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A Case Study

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Kelly M. Williams

May 2015

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Educational Leadership, self-efficacy, teacher leadership

ABSTRACT

Dynamics of Efficacy for Teachers in Formal Leadership Roles:

A Case Study

by

Kelly M. Williams

Effective leadership has a positive impact upon schools and student achievement. Teacher inclusion in leadership efforts has grown during a time of school reform. In order to sustain and define teacher leader responsibilities, efficacious teachers need to be supported by school and district administrators. A case study was used to understand the dynamics of self-efficacy as it pertains to teacher leaders in the Oak Ridge School District in Oak Ridge, Tennessee. Purposive sampling was used to select 5 teacher leaders and 2 district administrators for the case study. Interviews along with observations of meetings facilitated by teacher leaders allowed for inductive analysis of the phenomenon of self-efficacy for teachers in formal leadership roles.

Self-efficacy of teacher leaders can be nurtured through various structures, climates, and learning opportunities. School districts can purposefully design teacher leadership opportunities with a clearly defined vision for all stakeholders. The findings of the study support and extend the literature on the sources of self-efficacy. Attention to the sources of efficacy for teacher leaders could help administrators plan successful leadership opportunities and assists in retention for teacher leadership roles.

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DEDICATION

This dissertation is dedicated to my family. Travis, thank you for continuous support and encouragement during the most critical moments. Jackson and Gracie, you provide constant inspiration, motivation, and courage. Mom, thank you for listening. Sue, thank you for reading. I want to celebrate every goal I reach with you. This work is also dedicated in loving memory of my father who helped me believe I could accomplish anything.

ACKNOWLEDGMENTS

I am forever grateful for Sue Piper for her time and assistance. I would also like to acknowledge the teacher leaders working hard to make schools great. I am lucky to know so many teachers and leaders who make a difference in the lives of students. Thank you, Dr. William Flora, Dr. Bethany Flora, Dr. Scott, and Dr. Blankenship, for your guidance throughout this work.

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CHAPTER 1

INTRODUCTION

During a time of unprecedented educational reform school leaders have been given burdensome levels of responsibility in an effort to increase student achievement (Curtis, 2013). The role of a school principal has shifted from a building supervisor to a curriculum and instructional leader. Though it has existed for many years in successful organizations, the practice of identifying and leveraging talent within schools has been rarely used (Curtis, 2013). In the midst of great change many schools and districts have examined teacher leadership opportunities (Johnson & Donaldson, 2007). These opportunities provide much needed assistance for principals while also creating new avenues of advancement for teachers. With almost half of all new teachers exiting the profession within the first 5 years, it is critical to examine the constructs that promote teacher sustainability and success related to student achievement (Haynes, 2014).

Teacher leadership and efficacy are two constructs present in successful schools (Bandura, 2007; Marzano, Waters, & McNulty, 2005). Efficacy, or the belief in the capability to execute tasks successfully, is positively correlated to both teacher effectiveness and student achievement (Bandura, 1997). The focus of teacher leadership research has been largely qualitative and focused on dynamics, characteristics, and conditions surrounding successful teacher leaders (York-Barr & Duke, 2004). Teacher leaders often emerge through informal group dynamics in schools (Riveros, Newton, & Costa, 2013). The teacher leaders often exhibit characteristics similar to those found in teachers with high efficacy. With new evaluation methods linked to Common Core State Standards and outcome-based measures, a clearer method of distinguishing teacher effectiveness is emerging (Curtis, 2013). Schools may benefit by using new methods of teacher evaluation for the identification of teacher leaders. Building capacity by utilizing teachers with high levels of efficacy could have a positive effect on student achievement. The implications of strategically empowering the most efficacious teachers through school leadership roles potentially increase collective efficacy within the school and could ultimately lead to student achievement.

Teacher leaders serve as mentors and provide valuable guidance in collaborative planning and learning structures (Crowther, Kaagan, Ferguson, & Hann, 2000; Johnson & Donaldson, 2007). Teacher leaders often lead professional learning communities that prioritize data-based instructional decision making and focused goal setting (Curtis, 2013). Many districts in Tennessee created teacher leadership roles in response to the state mandate for differentiated pay plans (TDOE, 2014). If leadership contributes to increased teacher efficacy and teacher efficacy is related to improved student achievement, then further study and support for teacher leadership roles should be examined.

