum et al., 2006a, 2006b) survey is 49 - 343. The minimum score for the high range (suggesting a high degree of self-efficacy) was the number of items times six (i. e., to be in the high range required a minimum average response of six on all items). The minimum score for the moderate range (suggesting a moderate degree of self-efficacy) was the number of items times three (i. e., to be in the moderate range required a minimum average response of three on all items). All scores below the minimum score for the moderate range were classified as low, indicating a low degree of self-efficacy. The ranges were set as follows: high 294–343, moderate 147–293, and low 49–146. Descriptive statistics were presented in tables with brief accompanying narratives as needed and organized following the order of the ELCC Standards (NPBEA, 2002).

**Aggregated OES survey results.** Respondents were to select for each survey item one point on a six point Likert scale, with six anchors (6=*strongly agree*, 5=*agree*, 4=*agree somewhat*, 3=*disagree somewhat*, 2=*disagree*, 1=*strongly disagree*). Responses of 5 or 6 (agree/strongly agree) were characterized as reports of high organizational efficacy, responses of 3 or 4 (disagree somewhat/agree somewhat) were characterized as reports of moderate organizational efficacy, and responses of 1 or 2 (disagree/strongly disagree) on the six point Likert scale were characterized as reports of low organizational efficacy.

As the original survey contained four reversed items, the adapted survey in this study aligned the direction of all survey items. The total score range on the OES (Bohn, 2010) survey is 17-102. The minimum score for the high range (suggesting a high degree of organizational efficacy) on a given measure was the number of items times five (i. e., to be in the high range required an average response of five on all items). The minimum score for the moderate range (suggesting a moderate degree of organizational efficacy) was the number of items times three (i.

e., to be in the moderate range required an average response of three on all items). All scores below the minimum score for the moderate range were classified as low, indicating a low degree of organizational efficacy. The ranges were as follows: high 85–102, moderate 51–84, and low 17–50. Descriptive statistics were presented in tables with brief accompanying narratives as needed and organized following the order of the OES Factors.

To answer research question three, this study determined differences in self-reported self-efficacy based upon job preparation experiences. To answer research question four, this study determined differences in self-reported organizational efficacy based upon job preparation experiences. Data were collected from the SAES (McCollum, 2006a, 2006b) survey, the OES (Bohn, 2010) survey, and the participant information survey.

**Inferential statistics.** For research questions three and four, inferential analyses were conducted to comparatively examine the differences in self-reported self-efficacy based upon job preparation experiences, and also determined differences in self-reported organizational efficacy based upon job preparation experiences. Inferential statistics are used to make inferences about the larger population based on a smaller sample, and can be prone to error. The reported inferential statistic findings in this study did not report causation.

For each question, Analysis of Variance (ANOVA) was the hypotheses testing statistic used to determine significance of differences. An ANOVA analysis was selected for this study as it allowed for the comparison of the independent variable response items by calculating a separate test for each predictor against the group mean. Muijs (2011) noted that ANOVA analysis calculates both how well all the variables together predict the dependent variable by using the p-value to determine statistical significance and the F-test to measure effect size.

Bandura (2006) suggests the most effective measure of efficacy beliefs is an efficacy strength score, which both the SAES (McCollum et al., 2006a, 2006b) survey and OES (Bohn, 2010) survey capture. The SAES survey asks participants to respond to each item on a one through seven continuous scale in order to establish a self-efficacy strength score. The OES survey asks participants to respond to each item on a one through six continuous scale in order to establish an organizational efficacy strength score. On both survey instruments, respondents could select any whole number within the continuous scale when reporting their level of confidence on each item. After running the ANOVAs with continuous scale survey data, the operationalized results compared the *between groups* and *within groups* efficacy results for the

six ELCC Standards (NPBEA, 2002) for relationship to job preparation experiences. Likewise, the operationalized results compared the *between groups* and *within groups* efficacy results for the three OES Factors (Bohn, 2010) for relationship to job preparation experiences.

The research hypotheses offered were that there are significant differences in self-reported efficacy (self-efficacy or organizational efficacy) based upon job preparation experiences of assistant principals in one K-12 public school district. The research hypotheses were either accepted or rejected as F-test results were analyzed for research questions three and four. The null hypotheses offered were that there are no significant differences in self-reported efficacy (self-efficacy or organizational efficacy) based upon job preparation experiences in one K-12 public school district. Likewise, the null hypotheses were either accepted or rejected as F-test results were reviewed for research questions three and four. Ultimately, significance was determined by examining variability between groups and within groups. A statistically significant result, when a probability, p-value, was less than the researcher's set significance level of .05 justified the rejection of the null hypothesis. A cut-off point of  $< .05$  is used "as a rule of thumb" in smaller samples to determine whether or not relationship is significant (Muijs, 2011, p. 176).

If significance of difference was determined by the ANOVA hypotheses testing statistic, the researcher would have presented a post hoc after-the-fact comparison to better indicate the source of the differences. Ultimately, the gathered respondent data drove final determination of selected inferential analyses.

Beyond the four presented research questions, additional investigative analyses were conducted with the SAES (McCollum et al., 2006a, 2006b) survey, OES (Bohn, 2010) survey, and participant information survey data. The investigative analyses were conducted of respondents reporting both high self-efficacy and high organizational efficacy (a) to further describe job preparation experiences and (b) to further describe selected demographic characteristics.

### **Sampling Selection**

The study design utilized a non-random, convenience sampling strategy. The survey instruments were offered for voluntary completion to all those in the group of interest who were employed in the participating district, and as defined by the term assistant principal. The assistant

principal group was selected for study because that position is seen as “the most appropriate and most typical training ground for the principalship” (Marshall & Hooley, 2006, p. ix). Further, this sampling strategy was appropriate as it yielded information from the specific individuals who were anticipated to have the information, opinions and experiences with the perceptions and phenomenon being investigated (McMillan & Schumacher, 2006). This sampling strategy provided the researcher with a clearly defined, limited group for study. This design also brought potential sampling bias as the researcher had previously held a professional relationship with some of those invited to respond.

**Site selection and sample size.** The population selected for invitation to participate in this study was from one K-12 public school district in Virginia that serves a population of approximately 50,000 students. The survey instruments were offered for voluntary completion to all employed assistant principals, associate principals, or resource teachers working within any of the K-12 schools in the participating district. Within the selected district, the title designations of assistant principal, associate principal, and resource teacher vary based on school level and contract length, but all meet the study definition given for the term assistant principal. Within the selected district, the survey instruments were offered to 104 potential study respondents. As the Bell (2011) study utilizing the SAES (McCollum et al., 2006a, 2006b) survey in a study of assistant principal self-efficacy yielded a 23.0% (N=87) return rate, this study yielded a 42.3% (N=44) and return rate. Regarding the problem of non-response to surveys, Muijs recognizes that non-response can be substantial with “many questionnaires receiving response rates well below 50%” (Muijs, 2011, p. 36). The consideration of low statistical power defined by McMillan and Schumacher (2006) as, “the design does not have enough subjects...to detect a difference” (p. 259), was a concern of this study as the 42.3% (N=44) response rate was further hampered by missing data items.

This study sought voluntary participation in the completion of surveys from an invited group. The respondents solicited were representative of potential principal candidates in one K-12 participating public school district. District protocols for survey distribution and collection were followed; district permission was attained through submitted and approved district research request documents. As this study was completed within a single district, it mirrored the Edison (1992) and Singletary-Dixon (2011) assistant principal self-efficacy studies reviewed in Chapter One. There are no organizational efficacy studies in education for consideration.

**Site selection benefits.** The participants, the district, and the researcher realized participation benefits.

***The participants.*** A potential benefit of study participant involvement was the intrinsic reward individual respondents receive by contributing to the educational profession as they provided information regarding their self-efficacy levels, organizational efficacy levels, and job preparation experiences. Potential participants, through receipt of invitation, were validated as school leaders with voices that would be heard by district leaders. As the participating district has undergone significant leadership changes, this study allowed participants anonymous voices that would be shared with those new to district leadership positions. Ultimately, district leaders could guide future job preparation experiences to further benefit assistant principal participants, as they grow more ready for future principalship positions.

***The district.*** There was also potential benefit to the participating school district as this study provided information not previously collected, including benchmarking measurements from a bi-level efficacy study of principalship candidates and relationship results based upon job preparation experiences. Two initial aggregated benchmarking measurements were provided-- one in principal candidate self-efficacy levels and one in principal candidate organizational efficacy levels. This information better informed district leaders in succession, mentoring, or professional development planning, and the intentional application of findings potentially could bring more efficacious leadership development and improved human capital management results.

***The researcher.*** For the researcher, the potential benefit to assist the school district in this capacity held value beyond the apparent benefit of completing a doctoral degree requirement. As the researcher customized the participant information survey to include areas of district interest, collaborative efforts better maximized potential value to the school district. This study facilitated the researcher and district leaders further work on the human capital management concern of: *How do we create a pipeline of leaders who can make a real difference for the better, especially in troubled schools?* Through the completion of this research, the researcher gained the experience of partnering with a school district and customizing research to meet school district needs, which can potentially be applied to future research work with other school districts.

## Data Collection & Gathering Procedures

**Data collection.** Following Creswell's (2009) suggestion, this researcher (a) examined data collected and reported the number of participants in the sample and the percentages of respondents, (b) noted missing data, (c) discussed possible response bias, and (d) presented descriptive and inferential data analyses including significance of findings.

As Wright (1997) observed, most social science researchers view Likert-type scales as interval data with the individual researcher making the decision on how to view the data collected and how to view the specific scales of each survey. Given that the SAES (McCollum et al., 2006a, 2006b) survey uses a seven point Likert scale, the researcher treated the differences between each interval as equal values. Likewise, given that the OES (Bohn, 2010) survey uses a six point Likert scale, the researcher treated the differences between each interval as equal values.

Appendix C entitled *School Administrator Efficacy Scale*, Appendix D entitled *Organizational Efficacy Scale*, and Appendix E entitled *Participant Information Survey* were submitted for Institutional Review Board (IRB) approval (see Appendix F) with no required subsequent refinements requested and approval was granted on August 4, 2014.

**Data gathering.** Following similarly to previously conducted surveys within the participating school district, this study used the district's research and planning department personnel as the conduit for the distribution of the surveys. The surveys and prompts for participation were distributed electronically and collected electronically. The study design proposed a maximum of three communications including the introduction, follow-up prompt for participation, and appreciation for participation issued through the district email system.

**First contact.** Potential participants first received email notification introducing the study and its purpose through the *Study Cover Letter* in Appendix G. The first email communication included the invitation to participate in the study with a provided URL link to the online surveys. The *Informed Consent Form* in Appendix H was included as an attachment in all correspondence sent to potential participants.

**Second contact.** Potential participants were contacted through a follow-up second email seven calendar days after the first contact. Again, the URL link was provided to the surveys as well as the *Informed Consent Form* (see Appendix I). This communication included a note of

appreciation for those who had already participated and encouragement to those who had not yet participated.

**Third contact.** Potential participants were contacted through a follow-up third email (see Appendix J) four calendar days after the second contact. Again, the URL link was provided to the surveys as well as the *Informed Consent Form*. This communication included a note of appreciation for those who had already participated and an encouragement to those who had not yet participated.

Prior to the survey administration to the potential participants, a small-scale pilot test of the online survey delivery (see Appendix K) was completed. Using the Virginia Polytechnic Institute and State University email system, the IRB approved research timeline, and same communication types described for the survey, ten current district principals received the pilot survey. This pilot group received one additional introductory communication explaining their voluntary role as pilot group members to test the mechanics of the survey across the survey period. This pilot group received one additional concluding email (see Appendix L) sent after the survey period ended asking pilot group participants to submit feedback anonymously on a provided URL link. The link questions solicited feedback on issues related to survey formatting, delivery, and submission (see Appendix M). Feedback was used to direct the researcher in making modifications prior to the survey distribution.

The participant surveys were estimated to take a total of approximately 30 minutes to complete. Pilot survey respondents reported 10 to 20 minute completion times. The surveys were administered electronically and no participant follow-up was required once the survey data gathering cycle ended. Again, participants were informed that participation was completely voluntary; also, all responses were confidential as they were reported in aggregated form.

