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Teacher Perception Of Principal Leadership Practices: Impacting Teachers' Sense Of Self-Efficacy In Rural Appalachia Kentucky

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TEACHER PERCEPTION OF PRINCIPAL LEADERSHIP PRACTICES:

IMPACTING TEACHERS SENSE OF SELF-EFFICACY

IN RURAL APPALACHIA KENTUCKY

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DEDICATION

I would like to dedicate this manuscript to my family and friends. Your patience and understanding has been inspirational and I would not be here today without all your support and unwavering faith. I will always remember the encouragement you gave me during this time in my life.

To my wife, Kayla, you are the greatest thing that has ever happened to me. God really knew what he was doing when he put you in my life. I can't think of another woman that would put up with a nerd like me that took way more classes than any one person should. I know we missed out on a lot of things, but I promise that we will start from this day forward to make up for it. I love you with all my heart and I can't wait for the next chapter in our life.

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To my sister, Abigail, thank you for being the first. If you had never went to college I don't know if I would have had the courage to do it myself. You have always been an inspiration to me. You showed me that we didn't have to settle for the hand life dealt us. You found the way out and I was happy to follow in your footsteps.

To my mom, Janis, you will always be the greatest woman I have ever known. To have the resolve and determination, the way you did, to make a better life for your children is something I can only hope to mimic. Your strength carried me through the

toughest times in my life. Although you were taken from us to soon, I still felt your loving comfort during my times of doubt and frustration. I wouldn't be the person I am today had it not been for you. Thank you for always believing in me. I love you mom.

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ABSTRACT

The purpose of this study was to determine if a significant relationship existed between principal leadership practices, as perceived by teachers, and teacher's sense of self-efficacy. The target population was rural Appalachian teachers that worked for a principal that had been in administration for at least three consecutive years. This study utilized teacher responses from a survey consisting of the Teachers' Sense of Efficacy Scale (TSES, Tschannen-Moran & Woolfolk-Hoy, 2001) and the Leadership Practice Inventory – observer (LPI, Kouzes & Posner, 2003).

Results from the survey categorized levels of self-efficacy for teachers based on the works of Tschannen-Moran and Woolfolk-Hoy (2001). Self-efficacy was broken down into three sub-domains (student engagement, instructional strategies and classroom management) and correlated to response items on the TSES. Overall, Appalachian teachers in the study scored high in perceived levels of self-efficacy ($M = 7.1835$, $SD = .87641$).

The LPI collected data to measure five leadership practices as observed by teachers. These practices are: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. A close inspection of the data from the LPI revealed an issue with multicollinearity. Teacher responses did not measure the five leadership practices as intended but showed a consensus of exemplary leadership. This generalization made it impossible to perform a correlational analysis between teacher self-efficacy and perceived principal leadership practices.

The responses given from teachers in the study imply that principal leadership has the same meaning within the selected Appalachian schools. A similar leadership style

based on principal preparatory programs, cultural expectation and individual upbringing could have played a role in limiting the variance in LPI responses. This equates to principal leadership practices not holding a direct impact on self-efficacy as hoped, but a more implied sense of indirect leadership qualities and traits that drive teachers to push students to higher levels of success.

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CHAPTER 1: INTRODUCTION

Strong leaders have the ability to contribute to every aspect of their organization. These contributions are seen in their management skills, intrapersonal skills and how they encourage their subordinates to be confident and effective (Kotter, 1996). For years researchers have studied school principals and have discovered that strong educational leaders can encourage positive school cultures and robust learning environments (Collins, 2001; Ebmeier, 2003; Glickman, 2002; Hargreaves & Fink, 2004; Holland, 2004; Maxwell, 1999). Unproductive behaviors exhibited by school principals can inhibit the professional growth of teachers and in turn have a negative effect on student achievement (Blase & Blase, 2002). Scholars have discovered that actions performed by school leaders relate directly to personal beliefs and thought processes (McCormic, 2001; Serfiovanni, 1991). Additionally, the difference between effective and non-effective school leaders lies in their belief system rather than the behaviors they depict (Krug, Ahadi, & Scott, 1990).

Before the implementation of No Child Left Behind (NCLB) (2002), the leadership of a school was not clearly defined (Lynch, 2012). Principals were focused on discipline and various managerial tasks. Visits to the classroom were rare in many cases, only occurring to attend to a disciplinary problem or special classroom event. Today, a much more defined and heavily accountable characterization of principal is applied in schools. According to NCLB (2002), the principal is the instructional leader of the school. The attitudes of teachers, students and other staff members within the school are reflected through the leadership portrayed by the principal (Peterson, 2002). In a 2009 research study by Lortie, the roles and responsibilities of a principal were dissected and

evaluated to determine what exactly principals do and what policy makers and academics think they should do (Lytle, 2012). In academia it is understood that to be a principal, many hats must be worn every day. Today's principals must be leaders of personnel, students, government and public relations, finance, instruction, academic performance, culture and strategic planning (Lynch, 2012).

Effectiveness in Education

Just like the children's story, *The Little Engine That Could,* a teacher's belief that they can make a difference for students is one of the most powerful determinants in predicting teacher behavior and student success (Bandura, 1977).

> The very little engine looked up and saw the tears in the dolls' eyes. And she thought of the good little boys and girls on the other side of the mountain who would not have any toys or good food unless she helped. Then she said, "I think I can. I think I can. I think I can."
>
> The Little Engine that Could
>
> (Piper, 1930/1989)

Although the story is over 100 years old, the underlying theme has never changed-when faced with an insurmountable obstacle, be willing to roll up your sleeves and give it a try. Optimism combined in a belief that hard work pays off, gives individuals the power to overcome seemingly impossible tasks. Teachers who possess this quality, "I think I can, I think I can…", behave in such a way that provides advantageous results over those teachers who just wish they could (Vesely, 2009).

Often times the ability to be effective in education is confused with efficacy; however, there are distinctions between the two concepts. Covey (1989) defines effectiveness as the overt actions or practices that achieve results. He uses the illustration of the Goose and the Golden Egg taken from a children's fable. The goose equates the production capability while the desired result is to obtain a golden egg. Covey suggests that a balance between production of desired results and the production capability is important because overemphasizing one will harm the other. Leaders that are seen as effective, create a culture of value and purpose, make much needed improvements in the construct of the facility and require a high level of excellence from everyone, even more so themselves (Barth, 1990; Collins, 2001). Overtime as the quality of leadership becomes more effective, instruction in turn increases in effectiveness yielding higher student achievement (Goldring, Porter, Murphy, Elliott, & Cravens, 2007). Garmston and Wellman (2002) state that those possessing high levels of efficacy not only know they hold the capacity to impact others but have the willingness to do so. Efficacy comprises the attitude and beliefs that influence the courses of action that people choose to pursue when working toward a goal (Bandura, 1977, 1993, 1997).

Much research has been done to show a positive relationship exists between teacher practices and student achievement (Armor et al., 1976; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977) leading scholars to infer that teacher efficacy can have an influence on student performance. Later research revealed a positive correlation between a principal's personal efficacy with resultant leadership behaviors, and teachers' personal efficacy with resultant teaching behaviors (Bulach, Boothe, & Pickett, 2006; Hartnett, 1995; Krug et al., 1990). There have also been correlations made between leadership

behaviors and student achievement (Bulach et al., 2006; Marzano, Waters, & McNulty, 2005). Related research reports that in schools where principals inspire a common sense of purpose, foster a healthy school climate and encourage academic achievement, teachers in those schools display higher levels of self-efficacy than in other schools (Hipp & Bredeson, 1995, Hoy & Woolfolk, 1993; Moore & Esselman, 1992).

Principals that develop a learning culture within the school revere reflection as part of student, teacher and self-routine (Murphy & Lick, 2005). As Bandura (1986) researched the development of efficacy in individuals it became apparent that self-reflection was a required component in efficacy growth. Other researchers report that changes in behavior occur after reflection of current behaviors is examined. Studies suggest that behavior will not change until the individual examines the theories they practice and then seek alternative methods (Argyris & Schon, 1974). Reflection by educators is practice "to consider the impact of decisions and behaviors, analyze data, and think carefully about next steps" (Murphy & Lick, 2005 p. 96). Reflection goes beyond the daily assessments and scoring of student performance. A deeper understanding of self is needed to improve and grow.

Self-efficacy is a cognitive motivational construct, defined as "an individual's belief in his or her ability to organize and execute courses of actions to achieve desired outcomes" (Bandura, 1986). Power and belief in self affects the intended outcome of a task as well as performance during the task (Bandura, 1977, 1993). Ashton & Webb (1986, p.4) focus the definition of self-efficacy closer to education by defining it as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or

unmotivated." Other researchers termed efficacy as a "belief that any teacher's ability to bring about change is significantly limited by factors external to the teacher" (Gibson & Dembo, 1984, p. 574).

Bandura (1977) originally theorized that self-efficacy was based on internal perceptions and external dynamics. Sources of self-efficacy were independent, but could occur in various combinations, with different effects. Judgments are based on capabilities and individual efficacy as it relates to success or failure with a task. Experience is the teacher and efficacy can increase given the openness of the subject. Secondly, peer modeling increases efficacy when a strong identification is present between the observer and the model. Thirdly, upon completion of a task, feedback given by an onlooker can influence efficacy. Bandura's research concluded that positive verbal feedback form others can raise perceptions of efficacy. Likewise, negative feedback can lower perceptions of efficacy and individual capabilities. Finally, the physiological and psychological states of individuals influenced the level of self-efficacy being observed. Varying states of depression or anxiety lower self-efficacy, whereas, a positive demeanor yields high levels of accomplishment and success.

Teacher efficacy has become a foundation in educational research due to its correlation with teacher effectiveness. Researchers have shown that a teachers' sense of efficacy is related closely to student outcomes, such as student motivation (Midgley, Feldlaufer, & Eccles, 1989) and achievement (Ashton & Webb, 1986; McLaughlin & Marsh, 1978; Ross, 1992). Teachers' sense of efficacy also fosters a positive classroom environment (Woolfolk, Rosoff, & Hoy, 1990), a reduction in teacher stress (Greenwood, Olejnik, & Parkay, 1990) and plays an important factor in teacher retention (Johnson et

al., 2005). In addition, teachers' efficacious beliefs also relate to their behavior in the classroom as evident by the goals they set and their motivation to reach those goals. Allender (1994) believes that teachers with a strong sense of efficacy tend to exhibit greater levels of planning and organizational skills than those without. Efficacious teachers are open to new ideas and are willing to experiments with various methods and strategies to meet the needs of their students (Guskey, 1988; Stein & Wang, 1988). Teachers that hold a high level of efficacy show a resiliency not seen in average teachers when faced with setbacks. High efficacy enables teachers to limit criticism of students when error occurs (Ashton & Webb, 1986) and work longer with struggling students (Gibson & Dembo, 1984). Efficacious teachers are reluctant to refer students to special education just because they are difficult to deal with in class (Meijer & Foster, 1988; Soodak & Podell, 1993).

Statement of Research Problem

Leadership empowers, meaning the person in the leadership role inspires confidence and self-esteem in those expected to follow (Weinberg, 1986). Leadership is an ability that few have, allowing them to adapt a setting so everyone feels enabled. Evidence of leadership is not always seen in the present, but often shows up after a desired action or result is produced. In education those results are associated with test scores and school report cards. However, there are other elements to school leadership that go unnoticed or unmentioned. These components fall under the leadership role associated with the school principal. Federal, state and local mandates have placed an extensive amount of pressure on principals to run effective schools and to increase student achievement. Before the implementation of No Child Left Behind (NCLB)

(2002), school leadership was largely invested in managerial task (Lynch, 2012). Today, a much more defined and heavily accountable characterization of principal is applied in schools.

Research has clearly shown a relationship exists between teacher self-efficacy and levels of student achievement. Waters, Marzano, and McNulty (2003) emphasize that school leadership is an essential component in the effort to improve the education provided to students. However, research falls short in defining characteristics possessed by principals that build or maintain high levels of self-efficacy in teachers. Studies have concluded that principal's behaviors such as instructional leadership, encouraging risk taking, focusing on student achievement, building relationships with teachers, and involving staff in making decisions have an impact on teacher efficacy and a corresponding effect on student achievement (Barnett & McCormick, 2003; Barnett & McCormick, 2004; Dee, Henkin, & Duemer, 2003; Leithwood & Montgomery, 1982). However, little is mentioned about principal leadership practices and their impact on teacher self-efficacy. The purpose of this study is to identify any relationship between principal leadership practices as perceived by classroom teachers and the teachers' sense of self-efficacy.

Significance of Study

Do principals receive adequate edification to prepare for an administrative role in the school setting? Colleges offering principal coursework, generalize curriculum to suit any possible situation a principal may acquire. An abundance of political influence often accompanies communities making it difficult for principals to establish a moral administration (Flora & Flora, 2012). Strike, Haller, & Soltis (2005) believe that

decisions made at the administrative level carries with it the potential to restructure human life. This is why moral dilemmas add to the over complicated role of the principal. People tend to follow a code of ethics that results from life stories and critical incidents (Shapiro & Stefkovich, 1994). For principals, this code should be a development of experiences and expectations of their working lives (Shuman, 2010).

Throughout the U.S. school districts are focused on improving the recruitment, preparation, development, and retention of quality school administrators (Page, 2006). Findings from this research could play a significant role in influencing college course work for potential principal candidates. Character traits and behaviors mold and shape people into great or poor leaders. Preparation programs at the college level could prevent poorly qualified individuals from being certified as well as enhancing the potential of those seeking to enter the principalship. At the district level these findings may assist Site Based Decision Making (SBDM) committees when seeking to hire a new principal through character based surveys. Findings may assist in professional development for principals to develop leadership practices that impact teacher performance and student achievement.

Research Questions

1. What is the relationship between teacher perception of principal leadership practices and teacher self-efficacy?
2. Which specific principal leadership practices predict overall teacher self-efficacy levels and the three factors that comprise it?

Research Design

Using the Kentucky email Global Directory, teachers identified as working in rural school districts located in eastern Kentucky will be asked to take an anonymous survey using surveymonkey.com. The survey itself will not identify an individual teacher, principal, school or district. The survey will be a combination of *The Teacher Sense of Efficacy Scale* (TSES) developed at The Ohio State University and the *Leadership Practice Inventory* (LPI - Observer) developed by Kouzes and Posner (2003). TSES, also called the Ohio State Teacher Self-Efficacy Scale, is the culmination of research on teacher efficacy by Tschannen-Moran and Hoy (2001) where the authors focused on developing a scale that would be useful and generalizable to a broad spectrum of teachers by "tapping teachers' assessments of their competence across the wide range of activities and tasks they were asked to perform" (p. 795). Extensive study allowed the researchers to determine that this scale provided significant advances in data collection allowing increased accuracy and depth when measuring the efficacy of classroom teachers (Walker, 2009).

The Leadership Practice Inventory (Observer) will allow teachers the opportunity to answer questions about their principal's leadership. Teachers will answer 30 questions as they reflect on the principal's leadership behaviors. Using research developed by Posner (2002), the answers given by teachers will be used to identify specific leadership practices that teachers observe in their principals. All responses are recorded using Likert scales. TSES ranges from 1 to 9 whereas LPI is 1 to 10. On both scales 1 is the lowest whereas 9 on TSES represents a score of always and 10 represents always on LPI. All data is placed in IBM's SPSS software package for statistical analysis. Through a series

of sound mathematical calculations, teachers will be identified as having high or low levels of self-efficacy across different subcategories. Within this construct leadership practices will be identified that may correlate to teacher efficacies.

Conceptual Framework: Leadership Model

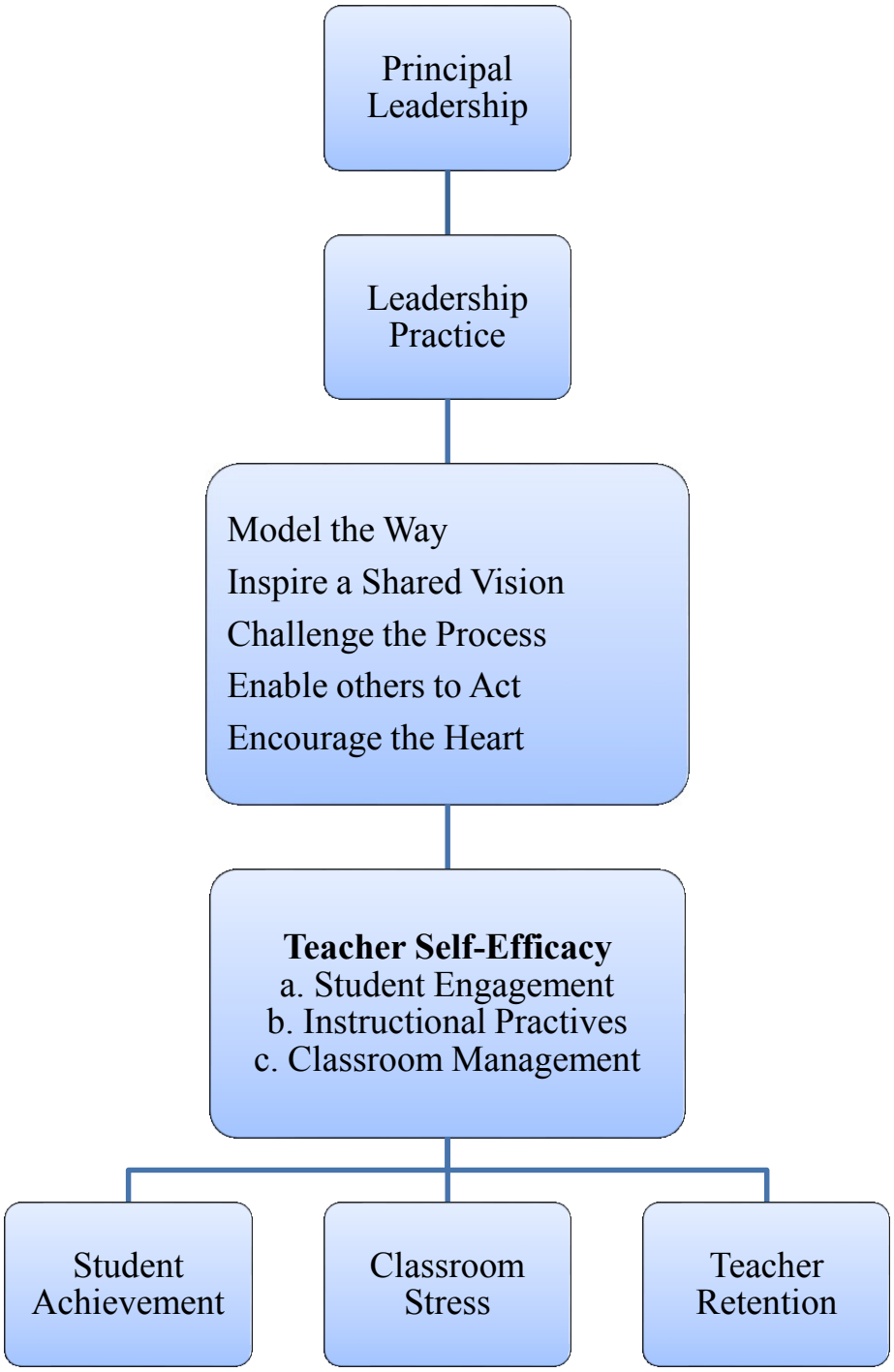


Figure 1.1. Conceptual Framework

Limitations

Studies have shown that efficacy beliefs tend to change throughout one's career (Davis-Kean et al., 2008; Hoy & Spero, 2005). Data collected in this study may encumber attempts for longitudinal comparisons by future researchers. This study was limited to the population of teachers and principals in the Appalachian region of Eastern Kentucky to increase efficacy study in rural settings. Findings and results may not be generalized to other sup-populations, locations or time periods. Due to the number or respondents in the survey, the sample size may not be large enough to suggest homogeneity of the target teacher and principal populations.

The data analyzed in this study was collected on a volunteer basis and respondents were anonymous. Because of the nature of data collection effectiveness of individual teachers and principals was not rated nor considered a factor in outcomes. School performance could be evaluated using the Kentucky Performance Rating for Educational Progress (K-PREP) test; however, this was not considered when analyzing data nor thought to be a factor in principal impact on teacher self-efficacy.

Definition of Terms

In this study various terms associated with teacher and leader efficacy were used. These terms are defined as follows as they relate to the theories and concepts included in this project:

Differentiated instruction. Differentiated instruction includes "a variety of options to successfully reach targeted standards. It meets learners where they are and offers challenging appropriate options for them in order to achieve success" (Gregory & Chapman, 2002, p. x). Teachers can differentiate content, assessment tools, performance tasks, and/or instructional strategies. In a differentiated classroom, the teacher proactively

planned and carried out varied approaches. "Differentiation is not a recipe for teaching. It is not an instructional strategy. It is not what a teacher does when he or she has time. It is a way of thinking about teaching and learning. It is a philosophy. As such, it is based on a set of beliefs" (Tomlinson, 2000, p. 6). Students learn better when teachers provide learning opportunities to support "student differences in readiness, interest, and learning needs" (Tomlinson, 2000, p. 7).

Effectiveness. Effectiveness was defined as the balance between the production of desired results and the production capability to produce the desired result. "True effectiveness is a function of two things: what is produced, and the producing asset or capacity to produce" (Covey, 1989, p. 54).

Group efficacy. Group efficacy, or collective efficacy, is the belief of the group "in its capacity to produce results and stay the course through internal and external difficulties to achieve goals" (Garmston & Wellman, 2002, p. 23). Group efficacy is defined as a group that "knows what it doesn't know, need to know or do, and develops strategies for attainment, focuses its resources where it can make the biggest difference, is motivated by and committed to achieving shared goals, learns from its experiences and shapes itself accordingly, and productively manages the tension between the vision of the desired state and the realities of the existing state" (Garmston & Wellman, 2002, p. 24). Collective efficacy is defined as "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, Hoy, & Hoy, 2000, p. 479).

Motivation. Motivation is the belief in the ability to succeed and attain a goal. "Success nourishes motivation and motivation makes further success more likely....An

individual .. .is motivated if he believes he can attain the goal" (Levine, 2002, p. 263). "Internal motivation stems from a genuine desire to accomplish something for its own sake... External motivation is motivation that has some outside incentive associated with it" (Levine, 2002, p. 264).

Multiple intelligences. The concept of multiple intelligences is a cognitive theory with "a pluralistic view of the mind, recognizing many different and discrete facets of cognition; acknowledging that individuals have different cognitive strengths and contrasting cognitive styles" (Gardner, 1993, p. 6). "Under the multiple intelligences theory, intelligence can serve both as the content of instruction and the means, or medium, for communicating that content" (Gardner, 1993, p. 32).

No Child Left Behind Act. The No Child Left Behind Act, NCLB, is federal legislation for school-wide improvement passed in 2001 as a reauthorization of the Elementary and Secondary Education Act to promote equity and student achievement in the American public school system. The legislation mandated continuing school improvement quantified by improvements in student achievement assessed by state assessment programs, with schools which did not improve sufficiently were designated as not making adequate yearly progress. Schools which met annual benchmarks were designated as making adequate yearly progress.

Professional learning community. A professional learning community (PLC) is an educational organization "characterized by a shared mission, vision, and values; collective inquiry; collaborative teams; an orientation toward action; willingness to experiment; commitment to continuous improvement; and a focus on results" (DuFour & Eaker, 1998, p. 45).

Quality of instruction. Quality of instruction as defined by Bloom, "has to do with cues or directions provided to the learner, the participation of the learner in the learning activity (covert or overt), and the reinforcement which the learner secures in some relation to the learning. Because much of school instruction is group instruction...a feedback and corrective system must also be included in the quality of instruction" (Bloom, 1976, p. 115).

Self-efficacy. Self-efficacy is the "self-assessment of the individual's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). It is the individual's belief in his or her power to affect the intended result, or his or her effectiveness when performing either a specific task, or tasks in a specific field (Bandura, 1977, 1993).

Teaching experience. The pedagogical development of teachers has been described in three stages, based primarily on years of teaching experience: novice, or beginning teachers; experienced teachers, with 5-10 years of experience; and expert teachers, with more than 10 years of experience (Allen & Casbergue, 1996).

Transcendental leadership. The elements of transcendental leadership include a leader who "utilizes a reflection paradigm, practices the principal of subsidiarity, acts from a political base, acts from a sense of duty and responsibility, respects the power of pluralism to resolve conflicts, advocates social justice, and formulates professional positions through discourse" (Rebore, 2003, p. 79).