Effective school leadership has a positive impact on student achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Marzano et al., 2005; Murphy & Hallinger, 1988). School leadership studies are focused primarily on principal efficacy, and there has been less focus on the teacher as a school leader (Johnson & Donaldson, 2007). Efficacious principals raise expectations for teachers and students (Tschannen-Moran & Gareis, 2004). Principal efficacy has also been linked to improvement of school-wide practices that promote student achievement (Bandura, 1997; Tschannen-Moran & Gareis, 2004). As more teachers move into formalized leadership roles, it will be important to determine whether teacher leaders have the same impact as efficacious principals.

Self-efficacy of teachers has a stronger correlation to student achievement than socioeconomic status (Hoy, Tarter, & Hoy 2006). Self-efficacy refers to beliefs in the capabilities to execute the courses of action required to attain desired goals (Bandura, 1986). This construct has a strong correlation to student achievement (Henson, 2001; Goddard, Hoy, & Hoy, 2000; Pajares, 1997). Observation of the roles in which strong teacher efficacy is present contributes to the current field of research and provides avenues for future research on how to strengthen teacher efficacy.

Conceptual Framework of the Study

A conceptual framework was developed to delineate variables and direct operational definitions of concepts within the study (Svinicki, 2010). The framework includes constructs believed to impact teachers' sense of efficacy in formal teacher leadership roles. The framework is derived from the theoretical perspective of Bandura's (1989) Social Cognitive Theory and Triadic Reciprocal Causation Model. Social Cognitive Theory posits that learning occurs through observation of others followed by practice and feedback (Bandura, 1986). Bandura further asserts that there are complex interactions between internal factors, environment, and behavior; the interactions of these areas established the Triadic Reciprocal Causation Model (Figure 1). The constant interaction in the Triadic Reciprocal Causation Model helps to explain the complex influences of environment, behavior, and internal factors on human

behavior (Bandura, 1986). These complex interactions that influence behavior are fundamental to assumptions driving Bandura's studies of self-efficacy.

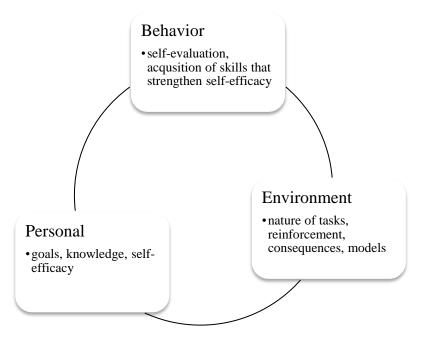


Figure 1. Triadic Reciprocal Causation Model. Adapted from Bandura (1986).

Self-efficacy is one of the internal factors that shapes learning and decision making in Triadic Reciprocal Causation (Bandura, 1989). Bandura's (1997) work highlighted the notion that skills along with the belief in one's ability to use skills well are needed for competency and motivation. Self-efficacy of teachers is important because it provides a framework for understanding both motivation and learning. Self-efficacy allows for motivation and learning even when negative reinforcement exists. This can explain why teachers continue to work in unfavorable conditions. It is also important because of the identified relationship between teacher self-efficacy and student academic achievement (Ashton, 1984). Bandura (1986, 1997) identified four sources of self-efficacy. An individual's selfefficacy will vary according to past experiences, vicarious experiences, social persuasion, and emotional/physiological impacts (Goddard et al., 2000). An understanding of sources of efficacy could provide fundamental constructs from which meaningful professional training opportunities could be developed for teacher leaders.

Past experiences included the successes and failures an individual has experienced. Access to success is critical in the development of strong self-efficacy (Bandura, 1997). Therefore, teachers who experience success in leadership expereience tend to develop a stronger belief in their own abilities. Conversely, experiences where teachers percieve their leadership performance as a failure have lower levels of efficacy. In a classroom where a teacher cannot manage behavior, the perceived failure will results in lowering the teacher's sense of efficacy. The resulting lower effecacy can decrease motiviation and confidence, not only in the teacher's ability to manage classroom behavior, but to become successful in other areas of teaching as well. Mastery experiences (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998), or tasks that were more easily mastered, strengthened self-efficacy. Bandura (1986, 1997), predicted that mastery expereinces provided the strongest source of efficacy. For teacher leaders past experiences derive from actual leadership opportunities with other teachers. Critical to the development of teacher leaders is establishing opportunities to experience successful leadership. The quality and quantity of these opportunities will vary among schools and districts.

Vicarious experiences resulting form the observation of others can directly influence efficacy (Bandura, 1997). Vicarious experience as a category of experience influencing effacy is important but not as strong as the impact of individual prior experience (Bandura, 1997). Despite this, it is important for individuals to have opportunities to observe successful leadership while developing a personal baseline for understanding and evaluating their own behaviors. "People must evaluate their performances in relation to the the attainments of others" (Bandura, 1991, p.250). Tschannen-Moran et al. (1998) found that, "the impact of the modeled performance on the observer's efficacy beliefs depends on the degree to which the observer identifies with the model" (p. 4). Vicarious experiences for teacher leaders are obtained through professional development, team meetings, and observation of their school and district administrators.