### **Instrument Design and Validation**

**The SAES survey instrument.** The self-efficacy measurement was gathered through the SAES (McCollum et al., 2006a, 2006b) survey as participants self-report self-efficacy levels on professional job responsibilities in accordance with the Educational Leadership Constituency Council's (ELCC) Standards for Advanced Programs in Educational Leadership (National Policy Board for Educational Administration (NPBEA, 2002). See the *ELCC Standards* in Appendix B. This survey contains 49 items utilizing a seven point Likert scale ranging from "Not at all true of

me” to “Completely true of me” as found in the *School Administrator Efficacy Scale* in Appendix C. Construct validity of the SAES survey was established utilizing a factor analysis with eight factors emerging, and 49 of the original 56 items being deemed to accurately measure and delineate further the construct domain. Regarding the SAES survey’s reliability, a Cronbach’s Alpha resulted in coefficients ranging from .81 to .93 for the factors. Given the available analyses, this researcher agreed with McCollum, Kajs, and Minter (2006a, 2006b) that the SAES survey presents adequate reliability and validity to be considered as a satisfactory measure of respondents’ reports of self-efficacy as related to the ELCC Standards. Regarding this survey instrument and sample fit, as the SAES survey is designed for school leaders, there was an anticipated alignment between the sample and the selected instrument. Finally, email communication from McCollum on February 24, 2014 (see Appendix N) granted permission on behalf of the publishing authors to use the SAES survey instrument in this study.

**The OES survey instrument.** The organizational efficacy measurement was gathered through the OES (Bohn, 2010) survey as participants self-reported efficacy levels on the three factors of (a) sense of collective capability, (b) sense of mission, future, or purpose, and (c) sense of resilience. This survey contains 17 items utilizing a six point Likert scale ranging from “Strongly disagree” to “Strongly agree” as found in the *Organizational Efficacy Scale* in Appendix D. Bohn’s process for developing the instrument included a two-part study; the first study tested divergent and convergent validity of the OES survey with existing efficacy instruments. The second study combined responses from 22 U. S. businesses (N=886) to validate the OES survey instrument. Construct validity of the OES survey was established utilizing a factor analysis with three factors emerging, and 17 of the original 80 items being deemed to accurately measure and further delineate the construct subdomain. Regarding the OES survey’s reliability, a Cronbach’s Alpha resulted in coefficients ranging from .73 to .92 for the three factors (Bohn, 2010). Given the available analyses, this researcher agreed with Decker (2010) that the OES survey presents adequate reliability and validity to be considered as a satisfactory measure of respondents’ reports of organizational efficacy. Decker stated, “the methodology of the author is sound and perhaps goes overboard in ensuring the validity of these components” (2010, p 254).

Organizational efficacy is of greatest concern when an organizational entity is in a state of change, and much of change management centers on the ability of the organization to rally

when adopting new vision, new direction, and new processes. While Bohn (2010) claimed that change is necessary in the business sector referencing frequent occurrences of mergers and acquisitions, educators realize that change is also prevalent in today's public school setting. According to the Richmond Times Dispatch, more than half of the state's 133 public school systems have changed superintendents since 2012 (Brown, May 17, 2014). For those leading organizational change, "measuring organizational efficacy is an extremely efficient way to get to the heart of whether employees believe companies can survive and thrive" (Bohn, 2010, p. 246). Additionally, Bohn (2010) claims that the OES survey goes beyond employee surveys that "address issues surrounding climate, organizational commitment, and organization-based esteem" (p. 246); it offers a measurement that "reaches to the heart of issues surrounding the ability of an organization to work together, to know where they are going, and to assess their resilience in the face of obstacles" (p. 246). As few leaders have patience for surveys that do not immediately guide action, the OES survey items "are specific enough to drive action plans and change" (Bohn, 2010, p. 246).

At the time of the study, the participating district was in a state of change with the preceding 28 months bringing top leadership changes at the superintendent, assistant superintendent, director, and school board levels. With the shifts in education to more quantifiable accountability within economically constricted structures, the adapted OES (Bohn, 2010) survey instrument with its origins in the business setting was anticipated to align well with this study. As the OES survey was not designed for school leaders, the survey instrument was altered following Bandura's (2006) suggestion that the measurement of efficacy is specific and relevant to the setting. The adapted items better reflect the language of school districts. For example, Bohn's item number 10 reads as, "*This organization has a strong vision of the future*" (2010, p. 244) and for this study was reworded to read as, "*This school district has a strong vision of the future.*" The number of items and the order in which items were presented did not change from the original Bohn (2010) instrument; however, four reversed items were reworded to eliminate the need for the reversal of data results during analyses. For example, Bohn's item number 14 reads as, "*This organization is likely to fall apart in a few years*" (2010, p. 244) and for this study was reworded to read as, "*This school district is not likely to fall apart in a few years.*" Email communication from Bohn on April 17, 2014 (see Appendix O) granted permission to use the OES survey with adaptations for the school environment.

**The participant information survey.** Finally, a self-reporting questionnaire was the third instrument selected for collecting data from one K-12 public school district's assistant principals. The participant information survey contains eight items and served three purposes. Item one ensured participants met the definition of assistant principal as defined in the study. Also, selection option "none of the above" in item eight ensured participants could note having none of the job preparation experiences defined in the study. All other items captured demographic information that would primarily be of interest during descriptive analyses.

Like the five assistant principal studies summarized in Chapter One, this study sampled those currently working as assistant principals or equivalent job positions, as defined in this study, within the participating district. Like the Bell (2011) study, information regarding specific demographics and job experiences was collected from each participant. This measuring instrument did extend beyond other similar study instruments in that it captured items specifically relevant to and partially selected by the participating school district. There was anticipated alignment between the sample and this survey instrument.

### **Data Treatment**

The human subjects review process was completed as required by the Virginia Polytechnic Institute and State University to ensure the research was in full compliance with the IRB parameters. The university Federalwide Assurance number is **FWA00000572**, which expires on April 25, 2018. The university mission statement assures:

Virginia Tech is committed to protecting the rights of and ensuring the safety of human subjects participating in research conducted by faculty, staff and students of the University and for research in which Virginia Tech is engaged. This commitment is vested in the Institutional Review Board for Research Involving Human Subjects (the IRB), and is guided by the ethical principles described in the "Belmont Report" and in applicable federal regulations. (IRB, April 16, 2014)

The researcher completed *Training in Human Subjects Protection* as certified on September 7, 2012 (see Appendix P). Additionally, subject confidentiality was preserved through the anonymous reporting feature of the survey design.

## **Data Management**

All data were reported in aggregated form. The researcher secured digital data files on the researcher's external hard-drive, which was dedicated to this study. The external hard-drive and all paper files remain stored in a locked, fireproof filing cabinet dedicated to this study and housed in the researcher's private office. Per the Data Retention and Sharing Guidelines of the American Psychological Association (2010), all data and analyses associated with this study will be kept for a minimum of five years to allow for data verification.

## **Timeline**

A timeline for research activities is attached in Appendix Q with dates noted for the pilot survey administration and study survey administration. The research proposal was submitted for the district's approval before a June 1, 2014 district deadline, and the district granted research approval on June 12, 2014 with the following requests: (a) remove all comments about participating school district as reports and publications generated from this study should not identify the individuals, schools, or the division, and (b) all communication to district staff must come from the district research and planning department. Additionally before the researcher began the study, the following items were submitted as requested to the participating district (see Appendix R): (a) a copy of the final prospectus used for IRB, (b) a copy of the IRB approval letter, (c) the online link to the surveys so the district could review them prior to distribution, and (d) the finalized timeline confirming the exact dates of distribution. Finally, after the completion of the research, the participating district requested an electronic copy of the dissertation for district archiving.

## **Methodology Summary**

The methodology for this study held generally the final data collection goals as follows: (a) assistant principal self-reported, perceived capabilities to perform the job of the principalship, (b) assistant principal self-reported, perceived capabilities of the organization's future success, and (c) assistant principal self-reported demographic information and job preparation experiences. The methodology described in this chapter then utilized these collected data to conduct: descriptive data analyses of frequency and percentages, mean, standard deviation, and range; inferential data analyses initially through ANOVA followed by possible post hoc analyses

as determined by data results; and additional investigative analysis as determined by the researcher.

## **Chapter Three**

### **Results of the Study**

#### **Purpose of Study Review**

This chapter reports the results of this quantitative, non-experimental comparative study. As discussed in Chapter Two, the study design utilized a non-random, convenience sampling strategy.

The purpose of this study was to investigate self-efficacy and organizational efficacy as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district. The research questions were: *(a) What are the self-efficacy levels of assistant principals?, (b) What are the organizational efficacy levels of assistant principals?, (c) Is there a difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?, and (d) Is there a difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?*

#### **Descriptive Data Analysis of Respondents**

All participants (N=44) were employed by the participating school district, received electronically an invitation to participate and an informed consent form. Further, invited participants currently held positions as previously defined by the term, assistant principal. As presented in Chapter Two, the timeline for research activities was followed with surveys distributed to 104 potential participants with 44 survey respondents yielding a response rate of 42.3%.

Participants responded to seven items on the participant information survey that provided sample characteristics information as follows: (a) gender, (b) age group, (c) path to licensure, (d) career aspirations, (e) years of experience, (f) current school level, and (g) job preparation experiences. Table 1 summarizes reported demographic characteristics.

Table 1  
*Demographic Characteristics of Participants (N =44)*

Characteristic	<i>n</i>	%
Gender		
female	29	65.9%
male	13	29.5%
no response	2	4.5%
Age Group		
20-29	1	2.3%
30-39	18	40.9%
40-49	15	34.1%
50-59	8	18.2%
60+	2	4.5%
Path to Licensure		
non-traditional route to licensure such as a career switcher program	5	11.4%
traditional university/college program to licensure	39	88.6%
Career Aspirations		
becoming a school principal in the future	33	75.0%
not becoming a school principal in the future	11	25.0%
Total years of administrative experience		
0-5	25	56.8%
6-10	12	27.3%
11-15	7	15.9%
Current School Level		
elementary school	17	38.6%
middle school	9	20.5%
high school	17	38.6%
no response	1	2.3%

*Note. The following is the list of missing data: gender=2 and current school level=1.*

As Table 1 shows, of the 104 invitations for participation, 42.3% voluntarily participated (N=44) with the majority of respondents 65.9% (n=29) identifying themselves as female and 29.5% (n=13) of respondents identifying themselves as male. The majority of respondents 75.0% (n=33) reported ages falling between 30-49. The majority of respondents 88.6% (n=39) reported following the traditional university/college program path to licensure. The majority of

respondents 75.0% (n=33) reported career aspirations of becoming a school principal in the future. The majority of respondents 84.1% (n=37) reported 0–10 years of experience. The majority of respondents 59.1% (n=26) reported working at the secondary school level, which is comprised of both the middle and high school levels.

The independent variable, job preparation experiences, had five items in which participants could report experiences. The five items were as follows: (a) administrative aide, (b) administrative intern, (c) summer school administrator, and (d) associate principal. These items were defined in the terms section. Items were dichotomous, as participants could only report participating or not participating for each of the items listed as job preparation experiences. Participants could also select (e) none of the above. As participants were able to select all response items in which they had participated, the summary of each job preparation experience response items is reported in Table 2.

Table 2

*Summary of Respondent Reported Job Preparation Experiences (N=39)*

Characteristic	<i>n</i>	%
administrative aide	22	25.9%
administrative intern	14	16.5%
associate principal	22	25.9%
summer school administrator	22	25.9%
None of the above	5	5.9%

The job preparation experiences most frequently reported by respondents were administrative aide, associate principal, and summer school administrator each at 25.9% (n=22), and the job preparation experience least frequently experienced by respondents was administrative intern at 16.5% (n=14). Also noted, 5.9% (n=5) reported having none of the listed job preparation experiences.

During further investigative analysis beyond the presented research questions, the five response items for the independent variable, job preparation experiences, shown in Table 2 were further sorted into groups. The groups represented the sources of the offered job preparation experiences. These groups were as follows: (a) school level offered job preparation experiences,

which were previously defined as administrative aide and administrative intern, (b) district level offered job preparation experiences, which were previously defined as summer school administrator and associate principal, (c) any combination of both school level and district level offered job preparation experiences, and (d) none of the studied job preparation experiences. The combinations of the five response items into these four group levels are found in Figure 3.1.

As shown in Table 3, respondents reported most frequently the combined school and district offered job preparation experience at 43.2% (n=19). In contrast, respondents reported school offered job preparation experience at 15.9% (n=7) and having none of the job preparation experiences at 11.4% (n=5).

Table 3

*Summary of Respondent Reported School and District Offered Job Preparation Experiences by Group Levels (N=44)*

Characteristic	<i>n</i>	%
Job Preparation Experience Offered by School or District		
school offered experience	7	15.9%
district offered experience	13	29.5%
both school and district offered experience	19	43.2%
none of the above	5	11.4%

### Reported Data Findings

This section contains the table results of data analyses and related narratives of findings presented in order by each research question.

**Research question one.** When answering the question, *What are the self-efficacy levels of assistant principals?*, to provide the participating school district with an overall benchmarking self-efficacy score for assistant principal respondents, the total scale score for all items (1 - 49) included in the SAES (McCollum et al., 2006a, 2006b) survey was reported. This score indicated the respondents' overall reported self-efficacy in performing their professional job responsibilities in accordance with the ELCC Standards (NPBEA, 2002).