Summary

This study examined specific leadership practices of principals that had an impact on teacher self-efficacy. This research is important because it increases the knowledge base behind developing quality and effective teachers as well as motivational instructional leaders. These findings can ultimately add to the toolkit of principals hoping to build teacher efficacy which in turn supports higher student achievement (Ashton & Webb, 1986; McLaughlin & Marsh, 1978; Ross 1992). Ultimately the goal of this research is to build and maintain teacher self-efficacy throughout a teaching career. This goal will improve classroom management (Woolfolk, Rosoff, & Hoy, 1990), reduce classroom stress (Greenwood, Olejnik, & Parkay, 1990) and increase teacher retention (Johnson, 2005). Additional research in collaboration with this study could lead to course development or modification at the graduate level for aspiring principals.

CHAPTER 2: REVIEW OF THE LITERATURE

This chapter examines relevant literature surrounding the practice and beliefs of efficacy as it relates to teachers. Within every school there are two groups that deal directly with student achievement, the school principal and the teachers in the classroom. Combining positive school leadership with effective instruction in the classroom should lead to increased student performance (Goldring et al., 2007). This literature review will examine the themes surrounding effective school leadership and instruction as well as efficacy in educators. Leadership trait theory will be identified and examined for data analysis needs. Effectiveness of educators is tied directly with student achievement, for school leadership it is twofold as achievement corresponds to both students and teachers. Effective practice results from a balance between the production of desired results and the production capability to produce the desired result (Covey, 1989).

Educational research has emphasized that both motivational and cognitive constructs surrounding teacher efficacy play an important role in the quality of instruction and student achievement. Literature in the fields of efficacy and teacher productiveness implicates positive outcomes on classroom practices. Although a continued interest in efficacy and teachers effectiveness exists, significant gaps in related research hinders our understanding of teacher efficacy. Decades of inconsistencies in defining teacher efficacy presents variability in the manner in which it has been measured. For this review and this study Bandura's (1993) definitions and findings will be referenced to structure and develop a framework. Bandura (1977) hypothesized that individuals with a high sense of efficacy should perform or work harder and stick with it longer that those who doubt their capabilities (Elliott, 2000). Bandura (1993) defines self-efficacy as the self-

assessment of a person's effectiveness within the context of a specific job or task. Efficacy includes knowing that one has the capacity to make a difference and being willing to work towards that difference (Garmston & Wellman, 2002).

Being an effective principal requires mastering two components of educational leadership. An effective school leader must possess positive instructional leadership skills and school management skills (Tschannen-Moran & Gareis, 2005). Principals must possess the ability to guide and develop instructional practices. McREL (2009) suggest that principals must hone in on the ability to develop people. In her article, *Teacher Learning that Supports Student Learning*, Darling-Hammond (1998) described these challenges. She stated, "Today's schools face enormous challenges. In response to an increasingly complex society and rapidly changing technology-based economy, schools are being asked to educate the most diverse student body in our history to higher academic standards than ever before." Developing others requires principals to be understanding to the emotional state along with the diverse and complex personalities of teachers to transmit a sense of mission and indirectly increase performance of those working under their leadership (Leithwood et al,. 2004).

Effective teachers have the persistence to master three major components of classroom instruction. Effective teachers use various instructional strategies to engage students, possess strong classroom management skills and continuously engage students at high levels (Tschannen-Moran & Woolfolk-Hoy, 2001). Researchers have attempted to find connections between effective principal or teacher actions and self-efficacy ratings. Fullan (2002) believed that efficacy played a vital role in the successful implementation of change. Hoy, Smith and Sweetland (2002) believe that positive school

climates foster trust, cooperation, and input from staff. These three components are present in high performing schools. Among these, the constant push for change and the lack of complacency keep high performing schools from falling behind. Bryk (2010) has spent numerous years researching the structure of the Chicago school system. Bryk concluded that the principal must lead the organizational process of developing change in the school to foster improvement. Principals who can genuinely establish a trusting school environment for all school members -- parents, teachers, students, community -- can become “drivers of change” (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, p. 131).

Positive correlations have reportedly been found between principal's personal efficacy with resultant leadership behaviors, and teachers' personal efficacy with resultant teaching behaviors (Bulach et al., 2006; Hartnett, 1995; Krug et al., 1990). Recently, scholars have reported positive relationships between principal leadership behaviors and student achievement (Bulach et al., 2006; Marzano et al., 2005). In schools where the principal inspired a common purpose, encouraged academic achievement, and fostered positive school climate, teachers were more apt to possess a positive sense of self-efficacy (Hipp & Bredeson, 1995; Hoy & Woolfolk, 1993; Moore & Esselman, 1992). Efficacy in teachers initially focused on the belief that a teacher can influence student performance. A positive relationship between teacher practices and student achievement has been reported (Armor et al., 1976; Berman et al., 1977). According to scholars, "if schools are to improve, they need educators who believe in the possibility of a better future-and in themselves" (DuFour & Eaker, 1998, p. 285).

Collective school efficacy and demographic differences in teacher efficacy have been included in numerous studies of school leadership and teacher self-efficacy. Bandura (1997) believed that efficacy influenced the choices people made and the extent to which they exerted effort in overcoming obstacles. Their level of resiliency became self-aiding or self-hindering when coping with job demands or environmental obstacles around them. When predicting school success the collective efficacy of all teachers outweighed many reoccurring themes, such as socio-economic status and family dynamics (Goddard, Hoy, & Hoy, 2004). Teacher groups defined various school events as opportunities for learning and developed strategies to achieve committed goals (Garmston & Wellman, 2002).

Effective School Leadership

School principals are often visionaries of change (Stronge, Richard, & Catano, 2008). Marzano et al., (2005) found that effective principals are committed to establishing a set of clear goals and are actively involved with the school community in working toward implementing and achieving those goals. Effective school leadership has evolved over the years to include concepts of change and levels of efficacy. Elmore (2000) states,

> Efficacy is improvement sustained over time that moves entire systems, raising the average level of quality and performance while at the same time decreasing the variation among units and engaging people in analysis and understanding of why some actions seem to work and others don't, (p. 13)

Over time various models have attempted to define the ever shifting role of an effective principal. The terms transcendental leadership (Rebore, 2003), facilitative leadership (Conley & Goldman, 1994; Lashway, 1995), strategic leadership (Reardon, Reardon, &

Rowe, 1998), transformational leadership (Lolly, 1996) and distributed leadership (Elmore, 2000) emphasize the aspects of leadership imposed upon the school principal. Without effective school leadership, student achievement is not likely to improve (Goldring et al., 2007). Skill tool sets held by individual principals are based primarily upon leadership behaviors and beliefs (Bulach et al., 2006; Goldring et al., 2007; Holland, Hogan, & Van Landuyt, 2002; Kabacoff, 2002; Krug et al., 1990) rather than personality traits.

Schools determined to be successful hold a common idea among the behaviors and beliefs of principal and teacher values. An organizational coherence must exist among core values to allow for effective leadership and progressive instructional growth (Elmore, 2000). Susan Rosenholtz (1986) studied variations in school effectiveness and discovered two types of school cultures impacting leadership and effectiveness. One culture focused on a coherent collaborative effort to improve instruction and student success while the other fostered a negative working environment failing to agree on student outcomes, teaching ideas and the meaning of success.

In 1983, the United States National Commission on Excellence in Education released the publication of *A Nation at Risk: The Imperative for School Improvement.* After years of failed attempts to improve student achievement the public school system became the focus of policy makers and communities alike. Upon passing the No Child Left Behind Act (NCLB) of 2001, a spotlight has been placed on every school with the added pressure of developing and implementing reform focused on student achievement. Greater focus has been centered on the leadership within each individual school. Leithwood and Riehl (2003) stated, “The increased focus on outcomes has invigorated

the quest for knowledge about the kinds of leadership that can help improve teaching and learning" (p.4). Principals are at the forefront of this leadership campaign. The managerial role originally assigned to principals has been transformed to serving first and foremost as the instructional leader (Liethwood & Riehl, 2003).

Instructional Leadership

In 1996 the Interstate School Leadership Licensure Consortium (ISLLC) Standards for School Leaders was developed to identify the components of effective school administrators (Council of Chief State School Officers, 1996). Included in these standards were communicating the vision, promoting learning, managing effectively, involving the community, acting in an ethical manner, and understanding the societal context of the school. States choosing to utilize the ISLLC standards developed a means for evaluating administrator certification. A framework for leadership training was essentially constructed from the standards. Based upon the ISLLC standards principals are inspired to take action in the running and development of the school. Principals are encouraged to focus on the vision and mission of the school. Vision and mission are the fundamental building blocks of the professional learning community and identify the values and goals needed to reach proficiency (DuFour & Eaker, 1998).

Vision. Schools in need of improvement often begin the journey by developing and implementing a common vision (DuFour & Eaker, 1998; Lezotte, 1997). Standard One of ISLLC states: "An educational leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders," (Council of Chief State School Officers, 2008, p. 14). Peter Senge (1990) assisted in creating the emphasis on collective

vision and collaborative learning. Shared vision and mission in the school community became a byproduct of collaborative environments and professional learning communities (PLC) (DuFour & Eaker, 1998; Hord, 1997). Principals project the shared vision in PLC's and share leadership associated with the vision. Principals taking action that contributes to goal achievement are at the highest level of effective leadership (Renchler, 1992). Effective leadership leads to effective schools, according to Lezotte (1997) effective schools begin with a clear and focused mission.

Learning Community. As instructional leader, the principal should hold a commitment to all students that communicates to teachers the need for effective instruction in the classroom (Tschannen-Moran & Gareis, 2004). Effective instruction as a component of school vision requires promotion of effort in both principals and subordinates. Empowering others must become the goal of principals that seek to influence teachers to be actively engaged in student learning (Tschannen-Moran & Gareis, 2004). Empowerment in teachers motivates them to believe that students learning important and an achievable goal (Gregory & Chapman, 2002; Jones, 2006; Tomlinson, 2000).

Harris and Lowery (2002) studies effective behaviors in school principals. Three themes developed based on survey responses and observation data. Respecting students, supporting students and communicating with students made the most difference in closing achievement gaps in high and low-performing schools. A moral commitment to student wellbeing tended to drive many principals in their involvement in student lives (Fullan, 2002).

The early school system followed a factory model of producing students as workers rather than individuals that learn at different levels (Schlechty, 1990; Sizer, 1992). Recent change has taken place based upon more ethical treatment of others to individualize classroom environments. Servant leadership, described by Rebore (2003), is a product of ethical treatment of others and lies at the core of the principalship. Leading with moral dignity follows a respect for others and an awareness of individuality.

Involving the school community is important in creating an environment that fosters learning. ISLLC standards require principals to reach out and make connections with community members and stakeholders. A shared culture of learning empowers both the school and community to strive for high levels of excellence. As instructional leaders, principals have the unique task of impacting motivational levels of people within the school community (Krug et al., 1990; McCollum, Kajs, & Minter, 2007). By empowering community members with the goal of learning, principals impact students that are typically not engaged actively in learning. Barth (2002) believed that creating a culture conducive to human learning will make it more likely for students and educators alike to become and remain life-long learners. This is the most important mission of any school and instructional leader.

School Management

Every principal must always be aware of the running and managing of the school. ISLLC Standard 3 states it is the responsibility of the educational leader to "promote the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment" 3 (Council of Chief

State School Officers, 2008, p. 14). With the added pressures of managing a school, principals must master the concepts of time management to be effective. Prioritizing the instructional leadership activities over managerial activities will increase the chance that student learning will have priority over everything else. (Acheson & Gall, 1997). "Emphasis on the effective management of the school in general is important as individual classroom management, and may even be a bigger determinant of the climate of the school than the aggregate impact of the management in individual classrooms" (Marzano, 2003, p. 106). Finding a balance between the role of instructional leader and the managerial duties of a principal continues to challenge many principals. Research shows that many principals get bogged down in their managerial duties and often neglect the instructional side of principalship (Amodeo & Taylor, 2004; Barnett, 2004; Guarino, Smith, & Wade, 2006; Smith, Guarino, Strom, & Adams, 2006). Although principals rate instructional leadership as their active priority, the description of how they spend their time often leads to managerial tasks (Elmore, 2000; Murphy, 1988).

In 2005 Marzano et al. published a study identifying 21 responsibilities associated with managing a school. Within those responsibilities were related behaviors of principals that affect responsibility. Six were closely related to management issues seen in schools; input, order, communication, situational awareness, resources and discipline. Managing the organization of a school requires the principal to include the responsibilities that ensure a unified operation. Within these managerial tasks were the procedures for school safety and efficiency. Finally, managing those resources of the school included proper allocation of any and all resources that promote the goals of the school.

Organizational Management

Managing an organization requires input and communication to allow the organization to distribute and evaluate information in a systemic manner. Input involves the collection of data that can be used to make decisions. Marzano et al. (2005) believes this collection of data is used to make decisions about teaching and learning and is the mark of an effective principal. Dewey held the philosophy that problem solving included several ways to check the data, try a solution, verify and rethink, and try again (Ryan, 1995). In the context of education and effective way to problem solve is to collect data and then include teachers in the design and implementation of important decisions and policies (Marzano et al., 2005).

Change cannot take place if everything in the system remains in a traditional framework. Improvement of instruction involves regular effective observations of teachers with informative feedback (Hord, 1992; Tschannen-Moran & Gareis, 2004). Holding to an ineffective evaluation system will result in ineffective classroom instruction (Drake & Roe, 1999). Truly effective observations are formative rather than summative. Beyond the instructional practices of the individual teacher, the supervision of instruction must focus on improving the entire school (Hord, 1992).

A routine review of policies and procedures used to facilitate building-level decisions is required to develop an effective and efficient school (Schlechty, 1990). Evaluation is essential in any planning process because it provides needed feedback to weigh choices that involve improving student achievement: “Information is data structured in a way so that it can be used in decision making within a context" (Drake &

Roe, 1999, p.294). Effective school leaders create systems and procedures for data input (Marzano et al., 2005).

Building and effective communication system within a school setting requires administrators to provide training and establish guidelines for collaboration among teachers (Marzano et al., 2005). Effective human relation skills become critical among instructional leaders seeking to build communication. Marzano et al. (2005) realized strong lines of communication with and among teachers and students builds effective communication within a school. Communicating the needs and goals is a necessary element in the creation of effective instruction in any institution (Tschannen-Moran & Gareis, 2004).

Frequency should not be the driving force of communication. A clear purpose and message must be at the heart of all communication stemming from the leadership. "How the school office is managed communicates many messages about the principal and the school in general" (Drake & Roe, 1999, p. 413). One of many responsibilities placed on the school principal is to communicate information to all stakeholders in the school community.

Operational Management

The working management of the school includes procedures for safety along with efficient operation of the school. Responsibility for order and discipline is reinforced by the situational awareness, or "with-it-ness" of a school leader who is able to anticipate difficulties then act to prevent problems from escalating (Nokelainen et al., 2007). Managing requires the protection of instructional time while enacting efficient procedures and eliminating unnecessary paperwork (Tschannen-Moran & Gareis, 2004). For a

school to run smoothly, clear and concise procedures must be in place along with routines for teachers, staff and students (Marzano et al., 2005). Dewy noted the basics of organization required getting people connected in a way that allows flexibility in work (Ryan, 1995).

The word principal has always been associated with a disciplinary process. Discipline has always been in place to protect teachers from influences that distract from classroom focus (Marzano et al., 2005). Drake and Roe (1999) found that effective classroom discipline could be obtained through positive teaching and a rich learning environment. Actively involving students in classroom discussion and participation builds a positive productive environment. Effective instructional leaders develop a priority for establishing and maintaining rule and procedures for common areas as well as classroom environments (Marzano et al., 2005).

Effective instructional leaders create an environment that establishes a fair and consistent discipline procedure for all students (Tschannen-Moran & Gareis, 2004). Principals cannot always determine what may be fair or democratic when administering discipline. Predetermined consequences are not always available, but decisions made in any circumstance should be moral and ethical in nature (Strike, Haller, & Soltis, 1998). Covey (1989) identifies values that are believed to be fundamentally moral guidelines administrators should reference in terms of discipline: fairness, honesty, human dignity, integrity, service, quality, growth, potential, patience, nurturance, and encouragement. School climate can enhance discipline by involving students and teachers in the development process (Drake & Roe, 1999). The Golden Rule Effect should be followed,

to treat others as you want to be treated, to empower others and in doing so build respect and strength through the community.

An Effective school leader has the foresight to look ahead and identify potential problems that may arise (Marzano et al., 2005). Often these problems stem from situations that occur outside of the school. Effective principals realize the significant of the social game of school leadership and develop high levels of social awareness and relationship management

(Nokelainen et al., 2007). "Situational awareness involves knowing the positive and negative dynamics that occur between individuals in the school, and using this information to forecast and head off potential problems" (Marzano et al., 2005, p. 103). Effective instructional leaders build and maintain a healthy relationship between school and community that fosters an atmosphere of teaching and learning for all (Tschannen-Moran & Gareis, 2004).

Resources

School principals must learn to manage the allocation of resources and determine where priorities lie. As with many business models, adjustments must be made as cost continues to increase and revenue remains constant. Principals must determine how time and materials will be used to increase student learning. "In the growth of education, finance has been a shaping and often governing factor" (Drake & Roe, 1999, p. 429). Principals can build credibility with internal and external populations by effectively handling the resources within the school. Developing credibility can occur through supplying informative professional development and providing materials necessary for the successful completion of job duties (Marzano et al., 2005). Effective schools improve

student learning by focusing everyday conversations on the proper use of existing resources to drive education (King, 2002).

Increased students achievement is always a product of effective leadership and effective instruction (Goldring et al., 2007). Success builds a belief to succeed again through ability (Bandura, 1977, 1993, 1997). Dufour and Eaker (1998) identified the positive relationship between school success and the self-efficacy of the staff and leadership. In spite of obstacles, individuals with self-efficacy hold the ability to help create a professional learning community. Howard (1990) held efficacy as a social construct and felt cultural beliefs affected individual achievement. Howard designed a framework for students to recognize effective effort in themselves to increase learning at the student level (Feinberg, 2004; Howard & Hammond, 1985).

Effective Instruction

This section reviews research on effective instruction based on the assumption that more effective instruction leads to higher teacher efficacy. Effective instruction is a practice that involves the use of quality instruction to maximize student learning.

> "Effective teachers are clear about their instructional goals, communicate to their students what is expected of them and why, make expert use of existing instructional materials, are knowledgeable about their students, adapt instruction to their students' needs, and anticipate misconceptions in students' existing knowledge" (Goldring et al., 2007, p. 6).

School reform holds the mission to obtain high quality teachers and provide students with and educational apprenticeship in democracy (Goodlad, 2002). High quality teachers care about the educational accomplishments of all students and are competent in their job duties. After the publication of *A Nation at Risk* (1983), it was made clear that to improve student performance, reformers needed to look closely at the

teachers assigned to educate students and realize what an integral part they played in achievement. A decline in quality classroom instruction has raised concerns about teacher accountability, student achievement and learning needs (Park, Turnbull, & Turnbull, 2002).

In 1997, Lezotte expressed that learning was for all students and it was the teachers' responsibility to reach every student. In Lezotte's book, *Learning for All*, education is reconstructed to be student-centered rather than teacher-centered. These ideas were taken from Robert Hutchins, who in 1953 said the greatest idea that America has given the world is the idea that education should be for all. Hutchins asked those in the educational field if this meant that everyone could be educated or that everyone had to attend school. Before Hutchins, John Dewey accentuated this same differentiated philosophy:

> "Education, therefore, must begin with a psychological insight into the child's capacities, interests, and habits. It must be controlled at every point by reference to these same considerations. These powers, interests, and habits must be continually interpreted-we must know what they mean" (Dewey, 1897, p. 77).

Caine and Caine (1997) noted that the learning climate is critically impacted by a teacher's belief in and about human potential and the ability of all students to learn. Effective teachers hold high expectations for student success (Wong & Wong, 1998). Instrumenting change in the attitude of educators to develop high expectations requires creating positive attitudes with direct experiences (Everington et al., 1999). Direct classroom applications exist between the development of self-efficacy and student performance. Developing student self-efficacy for all has been deemed a strategic learning intervention, especially for at-risk students (Brophy, 1998; Brown, 1999). For educators the challenge lies in adopting instructional interventions that make content

understandable for all students while increasing the belief of every learner that they can succeed at any given task (Bandura, 1977).

For years the reform debate of the ideal school model has hovered over public education. Lezotte (1997) examined reform models and described the various formulas as "compulsory schooling vs. compulsory learning". He identified seven elements of effective models that showed promise in increasing student achievement: a clear and focused mission for all, a safe and orderly learning environment, high expectations for all, opportunity to learn and stay on task, instructional leadership, frequent monitoring of student progress, and parent involvement. Teachers cannot expect every student to always learn using the same teaching method. Changes must be made to teach based on student need and student learning style. No longer can teachers teach to the whole but they must learn to differentiate their delivery methods to maximize student ability.

Marzano (2007) described effectiveness in schools as consisting of three major components: the use of effective instructional strategies, effective management strategies and effective classroom curriculum design. Principals that are deemed effective communicate and oversee the implementation of these components. Teacher efficacy has also been defined using three components: efficacy in student engagement, management and instruction (Tschannen-Moran & Woolfolk-Hoy, 2001). Similarly, Kozloff (2002) reiterated teacher efficacy components by claiming effective teachers provide sufficient scaffolding, help students organize and activate knowledge, and maintain high levels of student engagement. Research has shown that effective teachers always think of students when planning and design lessons with the intent of student mastery (Wong & Wong, 1998).

Student Engagement

The habit of lifelong learning is a byproduct of student engagements established by the teacher (Brewster & Fager, 2000). John Dewey, who is often referred to as the father of modern American education, stated that as schools questioned the components of student engagement they should ask three questions (Boydston, 1970, p. 266):

1. What is the student interested in that is significant?
2. How well is he learning?
3. For what is he motivated that is excellent?

Approaching student achievement using pre-assessments was still being studied and ratified a century after Dewey proposed the questions to educators (Gregory & Chapman, 2002; Tomlinson, 2001). Cognitive engagement signifies the amount of effort and types of processing strategies that students use for learning (Ravindran, Greene, & DeBacker, 2005). Research indicates that improving student achievement requires increasing time students are on task and engaged while experiencing repeated success in learning (Caine & Caine, 1997; Hague & Walker, 1996; Silver, Strong, & Perini, 2000). Garner (1993) noted that to increase the strength of multiple intelligences across various domains required higher levels of engagement in classroom interactions.

Strategies. Marzano's (2007) research identified three types of engagement that affected student achievement; behavioral, emotional and cognitive. Behavioral engagement studies the level of involvement students contribute in daily classroom interactions. Meaningful student engagement involves mental participation, emotional connections and physical interactions (Roukema, 2005). Effort is required of teachers to motivate and engage students that are not interested in schoolwork (Tschannen-Moran &

Woolfolk-Hoy, 2001). Teachers possessing effective classroom management techniques demonstrate higher student engagement and a 23% increase in student achievement (Marzano, Marzano, & Pickering, 2003). Students become productively engaged when teachers introduce high-yield instructional strategies that keep students on task and engaged (Lezotte, 1997). According to Hunter (2004) if the task is too easy or too difficult, student engagement decreases and the possibility for success is reduced.

Some students prove to be more of a challenge than others. Getting through often requires multiple strategies aimed at student interactions and engagement. Lezotte (1997, p. 31) wrote,

> The genius of good teachers is to develop instructional tasks and student activities that motivate students and hold their interest throughout the instruction. When students are asked to engage in tasks and activities that require them to be active rather than passive, for example, their academic engagement rates tend to increase.

Active participation is at the core of student engagement (Berliner, 2003). Schlechty (2002) referred to actively engaged participation as "minds-on" participation. A student's thoughts are focused and centered on the activity and nothing can distract from the task at hand. Through active learning the classroom becomes more student-centered rather than teacher-centered (Roukema, 2005). Rather than stress the academic subject and its abstract, Dewey reminded us that we should use subject-matter to invigorate both the interest and activity of the student (Boydston, 1970).

Research between the brain and body signify links between movement and learning. Over 80 studies delivered at the 1995 Annual Society of Neuroscience Conference suggested strong links between the cerebellum and memory, language, emotion, attention, nonverbal cues, special perception and decision making. These

finding give value to the idea of incorporating physical education, movement and games to boost cognition. Effective educators are open to incorporation these and other strategies into everyday learning.

Heward's (1994) research of six urban elementary classrooms showed that 75% of the school day was based upon instruction from teachers, while students spent less than 1% of the day responding to instruction. Gardner (1993, p. 246) wrote,

> "By building on a child's interest and motivation, schools might have more success in carrying out what may be their most crucial task: empowering children to engage meaningfully in their own learning."