Social persuasion was a source of efficacy derived from feedback from others. It is a form of interpersonal support. Personal feedback can strengthen or weaken efficacy beliefs (Bandura, 1997). Separate from direct, personal evaluative feedback, educational oportunities such as workshops, motivational speeches, mastery experiences, and leadership dialogue exemplify other sources of social persuasion. Educational environments are filled with complex relationship structures from subordinate/ superordinate interactions to collegial interactions and other workplace relationships. As a result of these varying structures, teacher leadership growth opportunities through social persuasion must be carefully structured so that developing leaders have a strong foundation for the establishment of high levels of efficacy attainment.

Finally, emotional impacts, or physiological states, provide cues that affect the human body and efficacy (Bandura, 1997). Stress, anxiety, and the ability to tolerate change are examples of affective states that increase or decrease efficacy. "Self-knowledge provides direction for self-regulatory control" (Bandura, 1991, p. 253). Past experiences can also play an important role in influencing emotional/physiologial states. "Attaining a goal results in self-approval and thus stimulates further goal-directed effort." (Ewart, 1991, p. 933) The sources of efficacy can act in a reciprocal nature to reinforce either postive or negative efficacy beliefs.

This study I seek to gain a greater understanding of the sources of efficacy present in teacher leadership. A review of the literature supports the importance of efficacy in teaching and a leader's ability to build efficacy in a school. Exploring the perceptions of teacher leadership experiences in a formal teacher leadership role will assist in identifying the sources of efficacy that are specifc to teacher leadership. This understanding will provide a clear foundation for the development of highly efficacious teacher leaders. The self-efficacy model (adpated from Bandura, 1997) in Figure 2 illustrates variables within the four sources of efficacy that contribute to teacher leader efficacy.

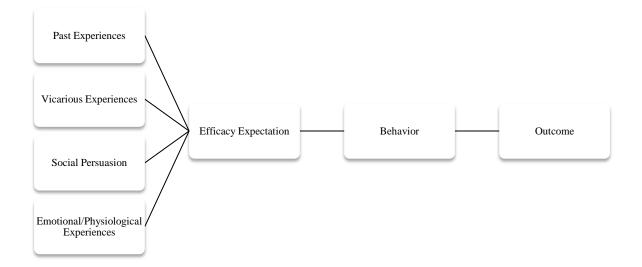


Figure 2.Self-efficacy Model. Adapted from Bandura (1997).

Statement of the Problem

Teacher leaders face obstacles such as ambiguous job descriptions, lack of adequate support from administrators, and short-term funding (Johnson & Donaldson, 2007). Without research to document successful teacher leadership and reinforce the importance of efficacious leaders, funding and administrative support for formalized teacher leader positions will be hindered. There is a significant positive correlation between teacher-efficacy and student achievement, which is why it is important to find ways to build capacity of the most efficacious teachers (Ashton, 1984; Marzano et al., 2005). Teachers in schools that exhibit high collective efficacy believe that students can achieve despite environmental factors, increased federal mandates, and other perceived impediments to learning. These teachers show increased resilience, persistence, preparation, and personal responsibility when analyzing achievement data (Ashton, 1984). They are not easily discouraged by setbacks (Henson, 2001). The task of developing and supporting collective efficacy falls on teacher trainers and school leaders. Identifying practices that support teacher-efficacy and collective efficacy will help administrators build teacher leader capacity and lead to greater student achievement in schools (Goddard et al., 2004; Tschannen-Moran & Gareis, 2004).

Statement of Purpose

The purpose of this case study is to understand the dynamics of self-efficacy as it pertains to teacher leaders in the Oak Ridge, TN school system. For the purpose of the study selfefficacy is defined as the belief in the capability to execute tasks successfully (Bandura, 1997), and the sources of self-efficacy include past experiences, vicarious experiences, social persuasion, and emotional/physiological impacts (Goddard et al., 2000).

Research Questions

- 1. What are the experiential sources of self-efficacy for teacher leaders?
- 2. What external dynamics contribute to the self-efficacy of teacher leaders?
- 3. How do teacher leaders describe the internal dynamics that contribute to self-efficacy?