More specifically, to provide the participating school district with a benchmarking self-

efficacy measurement for each ELCC Standard (NPBEA, 2002), an aggregation strategy was used as discussed in Chapter Two. This replicated the aggregated approach and response ranges used by Bell (2011) to allow for richer descriptions of results by characterizing responses as high, moderate, and low. Responses of 6 or 7 were characterized as reports of high self-efficacy, responses of 3, 4, or 5 were characterized as reports of moderate self-efficacy, and responses of 1 or 2 on the SAES (McCollum et al., 2006a, 2006b) survey seven point Likert scale were characterized as reports of low self-efficacy (Bell, 2011). The total score range on the SAES survey is 49 - 343. The minimum score for the high range implying a high degree of self-efficacy was the number of items times six (i. e., to be in the high range required a minimum average response of six on all items within a standard). The minimum score for the moderate range implying a moderate degree of self-efficacy was the number of items times three (i. e., to be in the moderate range required a minimum average response of three on all items within a standard). All scores below the minimum score for the moderate range were classified as low, implying a low degree of self-efficacy. The ranges shown in Table 4 were set as follows: high 294–343, moderate 147–293, and low 49–146.

Table 4

*Ranges for SAES (McCollum et al., 2006a, 2006b) Survey Total and Standard Scale Scores and Mean Scale Score Characterization (Bell, 2011)*

Scale Items	Scale Ranges	Mean Score Characterization		
		Low	Moderate	High
Standard 1.0 (1, 2, 3, 4, 43, 44)	6-42	6-17	18-35	36-42
Standard 2.0 (5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 39, 40, 41)	19-133	19-56	57-113	114-133
Standard 3.0 (22, 23, 28, 29, 30, 31, 32, 47, 48, 49)	10-70	10-29	30-59	60-70
Standard 4.0 (18, 24, 25, 26, 27, 33, 34, 35, 36, 37)	10-70	10-29	30-59	60-70
Standard 5.0 (38, 45)	2-14	2-5	6-11	12-14
Standard 6.0 (42, 46)	2-14	2-5	6-11	12-14
Total Score (1-49)	49-343	49-146	147-293	294-343

Responses reported by assistant principals on the SAES (McCollum et al., 2006a, 2006b) survey resulted in the mean, standard deviation, and the established response ranges for each ELCC Standard 1.0 through 6.0 (NPBEA, 2002) shown in Table 5.

Table 5

*Six ELCC Standards (NPBEA, 2002) Scale Score Means, Standard Deviations, Frequencies, and Percentages Presented with Response Ranges*

	<i>M</i>	<i>SD</i>	Response Ranges					
			Low		Moderate		High	
			N	%	N	%	N	%
Standard 1.0 Scale Score	36.78	4.819	-	-	15	36.6%	26	63.4%
Standard 2.0 Scale Score	115.26	11.773	-	-	17	48.6%	18	51.4%
Standard 3.0 Scale Score	58.51	7.546	-	-	21	53.8%	18	46.2%
Standard 4.0 Scale Score	57.10	8.626	-	-	22	56.4%	17	43.6%
Standard 5.0 Scale Score	12.64	1.428	-	-	8	19.0%	34	81.0%
Standard 6.0 Scale Score	11.19	2.133	-	-	22	52.4%	20	47.6%
Total Scale Score (N=27)	286.33	31.507	-	-	15	55.6%	12	44.4%

*Note. The following is the list of missing data: Standard 1.0=3, Standard 2.0=9, Standard 3.0=5, Standard 4.0=5, Standard 5.0=2, and Standard 6.0=2.*

To establish an overall benchmarking measurement of self-efficacy for respondents, the total scale score for all items (1 - 49) included in the SAES (McCollum et al., 2006a, 2006b) survey was 286.33 (SD=31.507), indicated that respondents' overall measurement of self-efficacy in performing their professional job responsibilities in accordance with the ELCC Standards (NPBEA, 2002) fell within the moderate range (147–293). The total scale scores for each respondent with complete data (N=27) ranged from a low of 231 (moderate efficacy) to a high of 343 (high efficacy).

To further examine the self-efficacy of respondents in performing professional job responsibilities in accordance with ELCC Standards (NPBEA, 2002), each standard was separately analyzed as follows:

**Standard 1.0.** ELCC Standard 1.0 focuses on the development, articulation,

implementation, and stewardship of a school or district vision of learning supported by the school community (NPBEA, 2002).

The mean Standard 1.0 scale score was 36.78 (SD=4.819), indicating that overall, 63.4% (n=26) of the respondents (n=41) reported a high level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 1, 2, 3, 4, 43, and 44. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 1.0 of .922.

**Standard 2.0.** ELCC Standard 2.0 focuses on promoting a positive school culture, providing an effective instructional program, applying best practices to student learning, and designing comprehensive professional growth plans for staff (NPBEA, 2002).

The mean Standard 2.0 scale score was 115.26 (SD=11.773), indicating that overall, 51.4% (n=18) of the respondents (n=35) reported a high level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 39, 40, and 41. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 2.0 of .953.

**Standard 3.0.** ELCC Standard 3.0 focuses on managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment (NPBEA, 2002).

The mean Standard 3.0 scale score was 58.51 (SD=7.546), indicating that overall, 53.8% (n=21) of the respondents (n=39) reported a moderate level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 22, 23, 28, 29, 30, 31, 32, 47, 48, and 49. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 3.0 of .909.

**Standard 4.0.** ELCC Standard 4.0 focuses on collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources (NPBEA, 2002).

The mean Standard 4.0 scale score was 57.10 (SD=8.626), indicating that overall, 56.4% (n=22) of the respondents (n=39) reported a moderate level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 18, 24, 25, 26, 27, 33, 34, 35, 36, and 37. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 4.0 of .930.

**Standard 5.0.** ELCC Standard 5.0 focuses on acting with integrity, fairly, and in an ethical manner (NPBEA, 2002).

The mean Standard 5.0 scale score was 12.64 (SD=1.428), indicating that overall, 81.0% (n=34) of the respondents (n=42) reported a high level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 38 and 45. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 5.0 of .763.

**Standard 6.0.** ELCC Standard 6.0 focuses on understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (NPBEA, 2002).

The mean Standard 6.0 scale score was 11.19 (SD=2.133), indicating that overall, 52.4% (n=22) of the respondents (n=42) reported a moderate level of self-efficacy in performing professional job responsibilities associated with this standard as gathered through SAES (McCollum et al., 2006a, 2006b) survey items 42 and 46. The SAES survey has an established Cronbach's Alpha coefficients ranging from .81 to .93 (McCollum et al., 2006a, 2006b). This study yielded a Cronbach's Alpha reliability rating for Standard 6.0 of .890.

**Research question two.** When answering the question, *What are the organizational efficacy levels of assistant principals?*, to provide the participating school district with an overall benchmarking organizational efficacy measurement for assistant principal respondents, the total scale score for all items (1 - 17) included in the OES (Bohn, 2010) survey was reported. This score indicated the respondents' overall reported organizational efficacy in OES Factors One, Two, and Three. An aggregated individual perception of collective capabilities is appropriate as they combine to assess the collective perception of organizational efficacy (Bandura, 2000).

More specifically, to provide the participating school district with a benchmarking

organizational efficacy measurement for each OES Factor (Bohn, 2010), an aggregation strategy was used as discussed in Chapter Two. By replicating the aggregation and range setting approach used in this study for self-efficacy, richer descriptions and comparison of results through characterizing responses as high, moderate, and low was possible. Responses of 5 or 6 (agree/strongly agree) were characterized as reports of high organizational efficacy, responses of 3 or 4 (disagree somewhat/agree somewhat) were characterized as reports of moderate organizational efficacy, and responses of 1 or 2 (strongly disagree/disagree) on the OES (Bohn, 2010) survey six point Likert scale were characterized as reports of low organizational efficacy. The total score range on the OES survey is 17 - 102. The minimum score for the high range implying a high degree of organizational efficacy on a given measure was the number of items times five (i. e., to be in the high range required an average response of five on all items). The minimum score for the moderate range implying a moderate degree of organizational efficacy was the number of items times three (i. e., to be in the moderate range required an average response of three on all items). All scores below the minimum score for the moderate range were classified as low, indicating a low degree of organizational efficacy. The ranges as shown in Table 6 were as follows: high 85–102, moderate 51–84, and low 17–50.

Table 6

*Ranges for OES (Bohn, 2010) Survey Total and Standard Scale Scores and Mean Scale Score Characterization*

Scale Items	Scale Ranges	Mean Score Characterization		
		Low	Moderate	High
Factor One (1, 2, 3, 4, 5, 6, 7, 8, 9)	9-54	9-26	27-44	45-54
Factor Two (10, 11, 12, 13, 14)	5-30	5-14	15-24	25-30
Factor Three (15, 16, 17)	3-18	3-8	9-14	15-18
Total Score (1-17)	17-102	17-50	51-84	85-102

From this study, Table 7 shows the mean, standard deviation, and includes the established response ranges for each of OES (Bohn, 2010) survey Factors One, Two, and Three.

Table 7

*OES (Bohn, 2010) Survey Three Factors Scale Score Means, Standard Deviations, Frequencies, and Percentages Presented with Response Ranges*

	<i>M</i>	<i>SD</i>	Response Ranges					
			Low		Moderate		High	
			N	%	N	%	N	%
Factor One Scale Score	41.35	6.091	1	2.5%	26	65.0%	13	32.5%
Factor Two Scale Score	24.14	3.616	-	-	17	39.5%	26	60.5%
Factor Three Scale Score	15.57	2.777	1	2.4%	11	26.2%	30	71.4%
Total Scale Score (N=38)	81.53	9.577	-	-	21	55.3%	17	44.7%

*Note. The following is the list of missing data: Factor 1=4, Factor 2=1, Factor 3=2.*

To establish an overall benchmarking measurement of organizational efficacy for respondents, the total scale score for all items (1-17) included in the OES (Bohn, 2010) survey was 81.53 (SD=9.577), indicated that respondents' overall measurements of organizational efficacy in three factor areas fell within the moderate range (51-84). The total scale scores for each respondent with complete data (N=38) ranged from a low of 65 (moderate efficacy) to a high of 102 (high efficacy).

**OES survey factor one.** This factor, Sense of Collaborative Capabilities, focuses on “how we work together to accomplish the goal” (Bohn, 2010, p. 234). The mean Factor One scale score was 41.35 (SD=6.091), indicating that overall, 65.0% (n=26) of the respondents (N=40) reported a moderate level of organizational efficacy as related to collaboration and as gathered through OES survey items 1, 2, 3, 4, 5, 6, 7, 8, and 9 with an established reliability rating of 0.918 for OES Factor One (Bohn, 2010); this study yielded a Cronbach's Alpha rating of .912.

**OES survey factor two.** This factor, Sense of Mission, Future, or Purpose, focuses on “how we know where we are going” (Bohn, 2010, p. 234). The mean Factor Two scale score was 24.14 (SD=3.616), indicating that overall, 60.5% (n=26) of the respondents (N=42) reported a high level of organizational efficacy as related to collaboration and as gathered through OES survey items 10, 11, 12, 13, and 14 with an established reliability rating of .877 for OES Factor Two (Bohn, 2010); this study yielded a Cronbach's Alpha rating of 0.854.

**OES survey factor three.** This factor, Sense of Resilience, focuses on “how we ‘stay the course’ in the presence of obstacles” (Bohn, 2010, p. 234). The mean Factor Three scale score was 15.57 (SD=2.777), indicating that overall, 71.4% (n=30) of the respondents (N=42) reported a high level of organizational efficacy as related to collaboration and as gathered through OES survey items 15, 16, and 17 with an established Cronbach’s Alpha rating of 0.727 for OES Factor Three (Bohn, 2010); this study yielded a Cronbach’s Alpha rating of .464.

**Research question three.** When answering the question, *Is there a difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?*, an Analysis of Variance (ANOVA) was conducted for each of the six ELCC standards and the job preparation experience levels noted in Table 3. Table 8 shows results with the F-test revealing no statistical significance with all p-values > .05; no measure of effect size or further post hoc analyses as discussed in the methodology were necessary.

Table 8

*Job Preparation Experiences - Results of One-Way ANOVA for SAES (McCollum et al., 2006a, 2006b) Survey and Six ELCC Standards (NPBEA, 2002)*

Scale		df	SS	MS	F	p
Total SAES	Between Groups	3	3,316.042	1,105.347	1.130	.358
	Within Groups	23	22,493.958	977.998		
Standard 1.0	Between Groups	3	135.877	45.292	2.113	.115
	Within Groups	37	793.147	21.436		
Standard 2.0	Between Groups	3	773.936	257.979	2.030	.130
	Within Groups	31	3,938.750	127.056		
Standard 3.0	Between Groups	3	229.439	76.480	1.384	.264
	Within Groups	35	1,934.304	55.266		
Standard 4.0	Between Groups	3	462.791	154.264	2.283	.096
	Within Groups	35	2,364.799	67.566		
Standard 5.0	Between Groups	3	3.896	1.299	.619	.607
	Within Groups	38	79.747	2.099		
Standard 6.0	Between Groups	3	24.757	8.252	1.939	.140
	Within Groups	38	161.719	4.256		

\*p < .05

**Research question four.** When answering the question, *Is there a difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?*, an Analysis of Variance (ANOVA) was conducted for each of the three organizational efficacy factors and the job preparation experience levels noted in Table 3. Table 9 shows results with the F-test revealing no statistical significance with all p-values > .05; no measure of effect size or further post hoc analyses as discussed in the methodology were necessary.