Emotionally students can be engaged with school based upon the attitude they possess about the school environment itself. Disengaged students feel a withdrawal from school and activities surrounding both community and classroom environments (Ginsberg, 2005). Emotionally there are student that feel rebellious and angry, do not try and give up easily (Skinner & Belmont, 1993). Student failure is linked to stress and negativity; poor peer relationships and unpredictable routines are among many factors influencing and weakening student engagement (Jensen, 1998).

Good learning recognizes and acknowledges psychological needs and embraces emotions (Jensen, 1998). Productive emotions can be purposely engaged by teachers to facilitate learning and reach students full potential (Glasser, 1986). A love of learning combined with enthusiasm about the title of teacher creates a positive working environment and builds rapport with students (Wong & Wong, 1998).

Not dealing with the emotions of students or inappropriate reactions to student expressions can lead to various discipline problems. Teachers often fail to understand student feelings and attitudes when looking for ways to influence learning (Caine &

Caine, 1997). Differentiation is meant to influence the various learning styles of students. Feelings, attitude and varying levels of intelligence affect student engagement (Schlechty, 2001). Students that feel the freedom to express themselves without a fear of failure often take needed risks that promote student success.

The sense of efficacy a student sees internally affects motivations levels and learning (Woolfolk-Hoy, 2004). Belief in oneself is a determining factor of success in school (Tschannen-Moran & Woolfolk-Hoy, 2001). Research has shown that success or foreseen success on difficult task builds self-belief in school work (Miller, 2006; Paris &Byrnes, 1989; Ravindran et al., 2005). In 1997, Bandura defined two types of efficacy that could be influenced by personal motivation. Preparatory efficacy undermines motivation in students and simply applies an effort toward preparing for a task. Performance efficacy forces students to overcome difficult task and in turn enhances self-motivation. Teachers have the power to motivate student self-efficacy by using feedback to guide students in difficult learning tasks and seeking the student's best effort (Landsman, Moore, & Simmons, 2008).

The number one predictor of student achievement is student-teacher relationship (Osterman, 2000). Teachers can reach students by showing interest and celebrating success both inside and outside the classroom (Jensen, 1998). Ruby Payne (2008) advocates building a relationship of respect and making leaning a personal experience between student and teacher. Having a personal relationship with students allows teachers to build excitement in education by incorporating personal interest (Miller, 2006). For all students, having a caring classroom community is essential to reaching

high levels of performance (Landsman et al., 2008; Tschannen-Moran & Woolfolk-Hoy, 2001).

According to research educators can affect the level of student engagements in the classroom (Brewster & Fager, 2000). Brain research confirms that students are impacted by the environment and climate of the classroom, which can hold a significant impact on student motivation and engagement (Jensen, 1998). Researchers have looked for important factors, such as interest perseverance and effort, which influence student motivation. Ginsberg (2000) defined motivation as "the natural human capacity to direct energy in the pursuit of a goal,…,We direct our energy through attention, concentration, and imagination to make sense of our world" (p. 218). Motivation studies have shown that students are more engaged through activities that allow for creativity and thought (Strong, Silver, & Robinson, 1995). To motivate students, Payne (2008) suggested creating mental models that students could translate from concrete into abstract, building on student engagement.

Learning should be a challenge to students, but should also be something they can obtain through organizational skills and guidance (Darling-Hammond & Ifill-Lynch, 2006). Dewey held the philosophy to solve, check, rethink and try again. Cushman (2006) asserted that students wanted to progress in their academic skillset and could do this by stretching their way of thinking instead of avoiding problems. Using prior knowledge and beliefs will allow students to develop new ideas and experiences in learning (Villegas & Lucas, 2007).

Increasing student self-efficacy involves adequate formative assessment and a developed sense of control (Brookhart, 2008). Marzano et al. (2005, p. 96), stated that,

"When students perceive they have progressed in the acquisition of knowledge or skills, they tend to increase their level of effort and engagement, regardless of their relative standing compared to other students." Brookhart (2008) noted that effective feedback involved the teacher giving a specific message to the student in a positive tone that allowed the student to reflect on the next assignment. Understanding by the student makes feedback more beneficial for future achievement.

Research has shown a positive correlation between the quality of teachers and improvements in academic performance (Darling-Hammond, 2001). High quality teachers know their subject matter inside and out. They engage students in daily activities while facilitating the knowledge transfer and understanding. High quality teachers see themselves as continuous learners and commit to the school-wide efforts of building an effective learning institution. In a 1996 report by The National Commission on Teaching and America's Future entitled *What Matters Most: Teaching for America's Future*, it was stated that what teachers know and what teacher do, made the crucial differences in what children learned. Brewster and Fager (2000) reiterate this by noting a clear direct impact between teacher's academic connections and the level student engagement and success.

No matter what the source may be motivation for students can be either intrinsic or extrinsic. Intrinsic motivation involves a participation in learning by the student, centered on topics of value and hold a personal interest (Berliner, 2003; Brewster & Fager, 2000). Intrinsic motivated learners often excel beyond their classmates because they are inspired by personal goals and hold a level of enjoyment by being in the

classroom (Lumsden, 1994). Skinner and Belmont (1994) noted that activities involving a real-life connection increased levels of intrinsic motivation in students.

Students that are extrinsically motivated require the stimulation of prizes or rewards to become successful (Ginsberg & Wlodkowski, 2000). Ginsberg and Wlodkowski (2000) noted students would more than likely rush through an activity or learning task when the grade or reward was more important than the content presented. However, Brewster and Fager (2000) stated that without motivation students are destined for failure. Extrinsic rewards are not always the best motivation for students, but there is a proper time and place for implementation. According to Skinner and Belmont (1993) extrinsic rewards should only be used when classroom expectations and behaviors have been clearly set and consistently applied. Then the available reward should be accompanied with praise and celebration to have a positive impact on student achievement (Marzano et al., 2003).

Effective Classroom Management

First year and experienced teachers consistently battle the challenges that accompany classroom management (Garrahy, Cothran, & Kulinna, 2005). Content area aside, teachers face the ever-changing personalities and circumstances that accompany the varying student population from year to year. Before learning can take place, teachers must implement an effective management plan as the foundation for expectations within the classroom (Wong & Wong, 1998). Effective teachers have a high regard for classroom management and are the outstanding at implementation (Marzano et al., 2003). Teachers must take into account the broad range of actions that accompany

classroom management. As teacher improve classroom management techniques learning opportunities increase leading to a higher quality classroom experience for students.

Management Factors

In 2003, Marzano completed over 100 studies on classroom management indicating that student achievement was affected by teacher implementation of management techniques. In classrooms where the teacher implemented effective classroom management students scored an average of 20% higher than students in classrooms where teachers did not implement effective classroom management. From his meta-analysis, Marzano determined four management factors for effective classroom management: disciplinary interventions, mental set, teacher-student relationships and rules.

Rules and Procedures. The fundamentals of effective classroom managements are embedded in rules, procedures and routines (Marzano, 2003). The first day of school should serve as a launch pad for implementation of classroom management techniques (Wong & Wong, 1998). Expectations should be clearly defined for students, while classroom rules and procedures can become a collaborative effort between teacher and students. Instruction and learning is at its highest when the consistency of practice and procedure is maintained in the learning environment (Wong & Wong, 1998). Reluctant learners have a better chance at achievement when policy and procedure is consistently enforced throughout the school year (Landsman et al., 2008). Parent buy-in and support can aid teachers in the implementation of rules and procedures. Effective instruction and increased student achievement will happen if clear expectations and established routines are present in the classroom (Tschannen-Moran & Woolfolk-Hoy, 2001).

Teacher effectiveness is a product of what Wong and Wong (1998) describe as readiness. Readiness requires an advanced preparation that enhances classroom management. Marzano (2003) emphasized that poor classroom management did not enhance the learning experience and that efficient preparation reinforced a positive learning environment essential to student success. Consistency of instruction and practice of class rules develop student understanding of how to plan and behave in classroom settings (Payne, 2008; Tschannen-Moran & Woolfolk-Hoy, 2001).

Disciplinary Interventions. Jacob Kounin's (1970) book, *Discipline and Group Management in Classrooms*, defines two observing characteristics of well-managed classrooms. Teachers categorized as effective had few, if any, behavioral interruptions in class and students displayed a high level of time-on-task. Discipline in those classrooms consisted of positive reinforcement, including a rewards system for constructive interactions, or punishment based on inappropriate behaviors. Marzano (2003) believed a healthy balance between positive reinforcement and consequences for negative behavior were essential for effective classroom management. Excessive negative reinforcement can lead to defiance, defensiveness, rage and resent (Kohn, 1993). Wong and Wong (1998) confirm the healthy balance of discipline by defining various discipline plans that leveled from student generated to teacher generated with the most effective plan being developed on a shared level.

When misbehavior occurs, Levine (2002) believes it is better to focus on correcting the behavior rather than hypothesizing the reason the behavior occurred. Effective teachers make better use of time by being productive in correcting misbehavior by modeling and practice. Personal experience can be an effective tool for teachers when

developing a general disciplinary plan to address classroom disruptions (Marzano, 2007). Invested time during the first days of school teaching discipline and procedures can pay off during the school year by protecting valuable instruction time (Wong & Wong, 1998).

Compassionate teachers make students responsible for learning while being there to provide the support students need (Stipek, 2006). In all content areas consistency is required through student-teacher interactions to develop feelings of success and accomplishment (Wong & Wong, 1998). Glasser (1986) noted effective discipline programs addressed the actions and behaviors while satisfying the students' needs in the classroom. Glasser's model resulted in a classroom environment that was orderly as well as relaxed and pleasant for both student and teacher.

Student-Teacher Relationships. Improved student achievement is a product of a supportive climate built upon positive student-teacher relationships. Effective classroom management is constructed upon the critical relationship between teacher and students (Marzano, 2003). Tomlinson noted that good teaching is a reflection of the strong bond developed between teacher and student. This bond is often a chain of trust developed during the first weeks of school as the teacher shows a consistent concern for both school work and life experience of the students (Wong & Wong, 1998). Villegas and Lucas (2007) defined teaching as an ethical activity and that teachers had an obligation to help students learn and be an advocate for them. Teaching goes beyond the classroom and effective teachers have a way of helping families by teaching the students to learn while maintaining positive community relationships (Lezotte, 2007). Increased frequency of varying instructional strategies extend that relationship and learning becomes a partnership that includes school, home, parents and community.

Effective Mind Set. Effective classroom managers keep student engaged through high expectations which prevents classroom disruptions (Kounin, 1970). Effective classroom managers identify potential problems before they escalate into serious disruptions that take away from valuable instructional time (Marzano et al., 2003). Planning a variety of learning activities that engage students on an individual level is essential to classroom management (Shanoski & Hranitz, 1991). Effective classroom management is an ongoing process that develops as teachers acquire additional knowledge about student behavior from experience ((Berliner, 2001; Bivona, 2002; Durrall, 1995). A significant part of the mental set is classroom climate. Classroom climate involves giving students choices for assessment and allowing student input in classroom rules (Stipek, 2006). Improving management involved encouraging students to offer input and opinion in classroom procedures.

Marzano et al., (2003) defines emotional objectivity as the ability to remain calm during classroom disruptions. Teachers should put emotion aside and focus on facts when dealing with disruptions. Effective teachers develop methods to deal with disruptions without allowing the incident to take away from the lesson or distract others from learning (Tschannen-Moran & Woolfolk-Hoy, 2001). Defining students based on labels creates a classroom environment that centers on control and management, overshadowing any opportunity for learning (Landsman et al., 2008).

Teacher difficulties in classroom management have been linked to both stress and teacher burnout (Berliner, 2001; Bosworth & Hamilton, 1994). These difficulties contribute to the disconnect that often occurs between teacher and student. New teachers report that undergraduate classes fail to address the management aspect of teaching.

Teachers are unprepared and lack the materials needed to develop a management plan to support instruction. Hoerr (2007) noted the lack of formal curriculum and poor treatment of students diminished the learning environment. Threatening and forcing student to contribute or take part in classroom activities alienates students and lowers the level of respect teachers need to be effective in managing the classroom (Landsman et al., 2008).

Effective classroom managers prevent disruptions and keep students engaged in the task at hand (Kounin, 1970). Extensive planning and concrete routines are basic elements associated with effective classroom management. Teachers that become effective classroom managers develop a foresight to identify and prevent potential disruptions before they escalate (Marzano, 2003).

Environmental Factors. Classroom climate is identified from a variety of physical attributes including lighting, organization, color pallet and cleanliness (Gregory & Chapman, 2002). Poor classroom environments hinder a student's learning process, where as a resource filled classroom is best for student growth and achievement (Levine, 2002). Clutter in the classroom combined with a lack of instructional materials sends a message to students that diminish the importance of learning (Wong & Wong, 1998). Teacher workspace should be defined appropriately with proximity to available and needed resources considered during decision making (Wong & Wong, 1998). Sounds should also be considered when identifying factors affecting classroom climate. Research has shown that music can enhance the learning experience, while noise associated with cooperative learning can hinder learning for some students (Gregory & Chapman, 2002).

When evaluating the classroom environment, teachers must consider the facilitation of learning and what will be best for all students. Glasser's (1986) research identified four psychological needs of classroom climate that effect student achievement: belonging, freedom, power and fun. Meeting student needs increases the likelihood that learning will take place. Holding power over the classroom environment can be a difficult need for teachers to fulfill. Effective teachers plan in advance classroom choices that allow students to exercise a need for control while completing assignments (Glasser, 1986; Jensen, 1998; Kaufeldt, 1999).

Effective Instructional Strategies

Students today need a global education that enables them think analytically and systematically about ideas and issues at a deeper level (Harsh & Kincaid, 2007). Students need the ability to analyze and synthesize information at a higher level in conjunction with the ability to apply reasoning and critical thinking skills. These are 21st century learning skills required of students to reach high levels of achievement. To master these levels learning, teachers must accumulate a repertoire of instructional strategies that help students' master complex concepts and skills.

Assessment

A starting point for teachers to build effective instruction and instructional strategies is to plan assessment (Marzano, Pickering, & Pollock, 2001). Teacher assessment is a philosophy that grows from what a teacher believes and reflects upon about learning (Tomlinson, 2001). Effective instruction must begin with the ending in mind (Lezotte, 1997). Instruction should be taught and tested with information students

are expected to know. Pre-assessment, self-assessment and summative assessment occurs in the classroom where effective learning is present (McTighe and O'Connor, 2005).

Stiggins (2007) noted a major role of assessment was to rank students in terms of achievement. NCLB legislation requires assessment in reading and math to determine student proficiency (Guilfoyle, 2006). Previously schools did not measure gains within a school year by performing beginning-of-the-year test and end-of-the-year assessments (Barton, 2008). One single test cannot accurately measure student gains, and effective teachers develop a variety of assessments to administer at different times throughout the year to track growth (Guilfoyle, 2006).

To obtain more accurate data of student performance, assessment should be occurring frequently in the classroom. Some models prescribe a timeline associated with assessment frequency. Slavin (1994) developed a model for school reform which prescribed a form of summative assessment to occur every eight weeks. Research defines effective instructional strategies to include performance assessment and assessment in multiple modalities (Pettig, 2000). Master-based evaluation and self-assessment encourage greater autonomy and learning when combined with student goal setting (Renchler, 1992; Tomlinson & McTighe, 2006). Making goal setting effective requires both teachers and students to set objectives and offer feedback related to those objectives (Marzano er al., 2001). Feedback comes in the form of designing scoring rubrics, individual learning contracts, peer reviews and student-led feedback.

Effective learners have the ability to understand their learning goals and individual learning styles (Tomlinson & McTighe, 2006). They know how to utilize instructional strategies to improve their classroom performance. Self-assessment falls in

the formative category as a process for students to improve their performance (Andrade, 2008; Marzano et al., 2003). Self-evaluation is summative as students grade themselves on performance an effort. Learning through assessment is the product of self-assessment, reflection, error analysis and re-evaluation of task performance. Feedback offered by the teacher is effectively designed to lead the student through the learning process (Brookhart, 2008). Gains in student achievement can be seen when assessment is used for learning, as opposed to using assessment as a monitoring tool (Black & Williams, 1998).

Feedback should occur early and often to ensure student success. Teachers need to model in advance the criteria needed to reach proficiency and offer various choices to students to reach proficiency given their particular skillset. Offering choice in assessment is particularly important especially when implementing differentiated instruction (Moon, 2005). Gregory and Chapman (2002) studied the component associated with successful differentiated instruction and pinpointed two major ideas accompanying it as *knowing the learner* and *assessing the learner*. Knowing the learner means that teachers understand the students in the context of the classroom as well as knowing the background experience of the student.

Research-Based Strategies. The best instructional strategies that yield high levels of impact on student performance are those strategies that are researched based (Lezotte, 1997). Teachers that exhibit high levels of self-efficacy use effective instructional strategies that increase student learning. Marzano et al. (2001) identified nine instructional strategies that were most effective in increasing student learning.

1. *Identifying similarities:* Identifying similarities and differences is the first and most effective instructional strategy. This includes classifying, comparing, creating analogies and creating metaphor (p. 16).
2. *Summarizing:* Summarizing provides students with the tools needed to identify and understand important aspects of learning (p. 48).
3. *Reinforcing effort:* Reinforcing effort offers recognition for goal attainment. It also stimulates student self-motivation (p. 59).
4. *Homework:* Homework extends practice for students and extends the school day by offering students additional opportunities to refine and extend knowledge (p. 71).
5. *Non-linguistic representations.* Nonlinguistic representations increase student understanding of content in a new way. Teachers can vary approaches by using graphic organizers or physical models. (p. 830.
6. *Cooperative learning.* Cooperative learning allows teachers to be flexible and increases the impact of classroom lessons (p. 91).
7. *Setting objectives.* Feedback is important for student growth in learning. The manner in which feedback is given can affect the level of impact it holds. Providing students with feedback in terms of specific levels of knowledge and skills is better than simply providing students with a percentage score, (p. 99)
8. *Generating and testing hypotheses.* Experimental inquiry can be applied across varying disciplines to guide student understanding of important content, (p. 108)

9. *Questions.* Enhancing student achievement can occur by allowing students time to think about new knowledge before experiencing it. Using cues, questions and advance organizers are some ways to help facilitate thinking (p. 120).

Brain-Based Strategies. Recent brain research has identified instructional practices that could impact student success (Hardiman, 2001; Jensen, 1998). For example, Wolfe's (1998) analysis of *Elements of Effective Instruction* and research on cognitive development indicates the brain needs to attend to task that connect to prior. Task analysis leads students through independent practice that forms permanent neural connections which are the foundations for procedural memory. Jensen (1998) broke down the development of students by noting that the brain learns fastest during the earlier years of schooling. Simulation, repetition and novelty are fundamental to building a foundation for learning. As the brain grows, the need for adult brain food requires input from the outside world. Smells, tastes, sights and sounds assist in the development of countless neural connections.

Over the past few decades, brain research has provided a better understanding of the physiology of leaning and retention (Kaufeldt, 1999; Lezotte, 1997). Research advocated the use of emotional, cognitive, physical and social connections to prior knowledge to utilize the brain's natural learning systems (Given, 2002). Katims and Harris (1997) noted the use of cognitive strategies worked well with all students and demonstrated higher achievement rates.

Differentiated Instruction. Differentiated instruction allows teachers the ability to strategically plan for the diverse needs of the students they teach (Gregory & Chapman, 2002). More than ever before, educators in the twenty-first century have better

understanding of the learning process (Jensen 1998; Lezotte 1997; Marzano et al., 2001). Expert teachers differentiate by planning multiple paths that lead to the same learning goal (Carolan & Guinn, 2007).

Effective instruction differentiates across content, assessment and instruction strategies (Gregory & Chapman, 2002; Katim & Harris, 1997; Lipinski & Gartner, 1998; McLeskey & Waldron, 1995). Schools that offer differentiated instructions do not offer a set number of selections for assignments (Carolan & Guinn, 2007), but offer various assessment tools designed to measure the performance task at hand while applying multiple instructional strategies across all content (Gregory & Chapman, 2002). Education becomes personalized and often scaffolds to allow for learning flexibility for all students.

A high quality, focused curriculum that carries meaning for students is the foundation of an effective differentiated classroom (Tomlinson & McTighe, 2006). Students must make the connection between the learning goal and the fundamentals of meaningful application. Leaning goals can help build those connections for students in conjunction with student constructed meanings and teacher facilitation (Tomlinson & McTighe, 2006). Researchers agree that teaching to the "high-end" for all students builds the learning capacity and support system that allows students at all educational stages to succeed at high levels (Carolan & Guinn, 2007; Tomlinson & McTighe, 2006).

Educational Diversity. The student population of many schools has become more diverse in recent years. Socio-economic levels, ethnic background, language and culture are noticeable items that are also recorded on state assessment data. Educators are constantly changing techniques and practices to accommodate for the wide variety of

student in the classroom. Teachers must instill a belief that all student groups have value in the system and that each individual is important (Hoerr, 2007). Hodgkinson (2001) reported that 20% of all students in the U.S. were below the poverty line in 2000, with 34% of that group belonging to all high school dropouts (Park et al., 2002). Payne (1998) researched the relationship between poverty and education and identified different rules of behavior for each social class and cultural group within a school. Growth of cultural differences in schools has increased the quantity and quality of differentiation needs in school. Lezotte (1997) noted "the lack of opportunity for students to learn is often interpreted as a lack of ability to learn" (p. 27). To reach high levels of student achievement, teachers must view diversity as an opportunity to offer multiple ideas, perspectives and solutions to tasks (Carolan & Guinn, 2007).

Special Populations. The increase of the special education population in schools combined with regular education collaboration has added to the need for classroom differentiation. Inclusion of special needs students in the classroom is a result of federal mandates to allow children with disabilities the right to be educated alongside students who are not disabled (Rozalski, Stewart, & Miller, 2010). In 1998 the U.S. Department of Education released a report titled *Condition of Education* which showed the number of children with disabilities participating in federal programs rose from 3.7 million in 1977 to 5.6 million in 1996. Within this time frame the percentage of students in K-12 receiving aid rose from 8.3% to 12%. A majority of those students received services within the regular school building. Approximately 5% of K-12 students were diagnosed with attention deficit disorder (ADD)-which is not considered special education, while

other agencies speculated the actual percentage was as high as 9% (National Institutes of Mental Health, 2008).

The needs of special education students along with gifted students became more aware in 2000 when the Guide to Disability Right Laws was published. Teachers felt the immediate impact on instructional practices along with the additional stress and high demands of making positive change in this special population (Gutloff, 1999; Haycock, 2001; Roach, 1995; Schattman & Benay, 1992; Tanner, Linscott, & Galis, 1996). Studies in teacher self-efficacy before and after inclusion of special populations proved to be beneficial in getting teachers on board with classroom diversity and the need for inclusion. A majority of teachers surveyed in the studies reported instructional practices that worked best for at-risk students also had a positive impact on the regular population (Bang, 1993; Burns & Purcell, 2001; Hague &
Walker, 1996; Henke, Chen, & Goldman, 1999; McLeskey & Waldron, 1995; Pettig, 2000; Trump & Hange, 1996).

Varying Instructional Practices. Differentiating instruction requires educators to practice using a variety of instructional strategies that allow students to explore concepts through many learning styles and multiple intelligences (Fisher & Rose, 2001; Gregory & Chapman, 2002; Jensen, 1998; Tomlinson, 2001). Effective teachers make adjustments as needed for diverse learners to target activities and lessons to the proper individual level (Tschannen-Moran & Woolfolk-Hoy, 2001). Using multiple approaches and alternative strategies will improve student understanding and increase achievement outcomes.

Research has shown that along with a variety of instructional strategies, teachers must incorporate a variety of assessment strategies to increase student performance (Tschannen-Moran & Woolfolk-Hoy, 2001). One-on-one oral assessment was reported to be used most among students with special needs. Wilson (2008, p.80) noted: "A conversation is the only process responsive enough to expose the human mind's complex interactions with language." Student's strengths and weaknesses can be measured through a range of performance assessments within the classroom setting (Gardner, 1993).

Intelligence is not a single entity but a collection of multiple facets of cognition intelligences (Gardner, 1993). According to Gardner (1993), people need to be engaged in constructive ways to feel they are a part of society. Schools main purpose is to "…develop intelligences and to help people reach vocational and avocational goals that are appropriate to their particular spectrum of intelligences" (p.9).