Significance of Study

School divisions are working to formalize teacher leadership roles for the purposes of developing talent, assisting weak teachers, implementing change effectively, training through principal internships, retaining teachers, increasing effective teacher impact, and distributing principal responsibilities (Curtis, 2013). Teacher leadership has positive effects on student

achievement (Crowther, Kaagen, Ferguson, & Hann, 2000). This study broadens the research on teacher efficacy by focusing specifically on teacher leaders. This study extends the research on teacher leadership and provides support for continued development of formalized teacher leadership positions.

In an effort to improve student achievement outcomes, an increasing number of formalized teacher leadership roles have been established (Johnson & Donaldson, 2007; Pearce & Sims, 2001). Selecting teachers for formalized school leadership opportunities requires a thoughtful process (Johnson & Donaldson, 2007). Teacher traits that link to student achievement have been evaluated during the accountability movement that currently defines schools (Johnson & Donaldson, 2007). In an effort to support formalized teacher leadership opportunities and to increase capacity building for teacher leaders, a case study methodology has been used to examine the self-efficacy beliefs of teacher leaders at the Oak Ridge School District in Oak Ridge, Tennessee.

Identifying teacher leader attributes that lead to student achievement is important to the body of knowledge pertaining to teacher leadership. Curtis (2013) states, "The promise lies in defining the processes that are most critical to student learning and then designing teacher leadership in service of them, rather than defining teacher leadership roles first and then figuring out how they can support the most important work. Form must follow function" (p. 8). Bandura (1997) indicated the importance of self-efficacy and collective efficacy in relation to student achievement. Teachers that perceived themselves as highly efficacious had students with significantly higher achievement scores (Henson, 2001). The same positive relationship is true of collective efficacy and academic achievement. In schools with higher collective efficacy, student achievement is also higher (Myers, Feltz, & Short, 2004). It is therefore logical that the efficacy of teacher leaders is an important construct for analysis when building teacher leadership initiatives or attempting to address the teacher and collective efficacy in a school.

Scope of the Study

This case study included Oak Ridge teacher leaders in Oak Ridge, Tennessee. The use of case study was selected because it can be designed to "contribute to theory, practice, policy, and social issues and action" (McMillan & Schumacher, 2010 p.325). The Oak Ridge School District includes eight schools; one high school, two middle schools, four elementary schools, and one alternative school. There are 411 teachers in the Oak Ridge School district. Of those teachers, 30 have been selected as teacher leaders by school principals. Oak Ridge teacher leaders operate in a formal leadership role, that includes professional development training specific to professional learning communities (PLC), Science, Technology, Engineering, and Math (STEM), or school data. In addition to a stipend, teacher leaders receive 2 days per month of substitute coverage for collaboration and training in their school sites. Teacher leaders are expected to meet monthly to collaborate on topics such as effective coaching and leadership. The amount of time in training and collaboration, the levels of autonomy granted, and the stipends allow for results transferable to teacher leaders with similar conditions.

Definition of Terms

The following terms are provided in relation to the study of efficacy and teacher leadership:

- Self-efficacy: The beliefs in one's capabilities to execute the courses of action required to produce goals (Bandura, 1986).
- 2. Teacher efficacy: The beliefs [about actions that affect student achievement] that are specific to teaching tasks (Woolfolk & Hoy, 1990).
- Teacher leader: A teacher who influences colleagues, principals, and other members of the school community to improve teaching and learning practices with the aim of increasing student learning and achievement (York-Barr & Duke, 2004).
- 4. Professional Learning Community (PLC) Leader: Teacher leaders who work with school teams to facilitate common assessments, the analysis of classroom data, and group or individual goal setting related to student achievement.
- 5. Science, Engineering, Technology, and Math (STEM) Leader: Teacher leaders who work within their schools to assist teachers with the inclusion of STEM activities and learning in all subject areas.
- 6. Data Leader: Teacher leaders who assist teachers by organizing and informing teachers of data that should be used for curriculum planning and goal-setting.

Overview of the Study

This qualitative case study is focused on the perceptions of self-efficacy of teacher leaders. This study is organized by chapters. In Chapter 1 efficacy and teacher leadership is introduced in an overview, followed by statement of the problem, research questions, definitions, and significance of the study. Chapter 2 is a review of pertinent literature. Topics in the literature review include self-efficacy, teacher efficacy, and teacher leadership. Chapter 3 is a presentation of the design of the study, the participants of the study, and the data collection methodology. Chapter 4 is a presentation of teacher leaders' perceptions of self-efficacy and data analysis. Chapter 5 is a presentation of findings, conclusions, and recommendations for future research.