Table 9

*Job Preparation Experiences - Results of One-Way ANOVA for the OES (Bohn, 2010) Survey and Three Organizational Efficacy Factors*

Scale		df	SS	MS	F	p
Total OES	Between Groups	3	493.236	164.412	1.927	.144
	Within Groups	34	2,900.238	85.301		
Factor 1	Between Groups	3	22.163	7.388	.954	.424
	Within Groups	38	294.123	7.740		
Factor 2	Between Groups	3	41.281	13.760	1.057	.379
	Within Groups	39	507.882	13.023		
Factor 3	Between Groups	3	22.163	7.388	.954	.424
	Within Groups	38	294.123	7.740		

\*p < .05

### **Additional Data Findings**

As findings revealed no significance of differences among variables examined in research questions three and four, additional investigative analyses were conducted of respondents reporting both high self-efficacy and high organizational efficacy (a) to further describe job preparation experiences and (b) to further describe selected demographic characteristics.

The investigative analyses were conducted to describe respondents (N=6) reporting both high self-efficacy and high organizational efficacy and job preparation experiences. Also, for these respondents (N=6), further analyses (Independent t-Test and ANOVAs) of gender, years of experience, and current school level were conducted and revealed no significance in relationships to efficacy.

To initially identify respondents who self-reported overall high self-efficacy and overall high organizational efficacy levels, the earlier established aggregation strategy and ranges were used. For the SAES (McCollum et al., 2006a, 2006b) survey, responses of 6 or 7 were characterized as reports of high self-efficacy, and any respondent with a mean score characterization of 294–343 (i. e., to be in the high range required an average response of six on all standards) was considered to have overall high self-efficacy. For the OES (Bohn, 2010) survey, responses of 5 or 6 were characterized as reports of high self-efficacy, and any

respondent with a mean score characterization of 85–102 (i. e., to be in the high range required an average response of five on all items) was considered to have overall high organizational efficacy. See Table 10.

Table 10

*Ranges (Bell, 2011) for SAES (McCollum et al., 2006a, 2006b) Survey and OES (Bohn, 2010) Survey Mean Score Characterization*

Scale Items	Scale Ranges	Mean Score Characterization		
		Low	Moderate	High
SAES Total	49-343	49-146	147-293	294-343
OES Total	17-102	17-50	51-84	85-102

Of the study respondents (N=44), those with missing data were removed. Of the remaining respondents (n=25), 24.0% (n=6) self-reported both high SAES (McCollum et al., 2006a, 2006b) survey and high OES (Bohn, 2010) survey mean score totals as shown in Table 11.

Table 11

*Respondent Self-Efficacy and Organizational Efficacy Levels (n =25)*

Characteristic	n	%
High SAES and High OES	6	24.0%
Moderate SAES and Moderate OES	9	36.0%
High SAES and Moderate OES	6	24.0%
Moderate SAES and High OES	4	16.0%

*Note. 19 respondents removed from analysis due to missing data.*

As shown in Table 12, the job preparation experiences most frequently experienced by the selected respondents (N=6) were both associate principal at 33.3% (n=4) and summer school administrator at 33.3% (n=4). The job preparation experiences least frequently experienced by

the selected respondents (N=6) were both administrative aide at 8.3% (n=1) and administrative intern at 8.3% (n=1).

Table 12

*Summary of High Self-Efficacy and High Organizational Efficacy Respondent Reported Job Preparation Experiences (N=6)*

Characteristic	<i>n</i>	%
Administrative Intern	1	8.3%
Associate Principal	4	33.3%
Summer School Administrator	4	33.3%
Administrative Aide	1	8.3%
None of the Above	2	16.7%

The high self-efficacy and high organizational efficacy respondents (N=6) were further examined with the previously established four distinguishing levels of job preparation experiences. They reported most frequently having only district level offered job preparation experiences at 50.0% (n=3), or a combination of school and district level offered job preparation experiences at 16.7% (n=1) for a total of 66.7% (n=4) reporting district level offered job preparation experiences as shown in Table 13.

Table 13

*Summary of High Self-Efficacy and High Organizational Efficacy Respondent Reported School and District Job Offered Preparation Experiences by Group Levels (N=6)*

Characteristic	<i>n</i>	%
Job Preparation Experience Offered by School or District		
School Offered Experience	0	0%
District Offered Experience	3	50.0%
Both School and District Offered Experience	1	16.7%
None of the Above	2	33.3%

Additionally, inferential analyses (Independent t-Tests and ANOVAs) were conducted to further examine high self-efficacy and high organizational efficacy respondents (N=6). Independent t-Tests were conducted to compare female and male assistant principals' total mean scores in Table 14.

Table 14

*Results of Independent t-Tests to Compare Female and Male Assistant Principals' Total Mean*

Measure	Male		Female		df	t
	M	SD	M	SD		
1. Total SAES	329.00	-	312.20	18.674	4	.821
2. Total OES	89.00	-	90.80	4.817	4	.341

\*p < .05

The test revealed that there was not a statistically significant difference between gender on total SAES survey scores,  $t(4) = (-.821)$ ,  $p > .05$  (computed  $P = .458$ ) or on total OES (Bohn, 2010) survey scores,  $t(4) = (.341)$ ,  $p > .05$  (computed  $P = .750$ ).

Further analysis determined whether significant differences existed among total years of administrative experience. A Univariate ANOVA was conducted for high self-efficacy and high organizational efficacy respondents (N=6) and the total number of years of administrative experience. Those reporting 0 - 5, 6 - 10, or 11 - 15 years of service are shown in Table 15.

Table 15

*Total Years of Administrative Experience - Results of ANOVA/Univariate Analysis of Variance for SAES (McCollum et al., 2006a, 2006b) Survey and OES (Bohn, 2010) Survey High Efficacy Respondents*

Scale		df	SS	MS	F	p
Total SAES	Between Groups	955.500	2	477.750	2.125	.266
	Within Groups	674.500	3	224.833		
Total OES	Between Groups	3.000	2	1.500	.049	.953
	Within Groups	92.500	3	30.833		

\*p < .05

An alpha level of  $< .05$  was used for all statistical tests. Total SAES (McCollum et al., 2006a, 2006b) survey analysis was not significant,  $F(2, 3)=2.125, p > .05$  ( $p=.266$ ), nor was Total OES (Bohn, 2010) survey analysis significant,  $F(2, 3)=1.500, p > .05$  ( $p=.953$ ).

Further analysis determined whether significant differences existed among high efficacy levels and current school level. A Univariate ANOVA was conducted for high self-efficacy and high organizational efficacy respondents and the current school level. Those reporting elementary, middle, or high school level are shown in Table 16.

Table 16

*Current School Level - Results of ANOVA/Univariate Analysis of Variance for SAES (McCollum et al., 2006a, 2006b) Survey and OES (Bohn, 2010) Survey High Efficacy Respondents*

Scale		df	SS	MS	F	P
Total SAES	Between Groups	1014.000	1	1014.000	6.584	.062
	Within Groups	616.000	4	154.000		
Total OES	Between Groups	1	.167	.007	.937	1
	Within Groups	4	23.833			4

\* $p < .05$

An alpha level of  $< .05$  was used for all statistical tests. Total SAES (McCollum et al., 2006a, 2006b) survey analysis was not significant,  $F(1, 4)=6.584, p > .05$  ( $p=.062$ ), nor was Total OES (Bohn, 2010) survey analysis significant,  $F(1, 4)=.007, p > .05$  ( $p=.937$ ).

### Summary of Analyses

This chapter presents the results of both descriptive and inferential data analyses.

**Descriptive analyses.** The descriptive analyses included describing participants through their responses on the participant information survey that gathered characteristics information as follows: (a) gender, (b) age group, (c) path to licensure, (d) career aspirations, (e) years of experience, (f) current school level, and (g) job preparation experiences. From the descriptive data analyses, two initial aggregated benchmarking measurements were provided--one in principal candidate self-efficacy levels and one in principal candidate organizational efficacy levels. Additionally, aggregated benchmarking measurements were provided for each of the six ELCC Standards (NPBEA, 2002) and for each of the three OES (Bohn, 2010) survey factors.

These aggregated benchmarking measurements were provided to answer research questions one and two.

***Self-efficacy benchmarking measurement.*** The aggregated measurements of assistant principals' self-reported self-efficacy levels showed an overall moderate level of self-efficacy performing their professional job responsibilities in accordance with the ELCC Standards. More specifically, the majority of assistant principal respondents reported high levels of self-efficacy in performing the professional job responsibilities associated with ELCC Standard 1.0—development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community; ELCC Standard 2.0—promoting positive school culture, providing effective instructional program, applying best practices to student learning, and designing comprehensive professional growth plans for staff; and ELCC Standard 5.0—acting with integrity, fairly, and in an ethical manner (NPBEA, 2002). Additionally, the majority of assistant principal respondents indicated a moderate level of self-efficacy in performing the professional job responsibilities associated with ELCC Standard 3.0—managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment; ELCC Standard 4.0—collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources; and ELCC Standard 6.0—focuses on understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (NPBEA, 2002).

***Organizational efficacy benchmarking measurement.*** The aggregated measurements of assistant principals' self-reported organizational efficacy levels showed an overall moderate level of organizational efficacy across the three organizational efficacy factors. More specifically, the majority of assistant principal respondents reported high levels of organizational efficacy in OES (Bohn, 2010) survey Factor Two - Sense of Mission, Future, or Purpose and OES (Bohn, 2010) survey Factor Three—Sense of Resilience. The majority of assistant principal respondents reported moderate levels of organizational efficacy in OES (Bohn, 2010) survey Factor One—Sense of Collaborative Capabilities.

***Inferential analyses.*** Inferential data analyses examined through participant responses the differences in self-efficacy based upon job preparation experiences and the differences in organizational efficacy based upon job preparation experiences. These results were provided to answer research questions three and four.

***Job preparation experiences relationship measurement.*** An ANOVA was conducted of each of the dependent, response variables, self-efficacy and organizational efficacy, and the independent, predictor variable, job performance experiences. With the dependent variable, self-efficacy, and the predictor variable, the F-test revealed no statistical significance with all p-values  $> .05$ ; no measure of effect size or further post hoc analyses as considered in the methodology were necessary. With the dependent variable, organizational efficacy, and the predictor variable, the F-test revealed no statistical significance with all p-values  $> .05$ ; no measure of effect size or further post hoc analyses as considered in the methodology were necessary.

**Investigative analyses.** Additional investigative analyses were conducted of respondents reporting both high self-efficacy and high organizational efficacy (a) to further describe job preparation experiences and (b) to further describe selected demographic characteristics.

These results were provided as additional data findings of interest. Analyses included frequency, Independent t-Tests and ANOVAs, with no statistically significant findings presented.

Chapter Four contains the summary and conclusions including (a) the introduction, (b) summary of findings and related literature, (c) implications for future practice, (d) recommendations for future studies, and (e) reflections.

## Chapter Four

### Summary and Conclusions

#### Introduction

The purpose of this study was to investigate self-efficacy and organizational efficacy as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district. All participants were employed by the participating school district with 104 potential participants invited and 44 responding to yield a response rate of 42.3% (N=44).

The research questions posed in this study were: (a) *What are the self-efficacy levels of assistant principals?*, (b) *What are the organizational efficacy levels of assistant principals?*, (c) *Is there a difference in self-reported self-efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?*, and (d) *Is there a difference in self-reported organizational efficacy based upon job preparation experiences of assistant principals in one K-12 public school district?* Beyond data findings for these four research questions, additional investigative analyses findings were presented that reported specifically on job preparation experiences, gender, years of experience, and current school level of those reporting both high self-efficacy and high organizational efficacy.

This chapter is organized in sections as follows: (a) introduction, (b) summary of findings and related literature, (c) implications for future practice, (d) recommendations for future studies, and (e) reflections.