Effective teachers incorporate models and examples that offer various ways of delivering instruction and assessment to individual student needs (Tschannen-Moran & Woolfolk-Hoy, 2001). Taking the philosophy "all students can learn" and changing it to "all students have special needs" forces educators to provide a variety of learning options across all educational settings (Burns & Purcell, 2001; Evans, Holland, & Nichol, 1996; Miller, 1996; Tomlinson, 2000; Wolk, 2001). According to Tschannen-Moran and Woolfolk-Hoy (2001) effective teachers foster student creativity and critical thinking by providing challenging questions to more capable students that in turn helps all students learn. There is no recipe to differentiated instruction, no specific strategy, nor is it

something a teacher does if they have time, it is a way of thinking about teaching and learning (Tomlinson, 2000).

Self-Efficacy

Self-efficacy is defined as "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). It is concerned then with judgments about personal capability in a specific domain and individual expectation about capability for performance in future situations. Self-efficacy therefore can determine how people feel, think, behave and motivate themselves (Cox, 2006). A social cognitive models explains the construct of self-efficacy as being a human function that results from personal interactions, behaviors and environmental influences.

Theory

Individual belief in self-efficacy influences the effort given in any endeavor, the ability to persevere when overcoming obstacles or failures, the extent to which thoughts can hinder or aid when faced with diverse demands and the level of accomplishment perceived (Bandura, 1977, 1993, 1997). Theoretical framework based in social cognitive theory dissected the interaction between self-efficacy beliefs and outcome expectancy looking for a relationship to behavioral outcomes. Findings suggest that self-efficacy belief is the best predictor of behavior rather than expected outcomes (Bandura, 1997; Oplatka, 2004; Pajares, 1996; Smith et al., 2006; Tschannen-Moran et al., 1998).

Self-efficacy is evaluated by an individual on the ability held to produce future success (Gist & Mitchell, 1992). Individual can either help or hinder self-efficacy development (Bandura, 1993; Scherbaum, Cohen-Charash, & Kern, 2006). Gist and

Mitchell (1992) believe self-efficacy is an evaluation made by an individual of the ability within to achieve success. A strong relationship has been established between self-efficacy and task performance (Goodstadt & Kipnis, 1970; Lyons & Murphy, 1994; Rotter, Seeman, & Liverant, 1962). Individuals who report having high levels of self-efficacy attribute failure to insufficient effort, where as those individuals who report having low levels of self-efficacy attribute failure to lack of ability (Bandura, 1993, 1994). Studies show that performance is strongly correlated to individual assessed self-efficacy rather than domain specific self-concept (Pajares, 1996). With research in mind, self-efficacy has become a better predictor of performance than previous performance results (Bandura, 1978; Schunk, 1996).

Bandura's (1994, 1997) research developed four sources for the development of self-efficacy. The first source, enactive mastery, refers to the success experienced on individual performance task. Higher success rates resulted in higher levels of self-efficacy. Second, verbal persuasion influences self-efficacy through encouraging and critical evaluations of others. Third is vicarious learning, which refers to learning taking place by observing the modeling of others. Finally, the physiological state of an individual holds significant influence about self-efficacy beliefs.

Enactive mastery involves all completed task that compromise successful experiences for the individual. Effective teachers develop tasks in which they can facilitate student success (Tschannen-Moran & Gareis, 2004). Kaufeldt (1999) referred to this process as creating a culture of success. Completing tasks successfully has become a cornerstone in the mastery learning strategy, resulting in the increased performance in student achievement (Bloom, 1976). As task failure undoubtedly lowers

levels of self-efficacy, mastery becomes most important as the fundamental factor in determining levels of self-efficacy.

Verbal persuasion can be positive or negative depending on the success or failure of the task at hand. The human brain is designed to operate in terms of internal and external feedback. Feedback can reduce uncertainty and increase the coping ability needed to raise self-efficacy levels while lowering stress responses (Jensen, 1998). Hattie (1992) believed the most powerful method to modify task response was through the use of feedback. Student achievement can be increased through the proper prescription of educational feedback.

Vicarious learning comprises a diversity of learning demonstrations including written, verbal, physical and auditory. Models that held the most impact on learning were those that related most to the individual. Providing models that can differentiate learning for students is a powerful teaching tool for school leaders and classroom teachers (Tschannen-Moran & Gareis, 2004).

Finally, physiological arousal occurring through environmental interactions, emotional conditions and overall health can increase or decrease stress levels. Stressful physical environments including crowded classrooms, poor student relationships and depleted facilities are linked to leaning failure (Jensen 1998). Positive and negative emotions affect self-efficacy perceptions of individuals (Erez & Isen, 2002). Goal orientation and affectivity in self-efficacy development is notably different on an individual level (Gerhardt & Brown, 2005). Higher positive affectivity resulted in greater changes to self-efficacy than those individuals experiencing higher levels of negativity affectivity. Lack of professional efficacy often resulted in significant levels of burnout,

where those workers that proved to be engaged in job tasks felt efficacious in their duties (Schaufeli, Bakker, & Salanova, 2006).

Assessing Levels of Efficacy

Several approaches have been taken to understand the underlying motives in employee behavioral patterns at work (Baranik, Barron, & Finney, 2007). With the emergence of self-efficacy as a motivational construct in employee behavioral patterns, researchers have attempted to define patterns of development (Bandura, 1977, 1986, 1993, 1994, 1997). Bandura (1977) first conceptualized self-efficacy as an assessment comprised of tasks and behaviors that focused on changing behaviors. Self-efficacy beliefs in leaders proved to have a significant impact on attitude and performance of subordinates (Luthans & Peterson, 2002). Employees that worked under leaders exhibiting high levels of self-efficacy increased performance abilities and overcome obstacles to change. Those leaders exhibiting persistently high levels of self-efficacy were able to organize collective efforts in order to bring about change (Bandura, 1994).

Although a positive correlation exists between self-efficacy and performance, this relationship may be a result of past performance on self-efficacy (Vancouver, Thompson, & Williams, 2001). Efficacy in the professional business sense is positively related to three components of work engagement, including dedication, vigor and absorption (Schaufeli et al., 2006). Complacency is sometimes seen as a negative byproduct of self-efficacy, yet self-efficacy can have a positive impact on work performance by forcing individuals to adopt difficult goals (Bandera, 1994; Vancouver et al., 2001). Research has shown that high levels of self-efficacy elevate performance across a plethora of tasks (Bandura, 1997; Frayne & Latham, 1987; Stajkovic & Luthans, 1998).

Jerusalem and Schwarzer (1992) developed one of the most widely used assessments of self-efficacy titled the General Self-Efficacy Scale. Available in 27 languages, the General Self-Efficacy Scale was used for over 20 years to assess adolescents and adults as they successfully coped with environmental and life change. Researchers assessed self-efficacy by recording levels of confidence in subjects as they successfully accomplished specific tasks (Pajares, 1996). Learning the connection between goal and mastery was the essential step in promoting achievement and performance (Baranik et. al., 2007).

Beliefs in self-efficacy determine how people think through and motivate themselves with specific tasks (Bandura, 1994). Self-efficacy is contextually sensitive to the setting in which behaviors occur (Bandura, 1994). As situations change and individuals transition to different task, reassessment of personal and professional efficacy occurs. Measuring self-efficacy beliefs require precise and detailed judgments because self-efficacy is task and domain specific, while broad scales of measurement have less effects on plausible outcomes (Pajares, 1996). An example would be a teacher holding curriculum-specific self-efficacy which will give them high levels of personal efficacy in math yet the teacher feels ineffective in reading (Koul, 1999). Bandera (1986) contested that precise measurement of capability as it corresponds to a desired outcome provided the most accurate prediction of behavioral results. Pajares (1996) made the push to assess efficacy by measuring self-efficacy beliefs and real classroom effects through direct observation.

Assessment of low self-efficacy beliefs became easier to measure as most researchers looked at self-efficacy as a situation-specific entity (Scherbaum et al., 2006).

Research showed that generalized perceptions of self-efficacy were a good predictor of individual performance (Pajares, 1996). Time proved to be instrumental in measuring the increased strength and weakening of self-efficacy as social comparisons were more pronounced through age. Bandura (1994) asserted that individuals must possess a robust sense of efficacy in order to maintain the efforts needed to succeed. Those that have a low pre-training self-efficacy keep low levels of efficacy, while individuals with high pre-training coupled with goal mastery showed higher levels of efficacy over time (Gerhardt & Brown, 2005). Career success was based on psychosocial skills rather than occupations skills and higher self-regulated efficacy in interpersonal interactions increased operational functioning (Bandura, 1994).

The majority of tasks among career paths were assessed with specific self-efficacy constructs. Teacher efficacy, more than other vocations, was measured in a broad global range (Henson, 2001). According to Bandura (1997), within any given domain the generality of efficacy is dependent upon the degree of the situation and the demands of the task. In education it was not considered useful to be too exact or predicting when assessing efficacy (Tschannen-Moran et al., 1998). For example, it was unlikely that an effective teacher would be efficacious only in teaching eighth grade girls who like fashion and reading, but not in science or technology.

Leadership Efficacy

Bandura (1986) believed self-reflection was the most uniquely human skill, because self-reflection allowed individuals to evaluate and change their way of thinking and behavior. Building a collaborative culture requires reflection and self-examination (Murphy & Lick, 2005). Covey (1990) summarized that self-knowledge and self-mastery

were promises made internally that formed the basis for success in others. In 1972, Greene stated that self-appraisal was important for improving effective leadership skills. Collins (2001) asserted that with brutal facts companies going from good to great imbued their problem solving process. Collins determined that after careful effort and thought has been used to determine underlining facts, the right decision can be made through reflection. For educators, reflection has been used as a practice to develop decisions and behaviors, analyze data and plan (Murphy & Lick, 2005). School principals must reflect regularly on the professional role as instructional leader and analyze the factors associated with implementing models of effectiveness (Miserandino, 1986). Bandura (1986) and Brown (1999) believe self-reflection is crucial in the development of self-efficacy and concluded self-efficacy was embedded in reflection.

A great kingdom has a great king, so too does an effective school have an effective instructional leader (Elmore, 2000). Research shows effective principals have a positive impact on teacher efficacy and pedagogy (Blase and Blase, 2000; Woolfolk-Hoy & Hoy, 2005). Hartnett (1995) identified a positive correlation between principal teaching and personal efficacy and teachers' teaching and teachers' sense of self-efficacy. Principal self-reports were also positively correlated to teacher ratings of instructional leadership behavior (Smith & Guarino, 2005).

Bandura's theory of self-efficacy helped develop a measurement of principal efficacy. Principal's sense of efficacy is the self-perceived capability to perform the cognitive and behavioral functions necessary to regulate group processes in relation to goal achievement (McCormick, 2001). Research suggests that effective principals and

schools are characterized through self-efficacy (Guarino et al., 2006; Lyons & Murphy, 1994).

Blase and Blase (2000) surveyed over 800 public school teachers and found that effective principals held a specific set of behaviors that promoted classroom instruction. Principal behaviors feed the sense of empowerment with teachers allowing self-efficacy to flourish when free dialogue was present. Survey data was organized into three action themes: promoting professional growth, fostering teacher reflection and talking with teachers. Results for the study have proven to be foundational to board-based approaches of professional development and school effectiveness. For any school organization to renew itself and begin a problem solving process it must move past individual teacher effectiveness and require improvements in the capacity of the organization (Sparks & Hirsh, 1997). Although in the study, school climate held an impact on the results, principal experience and education level surpassed the climate and overcame any adversities that could potentially hinder progress.

Sergiovanni (1967) believed that business workers obtained satisfaction from the impact they made on their work environment. Quarterly gains and cost containment are the measures of professional success or effectiveness of business communities. For educators, a sense of kinship within the work environment, valued input at all levels and teaching students as they see fit fosters an atmosphere of growth and success (Dinham & Scott, 1998). Ethical and effective principals use their power and position to enable teachers to take ownership of the classroom and education of their students (Rebore, 2001).

Principals must work with and through others in order to accomplish their goals. The decisions they make play an important role in teacher empowerment and improving teacher effectiveness (Lichtenstein, McLaughlin, & Knudsen, 1991). Principals with high levels of self-efficacy use internally based power when carrying out their role as instructional leader (Lyons & Murphy, 1994). According to Lyons and Murphy (1994), efficacy is positively related to expert and referent power and is negatively related to legitimate and reward power. Principals that allow teachers flexibility and control over classroom decisions see a stronger sense of self-efficacy beliefs in teachers (Moore & Esselman, 1992).

Research shows that self-efficacy beliefs influence both functional leadership strategies and organizational performance development (McCormick, 2001; Paglis & Green, 2002; Wood & Bandura, 1989). Teachers that report having a strong self-efficacy belief in turn have principals that promote a positive school climate and encourage academic achievement (Hipp & Bredeson, 1995; Hoy & Woolfolk, 1993; Moore & Esselman, 1992). As job complexity increase principal self-efficacy tends to increase and many principals feel efforts to facilitate effective learning environments become more productive (Lewandowski, 2005; Tschannen-Moran & Gareis, 2005). According to Bandura (1993), the more assertive individuals perform in taking on demanding activities the stronger their sense of self-efficacy.

Effective principals keep their focus on improving student learning (Barth 2002; DuFour, 2002; Fullan 2002). In elementary schools, teachers report that principals are more closely involved in classroom instruction and student achievement, which leads to higher levels of predictability on self-efficacy reports. Teacher self-efficacy beliefs

correlate to student self-efficacy belief and achievement, in turn, principals' self-efficacy beliefs directly encourage positive teacher self-efficacy belief and lead to stronger motivation and improved performance in teachers (Tschannen-Moran & Gareis, 2005). Although principal encouragement is directly related to teacher performance, it is less correlated to student achievement; however, judgment of student capabilities does affect behavior and attitude (Tschannen-Moran & Gareis, 2005).

Harnett (1995) referenced both experience and gender difference in self-efficacy based on demographic differences. Research shows that principals in the middle and later parts of their career possessed higher levels of self-efficacy as an instructional leader (Oplatka, 2004). Although race held a slight significant value in sense of self-efficacy, Tschannen-Moran and Gareis (2004) showed no significant relation between experience as a principal, tenure and current position. Experienced principals reported less time spent on managerial skills (Smith et. al., 2006). Variance in principal self-efficacy beliefs appeared to be based on gender (Tschannen-Moran & Gareis, 2005); females display a higher level of self-efficacy in instructional leadership (Smith et al., 2006). Socio-economic status showed significant in measurements of self-efficacy as principals working in schools with high percentages of free and reduced lunch reported higher levels of self-efficacy in both instructional leadership and management skills (Smith et al., 2006; Tschannen-Moran & Gareis, 2005). Those principals working in large school report high levels of self-efficacy only in management (Smith et al., 2006).

As research has shown, the strongest predictors of principal self-efficacy are not demographically or school related but is based upon interpersonal support from others and perception of personal preparation. All variables surrounding intrapersonal support

are positively correlated to principal's sense of self-efficacy (Tschannen-Moran & Gareis, 2005). Support from students, parents and the superintendent were all positively correlated to principal's sense of self-efficacy, however, support from teachers reported to be the most significant among correlated variables. Results concluded there were considerable ties between principal and teacher ratings of instructional leadership and a high correlation between instructional leadership and instructional climate (Ahadi et al., 1990; Krug et al., 1990). Additional findings report positive relations between expert and referent power in efficacy and negative relations to legitimate and reward power, however, as principal experience increased the likelihood of principals to use external based power also increased (Lyons & Murphy, 1994).

Teacher Sense of Efficacy

Teacher sense of efficacy is a perception of competence held by the teacher, not an objective measure of effectiveness. Research has studied both collective and individual efficacy in education to predict teacher behaviors and student outcomes. Studies have shown that teacher efficacy beliefs tend to remain the same over time and prove to be an essential component in student skill achievement (Ross & Bruce, 2007). Bandura's (1977, 1993) theories of efficacy became the ground work for future researchers in developing systems of efficacy measurement. Bandura (1977, 1993, and 1997) believed that an individual was motivated by the belief that they could demonstrate necessary behaviors in order to achieve an expected outcome.

The use of self-report has been a common way to assess teacher efficacy. Administrative assessment can be informative but not as eye opening as teachers documenting personal performance in journals and portfolios then improve instruction by

reviewing and evaluating on an individual level (Henninger, 2004). Joyce and Showers (1998) feel that in-service programs rely heavily on teacher self-report for evaluation but believe that documentation is underused and opinions are overly valued.

Bandura's (1977) and Rotter's (1966) studies developed two general sources of efficacy measures. Protheroe (2008) successfully differentiated between the two sources, referring to Bandura's concept as personal teacher efficacy and Rotter's as general teaching efficacy. Personal teacher efficacy relates to teacher confidence in individual ability, while general teaching efficacy is a general belief in the power of teaching. In 1976, the RAND study became one of the first studies that asked participants' teacher efficacy questions concerning the internal and external control of teacher reinforcement (Tschannen-Moran et al., 1998). Internal and external control has initiated other instruments of measure such as the Teacher Locus on Control (Rose & Medway, 1981) and the Responsibility for Student Achievement (Guskey, 1981). Upon completion of a second RAND study The Webb Efficacy Scale (Ashton, Olejnik, Crocker, & McAuliffe, 1982) attempted to improve the reliability of efficacy measurements (Tschannen-Moran et al., 1998).

The first instruments used in measuring teacher efficacy developed from Bandura's concept of self-efficacy, such as, the Teacher Efficacy Scale (Gibson & Dembo, 1984), the Science Teaching Efficacy Belief Instrument (Riggs & Enochs, 1990), and the Ashton Vignettes (Ashton et. al., 1982). Many studies looked at the satisfaction rating of teachers and their acquisition of new skills. Studies failed to determine if the new skills teachers acquired were being used in the classroom, the level of teacher

empowerment and the overall effect on student attitudes toward learning (Frechtling, 1995).

Ashton's (1984) research attempted to measure efficacy from both perspectives and identified eight dimensions of teacher efficacy development: personal accomplishment, positive expectations for student behavior and achievement, personal responsibility, strategies, positive affect, sense of control, common goals, and democratic decision making. Bandura (1997) expanded previous research by determining distinctions between self-efficacy and locus of control (Rotter, 1966). Data lead to four postulates as the source of efficacy expectations: mastery experiences, social persuasion, vicarious experience, and physiological and emotional states. Further research refined Rotter's and Bandura's models into an instrument assessing personal attributes as related to Bandura's four postulates of efficacy expectations with cognitive processes (Tschannen-Moran et al., 1998).

Woolfolk-Hoy (2005) describes the power in teacher efficacy judgments as cyclic in nature. "Greater efficacy leads to greater effort and persistence, which leads to better performance (a new mastery experience), which in turn leads to greater efficacy. The reverse is also true. Lower efficacy leads to less effort and giving up easily, which leads to poor teaching outcomes, which then produce decreased efficacy" (p.2).

The Master Teacher. Most teachers reflect upon their personal capabilities after classroom teaching has occurred by viewing the consequences of their choices (Tschannen-Moran et al., 1998). Efficacious teachers know the meaning of their work and before reflection hold the feeling that classroom actions can lead to personal accomplishment (Ashton, 1984). Efficacy beliefs held by teachers hold a direct

correlation to the student achievement in their classrooms (Ashton & Webb, 1986; Moore & Esselman, 1992; Ross, 1998). Research shows that teachers with high levels of self-efficacy yield greater levels of student achievement than those teachers holding lower levels of self-efficacy (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 2004). In correlation with high levels of self-efficacy, teachers possess greater levels of planning, organization and overall effort (Ross, 1998; Woolfolk-Hoy, 2003).

Kruger's (1997) research indicates the practice of planning and evaluating interventions for special needs impacts teacher self-efficacy beliefs. Results show that teachers valued the professed appreciation of co-workers as it relates to personal skills and abilities over the available assistance offered by co-workers. Support and approval from other professionals increased teacher abilities to problem solve and accommodate students with special needs.

Ashton (1984) noted efficacious teachers expected to see a positive improvement in both behavior and achievement in their students. Teachers accomplished this thorough modification of instruction and delivery of differentiated instruction. Efficacy beliefs of general classroom teachers have a strong direct effect on students with learning and behavior problems (Brownell & Pajares, 1996; Everington et al., 1999). Research shows that teacher efficacy beliefs have a strong impact on success with inclusion of special populations in the classroom (Brownell & Pajares, 1996). Attitude inventory surveys have shown that as teachers gain experience with inclusion practices, positive attitudes develop and efficacy increases (Everington et al., 1999).

Master teachers have a high sense of self-efficacy; they set goals for themselves and plan out strategies that allow them to reach those goals (Ashton, 1984). Instructional

efficacy for mastery teachers means devoting time to academic learning, helping students when they need it and praising students for their successes (Gibson &Dembo, 1984). Research has shown that teachers holding a positive sense of self-efficacy build relationship with students that strengthen the teaching and learning process (Pajares, 1996; Tschannen-Moran et al., 2004; Woolfolk, Rosoff, & Hoy, 1990).

Mental State of Efficacious Teachers. Efficacious teachers have a positive feeling about their teaching, their selves and student outlooks (Ashton, 1984). Influence from the principal and teaching institution can enhance the level of teacher efficacy, but greater efficacy comes through the level of confidence the teacher has in their ability to teach (Hoy & Woolfolk, 1993; Parkay, Greenwood, Olejnik, & Proller, 1988). Teachers are more likely to assume responsibility for influencing positive educational results than for preventing negative outcomes (Guskey, 1987).

According to Friedman (1997) the lack of efficacy beliefs in educators results in higher stress levels and teacher burnout. An inverse relationship between self-efficacy and stress levels can be seen in job satisfaction among teachers (Dunn-Wisner, 2004). As stress rises in the workplace, both intrinsic and extrinsic factors result in job dissatisfaction (Oxman & Michelli, 1980). Teacher perception of success results in higher levels of efficacy expectations, while lack of success or failures lowers efficacy expectations. Extrinsic rewards and negative consequences are often seen in teacher classrooms where the educator has low self-esteem and experiences failures in learning (Woolfolk-Hoy & Hoy, 1990). Intrinsic motivation and encouraged students are a consequence of teachers holding high levels of self-esteem with a positive outlook on educational goal attainment. Higher levels of self-esteem impact the self-efficacy levels

of the teacher in a positive manner (Gerhardt & Brown, 2005; Vancouver, Thompson, & Williams, 2001). Emotional and physiological arousal in teachers adds to the perception of self-efficacy and in turn is good for learning (Jensen, 1998; Tschannen-Moran et al., 1998).

Observed Experiences. The responsibility of student accountability is accepted by efficacious teachers and can be seen in their willingness to examine their teaching performance (Ashton, 1984). Competence is developed through peer observations of skillful models, a valuable tool in school reform (Bushman, 2006; Tschannen-Moran et al., 1998). Improved teaching is a product of observing expert teachers and being a part of a positive mentoring program filled with resources to develop differentiated instruction (Carolan & Guinn, 2007).

Individuals that believe they can acquire a skill through proper training have higher self-efficacy than those who believe their abilities are fixed (Martocchio, 1994). Assessment in teacher self-efficacy report greater increases when teachers experience professional development focused on improving teacher confidence in state standards (Wolfe et al., 2007). Changes in teacher efficacy and behaviors have a direct impact on the perceived academic abilities of their students (Ross & Bruce, 2007).

Student success is a product of good instructional practices, however, simply presenting teachers with research based instructional practices is not enough to effect efficacy change. In-service workshops in which presenters offer new teaching strategies fail to change the practice of schooling children. For change to take place, teachers need a desire and commitment that is commonly agreed upon by all parties (Marzano et al.,

2005). Educator's best understand change when it directly affects preparation time, student achievement and classroom practices (Nistler & Shepperson, 1990).

Feedback. Efficacious teachers believe in their abilities to influence student performance (Ashton, 1984). Information about efficacy in teacher behaviors comes in the form of feedback from administrators, other teachers, and students (Tschannen-Moran et al., 1998). A positive relationship between the level of teacher efficacy and student learning backs up the belief that teacher self-efficacy and talent develops cognitive skills in students (Bandura, 1994; Proctor, 1984). As teachers feel a sense of empowerment to make change they begin to believe their actions can help students learn (Finley, Marble, Copeland, & Ferguson, 2000). A direct effect of empowerment is the enhanced sense of efficacy developed from teachers gaining content and pedagogical knowledge (Firestone & Pennell, 1997). Efficacy grows as teachers feel a sense of control and believe that mastery can be accomplished through personal effort and persistence (Gerhardt & Brown, 2005; Ross & Bruce, 2007).

Teacher self-efficacy in relation to student learning is positively correlated to student motivation (Woolfolk et al., 1990). Efficacious teachers work with students to develop common goals and a plan to reach those goals (Ashton, 1984). Sharing a common goal and feeling the success of reaching that goal gives both parties a sense of accomplishment that builds teacher efficacy and student empowerment (Brown, 1999). Bishop (2003) stated that helping learners set specific and attainable goals make a significant impact on student performance in the classroom and in life. Efficacious teachers set goals to get students to believe in their own personal abilities to perform task successfully. Teachers structure classroom surroundings that improve the self-efficacy of

the learner and plan opportunities that allow students to experience success throughout daily tasks (Bandura, 1986).