CHAPTER 2

REVIEW OF LITERATURE

The teacher leader as a model of shared or distributed leadership has been noted increasingly in educational research as the demands on administrators have increased with numerous accountability measures (DeFour & Eaker, 1998; Fullan, 2008; Greenlee, 2007). Because teacher effectiveness is predictive of student academic achievement (Sanders & Horn, 1998; Stronge, 2002), it is essential to build the capacity of efficacious classroom teachers. As high-stakes testing and data-driven educational trends continue to expand in the United States, information related to tools that will increase both student and school achievement becomes more valuable. Teacher leadership not only provides a pathway for increasing teacher effectiveness but also provides assistance to school principals under pressure from increasing accountability demands (Greenlee, 2007; Keedy & Finch, 1994). Teacher leaders have emerged through informal channels while engaging in collaborative planning and learning, professional learning communities, and focused goal-setting (Curtis, 2013; Riveros et al. 2013). New teacher evaluation models that identify teacher effectiveness, along with increasing administrative demands, have provided increasing opportunities for formalized teacher leadership roles (Riveros et al., 2013). Continued research in the specific constructs and habits that lead to successful and effective teacher leaders will assist in formalizing teacher leadership roles. As the most effective teachers build capacity in schools through formalized leadership roles, students will benefit academically from more teachers with high levels of efficacy (Bandura, 1986).

A teacher's sense of efficacy has powerful effects on students (Henson, 2001). Selfefficacy refers to beliefs in one's abilities to successfully attain goals (Bandura, 1986). Selfefficacy is:

Accompanied by a set of skills that include the ability to; Identify long- and short-term aspirations that are personally meaningful and that contribute to one's sense of wellbeing. Set concrete long- and short-term goals relative to one's aspirations. Monitor progress toward long- and short-term goals and revise actions or goals as needed. Identify, monitor, and change personal beliefs and habits that are impediments to successfully completing one's goals (Marzano, 2012, p.86).

A teacher's efficacy is shaped by past experiences, interactions with colleagues and administrators, their perception of other successful teachers, and the school culture (Hanson, 2001). An efficacious teacher can influence school culture by sharing successful experiences just as school culture is a reciprocal component of building or diminishing a teacher's sense of efficacy (Hoy, 2014).

This review of literature is divided into sections about the study of self-efficacy from social cognitive beginnings to current understandings of teaching efficacy. Also addressed are the instruments that researchers have developed to measure efficacy and research-based outcomes from the study of efficacy related to schools. Information pertaining to efficacy and teacher leadership is covered in the final section.

Theoretical Foundations of Social Cognitive Theory

Research that preceded studies on teacher efficacy and student achievement was grounded in Social Cognitive Theory (Pajares, 1997). Behaviorist and psychoanalytical theorists studied imitative behaviors in the early 1940s (Pajaras, 1997). These initial studies provided early theories of learning and motivation. While Rotter's work focused on an individual's perception of what can and cannot be controlled, Bandura's social cognitive theories addressed human agency or "intentional pursuit of courses of action" (Henson, 2001, p.5). These studies laid the foundation for social learning theory, the origin of the construct of efficacy was established.

Both Rotter and Bandura provided work that developed into the study of self-efficacy and teacher efficacy. With the study of Locus of Control, Rotter presented the assumption that student learning and motivation reinforce teacher actions (Rotter, 1990). A Locus of Control has to do with a people's beliefs in the way their actions affect their outcomes. Locus of control provided an avenue to analyze the relationships between human actions and outcomes (Goddard et al., 2000). An internal control orientation leads a person to believe that the outcome of actions is contingent upon personal actions taken. Conversely, an external control orientation holds that events outside of a person's control dictate actions and outcomes. Rand studies, based on Rotter's theory, provided the first measure of teacher efficacy when they evaluated teacher beliefs of control over the reinforcement of their actions (Henson, 2001). Bandura's (1997) self-efficacy construct differed from Rotter's theory because a single influence such as external reinforcement, internal motivators, or biological factors was not sufficient for examining human

actions. Bandura concluded that a combination would be necessary for analyzing social learning. Bandura further clarified the difference in locus of control and his self-efficacy construct, "beliefs about one's capability to produce certain actions are not the same as beliefs about whether actions affect outcomes" (Goddard et al., 2000, p. 481). Bandura's (1986) work to define efficacy emphasized the importance of the interactions between environment, behavior, and personal factors.