#### Summary of Findings and Related Literature

**Finding 1.0. The majority of respondents reported overall moderate self-efficacy levels across the six measured ELCC Standards.** As presented in Table 5, an initial aggregated benchmarking measurement of assistant principal self-efficacy levels was provided to the participating district. A total scale score 286.33 (SD=31.507) indicated that respondents' overall measurement of self-efficacy in performing their professional job responsibilities in accordance with the ELCC Standards (NPBEA, 2002) fell near the top of the moderate range (147–293). Individually, the respondents fell convincingly within both the moderate and high self-efficacy ranges with individual total scale scores between 231 (moderate efficacy) and 343 (high efficacy). Specifically, the assistant principals without missing data (N=27) in one K-12 public

school district in Virginia reported moderate (n=15, 55.6%) to high (n=12, 44.4%) levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standards (NPBEA, 2002). As defined in Chapter One, the ELCC Standards encompass a set of competencies for effective school leadership that include knowledge, skills, and attributes required to lead and manage an educational enterprise centered on teaching and learning results (NPBEA, 2002).

These study results align with the Bell (2011) study results of public high school assistant principals (N=87) in Connecticut who reported moderate (n=58, 66.7%) to high (n=29, 33.3%) levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standards (NPBEA, 2002). While study results show alignment and Creswell (2009) claims that “a survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (p. 145), limitations are also presented for consideration. Within this survey design, one consideration regarding the respondents is that the 57.7% of non-respondents in this study would not necessarily report the same efficacy levels as the respondents; this is an inherent bias in survey research (Muijs, 2011). Muijs points out an inevitable lingering uncertainty when stating, “non-response would not matter if we could be certain that those that do not respond are very similar to respondents on all relevant variables, and therefore would have answered the survey similarly if they had taken part” (2011, p. 36). This limitation recognizes the possibility that respondents are those who feel most strongly, have higher interest in the study topic, have higher interest in supporting educational research, or have more time to readily respond. Unfortunately, “non-response is common and can lead to bias in survey research” (Muijs, 2011, p. 53) and must be noted as a limitation. Additionally, those in the district with lower efficacy may have elected not to participate. Also, those who did respond may have been reluctant to report low confidence in any areas of job performance, which may partially explain missing data. Therefore, these study results are presented with the consideration that they may be a reflection of self-efficacy within district assistant principals or may be limited by non-response bias.

**Finding 2.0. The majority of respondents reported ELCC Standard 5.0, acting with integrity, fairly, and in an ethical manner, as a point of high self-efficacy.** As presented in Table 5, respondents reported ELCC Standard 5.0 as a point of high self-efficacy with 81.0% (n=34) of response averages falling in the high self-efficacy response range. ELCC Standard 5.0

focuses on acting with integrity, fairly, and in an ethical manner (NPBEA, 2002).

These study results align with the Bell (2011) study results of public high school assistant principals (N=87) in Connecticut with the majority of respondents reporting high levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standard 5.0 (NPBEA, 2002). Bell (2011) reported high efficacy with 86.2% (n=75) of responses falling in the high self-efficacy range. While study results show alignment with both reporting more than 80.0% of assistant principal self-efficacy response averages falling in the high range for ELCC Standards 5.0, a limitation is noted in that the newer 2011 ELCC Standards (NPBEA, 2011) contain more specificity for Standard 5.0 than the 2002 ELCC Standards. A re-aligned SAES (McCollum et al., 2006a, 2006b) survey to the newer ELCC Standards could assist researchers in extending future findings to further ensure that school administrators continue to hold high efficacious beliefs around the more specifically defined 2011 ELCC Standard 5.0.

**Finding 3.0. Fewer than half of respondents reported ELCC Standard 3.0, managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment, as a point of high self-efficacy.** As presented in Table 5, respondents reported ELCC Standard 3.0 as a point of high self-efficacy with 46.2% (n=18) of response averages falling in the high self-efficacy response range. Respondents reported ELCC Standard 3.0 as a point of moderate self-efficacy with 53.8% (n=21) of response averages falling in the moderate self-efficacy response range. ELCC Standard 3.0 focuses on promoting a safe, efficient, and effective learning environment (NPBEA, 2002). This standard captures the internal managerial work of school administrators in running an effective school facility.

These study results align with the Bell (2011) study results of public high school assistant principals (N=87) in Connecticut with fewer than half of respondents reporting high levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standard 3.0 (NPBEA, 2002). Bell (2011) reported moderate efficacy with 66.70% (n=58) of response averages falling in the moderate self-efficacy range.

**Finding 4.0. Fewer than half of respondents reported ELCC Standard 4.0, collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources, as a point of high self-efficacy.** As presented in Table 5, respondents reported ELCC Standard 4.0 as a point of

high self-efficacy with 43.6% (n=17) of response averages falling in the high self-efficacy response range. Respondents reported ELCC Standard 4.0 as a point of moderate self-efficacy with 56.4% (n=22) of response averages falling in the moderate self-efficacy response range. ELCC Standard 4.0 focuses on collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources (NPBEA, 2002). This standard captures the external public relations work required of school administrators in the family and community arenas.

These study results align with the Bell (2011) study results of public high school assistant principals (N=87) in Connecticut with fewer than half of respondents reporting high levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standard 4.0 (NPBEA, 2002). Bell (2011) reported moderate efficacy with 71.30% (n=62) of response averages falling in the moderate self-efficacy range.

**Finding 5.0. Fewer than half of respondents reported ELCC Standard 6.0, understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context, as a point of high self-efficacy.** As presented in Table 5, respondents reported ELCC Standard 6.0 as a point of high self-efficacy with 47.6% (n=20) of response averages falling in the high self-efficacy response range. Respondents reported ELCC Standard 6.0 as a point of moderate self-efficacy with 52.4% (n=22) of response averages falling in the moderate self-efficacy response range. ELCC Standard 6.0 focuses on understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (NPBEA, 2002). This standard captures the navigation work required of school administrators in the budgetary, legal, and political arenas.

These study results did not align with the Bell (2011) study results of public high school assistant principals (N=87) in Connecticut. The Bell (2011) study reported more than half of respondents, 59.80% (n=52), reporting high levels of self-efficacy in performing their professional responsibilities in accordance with the ELCC Standard 6.0 (NPBEA, 2002). The lower efficacy levels findings for ELCC Standard 6.0 in Pope (2015) as compared to Bell (2011) might be partially explained with each legislative session that brings increased expectations directed at public education. Chapter One presented the high-stakes mandated accountability facing administrators that followed the 2011 Bell study (Commonwealth of Virginia Department of Education, 2012; Education Commission, 2012; NPBEA, 2013; Virginia Board of Education,

2012; Wallace Foundation, 2013).

**Finding 6.0. The majority of respondents reported overall moderate organizational efficacy levels across the three measured OES (Bohn, 2010) survey factors.** As reported in Table 7, an initial aggregated benchmarking measurement of principal candidate organizational efficacy levels was provided to the participating district. A total scale score 81.53 (SD=9.577) indicated that respondents' overall measurements of organizational efficacy in three factor areas fell near the top of the moderate range (51 - 84). Individually, the respondents fell convincingly within both the moderate and high organizational efficacy ranges with individual total scale scores between 65 (moderate efficacy) and 102 (high efficacy). Specifically, the assistant principals without missing data (N=38) in one K-12 public school district in Virginia reported moderate (n=21, 55.3%) to high (n=17, 44.7%) levels of organizational efficacy. Unlike the SAES (McCullum et al., 2006a, 2006b) survey with no individual response averages falling in the low response range for any of the six ELCC Standards, there were individual OES (Bohn, 2010) survey responses in the low response range for OES Factors One and Three.

There are no previous study results for comparison, but Bohn noted the "value of using organizational efficacy as an overarching construct to assess organizations" (2010, p. 247). As noted in Chapter One, limited research (Eck & Goodwin, 2010; Leithwood, 2008; Leithwood, Strauss & Anderson, 2007; Pujol, 2013) has captured aspects of district level collective efficacy measurements, yet none have captured the distinctive subdomain of organizational efficacy.

**Finding 7.0. The majority of respondents reported OES (Bohn, 2010) survey Factor Two, sense of mission, future, or purpose, as a point of high organizational efficacy.** As reported in Table 7, respondents reported OES (Bohn, 2010) survey Factor Three as a point of high organizational efficacy with 71.4% (n=30) of response averages falling in the high organizational efficacy response range, the Cronbach's Alpha rating was low at 0.464. Therefore, with OES survey Factor Three reliability concerns, these study findings more convincingly report OES survey Factor Two to the participating district as a point of high organizational efficacy with 60.5% (n=26) of responses falling in the high organizational efficacy response range. OES survey Factor Two is sense of mission, future, or purpose and is defined as, "how we know where we are going" (Bohn, 2010, p. 234).

There are no previous study results for comparison. Researchers (Petitta & Borgogni, 2011; Ross & Gray, 2006; Tasa & Whyte, 2005;) have examined forms of collective efficacy for

relationship to problem solving, group decisions making, motivation and organizational commitment, yet none have isolated the distinctive subdomain of organizational efficacy.

**Finding 8.0. Fewer than half of respondents reported OES (Bohn, 2010) survey Factor One, sense of collective capability, as a point of high organizational efficacy.** As reported in Table 7, respondents reported OES (Bohn, 2010) survey Factor One as a point of moderate (65.0%, n=26) or low (2.5%, n=1) organizational efficacy with response averages falling in the noted organizational efficacy response ranges. OES survey Factor One is sense of collective capability and is defined as, “how we work together to accomplish the goal” (Bohn, 2010, p. 234). Missing data (n=4) were highest in organizational efficacy OES survey Factor One, yet the reliability rating for OES survey Factor One remained high with a Cronbach’s Alpha of 0.912.

There are no previous study results for comparison, yet Bandura (1997) recognized “an organization’s beliefs about its efficacy to produce results is undoubtedly an important feature of its operative culture” (p. 476). As of 2013, Pujol notes that school district collective efficacy study still “has only been hinted at” (p. 106).

**Finding 9.0. No established relationships between self-efficacy or organizational efficacy and job preparation experiences presented as findings.** As presented in Table 8 and Table 9, to determine whether significant differences existed when considering job preparation experiences and each efficacy type, an Analysis of Variance (ANOVA) was conducted. The F-tests revealed no statistical significance with all p-values > .05; given these results, no measure of effect size or further post hoc analyses as discussed in the methodology were reported. The null hypothesis for research question three, which stated *there is no significant difference in self-reported self-efficacy based upon job preparation experiences in one K-12 public school district*, and the null hypothesis for research question four, which stated *there is no significant difference in self-reported organizational efficacy based upon job preparation experiences in one K-12 public school district*, were accepted.

This finding is presented with two literature based considerations for the discrepancy in the previously presented theoretical and empirical support for job preparation experiences holding relationship to efficacy versus the null hypotheses accepted in this study.

The first is the consideration of low statistical power. McMillan and Schumacher (2006) define this term as, “the design does not have enough subjects...to detect a difference” (p. 259).

While this study response rate is not unexpected given the recognition that many questionnaires receive response rates well below 50% (Muijs, 2011), and it is higher than the 23% response rate of the Bell (2011) study, low statistical power remains a concern. Given this study's 42.3% (N=44) response rate, which was further hampered by missing data items, low statistical power may partially explain the findings that support the acceptance the null hypotheses.

The second is the consideration of restriction of range. McMillan and Schumacher (2006) define this term as, "small variances or ranges (that) make it difficult to obtain significant relationships" (p. 259). Regarding this concern, there were no low responses from respondents on the SAES (McCullum, 2006a, 2006b) survey and only two low responses from respondents on the OES (Bohn, 2010) survey. This small variance in the data collected may partially explain the findings that support the acceptance of the null hypotheses.

**Finding 10.0. No established relationships between respondents reporting both high self-efficacy and high organizational efficacy when analyzed by gender, or years of experience, or current school level presented as findings.** As presented in Table 11, of the total (N=44) respondents, (n=19) were removed from analysis due to missing data, bringing again the consideration of low statistical power. From the remaining respondents (n=25), 36.0% reported moderate self-efficacy and moderate organizational efficacy, and 24.0% (n=6) reported both high self-efficacy and high organizational efficacy. As presented in Tables 14, 15 and 16 for this high efficacy subgroup (N=6), investigative analyses extended beyond the four research questions with Independent t-Tests and Analysis of Variance analyses. No significant differences between high self-efficacy and organizational efficacy, and gender, or years of experience, or current school level were reported.

These study results align with Tschannen-Moran and Gareis (2007), *Cultivating Principals' Self-Efficacy: Supports That Matter* and the Bell (2011) study results, which found that gender and the basic contextual variables of years of experience and school level were not significantly related to principals' self-efficacy. Previous studies have not consider organizational efficacy as related to gender or basic contextual variables.