High efficacy teachers involve students in goal planning and decisions involving instruction (Ashton, 1984). Efficacious teachers utilize classroom management that stimulates student independence and shares control with the class (Ross & Bruce, 2007). Teachers at high levels of efficacy use their resources to develop a school culture that focuses on students, resourcefulness, risk-taking and experimentation (Rebore, 2001). This type of school culture develops the problem solving and leadership skills of all students including those with disabilities. Jones (2006) believes that student empowerment is contagious and promotes a higher level of learning and decision making that should be taught has a means for developing self-determination within schools. Dewey (1903), noted that everyone in the school community should strive to enhance their problem solving and leadership skills. A culture that promotes risk taking for students and teachers build leadership skills (Rebore, 2003). To promote and implement empowerment in the school and community all members need to develop the skill of evaluation to establish their effectiveness.

Perceptions of Efficacy. Judgment about teacher efficacy is dependent upon how the teacher internalized what the teaching task require of them, including information about student abilities and interest, materials needed, classroom conditions and the support of administration and staff (Tschannen-Moran et al., 1998). New and unexperienced teachers analyze the teaching tasks individually, whereas experienced teachers analyze task on previous experiences. Through reflection and analysis teachers often become aware of deficiencies in their instructional capabilities. Teachers that hold

a strong sense of self-efficacy have a belief in how to address such deficits. Helping teachers understand and develop control over their professional lives in school increases self-efficacy and builds a sense of persistence and resilience leading to teaching mastery (Tschannen-Moran et al., 1998).

School Wide Efficacy

Bandura's (1977) understanding of social cognitive theory defines confidence as both a personal and a social construct. For a collective group to share in confidence there must be a common element that brings the group together in goal setting. Collective efficacy in the school is a product of overall student achievement (Garnston & Wellman, 2002; Goddard et al., 2004; Tschannen-Moran & Barr, 2004; Tschannen-Moran & Gareis, 2005). Attainment of student success is a shared belief in school districts that portray a collective sense of efficacy (Bandura, 1997). A school staff that collectively believes they possess the abilities needed to promote academic success cultivates an atmosphere of achievement, regardless of the socio-economic status of the student population (Bandura, 1994). In every school the staff acts collectively as a social system that shares a common belief in the students' academic abilities. Schools in which the teachers share a dismal outlook on student performance and feel powerless in changing the circumstances around them are ineffective and have a collectively low sense of self-efficacy. Bandura (1994) believes for a school to be successful and see student growth, teachers as a whole must promote a positive atmosphere for development and promote academic attainments, regardless of the advantages or disadvantages of the student body.

Purkey and Smith (1983) report that effective schools host teachers that emit a sense of empowerment that has a positive impact on the overall efficacy level of the

institution. Additional studies report that schools which are departmentalized have varying views of collective self-efficacy; however, staff members who collectively judge themselves as having high self-efficacy provided the environment needed to promote high levels of productivity among students (Bandura, 1994). Teachers that share a common belief in the school have the power to get through to the most difficult students and promote the change needed to shape the culture and environment of the school (Goddard, Hoy, & Hoy, 2004).

Schools that possess a collective lack of efficacy inhibit the attempts of others to impose change in the system (Tschannen-Moran et al., 1998). Change is a gradual and difficult process for many teachers and has a negative effect on personal efficacy (Guskey, 1989). Stein and Wang (1988) noted efficacy beliefs were slow developing in schools where instructional change was implemented during the previous school year.

As teachers collectively assess their job performance, a positive climate develops that promotes student learning and achievement (Bandura, 1994). Collective efficacy is a difficult construct that does not develop from individual perceptions of self but builds off the discernment of the entire faculty and school organization (Henson, 2001). Motivation for individual teachers is heavily influenced by their own visions of self-efficacy and the collective efficacy of their respected schools (Woolfolk-Hoy, 2004).

Creating collective efficacy within a school requires various social interactions among staff members. Teachers that have strong group affiliations report higher collective efficacy – a predictor of school performance outcomes (Smith, Freeman, & Cole, 2005). Team teaching highlights the various teaching skills of collaborators and offers classrooms where students can excel as teaching efficacy grows (Pounder, 1999).

Teaching collaboration has shown to best predict the change in general teaching efficacy, more so than any professional development opportunities (Henson, 2001). Effective teachers have shown to accept collaboration efforts with positive attitudes, looking for every way possible to meet student needs (Henninger, 2004).

Experience in Efficacy. The sense of efficacy a teacher holds can vary through the years. The biggest differences are seen between teachers having fewer than five years' experience and those having more than five years' experience (Tschannen-Moran & Woolfolk-Hoy, 2001). Teachers with fewer than five years teaching experience, regardless of age, are considered novice teachers (Allen & Casbergue, 1996; Berliner, 2001; Borthwick, 1982; Durall, 1995; Henry, 1994; Howe, 1995; Klecker, 2002; Stough &Palmer, 2001). Henninger (2004) refers to the first three years of teaching as an induction to the teaching experience. Studies have shown that preparatory programs where students have direct teaching experiences are most effective at building teacher retention (Darling-Hammond, 2001; Tschannen-Moran et al., 1998).

Research has focused on both pre-service and student teachers to map the development of teacher efficacy beliefs in prospective and novice teachers (Parker,Guarino, & Smith, 2003; Tschannen-Moran et al., 1998). Results show that efficacy beliefs change based on learning experiences and social persuasions (Tschannen-Moran et al., 1998). Personal teaching efficacy is impacted mostly by actual teaching experiences and growth through mastery.

Novice teachers showing some sense of efficacy report positive teaching experiences during their initial teaching years and experience less stress (Tschannen-Moran et al., 1998). Some studies report novice teachers experience higher levels of

burnout than more experienced teachers (Borthwick, 1982). Darling-Hammond (2001) noted that 30% of new teachers leave the profession within the first 5 years. Research shown that those teachers leaving the profession as novice teachers, scored lower on self-efficacy measures than those electing to remain in teaching (Glickman & Tamiashiro, 1982). Studies show an inverse relationship between teacher stress and self-efficacy measures, noting that the lack of principal openness was the best predictor of teacher stress levels (Dunn-Wisner, 2004).

Seasoned Educators. According to Berliner (2001), as teachers experience the complexity of the classroom they learn and improve on techniques to deliver instruction for maximum efficiency. Experienced teachers have more classroom skills than non-experienced teachers. Berliner (2001) noted test that it could take up to eight years for and educator to master the craft of teaching. Teachers having at least five years of experience report higher levels of efficacy for instruction and management than novice educators (Tschannen-Moran &Woolfolk-Hoy, 2002). As beliefs solidify over time it becomes harder to influence the personal teaching efficacy of experienced teachers, making it extremely important to lay the ground work for efficacy in novice teachers (Henson, 2001; Tschannen-Moran et al., 1998).

Studies have shown that experience plays a major role in improving student achievement on standardized test (Coylene, 1968; Darling-Hammond, 2001; Klecker, 2002). Tanner et al. (1996) noted a significant difference for total years in education when compared to the views of importance of collaborative strategies. A majority of efficacy research points out those teachers with higher self-efficacy have a wider range of

instructional strategies to utilize in the classroom (Bender & Ukeje, 1989; Durall, 1995; Stough& Palmer, 2001).

Reaching Mastery. Time is not a valuable tool when measuring teaching mastery. Although experts agree that an achievement difference can be seen after eight years (Berliner, 2001), others contest that fifteen or more years are requires to reach mastery levels in teaching (Henry, 1994; Shanoski & Hranitz, 1991). Research shows that to be at a level of expertise in the field of education, ten years of experience is needed (Allen & Casbergue, 1996; Bivona, 2002; Clarke & Williams, 1992). Master level teachers with sixteen or more years of experience implemented the following task effectively: student motivation, check for comprehension, listen to students and provide feedback (Shanoski & Hranitz, 1991). Reaching teacher mastery requires the teacher to build and maintain a positive attitude towards teaching, something more obtainable for experienced teachers than novice teachers (Bivona, 2002). Reaching a state of teaching mastery is a positive factor for increasing teacher sense of self-efficacy (Allen & Casbergue, 1996; Bivona, 2002).

Important Findings. Although studies done by Tschannen-Moran and Woolfolk-Hoy (2002) have shown teacher efficacy beliefs are not affected by gender, race or age; other notable studies have shown gender does play a part in efficacy levels (Edwards, 1996). In these studies male teachers were more likely to have low levels in teaching self-efficacy. Instruction, management and engagement efficacy was stronger in elementary teachers than middle and high (Tschannen-Moran & Woolfolk-Hoy, 2002). It has also been noted that teacher working in schools with lower socio-economic levels

tend to have higher levels of efficacy due to the different learning needs of students in poverty (Park, Turnball, & Turnball, 2002).

Leadership Trait Theory

Determining the factors that contribute to effective leadership has been the focus of studies for hundreds of years. Carlyle's 1841 essay on heroes depicted leaders as individuals endowed with unique traits that inspired others. Dowd (1936) believed that ordinary people could not be leaders, only a handful of gifted people possessed the degree of intelligence, energy and moral force required to lead.

In 1990, Bass posed the question if great men have superior qualities that make them different from others, could it be possible to identify these qualities? Results for this study became known as the Great-Man theories. Studies of great men and women throughout history have always been based off the result of their actions and perceptions of others. Using only anecdotal evidence has undermined the Great-Man theories and required a more empirical approach to leadership studies.

Failed efforts from the Great-Man era of study paved the path to trait theory. Trait theory focuses on personal leadership characteristics such as, capabilities, motives and behaviors. Cowley (1931) believes that the study of leadership traits should always be the focus of any leadership study. To gain validity Bass (1990) believed this approach should look past the idea of born characteristics and focus on acquired traits that distinguish leaders from other people.

Early trait theorist hypothesized that leadership traits were different for those of a non-leader (Kirkpatrick & Locke, 1991). It was later determined that no specific trait was universally associated with leadership performance. Stogdill (1948) noted that

people, who are recognized as leaders in one situation, may not be a leader under all circumstances. Stogdill believed that leadership was not the product of a combination of traits but included the working relationship among team members and the leader status obtained through active participation and cooperation in daily tasks.

Research conducted in the early 90's highlighted that leadership traits along could not predict effectiveness of leaders but was based on the circumstances surrounding the leader (Bass, 1990). Situational leadership studied the opportunities available for leaders and the frequency at which the leader successfully works through a problem (Bogardus, 1918; Murphy, 1941; Schneider, 1937). As in the case of trait theory, situational theory alone failed to explain the theories surrounding successful leadership. Research finally combined the personal and situational aspects of leadership theory to gain a more comprehensive construct.

Zaccaro et al. (2004) define traits as personality, temperaments, abilities and any enduring attributes that can be found in an individual. Leadership trait studies have developed the following list to identify valuable leadership traits that impact performance:

1. Cognitive abilities
2. Extraversion
3. Conscientiousness
4. Emotional Stability
5. Openness
6. Agreeableness
7. Motivation
8. Social Intelligence
9. Self-motivation
10. Emotional Intelligence
11. Problem Solving

Leading off research by Zaccaro et al. (2004), Northouse (2013) identified five primary traits associated with effective leadership:

1. Intelligence: Verbal, perceptual and reasoning capabilities.
2. Self Confidence: Certainty about one's competencies and skills.
3. Determination: Desire to get the job done.
4. Integrity: The quality of honesty and trustworthiness.
5. Sociability: Leader's inclination to seek out pleasant social relationships.

These five traits are contingent upon the 5-Factor Personality Model developed by Northouse's (2013) research:

1. Neuroticism: a tendency to experience unpleasant emotions easily, such as anger, anxiety, depression or vulnerability.
2. Extraversion: The tendency to be sociable and assertive and to have positive energy.
3. Openness: The tendency to be informed, creative, insightful and curious.
4. Agreeableness: The tendency to be accepting, conforming, trusting and nurturing.
5. Conscientiousness: The tendency to be thorough, organized, controlled, dependable and decisive.

Research has shown a strong relationship between personality traits and leadership effectiveness (Northouse, 2013). Judge et al. (2002) concluded that extraversion was the strongest personality factor associated with effective leadership. Neuroticism and openness held a similar impact in relation to leadership, however, neuroticism shown to be negatively associated with leadership effectiveness.

The trait approach to leadership study has strengths related to benchmarking leadership qualities (Northouse, 2013). Organizations base trait credibility on leadership questionnaires to find the perfect fit for their open positions. Briggs' (2013) Leadership Trait Questionnaire (LTQ) can be used to assess where leaders stand within an organization and provide the feedback needed to self-assess weakness or means to strengthen organizational positions.

Leadership Practices

Throughout the 20th century researcher have challenged the trait approach to leadership study by stating no individual trait can explain the reasoning behind choice (Northouse, 2013). Situational circumstance always plays a role in the reason for choice (Stogdill, 1948). Thus, the traits an individual possesses must be relevant to the situation to make the person become a leader. Northouse (2013) believes trait theory is the study of the leader only and has nothing to do with the follower or the situation. This make the trait approach a straightforward study focused on the traits the leader exhibits and who possesses these traits.

The trait approach lends itself to an organizational study focused on managerial tasks. To bring relevance to this study a shift from trait theory to leadership practices is essential in finding influence in teacher efficacy. Although traits can be important aspects of a leader that are identifiable through study they cannot be developed or hold influence on others as instructional practices can.

Kouzes and Posner (2002) have spent years studying the leadership practices of ordinary people that have excelled to do extraordinary things. Research was not limited to school leadership but did display commonalities across all genre. Leaders that do great things display five similar practices that consistently produce quality results. These practices have been correlated to educational leadership research and development.

Model the Way

Leaders that seek to earn the respect and admiration of their subordinates need to start by modeling the behaviors expected in others (Kouzes & Posner, 1995). Building a strong and valuable organization requires the leader to give voice to their own personal

values and share them with others through consistent action. A leader must know in themselves what is important and hold those ideas as values and beliefs.

Barth (1990) believes a school leader shares vision by being the head learner as well as modeling and displaying the behaviors desired from teachers and students. Authority does not always warrant the desired response, whereas, leading through commitment fosters a strong shared vision (Lezotte, 1999). Leaders must address every situation with sincerity and be authentic because the heart of the leader matters just as much as the head (Fullan & Hargreaves, 1996).

Inspire a Shared Vision

A leader often envisions what could be within the organization. This vision is an uplifting and ennobling future of the company or school. Leaders enlist others in a common vision based on their values, interest and hopes (Lezotte, 1999). Kouzes and Posner (2002) state, "Vision is about the common good, and not just about what the leader wants."

According to Bennis (1989) the first basic ingredient of a good leader is having a guided vision. This vision is connected both professionally and personally forcing the leader to build the strength and endurance to persevere through setbacks and failures. Lezotte (1999) points out that people do not need leaders to take them places a manager can, but leaders are needed to take them places they want to go but have not been yet.

Challenge the Process

Leaders seek to challenge the process by searching for opportunities to innovate, grow and improve their organization (Kouzes & Posner, 2002). No leader can achieve success by leaving things the same and settling for the norm. Lezotte (1999) ascertains

that the event of change comes from the inside with the people that already exist in the organization. Those inside the school may be required to do things differently or to learn new things but they are the best agents of change.

Leaders learn from their failures as well as their successes. Bennis (1988) states that the obstacles leaders face teach valued life lessons that grow their vision and virtue. As weather shapes mountains, problems and difficulties shape leaders beyond the circumstances they are faced against. Leaders are inquisitive about everything and in their efforts to learn, take risk and try new things.

Enable Others to Act

A single person acting alone in an organization has little chance of making greatness happen. Effective leadership is a team effort as leaders enable others to act (Kouzes & Posner, 2002). Project development and success rest on the leaders' ability to build trust and foster collaboration amongst workers. Producers need to feel a sense of ownership and personal power in relation to the project. Leaders often strengthen by relinquishing their personal power and providing a choice while offering visible support.

Within education, Lezotte (1999) believes leadership should be dispersed amongst multiple people. Every principal needs to evolve into a leader of leaders, not a leader of followers. Teachers should become more empowered through collaborative leadership with the principal and others. Trust must be developed to bring the extraordinary to life (Kouzes & Posner, 2002). The concept of trust is a two way street. Leader must trust the same as the teacher to develop lines of communication. Sharing power and developing a system of trust cultivates higher levels of competence and offers the confidence to act.

Encourage the Heart

Leaders recognize individual contributions that make every project successful (Kouzes & Posner, 2002). Through celebration leaders build morale and enhance the self-confidence of constitutes. Kouzes and Posner (2002) identify four essential components leaders must address in recognition of others. Leaders must build self-confidence by setting high expectations of others. Everyone is accountable for something and through high expectations individuals strive for personal improvement. There must be a connection made between individual performance and the reward that follows. Rewards should vary and spark healthy competition among others. Finally, leaders must be positive and have an optimistic outlook that signifies hope for all.

Principals need to find value in all the school's teachers (Fullan & Hargreaves, 1996). Teachers need to be appreciated as a total person rather than a bundle of competencies or deficiencies. Leaders can create the spirit of community by affirming and supporting the positive ideas of others (Kouzes & Posner, 2002).

Rural

Before the implementation of No Child Left Behind (NCLB) (2002), school leadership was largely invested in managerial task (Lynch, 2012). Today, a much more defined and heavily accountable characterization of principal is applied in schools. According to NCLB (2002), the principal is the instructional leader of the school. The attitudes of teachers, students and other staff members within the school are reflected through the leadership portrayed by the principal (Peterson, 2002). In a 2009 research study by Lortie, the roles and responsibilities of a principal were dissected and evaluated to determine what exactly principals do and what policy makers and academics think they

should do (Lytle, 2012). In academia it is understood that to be a principal, many hats must be worn every day. Today's principals must be leaders of personnel, students, government and public relations, finance, instruction, academic performance, culture and strategic planning (Lynch, 2012).

With the increased focus on school leadership, principals must respond to challenges posed by an increasingly complex environment. All principals must battle with curriculum standards, achievement benchmarks and unpredicted requirements placed upon the school. Literature surrounding the principalship is often taken in the context of urban or suburban settings (Schafft & Jackson, 2010). Findings resulting from such research are often generalized to rural schools. Although research of this type represents a large student population it leaves out the thousands of rural schools spanning across the United States. To combat the lack of rural research in the capacity of the school principal, this study will identify the problems faced by principals working in rural schools.

Principals are faced with numerous problems on a daily basis. Although research has been conducted on the role of the principal, in many cases this research is done in urban areas and then generalized to rural populations (Schafft & Jackson, 2010). An example of this is the increased research in ethical educational leadership. When looking at ethical complexities, the rural context is all but silent. Researchers fail to consider the staggering differences between rural and urban setting. This may undermine the unique issues of rural education and raises some concerns about principal research.

Rural schools face a number of additional hindrances when compared to urban and suburban areas. Rural communities have a lower cost of living, lower per-capita

income, a lower property tax base, lower expectations for educational attainment, and cultural attributes that create a greater propensity for social reproduction (Shuman, 2010). Rural schools face inequitable funding, a lack of highly qualified teachers, a lack of highly qualified administrators, geographic transportation issues and a digital divide (Shuman, 2010). Theobald and Wood (2010) orchestrated a discussion amongst school teachers, administrators and rural youth debating the structure of rural education. Comments from the students in attendance showed an awareness of shortcomings that stemmed from the feebleness of current rural teaching.

> "well aware that we don't have the best schools, we don't get the best teachers or the best education. We know that we're going to have to catch up when we go to college (Schafft & Jackson, 2010, p.17)"

Administration in attendance gave no protest or rebuttal to the comments made by students. This statement was believed and considered to be true by those involved in the educational setting.

According to Shuman (2010), rural school settings are accompanied by communities that have lower cost of living, lower per-capita income, lower property tax and lower expectations for educational attainment. Shuman's list of concerns brings about a second problem relevant to this research. Do principals receive adequate edification to prepare for administration in rural school settings? Colleges offering principal coursework, generalize curriculum to suit any possible situation a principal may acquire. However, the lack of ethical training for urban or rural settings hinders the development of principals in both settings. An abundance of political influence accompanies rural communities making it difficult for principals to establish a moral

administration (Flora & Flora, 2012). Strike, Haller, & Soltis (2005) believe that decisions made at the administrative level carries with it the potential to restructure human life. This is why moral dilemmas add to the over complicated role of rural principal. People tend to follow a code of ethics that results from life stories and critical incidents (Shapiro & Stefkovich, 1994). For principals, this code should be a development of experiences and expectations of their working lives (Shuman, 2010).

Many regions in the United States face the difficulty of finding and retaining well-prepared school leaders (Browne-Ferrigno & Allen, 2006). Problems associated with hard-to-staff schools are present in both urban and rural settings (Schafft & Jackson, 2010). Although current research is starting to address the rural setting and its diversity, research is lacking in the area of rural education and the principalship (Jacobson & Woodworth, 1989). With a systematic review of rural journals and available reports, this study seeks to identify problems faced by rural principals.

Rural Communities and Society

The year 2008 marked the first year in the history of the United States that more people lived in urban areas than not (Schafft & Jackson, 2010). This increase of urban population and outmigration of rural areas is a pattern of increasing proportion that continues today. With such diversity remaining in nonurban areas a definition of rural communities becomes difficult to pinpoint. In 1995 the US Census Bureau gave specific definitions for what constituted an urban population.

1. Places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the six New England States, New York, and Wisconsin), but excluding the rural portions of "extended cities."
2. Census designated places of 2,500 or more persons.

3. Other territory, incorporated or unincorporated, included in urbanized areas.

These general rules are contradicted later on in the definitions by incorporating special rules that can be applied to populations that do not fit the given constructs. Others have also attempted to define rural, but continue to struggle with common traits that all rural areas possess.

Today, rural communities differ more from each other than they do, on average, from urban areas (Flora & Flora, 2012). This diversity extends to the social and economic changes taking place across America. Government officials attempt to define rural in order to regulate federal funding administered to areas of low population. In many cases those communities defined as rural by the government are also poverty stricken with little to no development (Brown, 2004). Depending on location the idea of rural may look different to those living in these areas. For example, someone living in Arizona or Utah may think rural is desert land and no mountains. A person living in Kentucky or West Virginia identifies rural with mountains and creek beds located far away from the bustle of city life.

In the paradigm of this study, the definition of rural will be comprised of ideas given through various research models. One such idea is that of geographic isolation (Arnold, Newman, Gaddy, & Dean, 2005). Many areas that are considered rural are miles away from towns and infrastructure. In most cases homes are spread out and urban amenities are not available or too costly to afford. Alongside the image of isolation is a sense that rural people live out their entire lives in the towns in which they were born (Flora & Flora, 2012). Although this is not entirely true of all rural people, this idea

accompanies the design of this research. A second reoccurring theme that will fall in the rural construct is the rich culture of self-sufficiency (Flora & Flora, 2012). It is no surprise that those living in rural communities foster a level of self-sufficiency. Many rural areas are hours away from grocery stores, hardware stores and hospitals, forcing them to live on local wildlife, natural resources and rural medicines.

The Context of Appalachia and Kentucky

From a distance the Appalachian region of the United States is a beautiful wilderness full of potential. The abundance of natural resources paints a picture of wealth and success. However, a closer look reveals once thriving communities suffering from the depopulation of its citizens (Woodrum, 2004). History reveals that once the coal seams started to run out, many mine owners left town neglecting the remaining population. Appalachians needing jobs left for northern industrial cities in an attempt to gain employment and feed their families.

Education brought about change in the communities left behind by the coal industry. Old logging roads and paths to coal mines were narrow and rough (Eller, 2008). School officials began to consolidate small schools into larger institutions easier sanctioned by a governing body. Those families living along the old logging roads and mine paths felt left out or inadequate because of the distances formed by the consolidations. Those individuals that were once bosses or mine operators reared their children up to become the bourgeoisie of Appalachia. This new elite class became sheriffs, judges, congressmen and governors of the region (Woodrum, 2004). In so doing a rift formed between the elite and the rural population that impacted the local communities and local schools.

The changes taking place in the Appalachian area at the time mentioned carried down an assortment of issues that continue to plague local school principals today. One such problem is the disconnection between community and school agendas. In Kentucky, state-mandated testing has encompassed the decisions and the structure of the local school. Community members in rural neighborhoods struggle relating to the need for higher test scores and overall school performance. Principals look persuasive practices that will encourage parent involvement in the school. Through participation local parents may see the need for such largely reoccurring standardize testing and data analysis.