Social Cognitive Theory

Social cognitive theory was a model developed to describe the acquisition of social behaviors (Bandura, 1986). Social cognitive theory emphasizes action, forethought, intention, and choice when describing human experience (Bandura, 1986). Within social cognitive theory, Bandura (1997) described agency as the intentional actions taken toward an end. The features of agency, self-regulation, intention, reflectiveness, and forethought, allow for free will and choice despite environmental or personal demands. Self-regulation involved the adjustment of actions based upon negative or positive feedback. Intention explained how people can, "exert some influence over their life course by their selection of environments and construction on environments" (Bandura, 1986, p. 1178). Reflectiveness allowed for personal goal setting based upon previous experiences. Forethought regulated purposive human behavior, "People anticipate the likely consequences of their prospective actions they set goals for themselves, and they plan courses of action likely to produce desired outcomes" (Bandura, 1986, p. 1179). Agency required intentionality toward outcomes directed by actions. It also required the ability to act or choose in

spite of influences that would call for a different outcome (Bandura, 1986). The notion of predetermined events could not be supported by agency.

Bandura's (1997) model of Triadic Reciprocal Causation proposed that environment, behavior, and personal internal factors worked simultaneously to impact the choices and actions made by individuals. Environmental influences include those that are out of a person's control (Bandura, 1986). Behavior influences are motivators from prior experiences that shape actions and choices, and personal internal factors including cognitive, affective, and biological events (Goddard et al., 2000). Personal internal factors include agency, self-efficacy, and knowledge. The study of teacher efficacy is built upon this foundational model of human behavior. Research about the multiple influences on human behavior led to further inquiry and the establishment of the construct of efficacy (Pajares, 2002).

Self-Efficacy

As Bandura narrowed the focus of his study in social cognitive theory, self-efficacy became the tool for analyzing human behavioral changes and the effects of those changes. "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p.3). The amount of selfefficacy that a person had when attempting a task determined the amount of effort that an individual would put forth (Bandura, 1997). Self-efficacy affects persistence, resilience, and stress while coping with demanding situations (Goddard et al., 2000). Self-efficacy provides a framework for understanding learning that takes place even in unsuccessful circumstances or following negative reinforcement. It described the amount of control individuals believed they had over their environment, and the ability to initiate change further magnifying the simultaneous effects of cognition, behavior, and environment on human behavior (Pajaras, 1996). It is important to note that self-efficacy differs from self-esteem and self-worth in that it is predictive of human behavior, thus a worthwhile construct for guiding research (Egger, 2006). A movement toward motivational studies grew from the research surrounding self-efficacy (Pajares, 2002). Bandura wrote, "Efficacy expectations are a major determinant of people's choices of activities, how much effort they will expend, and how long they will sustain effort in dealing with stressful situations" (1997, p 194).

As the study of self-efficacy advanced, the realization that self-efficacy was situationally dependent emerged. Efficacy levels changed as individuals encountered different tasks at various times. For example, a person could have high levels of efficacy for engaging in a sport and simultaneously have low levels of efficacy for emotional regulation while engaging in the sport. Contextual relationship has been an important part of the studies conducted with a focus on teacher efficacy. Tschannen-Moran and Hoy (2001) found that teacher efficacy was also context-dependent and that teachers could exhibit different levels of efficacy about their own teaching abilities and their general beliefs of teaching. Based upon this research, it is important to consider the leadership situation for teacher leaders. Efficacious classroom teachers do not always make efficacious teacher leaders (Greenlee, 2007). While teachers may be highly efficacious in the classroom, they are often not given enough leadership training or a defined leadership role that could help to promote the efficacious teacher's capacity (Greenlee, 2007).

Sources of Self-efficacy

Bandura (1986, 1997) identified four sources of self-efficacy. An individual's selfefficacy will vary according to past experiences, vicarious experiences, social persuasion, and emotional/physiological impacts (Goddard et al., 2000). Past experiences included the successes and failures that an individual experienced. Past experiences influence in a reciprocal nature to strengthen or weaken self-efficacy perceptions. Mastery experiences (Tschannen-Moran et al., 1998), or tasks that were more easily mastered, strengthened self-efficacy. Therefore, access to success is critical in the development of strong self-efficacy. If teachers have been successful in a particular area in the past, they are likely to believe that they will be successful in that same area in the future. Experiences where teachers percieve their leadership performace as a failure lower levels of efficacy. Bandura (1986, 1997), predicted that mastery experiences provided the strongest source of efficacy. For teacher leaders, past experiences derive from actual leadership opportunities with other teachers. The sources of efficacy could come from mastery experiences as they lead professional learning communities or mentor new teachers (Curtis 201; Greenlee, 2007). Teacher leaders could also draw upon successful classroom outcomes as a source of efficacy. Teachers' beliefs in their strengths as a classroom teacher motivate them to lead other teachers toward similar classroom success.