**Finding 11.0. The majority of respondents reporting both high self-efficacy and high organizational efficacy levels most frequently reported district level job preparation experiences.** As presented in Table 12 and 13 for this high efficacy subgroup (N=6), investigative analyses extended beyond the four research questions. Respondents reported most

frequently at 66.7% (n=4) district offered job preparation experiences as compared to 0.0% (n=0) of respondents reporting only school offered job preparation experience. This frequency finding could be further explored through a more robust survey sample or through a mixed methods design to further investigate efficacy and district level influence. In other studies, Tschannen-Moran and Gareis (2007) acknowledge the influence of district level support and speculate on the origins of this influence when stating:

On the whole, the level of district-level support experienced by principals contributed to differences in their self-efficacy beliefs. It may be that the availability of high levels of support is what has helped these higher self-efficacy principals to be effective and to see themselves as capable school leaders. But it may be that those principals with the strongest self-efficacy...through their efforts and persistence, as well as their own interpersonal skill...seek out and win the assistance and support of important others in their professional lives—or; as Bandura (1997) suggests, the two may be reciprocally related, each, in turn, feeding the other. (p. 107)

Also recognizing the influence of the district on efficacy, Seashore-Louis et al. (2010) state, “One of the most powerful ways in which districts influence teaching and learning is through the contribution they make to feelings of professional efficacy on the part of school principals” (p. 172).

### **Implications for Future Practice**

Tschannen-Moran and Gareis (2004) hold that enhancing leader efficacy “should be an important objective for those responsible for improving the quality of leadership in schools” and they place the onus for “the preparation and professional development of school principals in order to equip them with the capabilities and the resilient sense of efficacy that will enable them to enhance both their well being and accomplishments” (p. 583) with those in positions to assist.

As the participating district leaders direct future district succession, mentoring, or professional development planning for increased efficacious leadership development and for potential improved human capital management results, two types of implications for future practice are presented in this study. These types are (a) short-term efficacy building efforts with examples presented in implications for future practice 1.0, 2.0, 3.0, and 4.0, and (b) long-term efficacy building efforts with examples presented in implications for future practice 5.0.

Reviewed studies (Bass, 1985; Chan & Drasgow, 2001; Dvir et al., 2002; Hannah, 2006; Hannah et al., 2008; McCormick, 1999; Shea & Howell, 1999) have shown short-term efficacy building efforts can be effective. Reviewed studies (Hannah, 2008; McCormick et al., 2002; Tschannen-Moran & Gareis, 2007) have shown that long-term efficacy building efforts can be effective. Together, the two types of implications for future practice presented in this study bring short-term and long-term, formative and summative, as well as general and customized leader benefits.

**Future Practice 1.0. School district leaders should provide targeted, short-term summative job preparation support in ELCC Standard 3.0, managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment, (NPBEA, 2002) for assistant principals.** This implication for future practice is offered to address Finding 3.0. ELCC Standard 3.0 is focused on managing organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment (NPBEA, 2002). This standard had as a benchmarking measurement 53.8% (n=21) of respondents reporting moderate self-efficacy levels. District supports might include: (a) district professional development that utilizes the school district safety department and (b) district resources that provide monthly organizational checklists for school leaders that summarize monthly managerial tasks and evidence look-fors related to ELCC Standard 3.0 topics. Post-efficacy measurements could be captured after training or checklist completions. Given the ELCC Standard 3.0 findings, this is a place where district leaders may consider focusing efficacy-building efforts with assistant principals.

**Future Practice 2.0. School district leaders should provide targeted, short-term summative job preparation supports in ELCC Standard 4.0 collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources, as a point of high self-efficacy, (NPBEA, 2002) for assistant principals.** This implication for future practice is offered to address Finding 4.0. ELCC Standard 4.0 is focused on collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources (NPBEA, 2002). This standard had as a benchmarking measurement 56.4% (n=22) of respondents reporting moderate self-efficacy levels. District supports might include: (a) district professional development in the availability and utilization of community agencies and community partners and (b) district resources that format or model for assistant principals how to

facilitate community conversation and business partnership meetings for their schools. Post-efficacy measurements could be captured after training and meeting completions. Given the ELCC Standard 4.0 findings, this is a place where district leaders may consider focusing efficacy-building efforts with assistant principals.

**Future Practice 3.0. School district leaders should provide targeted, short-term summative job preparation support in ELCC Standard 6.0, understanding, responding to, and influencing the larger political, social, economic, legal and cultural context, (NPBEA, 2002) for assistant principals.** This implication for future practice is offered to address Finding 5.0. ELCC Standard 6.0 is focused on understanding, responding to, and influencing the larger political, social, economic, legal and cultural context (NPBEA, 2002). This standard had as a benchmarking measurement 52.4% (n =22) of respondents reporting moderate self-efficacy levels. District supports might include: (a) district resources to encourage affiliations with and attendance at professional association conferences with political involvement (examples including the Virginia Elementary Association of School Principals and the Virginia Secondary Association of School Principals), (b) district resources to support subscriptions to professional journals for assistant principal Professional Learning Communities, and (c) district resources that provide daily or weekly electronic communication to school leaders containing educational headlines in the news, articles, and legislative updates as ways to increase exposure to information related to ELCC Standard 6.0. Post-efficacy measurements could be captured after conference attendance, PLC reading activities, or distributed news updates. Given the ELCC Standard 6.0 findings, this is a place where district leaders may consider focusing efficacy-building efforts with assistant principals.

**Future Practice 4.0. School district leaders should provide targeted, short-term summative job preparation support in OES (Bohn, 2010) survey Factor One, sense of collective capability.** This implication for future practice is offered to address Finding 8.0. OES (Bohn, 2010) survey Factor One is focused on “how we work together to accomplish the goal” (Bohn, 2010, p. 234). This factor had as a benchmarking measurement 67.5% (n=27) of respondents reporting low or moderate organizational efficacy levels. District supports might include: (a) district professional development focused on the roles of each organizational member in accomplishing goals, (b) district resource supports that articulate the work responsibilities and goal supports provided by organizational members and departments, and (c)

district resource supports that articulate organizational standard operating procedures. The participating district had in the preceding 28 months top leadership changes at the superintendent, assistant superintendent, director, and school board levels accompanied by various organizational restructurings. Post-efficacy measurements could be captured after training and distribution of articulation documents, and the OES survey could be again utilized to measure efficacy levels. As Bohn (2010) states,

assessment of organizational efficacy may be the most important assessment an organization can undertake prior to change implementation to increase the chance for success. Most important, this tool provides organizations, the real focus of this research, with a tool to assess the collective competence of the organization” (p. 247).

Given the OES Factor One study findings, this is a place where district leaders may consider focusing efficacy-building efforts with assistant principals.

Each of the implications for future practice, 1.0 through 4.0, might be extended further with follow-up components by including: (a) an informal reflection or journaling component in district-directed assistant principal mentoring sessions and (b) an efficacy-building agenda component at district led meetings for assistant principals.

**Future Practice 5.0. School district leaders should capture a periodic efficacy measurement as a long-term formative job preparation support.** This implication for future practice is offered to address Finding 11.0. Of respondents (n=25) with no missing data, 40.0% (n=10) reported combinations of moderate and high efficacy levels across self-efficacy and organizational efficacy. This finding shows that strong efficacious beliefs in one area do not guarantee strong beliefs in the other. As Bohn recognizes, “a person may have a strong sense of self-efficacy in an organization that is failing, and a person with a weak or low self-efficacy may find him- or herself emboldened in a company with strong organizational efficacy” (2010, p. 232). Likewise, respondents holding high efficacy are not guaranteed to be successful as principals. Of respondents (N=6) reporting both high self-efficacy and high organizational efficacy, 66.7% (n=4) reported district offered job preparation experiences as compared to 0.0% (n=0) reporting only school offered job preparation experiences.

In this study, the SAES (McCollum et al., 2006a, 2006b) survey and OES (Bohn, 2010) survey showed their potential as formative and summative efficacy measurement instrument; furthermore, the SAES survey has established use as a pre-test, mid-test, and post-test

assessment of efficacy within educational arenas (NCPEA, 2007). Whether these efficacy measurement instruments or other efficacy instruments are utilized, district supports might include: (a) principalship candidates periodically measuring and monitoring their individual efficacy levels, (b) candidates applying individual efficacy level results from self-diagnostic efficacy measurements when setting goals and selecting district professional development trainings, and (c) candidates determining customized mentoring session topics. By customizing a long-term formative efficacy-building approach, assistant principals may be more empowered in their own efficacy development. Machida & Schaubroeck (2011) proposed that beyond having awareness, leaders must also manage their efficacy to optimize their own leadership development. This furthers district human capital management efforts by empowering future leaders to strengthen their own internal and external efficacious beliefs. Just as educators realize the power of customized student learning through individual education plans and tiered responses to intervention, it is increasingly important to transfer these exemplary practices to the development of school leadership. This second implication for practice, 5.0, requires moving beyond short-term, summative efficacy-building attempts, which can be extended to all assistant principals. This implication for practice adds the dimension of long-term, formative efficacy-building, which can be customized for each assistant principal to better individualize leader development as part of succession planning.

### **Recommendations for Future Studies**

From a review of previous efficacy study designs and from the results of this study, suggestions are offered for future efficacy studies.

The benefit of a mixed-methods design may further describe candidates who report both high self-efficacy and high organizational efficacy levels on quantitative surveys. In this study, of the total respondents (N=44), high self-efficacy and high organizational efficacy respondents (n=6) were a manageable number that could have been interviewed for added qualitative findings. In this study, to integrate a mixed-methods approach would have required respondents to be identified in some manner to allow the researcher to make further inquiry for qualitative study participation based on the initial quantitative study results. Identifying respondents during the quantitative portion of a study could further lower response rates or further increase missing data. As Muijs (2011) notes, significance tests can hamper the development of social sciences

with arbitrary boundaries, and a good compromise may not rely on significance testing as a sole measure (2011). A mixed-methods study design would bring the added benefit of allowing an additional form of efficacy measure.

The benefit of incorporating open-ended survey questions may further describe candidate efficacy levels beyond quantitative surveys solely containing closed-ended questions. Adding open-ended questions that allow respondents to formulate their own answers may further expand research findings. This approach would allow continued participant anonymity through a survey design without the added interview component in a mixed-methods approach, yet it would expand the information gathered from participants.

Additional benefit may be realized by conducting future studies in related areas with limited research. Future efficacy studies with experimental design components and longitudinal design components are warranted, as these remain limited types of research. Tschannen-Moran and Gareis (2007) recognize that efficacy is a “relatively stable characteristic once set” (p. 110) but longitudinal study designs would “allow researchers to observe the periods of flux and stability of efficacy beliefs at different career stages” (p. 110). Better understanding efficacy and career stages would be useful for school districts interested in human capital management. Likewise, future efficacy studies with a focus on the antecedents of high efficacy levels, with a focus on effective efficacy-building strategies, and with a focus on the outcomes of highly efficacious school leaders are warranted, as these also remain limited areas of research. Finally, future efficacy studies devoted to assistant principals and devoted to organizational efficacy in education are warranted, as these remain limited areas of research.

## **Reflections**

Regarding this research study, there were few difficulties during the process. The responsiveness of earlier researchers and authors contacted, along with their willingness to share and to suggest openly with a beginning researcher, were encouraging. The university faculty, through a well-designed program, provided both breadth and depth of understanding and fostered a genuine fidelity in learners to the research process.

In reflection, one challenge came during analysis with low response rates and missing data, bringing the realization that small-scale survey research by individual researchers should be supplemented through a mixed-methods research design. Another reflection for emphasis was

that while this study examined efficacy levels and relationships to job preparation experiences, this study did not determine causes of high efficacy, nor did it determine the successes of highly efficacious assistant principals once assuming principalships. It remains possible that even when holding high efficacy levels, leaders may not be successful in principalships. A third reflection stemmed from the data analyses, when the familiar statement, *learn to accept instead of expect*, was better realized. While results in this study did not find significance in relationship between reported efficacy levels and district provided job preparation experiences, school district leaders should continue to consider based on the study's benchmarking efficacy measurements the practices that will build low and moderate areas in principal candidates.

In the end for this researcher, the value in the research completed was most realized in the examination of the burgeoning organizational efficacy subdomain for the first time within the educational setting. As recent researchers have focused on school district contributions to leader efficacy, it was gratifying to further this limited research. Also, as a career educator, the researcher is gratified that this study centered on determining more about the efficacy of assistant principals. Study in this area continues to be well justified because of the efficacy construct's potential for supporting the well-being and potential success of tomorrow's school leaders.

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## Appendix A

### Permission Request for Research

**From:** "Fearon, Colm (colm. fearon@canterbury. ac. uk)" <colm. fearon@canterbury. ac. uk>

**Date:** Sun, 29 Jun 2014 19:34:25 +0000

**To:** jacob pope <smaxpope@gmail. com>

**Subject:** RE: Permission Request for Research

Hi Sharon,

Yes, of course, Please use. Your resume is very impressive indeed. I wish you the very best of luck with your studies.

Kind Regards

Colm

**From:** jacob pope [mailto:smaxpope@gmail. com] **Sent:** 28 June 2014 20:34 **To:** Fearon,

Colm (colm. fearon@canterbury. ac. uk) **Subject:** Permission Request for Research

**Importance:** High

Greetings from Richmond, Virginia, U. S.