While battling disconnect between community view and school mandates, principals in rural Appalachia must also deal with the control possessed by the old political and economic elites (Woodrum, 2004). Clay County, Kentucky is a prime example of the elite using social capitol to gain access to local school districts to promote self-gain (Billings & Blee, 2000). Although political elites were imprisoned for their unjust actions in Clay County, the ramifications of those actions have placed a cloud of deceit over school systems and local governances that principals must combat.

Other Related Theories and Context - Rural

Educational research offers various theories surrounding the development of rural education. Rural school is often associated with low test scores translating to undereducated communities. The following three theories are taken from current rural research and relevant to this study (Arnold et al., 2005; Brown, 2004; Browne-Ferrigno & Allen, 2006; Flora & Flora, 2012; Schafft & Jackson, 2010; Shuman, 2010).

Theory 1: The education offered in schools does not prepare students for the rural job market.

- Education follows a Gesellschaft (urban) model that is generalized to rural situations.
- Many rural jobs in Appalachia are centered on the coal industry, thus the education offered in schools does not prepare students to be workers in the coal industry.
- The focus on assessment means little to parents and students in rural Appalachia as it has no relation to student achievement in the community structure.

Theory 2: State assessment questions do not relate to middle and lower class students from rural Appalachia.

- Limited vocabulary
- Lack of culture
- Inability to relate to topics that are commonplace in urban settings.

An example that accompanies this theory is given in an interview of teachers on the value of testing. One teacher explains that a question given on a state assessment mentioned a "wharf". Students had no idea what a "wharf" was. They could not relate to the terminology and thus placed a level of unfairness in the test.

Theory 3: Appalachian parents do not encourage their children to get an education and attend college.

- The argument of physical labor versus technical and professional careers still resonate in Appalachian communities. Many parents stick to the idea that school does not prepare their children for the physical labor that they will be doing outside of school.
- Appalachian stereotypes undermine the value of education as it relates to parents and their ideas for their children.
- Adolescent pregnancy is sometimes celebrated because motherhood is the only viable goal for many females.
- The strong family ties that are ever so present in Appalachia, overshadow the urge many students have to go off to college and further their education. Why should they go away from family and friends when they are already located where they belong?

Kentucky's Professional Growth and Effectiveness System (PGES)

The Kentucky Department of Education (KDE) has changed the way school and school districts evaluate employees. At the start of the 2014-2015 school year teachers, principals and superintendents will be evaluated using a new system based of Charlotte Danielson's 2011 Framework for Teaching ("PGES Headline News", 2013). The Professional Growth and Effectiveness System (PGES) have three projects to evaluate the development and effectiveness of teachers, principals and superintendents. TPGES, for teachers, requires teachers to watch a series of videos and identify needs of improvement in their personal teaching methods. Teachers are observed by both the school principal as well as a peer-observer offering feedback throughout the year as the teacher is evaluated on performance.

PGES uses the Framework for Teaching developed by Charlotte Danielson (2011). Framework for Teaching is research-based and contains components of instruction that are aligned to the Interstate Teacher Assessment and Support Consortium (INTASC) standards. Multiple standards are clustered and divided into five domains of teaching responsibility. These domains are:

1. Planning and Preparation
2. Classroom Environment
3. Instruction
4. Professional Responsibilities
5. Student Growth

Starting with pilot programs and initial evaluations KDE has considered using only two domains to focus on for Kentucky teachers. Currently domain 2, Classroom

Environment, and domain 3, Instruction, are the only domains teachers are responsible for. According to KDE, other domains will be implemented in upcoming years. Student Growth is not a component of Danielson's framework, but was considered important for Kentucky's PGES as student growth, alongside other factors, is a component of evaluating schools and districts from year to year. Currently student growth is only marked for consideration in evaluation.

Teacher Professional Growth and Effectiveness System

Danielson's four domain model stresses the importance of teacher quality ("The Danielson Group", 2012). Teachers that are of high quality revere teaching as a professional practice and not just a job. Domains one through four represent the components of professional practice. Figure 2.1 displays the elements of effectiveness within each domain.

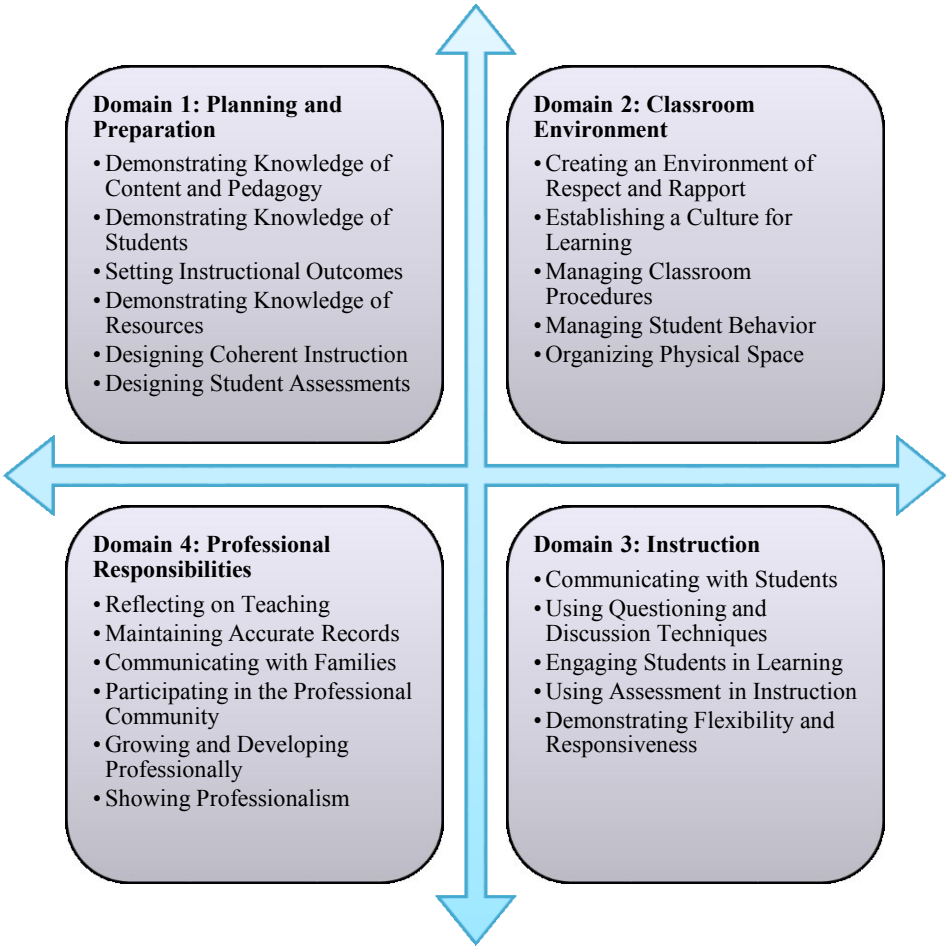


Figure 2.1. A Framework for Teaching: Components of Professional Practice

Source: Charlotte Danielson, "Framework for Teaching, 2011." Adapted for the Kentucky Department of Education, February 2014, p.4.

According to Danielson (2007), domains one through four comprise a circular teaching strategy - seen in Figure 2.1 - which professional, effective teachers adhere to on an ongoing basis.

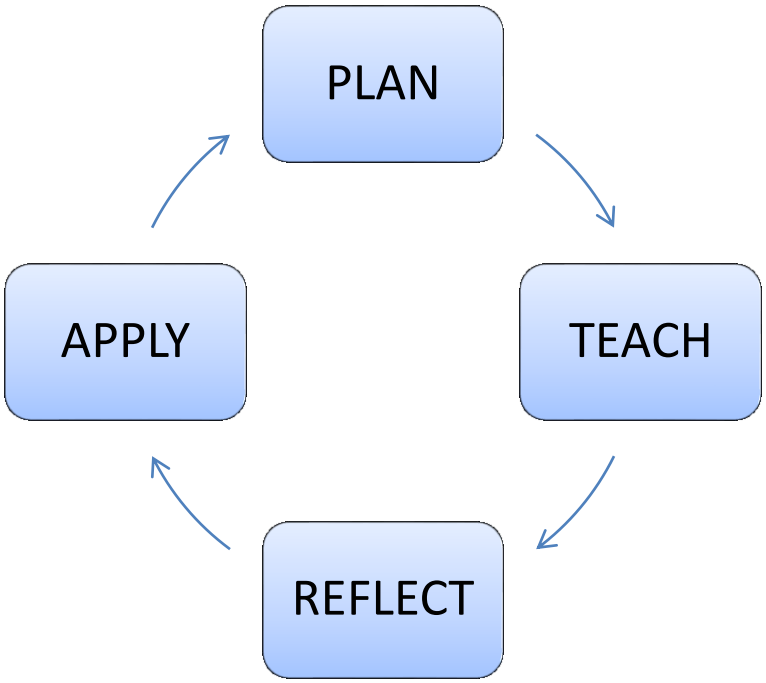


Figure 2.2. Effective Teaching Strategy

Source: Charlotte Danielson, "Framework for Teaching, 2011." Adapted for the Kentucky Department of Education, February 2014, p.1.

Throughout the framework, teachers must display a keen sense of efficacy to be efficient at demonstration components (Danielson, 2013). According to Danielson, committed teacher don't give up easily on struggling students and persistently work to find alternative approaches to help students be successful. Teachers learn to adjust instruction and respond to evidence that students are progressing or falling behind. Teachers that hold a sense of self-efficacy seize every available teaching moment.

Principal's Role

Kentucky teachers involved in the pilot program are evaluated by both a peer observer and the school principal. Student surveys are also used at the end of the school

year to account for total teacher accountability (Little, Goe, & Bell, 2009). Peer-Observers must sign up and complete an online module training them on how to observe and record in an unbiased manner. Principals are required to observe more throughout the year both mini observations and lengthy formal observations. Training for principals include 36 hours of online videos that include quizzes and checkpoint observations. Once the video modules are complete the principal must pass two online tests to be allowed to observe teachers under the framework. Principal modules teach observation without bias and show principals what good teaching should look like.

KDE requires principals to observe teachers three times during the school year. Observations windows are set at the beginning of the year for principals and peer-observers. Kentucky principals use the Continuous Instructional Improvement Technology System (CIITS) to record pre-observation, observation and post-observation results. Principals are required to give teacher feedback during post-observations as it relates only to the domain in which the observation focused on. At the end of the observation cycle principal and peer results determine if a teacher is ineffective, developing, accomplished or exemplary.

CHAPTER 3: METHODOLOGY

This chapter contains the description of the research, the sample population, all instruments used for this study along with the steps involved in collecting data for analysis. This research focused on principal leadership practices as perceived by teachers and the impact that has on teacher self-efficacy. Research has shown that high levels of self-efficacy in teachers have a direct impact on student performance (Caine & Caine, 1997; Marzano et. al., 1998). Teachers that hold the belief in the ability of all students to learn and achieve at high levels impact the learning climate of the whole school. Additional research shows that teacher efficacy leads to changes in teacher behaviors (Ross & Bruce, 2007). Protheroe's (2008) research indicated that principals intentionally cultivated teacher efficacy and student efficacy to improve achievement. Further research has shown a positive relationship between principals' sense of efficacy and teacher's work ethic as well as teacher's sense of self-efficacy (Hartnett, 1995).

Trait theory has generated much interest among researchers to explain how leaders are able to influence others and succeed (Northouse, 2013). Bryman (1992) explained how leaders used inherent traits to develop into strong leaders. Additional research has shown that trait characteristics explain only a small portion of leadership success (Stogdill, 1948). Traits that are aspects in successful leadership are mostly accompanied by personality and situational factors (Stogdill, 1974). This research will extend beyond earlier research and focus on the practices of leaders as perceived by teachers. The construct will seek to identify leadership practices defined by Kouzes and Posner (2002) that teachers perceive in principals. A relationship between identified practices and teacher self-efficacies will be analyzed for significance.

Research Design

Since the main focus of this research stems from the perception of teachers, data for analysis will come from teacher responses to survey items. Data is collected through a survey administered using surveymonkey.com and evaluated with IBM's Statistical Package for the Social Sciences (SPSS). To obtain response data an email is sent to 427 teachers in Clay, Leslie, Perry, Owsley, Breathitt, Letcher and Floyd counties. Counties we chosen based on rural population and potential willingness to be included in the study. In addition, the acting principal must have been working at the school a minimum of three years for consideration. The Kentucky Department of Education suggest a minimum of three years in an administrative role is need to measure the impact a principal has had on teacher effectiveness and student achievement. Part one consist of general demographic information. Part two contains the Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001) of The Ohio State. TSES consist of twenty four questions valued on a Likert scale from one to nine. Combinations of questions on TSES can be evaluated to determine specific types of teacher efficacy or a lack thereof. Part three utilizes the Leadership Practice Inventory (LPI). The LPI has been used extensively in education and business to identify leadership qualities that can be harnessed in individuals for success. LPI consists of 30 questions on a Likert scale from one to ten. Once data has been collected, statistical analysis will seek any significant relationship between teacher self-efficacy and perceived principal leadership traits.

Purpose

The purpose of this study is to examine the relationship between perceived principal leadership practices and teacher sense of self-efficacy. Within the research construct, data will be analyzed to identify any practice, or combination of practices, that have a positive impact on teacher sense of self-efficacy and/or sublevels of self-efficacy. Measurements are based on research tested instrumentations that are accepted in the current field of research.

Variables

There are multiple variables that impact the data collected from the surveys. The dependent variable is teacher sense of self-efficacy as measured by *the Teachers' Sense of Efficacy Scale* (Tschannen-Moran & Woolfolk-Hoy, 2001). Within this measure is also the sub-dependent variables consisting of self-efficacy constituents; student engagement, instructional strategies and classroom management. Table 3.1 shows the correlation between TSES items and sub-dependent self-efficacy variables.

Table 3.1. Efficacy Sub-domains and TSES Items

Sub-Variable	Type of Efficacy	Correlating Item (TSES)
1	Student Engagement	1, 2, 4, 6, 9, 12, 14, 22
2	Instructional Strategies	7, 10, 11, 17, 18, 20, 23, 24
3	Classroom Management	3, 5, 8, 13, 15, 16, 19, 21

The independent variables consist of the principal leadership practices as perceived by the teachers. Independent variables are collected through teacher responses to the *Leadership Practices Inventory* (Kouzes & Posner, 2003). Table 3.2 displays the identified practices and corresponding items numbers from the LPI for evaluation.

Table 3.2. Leadership Practices and LPI Items

Practice	Description	Correlating Item (LPI)
1	Model the Way	1, 2, 6, 7, 11, 16, 21, 26
2	Inspire a Shared Vision	12, 17, 22, 27
3	Challenge the Process	3, 8, 13, 18, 23, 28
4	Enabling Others to Act	4, 9, 14, 19, 24, 29
5	Encouraging the Heart	5, 10, 15, 20, 25, 30

Hypothesis Tests

1. H_0: $\mu_1 = \mu_2$

   μ_1 = levels of teacher self-efficacy uninfluenced by perceived principal leadership practices

   μ_2 = levels of teacher self-efficacy as influenced by perceived principal leadership practices

   (There is no significant difference in teacher self-efficacy levels based on perceived principal leadership practices.)

   H_a: $\mu_1 \neq \mu_2$

   (There is a significant difference in teacher self-efficacy levels based on perceived principal leadership practices.)

2. H_0: There is no significant relationship between the three sub-level efficacy ratings and the five perceivable practices of principal leadership.

   H_a: There is a significant relationship between the three sub-level efficacy ratings and the five perceivable practices of principal leadership.

Population

Subject used in this study consist of teachers located in rural eastern Kentucky. Specifically teachers in the following counties: Clay, Leslie, Perry, Owsley, Breathitt, Letcher and Floyd. A combined 427 teachers were asked to take part in the survey. Teachers in this population represent schools defined as being rural located in Appalachia based on Kentucky Department of Education (2011) demographic information supplied through school report cards and census data. Subjects are both male and female and teach across a variety of content areas. Teacher careers vary from non-tenure teachers having less than five years' experience to seasoned teachers that have been in the classroom over twenty years.

The total number of responses returned on the survey was 225. As shown in Tables 3.3 and 3.4, 77.3% of respondents were female while 22.7% were male. 98.7% were white with only 3 respondents having a diverse background.

Table 3.3. Gender

What is your gender?

Sex	Frequency	Valid Percent
Female	174	77.3
Male	51	22.7

Table 3.4. Ethnicity

Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, or some other race?

Race	Frequency	Valid Percent
White	222	98.7
Asian	1	.4
Multiple	2	.9

The majority of respondents were between the ages of 41 and 50 (34.7%) as seen in Table 3.5. Table 3.6 shows that 57.8% of respondents have taught more than 15 years with only 15.1% of responses coming from new teachers with less than 5 years' experience.

Table 3.5. Age

What is your age range?

Age Range	Frequency	Valid Percent	Cumulative Percent
21 to 30	36	16.0	16.0
31 to 40	47	20.9	36.9
41 to 50	78	34.7	71.6
Over 50	64	28.4	100.0

Table 3.6. Experience

How many years have you been teaching?

Experience	Frequency	Valid Percent	Cumulative Percent
Less than 5	34	15.1	15.1
5 to 10	34	15.1	30.2
11 to 15	27	12.0	42.2
More than 15	130	57.8	100.0

Grade level experience for teacher in this student ranges from kindergarten through 12th grade. Table 3.7 shows that the majority have experience teaching at the K-5 level with 6-8 having the least representation in the study. 10.2% of respondents have had experience teaching at all levels of K-12 education.

Table 3.7. Grade Range Taught

What grade level(s) taught? You may select more than one answer. K-5, 6-8, 9-12

Grade Level	Frequency	Valid Percent
K-5	72	32.0
6-8	29	12.9
9-12	45	20.0
K-5 and 6-8	33	14.7
6-8 and 9-12	21	9.3
K-5 and 9-12	2	.9
K-5, 6-8 and 9-12	23	10.2

Instruments

To determine the level of self-efficacy, teachers are given *the Teachers' Sense of Efficacy Scale* shown in Appendix A (Tschannen-Moran & Woolfolk-Hoy, 2001). *The Teachers' Sense of Efficacy Scale* (TSES) contains twenty-four questions on a Likert scale ranging from one to nine. Upon completion of the survey, results are tabulated and analyzed to determine the level and components of self-efficacy. Teacher responses that correspond to high levels of self-efficacy will be utilized in this study.

The *Leadership Practices Inventory* in Appendix A (Kouzes & Posner, 2003) is used to identify leadership traits in principal subjects as perceived by teachers. Although the survey itself consist of different variations this study focused on the observer versions as teachers gave their answers to questions with principal leadership in mind. LPI consist of 30 questions on a Likert scale from one to ten. LPI identifies behavior practices in principal leadership and decision-making.

Data Collection

Data will be collected using the online instrument surveymonkey.com. Respondents will be asked via email to take the survey for assistance in this research project. Each respondent will be greeted with a survey script shown in Appendix A. The survey is broken into three parts and takes fifteen to twenty minutes to complete. Part one is a basic demographic questionnaire. Part two consists of the TSES long form. Part three is the 30 question LPI and concluded the survey. All questions and available responses are designed to keep teachers anonymous throughout this process.

CHAPTER 4: RESULTS

The purpose of this chapter is to present the data collected through the study and subsequently report the findings associated with the analysis as it relates to the research questions. This descriptive/correlational study sought to answer questions linked to perceived principal practice and teachers' sense of self-efficacy. Analysis of the data focused on understanding what practices as identified through the Leadership Practice Inventory (LPI, Observer) correlated to teachers overall sense of self-efficacy or sub levels of self-efficacy as identified using the Teaches' Sense of Efficacy Scale (TSES).

Descriptive Information of Survey Data

The following three tables (Tables 4.1-4.3) show the breakdown of the three sub-levels of self-efficacy as measured by the TSES. Questions from the TSES have been organized based on which sub-level they correlate to. Means and standards deviations for teacher responses have been recorded.

Table 4.1. Efficacy in Student Engagement Item Means in Descending Order

TSES Student Engagement Questions	Mean	Std. Deviation
How much can you do to get students to believe they can do well in school work?	7.24	1.338
How much can you do to help your students' value learning?	6.97	1.431
How much can you do to help your students think critically?	6.89	1.440
How much can you do to foster student creativity?	6.75	1.398
How much can you do to improve the understanding of a student who is failing?	6.52	1.360
How much can you do to motivate students who show low interest in school work?	6.38	1.534
How much can you do to get through to the most difficult students?	6.31	1.547
How much can you assist families in helping their children do well in school?	6.19	1.681

Table 4.2. Efficacy in Instructional Practices Item Means in Descending Order

TSES instructional Practices Questions	Mean	Std. Deviation
To what extent can you provide an alternative explanation or example when students are confused?	7.59	1.162
How much can you gauge student comprehension of what you have taught?	7.53	1.180
How well can you respond to difficult questions from your students?	7.52	1.122
To what extent can you draft good questions for your students?	7.40	1.339
How well can you provide appropriate challenges for very capable students?	7.31	1.274
How much can you use a variety of assessment strategies?	7.24	1.355
How much can you do to adjust your lessons to the proper level for individual students?	7.22	1.443
How well can you implement alternative strategies in your classroom?	7.01	1.280

Table 4.3. Efficacy in Classroom Management Item Means in Descending Order

TSES Classroom Management Questions	Mean	Std. Deviation
To what extent can you make your expectations clear about student behavior?	8.02	1.210
How well can you establish routines to keep activities running smoothly?	7.98	1.112
How much can you do to get students to follow classroom rules?	7.72	1.110
How well can you establish a classroom management system with each group of students?	7.67	1.187
How much can you do to control disruptive behavior in the classroom?	7.55	1.359
How well can you keep a few problem students from ruining an entire lesson?	7.14	1.380
How much can you do to calm a student who is disruptive or noisy?	7.13	1.359
How well can you respond to defiant students?	7.12	1.437

Table 4.1 breaks down responses related to Student Engagement. This table shows the lowest means as recorded by teachers, with the following question having the lowest mean: How much can you assist families in helping their children do well in school ($M = 6.19$, $SD = 1.681$)?

The summative means in Table 4.4 report that Student Engagement held the lowest responses from teachers taking the survey ($M = 6.6572$, $SD = 1.10135$). Teachers in Appalachia, Kentucky responding to the survey report higher levels of self-efficacy in Classroom Management than any other sub-level of self-efficacy ($M = 7.5406$, $SD = .96786$). Overall teacher sense of efficacy ($M = 7.1835$, $SD = .87641$) in this study is remarkably similar to results reported by Tschannen-Moran and Woolfolk-Hoy in 2001 ($M = 7.1$, $SD = .94$).

Table 4.4. Overall Teacher Efficacy and Factor Means

Levels of Efficacy	Mean	Std. Deviation
Efficacy in Student Engagement	6.6572	1.10135
Efficacy in Instructional Practices	7.3528	.97746
Efficacy in Classroom Management	7.5406	.96786
Teacher Sense of Efficacy Scale	7.1835	.87641

Tables 4.5-4.9 show the mean teacher responses to the LPI within the five categories of leadership practices. Table 4.5, Model the Way, records the lowest mean in response to the question: Asks for feedback on how his/her actions affect other people's performance ($M = 7.29$, $SD = 2.506$). Table 4.8, Enables Others to Act, reports the largest mean in response to the question: Treats others with dignity and respect ($M = 8.95$, $SD = 1.848$).