Vicarious experiences, identified as successes experienced through the observation of others, influenced efficacy levels in teachers (Bandura, 1997). After observing similar models individuals made judgements about their own capabilities for performance. The vicarious experience has a greater impact if the observing individual can relate to the model. Vicarious

experiences that build efficacy illustrated the importance of postive success models. "People must evaluate their performances in relation to the the attainments of others" (Bandura, 1991, p. 255). Tschannen-Moran et al. (1998) found that, "the impact of the modeled performance on the observer's efficacy beliefs depends on the degree to which the observer identifies with the model" (p. 4). Vicarious experiences for teacher leaders are obtained through observation of professional development presentations, workshops, and team meetings. Administrative and faculty support are also important sources of efficacy in successful teacher leadership models (Curtis, 2013). The opportunity to observe principals, heads of department, or team leaders as they address school concerns provide experiences from which teachers learn (Muijs & Harris, 2003). Vicarous learning occurs when teacher leaders have opportunities to collaborate and reflect together.

Social persuasion is a source of efficacy derived from feedback from others. It is a form of interpersonal support. Both verbal and nonverbal feedback strengthened or weakened efficacy beliefs (Bandura, 1997). Credibility of the persuader is an important factor. If there is little credibility in an individual, self-efficacy is less likely to be affected by the individual's persuasive techniques. Educational oportunities, administrative support, and motivational speeches from administrators, colleagues, and other educational professionals served as examples of sources that strengthen or weaken efficacy. Awareness of high expectations, or the lack of expectations, can also strengthen or weaken self-efficacy through social persuasion. Feedback that administrators give in connection with formal evaluation is an example of the type of feedback that can affect efficacy. Social persuasion can also come from collaboration following mastery experiences. An understanding of the possible sources of efficacy that impact the beliefs of teacher leaders could provide guidance in establishing ideal traning and settings for successful teacher leaders (Pajares, 1997).

Emotional impact, or physiological states, provide cues that affect the human body and efficacy (Bandura, 1997). Stress, anxiety, and the ability to tolerate change are examples of affective states that increase or decrease efficacy. The amount of control percieved by an indivdual during stressful times of change contributes to emotional impact that shapes efficacy. Extreme neverousness could send the type of physiological cues that lower perceptions of self-efficacy. Teachers who can anticipate problems and regulate their emotions and reactions to problems percieve change in positive terms and are less likely to experience lower efficacy in the face of change. Bandura stated, "self-knowledge provides direction for self-regulatory control" (1991, p. 268). Ewart found that "attaining a goal results in self-approval and thus stumulates further goal-directed effort" (1991, p. 939). Past experiences can also play an important role in influencing emotional/physiologial states. The sources of efficacy constantly act in a reciprocal nature to reinforce either postive or negative efficacy beliefs.

Identifing sources of self-efficacy has contributed important information to the teaching profession and to social cognitive theoriests. The contextual dependence of self-efficacy suggests that the specific sources of efficacy be explored in relation to teacher leaders. This leadership-specific information can potentially assist in defining teacher leader responsibilities in ways that will maximize capacity of leadership expertise. Parjaras (1997) reccomends that, "researchers will also need to examine how information from these different sources are integrated in the formation of effiacacy judgments" (p. 1). Optimal learning and teaching environments could be analyzed throughout the sources of leadership efficacy to not only train future leaders but sustain and support teacher leaders.

Teacher Efficacy

Teacher efficacy encompasses the efficacious beliefs that are specific to teaching tasks and actions. Woolfolk and Hoy (1990) described an efficacious teacher as one who believes that all students can learn in spite of negative influences. Teachers with strong efficacy believe that they successfully impacted student achievement (Woolfolk & Hoy, 1990). Previous studies have shown that:

Efficacious teachers persist with struggling students and criticize less after incorrect student answers. They are more likely to agree that low SES [Socio-Economic Status] students should be placed in a regular education setting and less likely to refer students for special education (Henson, 2001, p 5).

Henson (2001) found that efficacy impacts teaching methods, the likelihood of experimentation with instructional materials, and a higher professional commitment. Bangs and Frost (2012) report that, "a teacher with strong beliefs in his or her own efficacy will be resilient, able to solve problems, and most importantly, learn from their experiences" (p. 3).