Dr. Fearon,

I am reaching out to introduce myself to you, thank you for your research, and ask for your support of my future research. I am currently working through Virginia Polytechnic Institute and State University (known better in the United States as Virginia Tech) in an Ed. D. Program within the School of Education for Educational Leadership and Policy Studies. I have enclosed my vitae to further introduce myself as a career educator to you.

I have been inspired by the work of you and your colleagues as related to your published article entitled *Conceptualizing Work Engagement— An Individual, Collective and Organizational Efficacy Perspective*. (Retrieved from: [www. emeraldinsight. com/2046-9012. htm](http://www.emeraldinsight.com/2046-9012.htm))

As I complete my second year of studies at Virginia Tech, I am fully committed to the research topic of assistant principal self-efficacy and organizational efficacy levels as related to job preparation experiences. My research progress to date includes my successful presentation to my dissertation committee of chapters one and two, with my prospectus, including chapter 3, scheduled for July 16th. I also have received approval from my school district for my research and approval from two researchers to use their efficacy measurement instruments. My intention is to seek IRB approval and complete my data gathering by November 2014, followed by final research defense during February 2015.

As part of my introductory discussion of efficacy levels in my dissertation, may I have your permission, on behalf of you and your published colleagues, to print with source credit *Figure 1 Conceptualising engagement in terms of efficacy and interaction* found on page 246 of your published article named above?

I appreciate your consideration of my request for permission to use, with source credit, this

figure. I hope you approve and are pleased that you have inspired further study in such a worthy topic area.

Thank you for your consideration,  
Sharon E. Pope

## **Appendix B**

### **ELCC Standards**

*ELCC Standard 1.0:* assistant principals facilitate the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community (NPBEA, 2002).

*ELCC Standard 2.0:* assistant principals promote a positive school culture, provide an effective instructional program, apply best practices to student learning, and design comprehensive professional growth plans for staff (NPBEA, 2002).

*ELCC Standard 3.0:* assistant principals manage the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment (NPBEA, 2002).

*ELCC Standard 4.0:* assistant principals collaborate with families and other community members, respond to diverse community interests and needs, and mobilize community resources (NPBEA, 2002).

*ELCC Standard 5.0:* assistant principals act with integrity, fairly, and in an ethical manner (NPBEA, 2002).

*ELCC Standard 6.0:* assistant principals understand, respond to, and influence the larger political, social, economic, legal, and cultural context (NPBEA, 2002).

## Appendix C

### School Administrator Efficacy Scale (McCollum, Kajs, & Minter, 2006a, 2006b)

**Directions:** This survey is designed to measure your beliefs and confidence in your actions when performing the professional job responsibilities of a school administrator. The survey contains 49 items.

Please read each item carefully and select the point on the scale that best reflects how true the statement is of you by “clicking” on that number. You may only select one response for each item.

- |    |   |                            |
|----|---|----------------------------|
| 1. | I am confident that I possess the skills to lead a school community in the development of a clear vision.   | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |
|    |   |                            |
| 2. | I can develop a vision that will help ensure the success of all students.   | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |
|    |   |                            |
| 3. | I am able to use strategic planning processes to develop the vision of the school.  | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |
|    |   |                            |
| 4. | I am confident that I can establish two-way communication with stakeholders (staff, parents, students, community) in order to obtain the commitment necessary for implementing the vision for our school. | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |
|    |   |                            |
| 5. | I have the ability to engage students in the assessment of our school climate.  | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |
|    |   |                            |
| 6. | I have the ability to assess school climate using multiple methods.   | <input type="checkbox"/> 7 |
|    | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6   |                            |
|    | Not at all true of me   | Completely true of me      |

(continued)

## Appendix C (continued)

7. I have the ability to engage staff in the assessment of our school climate.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

8. I have the ability to engage parents in the assessment of our school climate.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

9. I am confident that I know how to use data about our school climate to improve the school culture in ways that promote staff and student morale.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

10. I am confident that I know how to use data about our school climate to encourage appropriate student behavior.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

11. I am confident that I know how to use data about our school climate to support a positive learning environment.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

12. I am confident in my understanding of the total instruction program in my school.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

13. I am able to understand the process of curriculum design, implementation, and evaluation.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

Not at all true of me	Completely true of me
-----------------------	-----------------------

(continued)









## Appendix C (continued)

42. I can explain to staff and parents how the governance process of my school is related to state and national institutions and politics.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
43. I am confident in my ability to examine student performance data to extract the information necessary for campus improvement planning.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
44. I am confident in my communication abilities to lead in a variety of educational settings.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
45. I can make decisions within the boundaries of ethical and legal principles.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
46. I am able to explain the role of law and politics in shaping the school community.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
47. I am confident I can resolve issues related to budgeting.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |
48. I am able to supplement school resources by attaining resources from the community.
- |                            |                            |                            |                            |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 |
| Not at all true of me      |                            |                            |                            |                            |                            | Completely true of me      |

(continued)

Appendix C (*continued*)

49. I am confident I can solicit community resources to resolve school issues.

1                      2                      3                      4                      5                      6                      7

---

Not at all  
true of me

Completely  
true of me

## Appendix D

### Organizational Efficacy Scale (adapted from Bohn, 2010)

**Directions:** This survey is designed to measure your beliefs and confidence in your current school district as an organization. This survey contains 17 items.

Please read each item carefully and select the point on the scale that best reflects your assessment of that item by “clicking” on that number. You may only select one response for each item.

1. People in this school district can take on any challenge.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

2. This school district can outperform other school districts.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

3. This school district is far more innovative than most school districts.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

4. In this school district, we coordinate our efforts to meet complete difficult projects.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

5. People in this school district can work together to accomplish difficult and complex goals.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

6. People in this school district can mobilize efforts to accomplish difficult and complex goals.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

(continued)

## Appendix D (continued)

7. In this school district, everyone works together very effectively.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

8. This school district can meet stakeholder needs because the employees are extremely competent.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

9. People here have a sense of purpose.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

10. This school district has a strong vision of the future.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

11. This school district is confident about its future.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

12. This school district will have a stronger reputation in the community in the next ten years.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

13. During an economic downturn, this school district will come out strong.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

(continued)

## Appendix D (continued)

14. This school district is not likely to fall apart in a few years.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

15. This school district has hope of surviving more than a year or two.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

16. I would not be surprised if this school district exists in 5 years.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

17. Because this school district is not likely to fail, I would recommend that a friend work here.

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Strongly Disagree	Disagree	Disagree somewhat	Agree somewhat	Agree	Strongly agree

**Appendix E**  
**Participant Information Survey**

**I am voluntarily participating in the study entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*. I have received the electronic invitation to participate and the Informed Consent Form.**

Yes (Required response)

**Directions:** This survey is designed to capture general information. The survey contains 8 items. Please read each item carefully and indicate your response by “clicking” on your selection(s). You may only select one response for items 1 through 7. You may select multiple responses for item 8.

1. Do you hold a current Virginia Board of Education educators license with an endorsement in administration? (Check one response)

- Yes  
 No

2. What is your gender? (Check one response)

- Male  
 Female

3. What is your age group? (Check one response)

- 20 - 29  
 30 - 39  
 40 - 49  
 50 - 59  
 60+

4. Which path best describes your path to licensure? (Check one response)

- traditional university/college program to licensure  
 non-traditional route to licensure such as a career switcher program

5. Which best describes our career aspirations? (Check one response)

- becoming a school principal in the future  
 not becoming a school principal in the future

6. How many total years have you been an associate principal, assistant principal or resource teacher? (Check one response)

- 0-5
- 6-10
- 11-15
- 16-20
- 21+

7. Which best describes your current school? (Check one response)

- elementary school
- middle school
- high school
- other

8. In which job preparation experiences listed below have you participated? (Check all responses that apply)

Job preparation experiences–School level

- administrative aide
- administrative intern

Job preparation experiences–District level

- summer school administrator
- associate principal
- none of the above

## Appendix F

### IRB Approval Memo



Office of Research Compliance  
 Institutional Review Board  
 North End Center, Suite 4120, Virginia Tech  
 300 Turner Street NW  
 Blacksburg, Virginia 24061  
 540/231-4606 Fax 540/231-0959  
 email irb@vt.edu  
 website <http://www.irb.vt.edu>

#### MEMORANDUM

**DATE:** August 4, 2014  
**TO:** Sharon Elaine Pope, Carol S Cash  
**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)  
**PROTOCOL TITLE:** A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District  
**IRB NUMBER:** 14-784

Effective August 4, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

#### PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**  
 Protocol Approval Date: **August 4, 2014**  
 Protocol Expiration Date: **N/A**  
 Continuing Review Due Date\*: **N/A**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

#### FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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 An equal opportunity, affirmative action institution

(continued)

## Appendix F (cont. )

IRB Number 14-784

page 2 of 2

Virginia Tech Institutional Review Board

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

\* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

## Appendix G

### Study Cover Letter

#### An Invitation to Participate

November 2014

Dear Public School Administrators:

Currently, I am a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. I am writing to share my dissertation research topic and to invite you to participate. My study is entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*.

You are invited to participate as a school administrator serving at the associate principal, assistant principal, or resource teacher level, by describing yourself in three ways --

- First, you will describe the degree of self-efficacy (Bandura, 1997) you hold as related to performing your professional job responsibilities in accordance with the Educational Leadership Constituency Council's Standards (National Policy Board for Educational Administration, 2002). These national standards describe the key work you do every day.
- Secondly, you will describe the degree of organizational efficacy (Bandura, 1997) you hold as related to our school district as measured by the factors of sense of collaborative capabilities, sense of mission, future or purpose, and sense of resilience.
- Thirdly, you will describe yourself through a participant information survey. Be assured that your responses are completely confidential and will not be associated with you or your school, nor reported individually.

While the above descriptors may sound rather intense, your participation really only requires you to honestly report your responses on very simply worded electronic survey items. So, I encourage you to participate in this important study. Results will only be reported in summary form, but hold the potential to guide future district succession, mentoring, or professional development offerings to better serve school administrators.

The combined surveys will take approximately 30 minutes to complete. Please commit now to complete this district endorsed survey. Your voice is critical in this research and important to your district. Your next step is to review the attached *Informed Consent Form* and submit your responses at the survey link below.

<https://survey.vt.edu/survey/entry.jsp?id=1407535964772>

Finally, please contact me, as I am available to discuss any participation concerns with you.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

## Appendix H

### Informed Consent Form

#### Please Keep this Informed Consent Form for Your Records

*A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*

The purpose of this study is to investigate self-efficacy levels and organizational efficacy levels as reported by assistant principals for relationships to their job preparation experiences in one K-12 public school district. Study findings will provide the school district with information not currently collected. Findings may further inform district succession, mentoring, or professional development planning.

When considering participation, please remember...

- Participation in the study is **voluntary**.
- Your completion and **submission of the online survey items implies consent to participate** in this study and consent to use the information you provide in aggregate form in the study write-up, presentations, or publications.
- It is estimated that completion of all survey items will take **30 minutes**.
- You may elect to not participate or **withdraw from this study at any time** without adverse consequences or jeopardizing your relationship with your district.
- You may **benefit** by knowing that study findings will contribute to a limited research base.
- You may **benefit** as study findings may further inform district succession, mentoring, or professional development planning.
- **Risks** of participation in this study are not greater, considering probability and magnitude, than those ordinarily encountered in daily life. There are no apparent physical risks.
- All survey data will be reported only in summative, aggregate form.
- **Individual responses will not be reported, and responses do not require participant personal identification.**
- The Data Retention and Sharing Guidelines of the American Psychological Association (2010) will be followed for secure electronic and paper data storage.
- If you have any questions about your rights as a research subject, please contact the Virginia Tech Institutional Review Board (IRB) [www.irb.vt.edu](http://www.irb.vt.edu). This is an IRB approved study.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

## Appendix I

### A Second Invitation to Participate

November 2014

Dear Public School Administrators:

Last week you received an invitation to participate in a study entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*. Thank you to those who have already taken the time to participate in this study.

If you have not yet completed the study surveys, you are again invited to participate as a school administrator serving at the associate principal, assistant principal, or resource teacher level, by describing yourself in three ways –

- First, you will describe the degree of self-efficacy (Bandura, 1997) you hold as related to performing your professional job responsibilities in accordance with the Educational Leadership Constituency Council's Standards (National Policy Board for Educational Administration, 2002). These national standards describe the key work you do every day.
- Secondly, you will describe the degree of organizational efficacy (Bandura, 1997) you hold as related to our school district as measured by the factors of sense of collaborative capabilities, sense of mission, future or purpose, and sense of resilience.
- Thirdly, you will describe yourself through a participant information survey. Be assured that your responses are completely confidential and will not be associated with you or your school, nor reported individually.

While the above descriptors may sound rather intense, your participation really only requires you to honestly report your responses on very simply worded electronic survey items. So, I encourage you to participate in this important study. Results will only be reported in summary form, but hold the potential to guide future district succession, mentoring, or professional development offerings to better serve school administrators.