Table 4.5. Model the Way Item Means in Descending Order

LPI Model the Way Questions	Mean	Std. Deviation
Sets a personal example of what he/she expects of others	8.61	1.790
Follows through on the promises and commitments that he/she makes	8.44	2.082
Is clear about his/her philosophy of leadership	8.30	2.267
Spends time and energy making certain that the people he/she works with adhere to the principals and standards we have agreed on	8.16	2.152
Builds consensus around ta common set of values for running our organization	8.10	2.258
Asks for feedback on how his/her actions affect other people's performance	7.29	2.506

Table 4.6. Inspire a Shared Item Means in Descending Order

LPI Inspire a Shared Vision Questions	Mean	Std. Deviation
Speaks with a genuine conviction about the higher meaning and purpose of our work	8.38	2.335
Talks about future trends that will influence how our work gets done	8.29	1.876
Paints the "big picture" of what we aspire to accomplish	8.28	2.129
Describes a compelling image of what our future could be like	8.01	2.214
Appeals to others to share an exciting dream of the future	7.93	2.278
Shows others how their long-term interest can be realized by enlisting in a common vision	7.80	2.377

Table 4.7. Challenge the Process Item Means in Descending Order

LPI Challenge the Process Questions	Mean	Std. Deviation
Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on	8.31	2.210
Challenges people to try out new and innovative ways to do their work	8.05	2.158
Seeks out challenging opportunities that test his/her own skills and abilities	7.97	2.137
Searches outside the formal boundaries of his/her organization for innovative ways to improve what we do	7.94	2.286
Asks "what can we learn?" when things don't go as expected	7.90	2.247
Experiments and takes risks, even when there is a chance of failure	7.77	2.329

Table 4.8. Enables Others to Act Item Means in Descending Order

LPI Enable Others to Act Questions	Mean	Std. Deviation
Treats others with dignity and respect	8.95	1.848
Develops cooperative relationships among the people he/she work with	8.47	2.079
Gives people a great deal of freedom and choice in deciding how to do their work	8.38	1.896
Ensures that people grow in their jobs by learning new skills and developing themselves	8.02	2.205
Actively listens to diverse points of view	8.02	2.212
Supports the decisions that people make on their own	7.96	1.978

Table 4.9. Enables Others to Act Item Means in Descending Order

LPI Encourage the Heart Questions	Mean	Std. Deviation
Praises people for a job well done	8.30	2.164
Gives the members of the team lots of appreciation and support for their contributions	8.20	2.371
Makes it a point to let people know about his/her confidence in their abilities	8.09	2.213
Makes sure that people are creatively rewarded for their contributions to success of our projects	7.73	2.301
Publicly recognizes people who exemplify commitment to shared values	7.73	2.276
Finds ways to celebrate accomplishments	7.70	2.263

Table 4.10 records the overall means for the five categories measured using the LPI. Enable Others to Act hold the highest mean (M = 8.2985, SD = 1.78206) while Encourage the Heart records the lowest (M = 7.9593, SD = 2.10611).

Table 4.10. Overall Exemplary Leadership and the Five Practices of Exemplary Leadership Means

Leadership Practice	Mean	Std. Deviation
Model the Way	8.1496	1.94507
Inspire a Shared Vision	8.1148	2.05010
Challenge the Process	7.9911	2.02144
Enable Others to Act	8.2985	1.78206
Encourage the Heart	7.9593	2.10611
Overall Exemplary Leadership	8.1027	1.92403

Analysis of Data

Table 4.11 shows the correlations between the three sub-levels of teacher self-efficacy. A significant positive correlation exist between all sub-levels of self-efficacy (p = .000). TSES accurately measured the responses of teachers in the study and identified the sub-levels of teacher self-efficacy and the overall self-efficacy of respondents.

Table 4.11. Intercorrelation Matrix of Teacher Efficacy Factors

		Efficacy in Student Engagement	Efficacy in Instructional Practices	Efficacy in Classroom Management
Efficacy in Student Engagement	Pearson Correlation	1	.679**	.570**
Efficacy in Instructional Practices	Pearson Correlation	.679**	1	.598**
Efficacy in Classroom Management	Pearson Correlation	.570**	.598**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.12 shows the intercorrelation matrix for the five leadership practices as measured by the LPI. A significant positive correlation is shown between all five practices measured (p = .000). R-values between leadership practices are similar and exceptionally high, which raises some alarm. Teacher responses to the questions are so similar that there appears to be a problem with what the LPI is measuring. A test for multicollinearity is needed to determine if the LPI has measured the five leadership practices and if not, how many factor of the LPI have been measured, if any. Tables 4.13-4.17 display regression analysis of the five leadership practices as measured by the LPI.

Table 4.12. Intercorrelation Matrix of Five Exemplary Leadership Practices

		Model the Way	Inspire a Shared Vision	Challenge the Process	Enable Others to Act	Encourage the Heart
Model the Way	R-value	1	.946**	.952**	.939**	.923**
Inspire a Shared Vision	R-value	.946**	1	.973**	.906**	.894**
Challenge the Process	R-value	.952**	.973**	1	.924**	.909**
Enable Others to Act	R-value	.939**	.906**	.924**	1	.929**
Encourage the Heart	R-value	.923**	.894**	.909**	.929**	1

**. Correlation is significant at the 0.01 level (2-tailed).
N=225

Table 4.13. Regression Analysis: Model the Way

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	3.647	.000		
	Inspire a Shared Vision	6.053	.000	.062	16.057
	Challenge the Process	6.587	.000	.054	18.468
	Enabling Others to Act	4.644	.000	.100	9.957
	Encouraging the Heart	1.654	.100	.116	8.592

Table 4.14. Regression Analysis: Inspire a Shared Vision

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	-2.677	.008		
	Challenge the Process	8.318	.000	.059	16.821
	Enabling Others to Act	-1.020	.309	.092	10.882
	Encouraging the Heart	1.763	.079	.117	8.577
	Model the Way	6.053	.000	.050	20.193

Table 4.15. Regression Analysis: Challenge the Process

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	-1.178	.240		
	Enabling Others to Act	2.076	.039	.093	10.724
	Encouraging the Heart	.628	.530	.115	8.683
	Model the Way	6.587	.000	.051	19.675
	Inspire a Shared Vision	8.318	.000	.070	14.249

Table 4.16. Regression Analysis: Enabling Others to Act

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	7.692	.000		
	Encouraging the Heart	8.115	.000	.149	6.695
	Model the Way	4.644	.000	.047	21.452
	Inspire a Shared Vision	-1.020	.309	.054	18.642
	Challenge the Process	2.076	.039	.046	21.686

Table 4.17. Encourage the Heart

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	-3.705	.000		
	Model the Way	1.654	.100	.043	23.266
	Inspire a Shared Vision	1.763	.079	.054	18.470
	Challenge the Process	.628	.530	.045	22.072
	Enabling Others to Act	8.115	.000	.119	8.415

Statistically, a low Variance Inflation Factor (VIF) is desired when working with regression models. VIF levels greater than 5 usually signify that there is an issue with multicollinearity. VIF values displayed in Tables 4.13-4.17 conclude that multicollinearity is an issue with teacher's responses as recorded by the LPI. Comparing both the VIF levels along with the correlation results from Table 4.12 it appears that the LPI measured overall exemplary leadership instead of the five leadership practices.

Table 4.18 is a factor analysis of the LPI and suggests that there are two factors being measured. Factor 1 explains 44.985% of the variance while factor 2 explains 36.547%. Cumulatively factors 1 and 2 explain 81.532% of the overall variance. Using a Principal Component Analysis including the rotation method Varimax with Kaiser Normalization, Table 4.19 shows the component correlation of the two identified factors.

Table 4.18. Factor Analysis: Total Variance Explained

	Initial Eigenvalues			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	23.349	77.830	77.830	13.495	44.985	44.985
2	1.111	3.702	81.532	10.964	36.547	81.532
3	.754	2.513	84.045			
4	.627	2.089	86.134			
5	.422	1.406	87.540			
6	.371	1.238	88.777			
7	.316	1.053	89.830			
8	.288	.961	90.791			
9	.268	.895	91.686			
10	.246	.819	92.505			
11	.235	.783	93.288			
12	.222	.741	94.029			
13	.185	.618	94.647			
14	.177	.590	95.237			
15	.168	.559	95.796			
16	.159	.531	96.328			
17	.125	.417	96.744			
18	.115	.384	97.128			
19	.105	.351	97.479			
20	.101	.336	97.815			
21	.098	.327	98.142			
22	.088	.292	98.434			
23	.080	.266	98.700			
24	.072	.240	98.940			
25	.068	.227	99.167			
26	.064	.214	99.381			
27	.054	.179	99.560			
28	.049	.164	99.724			
29	.043	.143	99.866			
30	.040	.134	100.000			

Extraction Method: Principal Component Analysis.

Table 4.19. Rotated Component Matrix

LPI Survey Questions	Component 1	Component 2
Sets a personal example of what he/she expects of others	.740	.495
Talks about future trends that will influence how our work gets done	.878	.272
Seeks out challenging opportunities that test his/her own skills and abilities	.816	.443
Develops cooperative relationships among the people he/she work with	.644	.608
Praises people for a job well done	.509	.741
Spends time and energy making certain that the people he/she works with adhere to the principals and standards we have agreed on	.756	.514
Describes a compelling image of what our future could be like	.808	.464
Challenges people to try out new and innovative ways to do their work	.843	.368
Actively listens to diverse points of view	.592	.678
Makes it a point to let people know about his/her confidence in their abilities	.605	.684
Follows through on the promises and commitments that he/she makes	.556	.685
Appeals to others to share an exciting dream of the future	.739	.574
Searches outside the formal boundaries of his/her organization for innovative ways to improve what we do	.808	.431
Treats others with dignity and respect	.474	.746
Makes sure that people are creatively rewarded for their contributions to success of our projects	.597	.679
Asks for feedback on how his/her actions affect other people's performance	.514	.668
Shows others how their long-term interest can be realized by enlisting in a common vision	.793	.497
Asks "what can we learn?" when things don't go as expected	.656	.640
Supports the decisions that people make on their own	.551	.744
Publicly recognizes people who exemplify commitment to shared values	.557	.723
Builds consensus around ta common set of values for running our organization	.691	.643
Paints the "big picture" of what we aspire to accomplish	.726	.537
Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on	.740	.548
Gives people a great deal of freedom and choice in deciding how to do their work	.136	.811

Table 4.19 (continued)

LPI Survey Questions	Component 1	Component 2
Finds ways to celebrate accomplishments	.458	.753
Is clear about his/her philosophy of leadership	.729	.432
Speaks with a genuine conviction about the higher meaning and purpose of our work	.748	.540
Experiments and takes risks, even when there is a chance of failure	.588	.600
Ensures that people grow in their jobs by learning new skills and developing themselves	.778	.443
Gives the members of the team lots of appreciation and support for their contributions	.581	.739

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization

R values in Table 4.19 above .30 are considered to be correlated at some level. "Talks about future trends that will influence how our work gets done" correlates to component 1 (R = .878) and "Gives people a great deal of freedom and choice in deciding how to do their work" correlates to component 2 (R = .811). All other items of the LPI correlate to both component 1 and 2 on various levels of significance.

Hypothesis 1 Results

The first hypothesis in this study analyzes the relationship between teacher self-efficacy levels and perceived principal leadership practices. The null hypothesis says there is no significant difference in teacher self-efficacy levels based on perceived principal leadership practices. Given the data collected from the TSES and the LPI this study fails to reject the null hypothesis. Data from the LPI failed to produce distinguishable levels of principal leadership practices as perceived by teachers. Teacher

responses did not distinguish between the specific categories of leadership practice and therefore an analysis was unable to be performed to reject the null hypothesis.

Hypothesis 2 Results

The second hypothesis in this study categorized teacher self-efficacy into three sub-levels and looked for a significant relationship between sub-levels of teacher self-efficacy and the five perceivable practices of principal leadership as measured by the LPI. Teacher responses to the LPI failed to produce distinguishable categories of principal leadership and therefore a statistical analysis of data was unable to be performed. This research has failed to reject the null hypothesis, thus there is no significant relationship between the three sub-levels of teacher self-efficacy ratings and the five perceivable practices of principal leadership.

Summary

The TSES measured the levels of self-efficacy of 225 teachers in the Appalachian region of Kentucky as reported by themselves through the survey. Teachers reported high levels of both overall self-efficacy and sub-levels of self-efficacy. Sub-levels showed that teachers had the highest levels of self-efficacy in classroom management.

Principals represented in the study total 18 based upon respondent demographics. Data collected for the LPI in this study did not accurately measure the perceived principal practices as observed by teachers. Issues with multicollinearity lead to a factor analysis of data revealing that the LPI measured two factors of leadership instead of five individual principal practices. These results can be summarized as saying that the LPI measure exemplary leadership in Appalachian principals in Kentucky as perceived by their respectful teachers. This information does not allow a check for correlation between

perceived principal practices and teachers' sense of self-efficacy, therefore the research fails to reject both null hypothesis in this study.

CHAPTER 5: DISCUSSION, IMPLICATIONS AND CONCLUSIONS

The impact of enhanced teacher efficacy on student achievement has been the focus of educational leadership for years (Bandura, 1997; Caprara, et al., 2006; Gibson & Dembo, 1984; Guskey & Passaro, 1994; Hipp, 1996; Hoy & Woolfolk, 1993). Principal leadership has been found to influence the success of teachers, students and the school as a whole (Andrews & Soder, 1987; Griffith, 2004; Marzano, Waters, & McNulty, 2005). With the introduction of No Child Left Behind (2001), principals were no longer considered managers but became classified as instructional leaders. This change lead to principals leading the school from the classroom rather than from behind a desk in their office (Leithwood et al., 2004). Leadership has become a shared role between principal and teacher rather than a dictated act from principal to constitute. In addition, research has provided evidence that principal characteristics and behaviors influence the efficacy of teachers (Ashton & Webb, 1986; Bandura, 1997; Ebmeier, 2003; Hipp, 1996; Hoy & Woolfolk, 1993; Marzano, Waters, &McNulty, 2005). Lumsden's (1998) research supports the concept of principal's fine tuning their interpersonal skills through building relationships with teachers and considering morale in all facets as they lead. The primary purpose of this study was to contribute to this area of literature by collecting data to correlate principal leadership practices to teacher sense of self-efficacy and the three sub-levels of efficacy: student engagement, instructional strategies, and classroom management.

The principal communicates expectations to all stakeholders, molding and shaping the atmosphere of the school. School leadership comes in second to effective instruction when determining the level of student achievement. Within the past seventy

years researchers have studied both behaviors and traits that led to various models of leadership style for educational models as well as corporate. Born from this work was McGregor's Theory X and Y leadership styles and J. M. Burn's transformational and transactional leadership (Molero et al. 2007).

This study focused on the leadership model of Kouzes and Posner (2002) which identified five leadership practices that have been correlated to educational leadership research and development. Kouzes and Posner's five practices (listed below) outline those behaviors effective leaders use to promote success both in the educational and organizational sense.

1. Model the Way,
2. Inspire a Shared Vision,
3. Challenge the Process,
4. Enable Others to Act, and
5. Encourage the Heart (Kouzes and Posner, 2007).

Leaders that model the way clearly demonstrate their expectations for their constituents. They define core values through their actions and by working closely with others. By seeing the potential in their organization and all those involved in it, leaders can begin to inspire a shared vision. Enabling others to understand that vision requires and outwardly commitment and confidence in the potential to reach it. Utilizing a variety of venues encourages followers to accept the vision as their own. Leaders must know the needs, wants and desires of followers to connect on an emotional level, simply talking about the vision does not satisfy the goal. Encouraging others to act requires leaders to

become trailblazers in their field. Forgoing the standard response with a sense of fearlessness in order to achieve the goal builds confidence in others. In addition they enlist all stakeholders to help design the pathway to success. Finally, effective leaders encourage the hearts of others by building relationships involving trust and self-confidence. Rather than give up when times get tough, constituents learn to problem solve and move forward. To build the emotional connection needed to accomplish this task, leaders showed appreciation for followers and celebrated in personal success as well as organizational success.

Summary of Procedures

Building off research by Kouzes and Posner (2007), the Leadership Practice Inventory (LPI – observer) was joined with the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy 2001) and administered through surveymonkey.com. Included in the survey was a brief demographic section that did not identify any specific school, district or teacher. Survey links were emailed to 427 classroom teachers in seven Kentucky counties: Breathitt, Clay, Floyd, Leslie, Letcher, Owsley, and Perry. A total of $N = 225$ responses were received back and data was keyed into IBM's SPSS for statically analysis. Results were then used to test each hypothesis in this study.

Statistically, additional mathematical procedures were needed to work through the issues of multicollinearity discovered in the data. Correlation coefficients, as seen in Table 19, were found to be greater than .9 signifying the relationship between leadership practices were near linear. Although there are multiple ways to address collinearity (delete variable, hierarchical multiple regression) those methods cannot be used because

of the nature of the study and the five leadership practices used comprise the leadership scale itself. The sample size could have been larger, however, research suggest 40 cases per predictor variable to obtain an adequate sample size (Green & Salkind, 2005). This would equate to a sample size of 200 given the 5 leadership practices. The obtained sample ($N = 225$) exceeds this value so it should suffice for this study.

Summary of Findings

The research methodology used in this study is primarily correlation. Descriptive analyses are present to identify the target population and the responses related to principal practices and efficacy ratings. The analysis of teacher efficacy identifies mean values for respondents and also mean values for each of the three sub-levels of teacher efficacy. 225 teachers responded to the survey reporting an average efficacy rating of 7.1835. Teachers' sense of efficacy in student engagement was the lowest sub-level recorded with a mean of 6.6572. Efficacy in classroom management was the highest with a mean of 7.5406. Efficacy in instructional practices recorded a mean of 7.3528.

The Leadership Practice Inventory (LPI) posed some concern when analyzing teacher responses. Although there was some variance in response data, a problem with multicollinearity kept the research from forging a comparison between leadership practice and teachers' sense of self-efficacy. LPI data did not produce a functional analysis of five leadership practices but instead yielded a collaborative response on exemplary leadership. Factor analysis showed that teachers in the Appalachian region of Eastern Kentucky taking part in the survey did not distinguish between principal

leadership practices but in general felt their principals showed positive leadership that promoted educational growth.

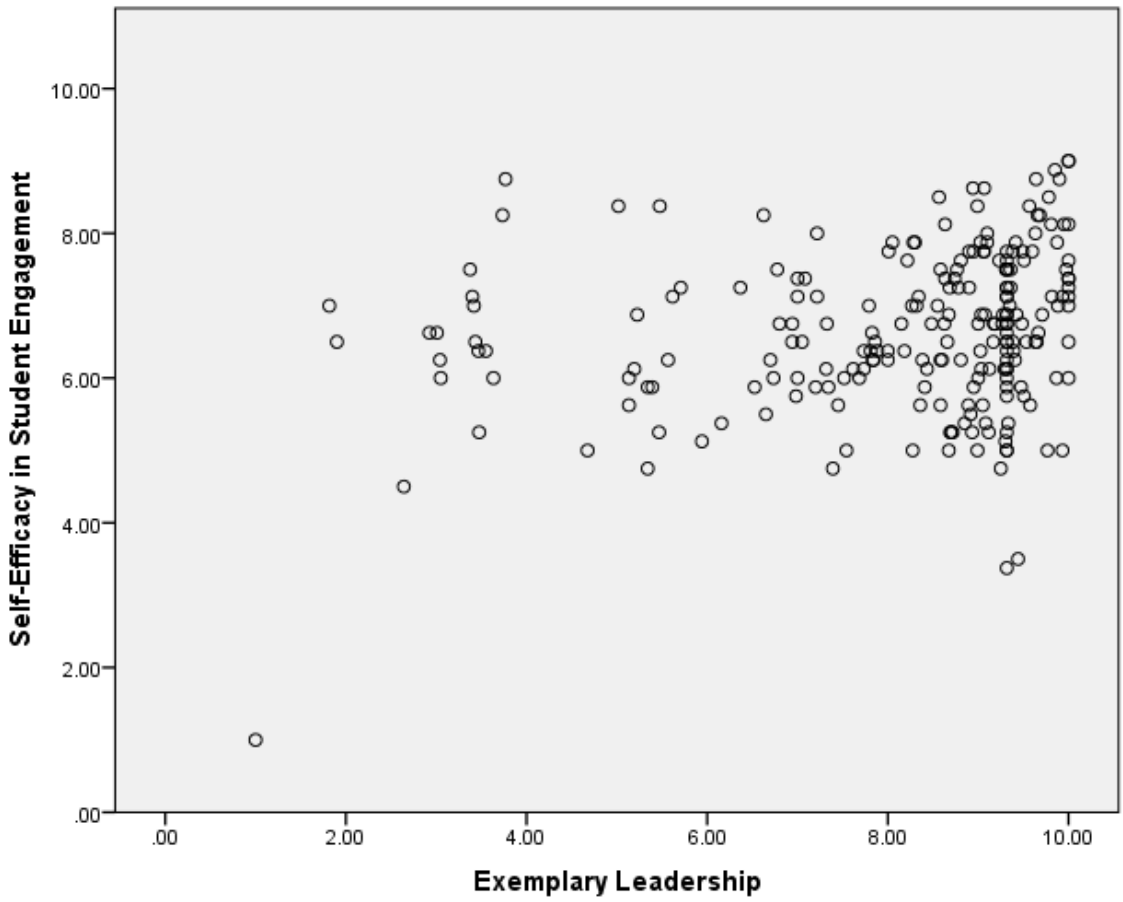
Given that the LPI measured exemplary leadership, it is important to show the relationship between exemplary leadership and teacher self-efficacy and the sub-domains of self-efficacy. Table 5.1 shows the correlational analysis of exemplary leadership and efficacy data.

Table 5.1. Correlation of Exemplary Leadership and Efficacy

		Student Engagement	Instructional Strategies	Classroom Management	Teacher Efficacy
Exemplary Leadership	Pearson Correlation	.221**	.164*	-.024	.145*
	Sig. (2-tailed)	.001	.014	.719	.030
	N	225	225	225	225

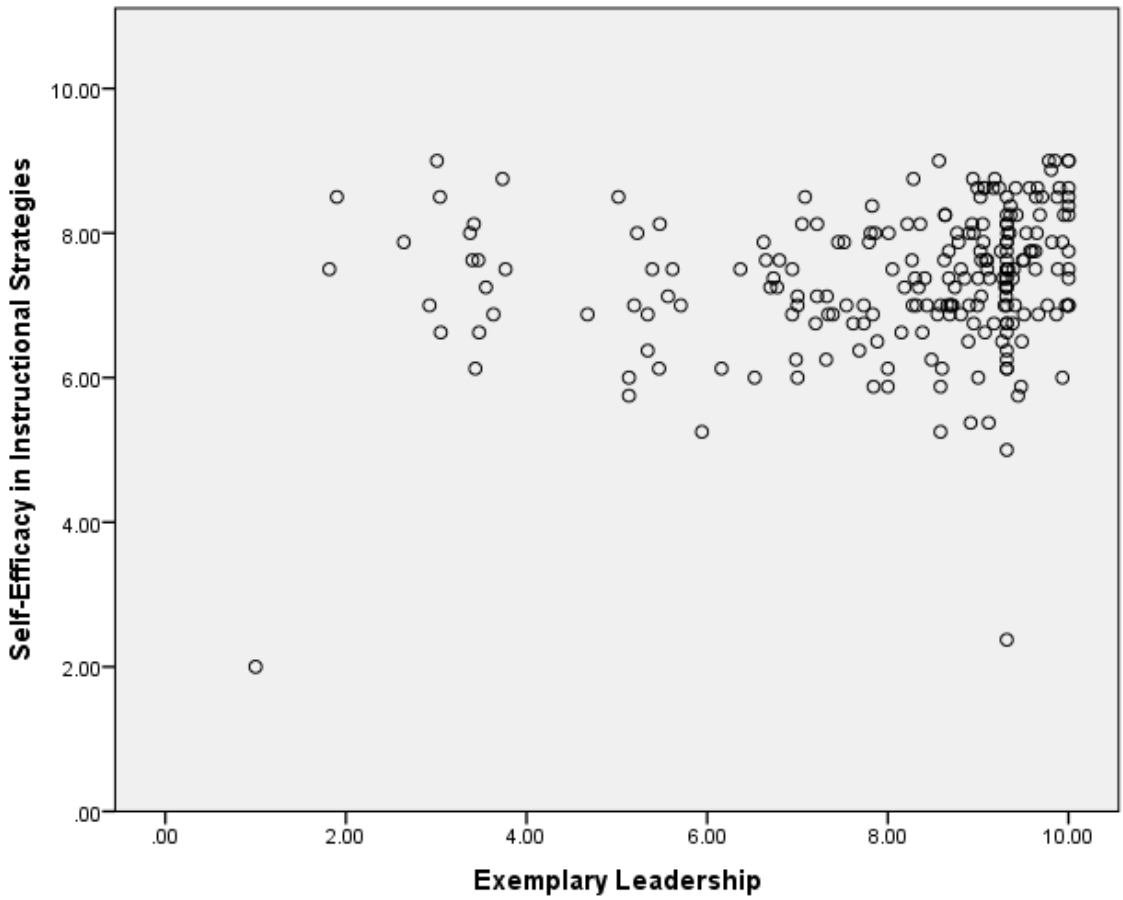
Correlation is significant at the 0.01 level (2-tailed) **
Correlation is significant at the 0.05 level (2-tailed) *

The Pearson correlation coefficient for all comparisons is relatively low ($R < .30$). Statistically arguments could be made for correlations between exemplary leadership and student engagement at the .01 level. However, by graphing the data the results show most responses are clustered at the high end of both survey instrument. Figures 5.1-5.3 show the cluster of leadership practices and teachers self-efficacy sub-domains. Each cluster pattern implies that teachers view principal leadership in a similar manner. This signifies a similarity in rankings but not necessarily a correlation of variables.



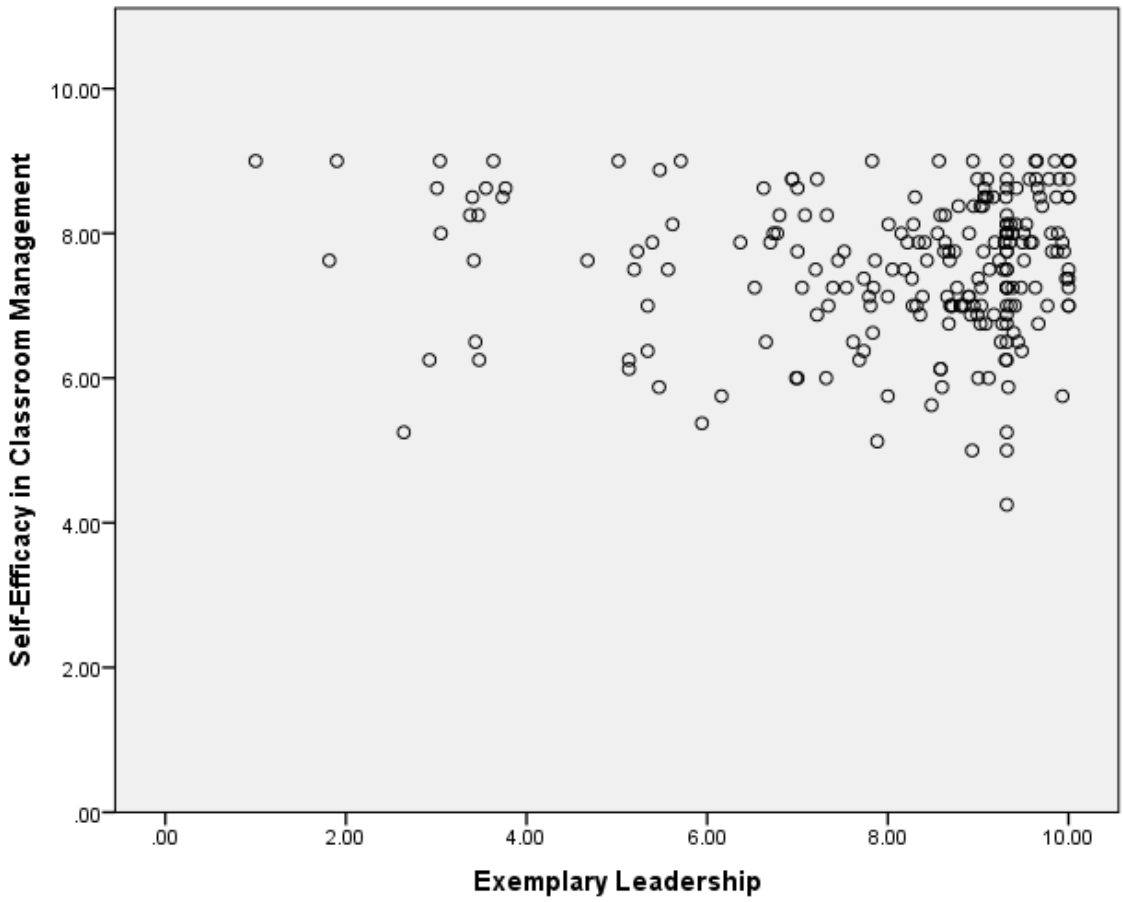
R = .221

Figure 5.1. Exemplary Leadership and Self-Efficacy in Student Engagement



R = .164

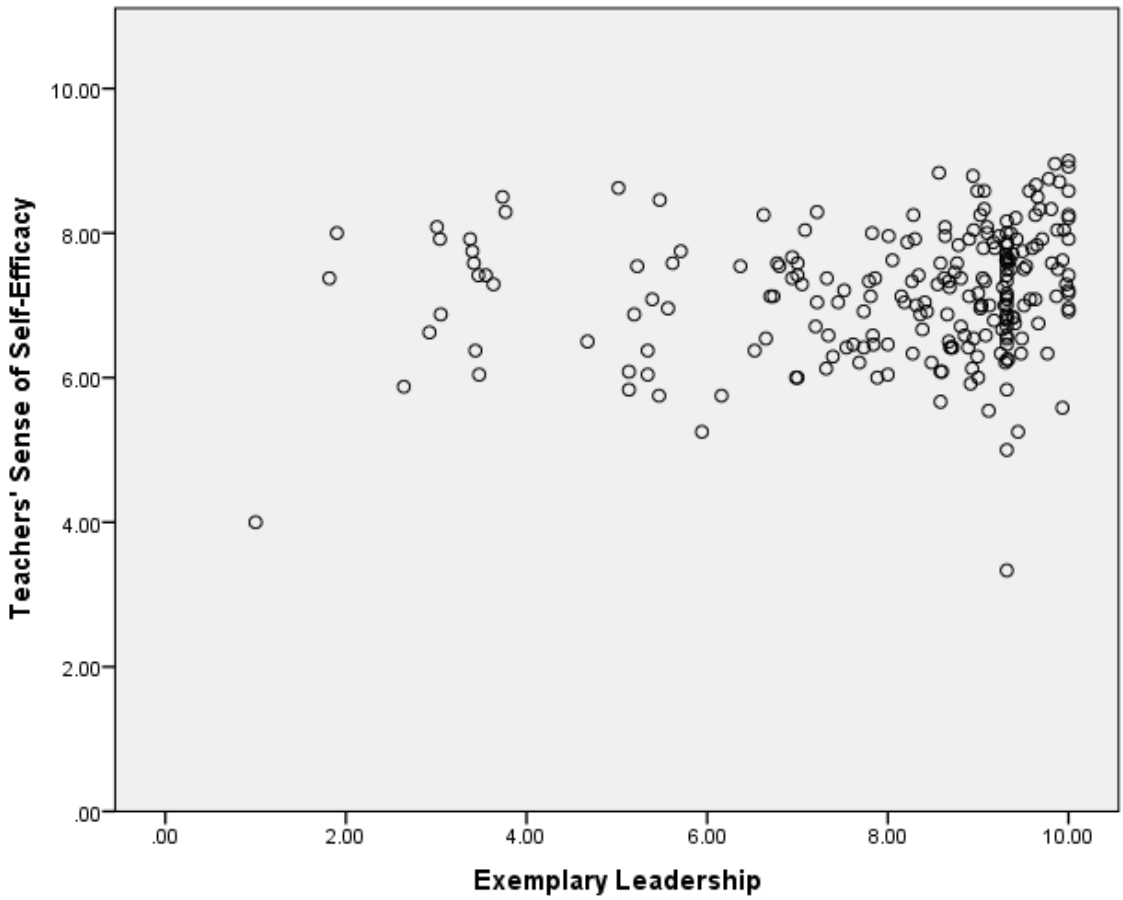
Figure 5.2. Exemplary Leadership and Self-Efficacy in Instructional Strategies



R = -.024

Figure 5.3. Exemplary Leadership and Self-Efficacy in Classroom Management

Additional analysis of figures 5.1-5.3 would suggest that some teachers hold a high degree of self-efficacy in a sub-domain regardless of their principal's level of leadership. Figure 5.4 shows the mean teachers' sense of self-efficacy in relation to exemplary leadership. This distribution reiterates that some teachers will have high levels of self-efficacy in opposition of any practice or lack of practice visible by the principal.



R= .145

Figure 5.4. Exemplary Leadership and Teachers' Sense of Self-Efficacy

The cluster patterns in Figure 5.4 would imply that when exemplary leadership is present then higher levels of teacher self-efficacy is also present. Figure 5.4 also makes a case for the implication that some teachers will have high self-efficacy given any level of leadership.

Implications

Research question one asked: What is the relationship between teacher perception of principal leadership practices and teacher self-efficacy? Based upon the findings from this study a relationship cannot be identified between the two factors.

Research question two asked: Which specific principal leadership practices predict overall teacher self-efficacy levels and the three factors that comprise it? Based upon the findings from this study a relationship cannot be identified between the two factors.

Failing to reject both null hypothesis is based on the high levels of collinearity between teacher responses to the LPI (Observer). Commonalities between responses suggest that teachers view principal leadership similarly in the Appalachian region of eastern Kentucky. Furthermore, principal leadership practices individually, grouped or as a whole, may or may not impact teachers' sense of self-efficacy. Findings suggest that teachers in the study perceive principals exhibit exemplary leadership practices more often than not in their respectful schools. This implies that direct principal leadership practice is viewed in a comparable manner among Appalachian teachers.

LPI Observations

The LPI has been developed using quantitative data from a field of managers and employee's in both the public and private sectors to identify the five leadership practices (Kouzes & Posner, 2002b). The LPI was tested using over 4000 men and women across the United States working in business and education. In the past 20 years, the development as usage of the LPI has tested over 350,000 managers and non-managers

effectively in leadership behaviors and practices. Studies have shown that individuals in a managerial position that model the five leadership practices consistently "create an environment that results in positive trends in employee job attitudes" (Bell-Roundtree, 2004). Loke's 2001 study of the validity of the LPI in leadership revealed a significant correlation between employee productivity, organizational commitment and job satisfaction and the manager's ability to use the leadership behaviors and practices measured by the LPI.

The LPI has been utilized in hundreds of studies over the years to assess a leader's effectiveness, however, there have been cases where the responses forced the researcher(s) to deal with issues of multicollinearity (Eisler, 2009; Shorter, 2012). Although this can be troubling for researchers, it can be expected that the leadership practices would be correlated as they are all measuring some aspect of leadership. A close look at each practice would argue that they all share a commonality in motivational leadership. Motivational leadership allows the leader to model and use strategies to get others to follow their vision for the company or school. Motivational leaders share common qualities that build a safe and trusting environment where the organization is positioned for success (Briel, 2013). Motivational leadership qualities include but are not limited to: honesty, communication, vision, courage and creativity. Motivational leaders are optimistic and have a confidence in their abilities and the abilities of constitutes. These qualities can arguably be compared to the five leadership practices found in the LPI. Challenge the Process, Inspire a Shared Vision, Enable Others to Act, Model the Way and Encourage the Heart all require the leader to build a relationship with those they work with that is grounded in the fundamental structure of motivational leadership.

Directional Efficacy

Evidence of multicollinearity in this study places greater focus on the teacher responses to the questions on the LPI (observer). Similar responses from all teachers in the study would imply that teachers are viewing principal leadership in a like manner. Referring back to Figures 5.1-5.4, the data shows teacher leadership is high even though not all responses to principal leadership or exemplary leadership were ranked high. This data would imply the existence of directional efficacy with respect to the teachers. In other words, the level of professionalism and work applied by the principal has no true effect on teacher self-efficacy levels for those teachers in the study. Teachers are implying that they have control of their self-efficacy levels whether a principal exhibits high levels of exemplary leadership or not. Future research could confirm or deny if this directional efficacy exist in terms of principal efficacy or exemplary leadership. Do principals excel in spite of teacher efficiency?

Recommendations

The research conducted in this study failed to identify any correlation between perceived principal leadership practices and teachers' sense of self-efficacy in teachers in Appalachia Kentucky. Results imply that teachers in Appalachia Kentucky view principal practices in a comparable fashion. Similarly principals in these locations may approach their job in a like manner due to related educational backgrounds. Future research needs to identify principal educational backgrounds to determine if principals in the Appalachian region of Kentucky attend the same programs at local universities that could skew results for this type of research.

A factor that often impacts teacher responses to survey questions is morale. Administrators have the ability to impact a teacher's satisfaction level through servant leadership (Cerit, 2009). Culturally, the rural construct pressures leaders to adopt the servant leadership style because of the needs of the community and the acceptance it brings to the job position (Stone & Patterson, 2005). Servant leadership places the organizational purpose, the needs of the organization, and the needs of the people over all others, including the needs of the leader themselves (Woodruff, 2004). Additional research would need to be conducted to determine if principals in this study had adopted the servant leadership style and what impact that had on teacher responses as it related to principal practices. Also, research suggests that servant leadership rests in the belief that goals will be achieved on a long-term basis once the needs of the individuals within the organization are met through personal connections and genuine concern of well-being (Stone et al., 2004). Initial success under servant leadership is usually seen when the followers exercise initiative and direct their own activities in a desirable fashion (Fields et al., 2006). Future studies could compare student achievement results under servant leadership principals from the selected counties and teacher efficacy scales to gain better insight on the responses received during this study's LPI survey.

Responses measured using the LPI identify direct practices that are visible to the teachers. Although the frequency of a leadership practice was not measured, the occurrence of the five practices as measured by the LPI were enough to yield comparable responses by all teachers that participated in the study. Future research should factor in school success on state assessments and how teachers at high performing schools rank

principals as opposed to those in low performing schools. These results could then be compared to teachers' sense of self efficacy scores.

Although this research did not distinguish between the direct leadership practices of principals, it did develop the notion that direct practices do not hold the greatest impact on teachers' sense of self-efficacy. An implied sense of indirect leadership qualities is apparent in the study. That is, the direct leadership practices of the principal does not hold the greatest impact on teacher's sense of self-efficacy as does the indirect leadership qualities of the principal. Future research needs to be conducted to confirm or deny this statement.

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APPENDIX A

SURVEY INSTRUMENTS

Survey Script

Dear Educator,

You are invited to participate in a research study being conducted for a dissertation through Eastern Kentucky University. The study asks that you take part in this brief survey, giving your opinion on your personal teaching beliefs. You will also be given the opportunity to answer questions about your principal's leadership traits. You were selected to participate in this study because of your geographic location and your experience as a teacher. Your participation is voluntary and all responses are completely anonymous. Data collected will be used solely for the purpose of this dissertation.

This survey consists of questions from the *Teachers' Sense of Efficacy Scale* and the *Leadership Practice Inventory* (Observer). By submitting your response you are giving your informed consent to use your responses for the purpose of this study. If you have any questions about the study or the nature of the questions in the survey please feel free to contact me by phone or email. Thank you for your time.

Sincerely,

Brandon Hibbard

brandon.hibbard@eku.edu

Phone: 606-847-4212

LEADERSHIP PRACTICES INVENTORY-(OBSERVER)
James M. Kouzes and Barry Z. Posner ©2003

Dear Principal,

Thank you for taking the time to complete this three-part survey; it should take you about 30 minutes to complete. Your participation is strictly voluntary. However, by participating, the information that you share will possibly help strengthen principal-teacher relationships. By submitting your responses you are giving you informed consent to use your responses for the purpose of this study. Your anonymity is important to the success of this project. Therefore, your responses will remain nameless and results will not be reported by school or district. Any questions or comments can be submitted to brandon.hibbard@eku.edu

Brandon Hibbard

DEMOGRAPHIC INFORMATION

Directions: Please complete the information in this section by clicking the appropriate radio button for your response.

Gender:
- o Male
- o Female

Race:
- o Caucasian
- o African-American
- o Asian
- o Spanish
- o Native-American
- o Other

Number of Years of Experience:
- o <5
- o 5-10
- o 11-15
- o >15

Grade Level(s) Taught:
- o K-5
- o 6-8
- o 9-12

Age:
- o 21-30
- o 31-40
- o 41-50
- o >50

II. LEADERSHIP PRACTICES INVENTORY-(OBSERVER)

James M. Kouzes and Barry Z. Posner ©2003

This part of the survey will give you an opportunity to express your opinion about your principal's primary leadership traits.

Directions: To what extent does your principal typically engage in the following behaviors? Choose the response number that best applies to each statement and record it in the box to the right of that statement. Please **do not** record your name on this document.

1 = Almost Never **2** = Rarely **3** = Seldom **4** = Once in a While **5** =Occasionally
6 = Sometimes **7** =Fairly Often **8** = Usually **9** = Very Frequently **10** = Always

#	Description	Rating
1	Sets a personal example of what he/she expects of others	
2	Talks about future trends that will influence how our work gets done	
3	Seeks out challenging opportunities that test his/her own skills and abilities	
4	Develops cooperative relationships among the people he/she work with	
5	Praises people for a job well done	
6	Spends time and energy making certain that the people he/she works with adhere to the principals and standards we have agreed on	
7	Describes a compelling image of what our future could be like	
8	Challenges people to try out new and innovative ways to do their work	
9	Actively listens to diverse points of view	
10	Makes it a point to let people know about his/her confidence in their abilities	
11	Follows through on the promises and commitments that he/she makes	
12	Appeals to others to share an exciting dream of the future	
13	Searches outside the formal boundaries of his/her organization for innovative ways to improve what we do	
14	Treats others with dignity and respect	
15	Makes sure that people are creatively rewarded for their contributions to the success of our projects	
16	Asks for feedback on how his/her actions affect other people's performance	
17	Shows others how their long-term interests can be realized by enlisting in a common vision	
18	Asks "what can we learn?" when things don't go as expected	
19	Supports the decisions that people make on their own	
20	Publicly recognizes people who exemplify commitment to shared values	
21	Builds consensus around a common set of values for running our organization	
22	Paints the "big picture" of what we aspire to accomplish	
23	Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on	
24	Gives people a great deal of freedom and choice in deciding how to do their work	

25	Finds ways to celebrate accomplishments	
26	Is clear about his/her philosophy of leadership	
27	Speaks with a genuine conviction about the higher meaning and purpose of our work	
28	Experiments and takes risks, even when there is a chance of failure	
29	Ensures that people grow in their jobs by learning new skills and developing themselves	
30	Gives the members of the team lots of appreciation and support for their contribution	

Teachers' Sense of Efficacy Scale[1] (long form)

Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	How much can you do? Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students ?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge student comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
17. How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students form ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

APPENDIX B

PERMISSION TO USE SURVEY INSTRUMENTS

THE OHIO STATE UNIVERSITY COLLEGE OF EDUCATION AND HUMAN ECOLOGY

ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear Brandon Hibbard,

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm

Best wishes in your work,

Anita Woolfolk Hoy

Anita Woolfolk Hoy, Ph.D.
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Permission to use LPI

Electronic message received November 4, 2014

Dear Brandon Hibbard,

This email represents official permission for you to use the LPI Self and/or Observer instruments in English to collect data for your research. You have paid the permissions fee to include the Self and/or Observer instruments in a questionnaire sent out through Survey Monkey or similar questionnaire site, combined with questions from the Teachers' Sense of Efficacy Scale. Please not that you must obtain separate permission to use other surveys outside of the LPI. In relation to the LPI, your questionnaire must be clear about which questions come from the LPI, and must include the appropriate copyright notice(s) from our publications. Our only other request is that you supply us with a copy of your final paper when it is completed.

Thank you for your interest in the Leadership Practices Inventory. Of course, please let me or Ryan Noll know if you have any questions or concerns.

Debbie

--
Debbie Notkin
Contracts Manager
Wiley
One Montgomery Tower – Suite 1200
San Francisco, CA 94104-4594
www.wiley.com
+1 415 782 3182

APPENDIX C

COPY OF IRB APPROVAL LETTER

EASTERN KENTUCKY UNIVERSITY
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Graduate Education and Research
Division of Sponsored Programs
Institutional Review Board

Jones 414, Coates CPO 20
521 Lancaster Avenue
Richmond, Kentucky 40475-3102
(859) 622-3636; Fax (859) 622-6610
http://www.sponsoredprograms.eku.edu

NOTICE OF IRB EXEMPTION STATUS
Protocol Number: 15-148
Institutional Review Board IRB00002836, DHHS FWA00003332

Principal Investigator: **Brandon Hibbard** Faculty Advisor: **Dr. Charles Hausman**

Project Title: **Teacher Perceptions of Principal Leadership Traits that Affect Teachers' Sense of Self-Efficacy**

Exemption Date: **1/30/2015**

Approved by: **Dr. Jonathan Gore, IRB Member**

This document confirms that the Institutional Review Board (IRB) has granted exempt status for the above referenced research project as outlined in the application submitted for IRB review with an immediate effective date. Exempt status means that your research is exempt from further review for a period of three years from the original notification date if no changes are made to the original protocol. If you plan to continue the project beyond three years, you are required to reapply for exemption.

Principal Investigator Responsibilities: It is the responsibility of the principal investigator to ensure that all investigators and staff associated with this study meet the training requirements for conducting research involving human subjects and follow the approved protocol.

Adverse Events: Any adverse or unexpected events that occur in conjunction with this study must be reported to the IRB within ten calendar days of the occurrence.

Changes to Approved Research Protocol: If changes to the approved research protocol become necessary, a description of those changes must be submitted for IRB review and approval prior to implementation. If the changes result in a change in your project's exempt status, you will be required to submit an application for expedited or full IRB review. Changes include, but are not limited to, those involving study personnel, subjects, and procedures.

Other Provisions of Approval, if applicable: None

Please contact Sponsored Programs at 859-622-3636 or send email to tiffany.hamblin@eku.edu or lisa.royalty@eku.edu with questions.

BRANDON LEE HIBBARD
brandon.hibbard@eku.edu

CAREER GOAL: My goal is to provide educational leadership to teachers and fellow administrators as we work together to develop new, cutting edge teaching philosophies while helping student reach their full potential. My hope is to one day share my educational experiences with teacher candidates and improve education training at the college level.

EDUCATION

Eastern Kentucky University, Richmond, KY
Doctoral Candidate, Ed.D, Educational Leadership & Policy Studies **2011-2016**
Dissertation: "TEACHER PERCEPTION OF PRINCIPAL LEADERSHIP PRACTICES: IMPACTING TEACHERS' SENSE OF SELF-EFFICACY IN RURAL APPALACHIA KENTUCKY"

Eastern Kentucky University, Richmond, KY
Director of Pupil Personnel and Superintendent Certificates **2014-2015**

Eastern Kentucky University, Richmond, KY
M.A in Mathematics **2010-2011**

Union College, Barbourville, KY
Masters in Leadership, Rank 1 Supervision **2005-2007**
Certified as Kentucky Principal

Morehead State University, Morehead, KY
Bachelor of Science **1996-2001**
Major: Mathematics
Minor: Physics
Secondary Teaching Certificate

Perry County Central High School, Hazard, KY
College Preparatory Diploma **1992-1996**
Clubs: Math Club, Physics Club, National Art Honor Society, Academic Team, Media Club, National Beta Club
Honors: Graduated top 10% (246 total students), Algebra Award, Geometry Award, Physics Award, Art Award, Most Trustworthy Student

PROGESSIONAL ORGANIZATIONS

EKU Honor Society	**2014**
Kentucky Association of School Administrators	**2013**
The Golden Key Society	**2012**
Phi Kappa Phi	**2011**
Honorary Kentucky Colonel	**2002**

GRANTS

MIT AddVantage Plus Math Grant - $48,000	**2015**
RTA Reading Grant - $55,000	**2015**
Wal-Mart Technology - $5,000	**2014**
Macy's Drama – Willie Wonka Production - $6,800	**2013**

PROFESSIONAL EXPERIENCE

Eastern Kentucky University, Manchester Extended Campus, KY
Mathematics: MAT 095, MAT 105 **2011- Present**

Oneida Elementary School, Oneida, KY
Principal **2012- Present**

Union College, Barbourville, KY **2010- 2013**
Contract Education Praxis Prep
Assignment: Assist Undergraduate Education majors prep and pass the Praxis.

Upward Bound - Hazard Community and Technical College **2007- 2011**
Math Instructor, Computers, Writing, College Transition
Five consecutive summers working in Perry and Breathitt Counties
Field Trip Chaperone

Perry County Central High School, Hazard, KY
Mathematics: Algebra2, Geometry, Advanced Math,
Discrete Math, Statistics, Chemistry **2001- 2012**
Committees: Attendance, School Improvement, School Culture, Technology, PLC Lead, School Finance, SBDM.
Extra-Curricular: Tennis, Soccer, Basketball, Academic Team, Wrestling Team, Beta Club,

Jackson Independent High School, Jackson, KY
Mathematics: Algebra 1, Algebra 2, Geometry, Pre-Calculus **Spring 2001**
(Student Teaching Experience)

PRESENTATIONS/PROFESSIONAL TALKS

"Teacher Perception of Principal Leadership Practices: Impacting Teachers' Sense of Self-efficacy In Rural Appalachia Kentucky"	**2016**
Supporting Teacher Efficacy – Galt House Louisville, KY	**2015**
CSIP Planning and Implementation – Hazard Community College	**2014**
TPGES Panel Guest Speaker – SESC Co-op Corbin, KY	**2014**
TPGES Student Voice – Clay County Middle School	**2014**
Taming Program Reviews - Hazard Community College	**2014**
"Changing the Attitudes of Students and Faculty Members to one of Positive Achievement" – Pulaski County High School	**2012**
Improving Math Awareness with Technology – Letcher Central	**2011**