The combined surveys will take approximately 30 minutes to complete. Please commit now to complete this district endorsed survey. Your voice is critical in this research and important to your district. Your next step is to review the attached *Informed Consent Form* and submit your responses at the survey link below.

<https://survey.vt.edu/survey/entry.jsp?id=1407535964772>

Finally, please contact me, as I am available to discuss any participation concerns with you.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

## Appendix J

### A Final Invitation to Participate

November 2014

Dear Public School Administrators:

Over the past two weeks you have received two invitations to participate in a study entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*. Thank you to those who have already taken the time to participate in this study.

If you have not yet completed the study surveys, this is your final invitation to participate as a school administrator serving at the associate principal, assistant principal, or resource teacher level, by describing yourself in three ways –

- First, you will describe the degree of self-efficacy (Bandura, 1997) you hold as related to performing your professional job responsibilities in accordance with the Educational Leadership Constituency Council's Standards (National Policy Board for Educational Administration, 2002). These national standards describe the key work you do every day.
- Secondly, you will describe the degree of organizational efficacy (Bandura, 1997) you hold as related to our school district as measured by the factors of sense of collaborative capabilities, sense of mission, future or purpose, and sense of resilience.
- Thirdly, you will describe yourself through a participant information survey. Be assured that your responses are completely confidential and will not be associated with you or your school, nor reported individually.

While the above descriptors may sound rather intense, your participation really only requires you to honestly report your responses on very simply worded electronic survey items. So, I encourage you to participate in this important study. Results will only be reported in summary form, but hold the potential to guide future district succession, mentoring, or professional development offerings to better serve school administrators.

The combined surveys will take approximately 30 minutes to complete. Please commit now to complete this district endorsed survey. Your voice is critical in this research and important to your district. Your next step is to review the attached *Informed Consent Form* and submit your responses at the survey link below.

<https://survey.vt.edu/survey/entry.jsp?id=1407535964772>

Finally, please contact me, as I am available to discuss any participation concerns with you.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

**Appendix K**  
**Pilot Group Invitation**

September 22, 2014

TO: (6–10 current participating district principals)

FROM: (co-investigator) psharon8@vt. edu

RE: Pilot Group Invitation

Currently, I am a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. I am writing to request your valuable participation in the completion of my research. My study is entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*.

You are among six to ten current district principals receiving this invitation to test the mechanics of a November survey that will be distributed to assistant principals, associate principals, and resource teachers across the district. You will receive three emails identical to those that will be distributed in November. These emails will be sent to you on September 25, October 2, and October 6, 2014. Please complete these surveys focusing on the formatting, delivery, and submission mechanics of the process.

Finally, you will receive one follow-up email on October 8, 2014 where you will be able to anonymously report comments regarding the formatting, delivery, and submission mechanics of the surveys. Your feedback will be instrumental in determining any refinements needed to the survey process before the actual survey distribution in November.

I thank you in advance for your time and valuable feedback as your participation will better ensure the success of this research study.

Sincerely,

Sharon E. Pope

Please contact me, as I am available to discuss any participation concerns with you.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

**Appendix L**  
**Pilot Group Feedback**

October 8, 2014

TO: (6–10 participating district principals)

FROM: (co-investigator) psharon8@vt. edu

RE: Pilot Group Feedback

Thank you to those who participated as pilot group participants in my study entitled *A Relationship Study of Assistant Principals' Reported Self-Efficacy and Organizational Efficacy Levels Based Upon Job Preparation Experiences in One K-12 Public School District*.

Your feedback on your experiences in completing the pilot survey process (emails received on September 25, October 2, and October 6, 2014) is instrumental in determining refinements needed to the survey process before the actual survey distribution to assistant principals, associate principals, and resource teachers in November.

Your anonymous feedback on the formatting, delivery, and submission mechanics of the surveys can now be reported at the survey link below.

<https://survey.vt.edu/survey/entry.jsp?id=1411257232243>

Thank you for your time and valuable feedback as a pilot survey participant.

Sincerely,

Sharon E. Pope

Please contact me, as I am available to discuss any participation concerns with you.

**Researcher Contact Information:** Sharon E. Pope, 804-937-1946, e-mail: [psharon8@vt.edu](mailto:psharon8@vt.edu)

**Appendix M**  
**Pilot Group Feedback Survey**

1) Please share any comments on the formatting of the invitation emails, consent form, and survey (typos, ease of reading, layout, etc. ).

2) Please share any comments on the delivery of the invitation emails, consent form, and survey (mechanical delivery, clarity in direction & questions delivery, etc. ).

3) Please share any comments on the submission of the survey (mechanical or navigation issues, length of time to complete, etc. ).

4) Place any additional comments/feedback here.

## Appendix N

### Permission Request for Research—McCollum, Kajs, and Minter

**From:** Dan McCollum <dan. mccollum@umuc. edu>  
**Date:** Mon, 24 Feb 2014 07:58:18 -0500  
**To:** jacob pope <smaxpope@gmail. com>  
**Subject:** Re: From S. Pope - permission request for research

Sharon,  
 Yes you can use the instrument. However, I do not have a copy other than that in the article.  
 Thanks.  
 Dan McCollum

Dr. Dan McCollum, Ph. D.  
 Senior Research Associate  
 Institutional Research Office  
 University of Maryland University College  
 Dan. McCollum@UMUC. edu  
 301-789-8044

\*\*\*\*\*

Thank you for your interest in using the efficacy scale. I am sending a cc to Dr. Dan McCollum who is at the University of Maryland asking him to respond to your email.

The very best in conducting your research project.

Sincerely,  
 Lawrence T. Kajs, EdD  
 Professor & Chair Educational Leadership University of Houston-Clear Lake 2700 Bay Area Blvd. Houston, TX 77059 281.283.3555 (office) 281.283.3630 (fax) kajs@uhcl. edu

\*\*\*\*\*

**From:** jacob pope [mailto:smaxpope@gmail. com]  
**Sent:** Thursday, February 13, 2014 5:12 PM  
**To:** Kajs, Lawrence; Minter, Norma; mccollum@uhcl. edu  
**Subject:** [Possible Spam: 11%] S. Pope - Research Request  
**Importance:** High

Drs. McCollum, Kajs, and Minter -

Greetings from Richmond, Virginia. I am reaching out to introduce myself to you, thank you for your research, and ask for your support of my future research. I am currently working through Virginia Polytechnic Institute and State University (known better nationally as Virginia Tech) in an Ed. D. Program within the School of Education for Educational Leadership and Policy Studies. I have enclosed my vitae to further introduce myself to you as a career educator.

I have been inspired by your esteemed work related to school administrator efficacy. As I enter my twentieth month of Virginia Tech study, I am fully committed to the research topic of assistant principal self-efficacy. I am also committed to my belief that your measurement instrument, the School Administrator Efficacy Scale (SAES), 2005, is the best-suited measurement instrument for my future research. My research progress to date includes my successful presentation to my dissertation committee of chapters one and two. I also have a preliminary nod of approval from my school district for my proposed area of research. My intention is to seek IRB approval and to present my prospectus in spring or summer of 2014. Finally, I have already been in communication with Dr. S. Bell, as I wish to replicate her 2010 research work in which she used the SAES survey as she explored assistant principal self-efficacy.

May I have your permission to use your SAES (2005) survey instrument? I anticipate administering it through an online method similar to Bell (2011) and following her scoring protocols. I have access to the 49-item SAES she published, but would ask you for the original instrument as you created it for my use. If you have a revised SAES aligned to the 2011 ELCC Standards or other alterations to the original survey instrument preferable to you for future research, please better direct me as you consider my request.

I appreciate your consideration of my request for permission to use the SAES. Any thoughts, concerns, guidance, or suggestions would be gratefully received and considered invaluable. I hope you approve and are pleased that you have inspired further study in such a worthy topic area.

Thank you for your consideration,

Sharon E. Pope

## Appendix O

### Permission Request for Research - Bohn

**From:** <james.bohn@att.net>  
**Reply-To:** <james.bohn@att.net>  
**Date:** Thu, 17 Apr 2014 18:42:01 -0700 (PDT)  
**To:** jacob pope <smaxpope@gmail.com>, "info@proaxios.com" <info@proaxios.com>  
**Subject:** Re: For Dr. Bohn - S. Pope - Research Request

Delighted and honored to hear from you Sharon. And congratulations on your progress to date. You have my warmest encouragement to use the OES for your purposes, provided I see the output from the data. I suggest analyzing the self-efficacy of the principal and the school at the same time . . .

As to the metrics - they are very straightforward. Just ensure you reverse score the items I indicated in my paper so you get accurate statistics.

As to rewording, go as sparingly as you can . . . Instead of 'organization' you'll use school, and use some other metric like "this school will have a stronger reputation in the community in the next ten years . . ." something that demonstrates longevity.

Does that help?

Kind regards,  
 Jim Bohn  
 Jim Bohn, PhD.

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 www.proaxios.com

\*\*\*\*\*

**From:** jacob pope <smaxpope@gmail.com>  
**To:** info@proaxios.com  
**Sent:** Thursday, April 17, 2014 7:38 PM  
**Subject:** For Dr. Bohn - S. Pope - Research Request

Dr. Bohn -

Greetings from Richmond, Virginia. I am reaching out to introduce myself to you, to thank you for your research in organizational efficacy, and to ask for your support of my future research. I have been inspired by your work related to organizational efficacy as published in *Human Resource Development Quarterly*, Fall 2010, under the title *Development and Exploratory Validation of an Organizational Efficacy Scale*.

I am currently working through Virginia Polytechnic Institute and State University (known better nationally as Virginia Tech) in an Ed. D. Program within the School of Education for

Educational Leadership and Policy Studies. I have enclosed my vitae to further introduce myself as a career educator to you.

As I approach my third year of Virginia Tech study, I am fully committed to the research topic of assistant principal self-efficacy. For my study participants, I intend to review a measurement of their self-efficacy along with a measurement of their organizational efficacy for any associations to their basic demographic information and job preparation experiences.

My research progress to date includes my successful presentation to my dissertation committee of chapters one and two. I also have a preliminary nod of approval from my school district for my proposed area of research. My intention is to seek IRB approval and to present my prospectus to my committee within the next three months.

Please consider granting me permission to use your Organizational Efficacy Scale (OES) instrument. If permitted, I anticipate administering it online per my school district guidelines in August or September 2014. I also anticipate needing to alter the wording of survey items slightly to better fit the educational setting, especially in the Factor 3–Resilience section.

I appreciate your consideration of my request. To better replicate your work, I would ask your extended consideration in providing me with the OES including any administration directions and scoring protocols. Additionally, any thoughts, concerns, guidance, or suggestions—especially related to Factor 3 item alterations—would be gratefully received and considered invaluable.

I hope you approve or are open to further dialogue and consideration; I also hope that you are pleased that you have inspired further study in such a worthy topic area.

Thank you for your consideration,

Sharon E. Pope

Appendix P  
Training in Human Subjects Protection Certificate



**Appendix Q**  
**Timeline for Research Activities**

Research Timeline	Research Collection Tasks
September 22–October 8	Pilot run of electronic distribution process to 6 to 10 district principals 9.22–email #1 (Appendix K) 9.25–email #2 (Appendix G, Appendix H) 10.2–email #3 (Appendix I, Appendix H) 10.6–email #4 (Appendix J, Appendix H) 10.8–email #5 (Appendix L)
October 30	Electronic distribution process completed, and final adjustments were made as needed based on pilot run feedback
November 6–November 17	Surveys distributed electronically to the proposed participants 11.6–email #1 (Appendix G, Appendix H) 11.13–email #2 (Appendix I, Appendix H) 11.17–email #3 (Appendix J, Appendix H)

**Appendix R**  
**Revisions to the Study**

From: XXXXXXXXXXXX  
Sent: Thursday, June 12, 2014 1:35 PM  
To: Sharon E. Pope  
Subject: Revisions to the study

Sharon,

The research committee has approved your research with the following revision:

1. Remove all comments about XXXXX XXXXX XXXXX Schools. Reports and publications generated from this study should not identify the individuals, schools, or the division.
2. All communication to XXXX staff must come from Research and Planning.

Before you can start your study, I will need the following things:

1. A copy of your final prospectus used for IRB.
2. A copy of your IRB approval letter
3. The online link to your survey so that we can review prior to sending out.

Once I have IRB approval, you will need to send me your email invitation and survey link. I will also need a review of your time line especially when you want me to send the survey to the teachers.

Once your pilot study is done, please send us the results to confirm that you survey is ready to be administered. Finally, once your dissertation is done, please send us an electronic copy of your dissertation for our records.

If you have any questions, let me know.

XXXXXXXXXXXXXXXXX  
Education Specialist - Research  
XXXX XXXX XXXX Schools  
Department of Research and Planning