The first studies of teacher efficacy were organized by the RAND Corporation in the 1970s, and they followed Rotter's inquiry into internal and external control (Rotter, 1990). Student motivation and learning were believed to be the primary reinforcement for teaching actions (Pajares, 1997). Bandura's research shifted the focus of teacher efficacy into the more

recent construct derived from social cognitive theory and sought to measure efficacy stemming from his identified four sources of efficacy (Pajares, 1997). While expanding Bandura's work to differentiate between the dimensions of general and personal teaching efficacy, Aston's (1984) identified correlations between teacher efficacy and learning outcomes. The dimension of general teaching efficacy measured teacher beliefs that students can learn, and the personal dimension of teaching efficacy measured teacher beliefs in the ability to affect learning. Continuing the efficacy research, Tschannen-Moran and Wollfolk Hoy (2001) presented a model of teacher efficacy that integrated Bandura's four sources of efficacy with contextual information and two additional dimensions of task analysis and teaching competence (Goddard et al., 2000). This integrated model emphasized the critical nature of context while examining efficacy and highlighted the cyclical tendencies of teacher efficacy. Teachers with high efficacy engaged students in activities that expanded their mastery experiences and contributed to continuously high levels of efficacy. Teachers who had a lower sense of efficacy negatively reinforced beliefs by continuously confirming failures and bolstering hopelessness, thus lowering their sense of efficacy. Efficacious beliefs grow with success rather than diminish (Tschannen-Moran et al., 1998).

Teacher Efficacy and Student Academic Achievement

Students taught by effective teachers have better academic outcomes (Aston, 1984). Darling-Hammond (2000) found that students who spend 3 years with the most effective teachers score up to 18 points higher on standardized mathematics tests and up to 11 points higher in standardized reading tests. Studies on the impact of teacher efficacy and student outcomes, as well as the development of new measurement scales, offered insights on the implications for building teacher efficacy (Ashton, 1984; Tschannen-Moran et al., 1998). In the 1980s Ashton (1984) conducted instrumental research in teacher efficacy that linked teachers' efficacy beliefs with student outcomes. Students benefit from efficacious teachers. Henson (2001) noted that, "Students of efficacious teachers generally have outperformed students in other classes" (p.5). Research has shown positive correlations between teacher efficacy, student achievement, and student achievement beliefs (Pajares, 1997). Efficacious teachers are more likely to provide successful environments for students (Goddard et al., 2000). When working with struggling students efficacious teachers have greater resilience when faced with setbacks and exhibit sustained persistance without criticism (Tschannen-Moran et al., 1998). Not only do students benefit academically from teachers with high efficacy, but the students' efficacy beliefs and general motivation are also positively influenced (Tschannen-Moran et al., 1998). Students also benefit from the positive outcomes experienced by teachers with high efficacy.

High levels of teacher efficacy are positivly correlated with teaching satisfaction, taking risks or trying new roles in teaching, persistance in teaching, positive beliefs about students from low socioeconomic backgrounds, and higher commitment to teaching (Goddard et. al., 2004; Henson, 200;1 Ross, 1998). Teacher sense of effiacy appeared to be more fluid in the beginning of their career and tended to stabilize over time (Tschannen-Moran & Woolfolk Hoy, 2001). Klassen and Chiu (2010) found that, "Teachers with greater classroom management self-efficacy or greater instructional strategies self-efficacy had greater job satisfaction" (p. 741). Teachers with high self-efficacy exhibit behaviors that include greater levels of planning, organization, and enthusiasm in teaching (Tschannen-Moran et al., 1998).

Teacher Efficacy Measurement

The measurement of teacher efficacy has been developed and refined over many years. The evolution of the social cognitive and self-efficacy framework has provided conceptual designs that have clarified the construct and provided increased validity. Henson (2001) highlighted problems in the development of teacher efficacy measurement and noted:

"First, based on the theoretical nature of the self-efficacy construct as defined by Bandura, researchers have argued that self-efficacy is most appropriately measured within context regarding specific behaviors. Second, the construct validity of scores from the primary instruments purporting to measure teacher efficacy has been severely questioned." (p. 5)

The initial measurement tool for teacher efficacy identified items that were beyond a teacher's control (Tschannen-Moran et al., 1998). Following this, the Personal Teaching Efficacy (PTE) was developed. This instrument examined what teachers could control. These instruments contributed valuable information that social learning theorist used to refine efficacy measurement tools and strengthen the construct of efficacy.

The need for additional context-specific measures grew from Bandura's self-efficacy studies. Efficacy in one context did not always translate to perceptions of efficacy across all teaching tasks (Tschannen-Moran et al, 1998). Pajares (1997) writes, "Efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the criterial task being assessed

and the domain of functioning being analyzed." Generalized studies of efficacy highlighted the difficulties in maintaining predictive ability and construct validity when attempting to measure efficacy (Pajares, 1997). Following Bandura's initial instrument development, the Teacher Efficacy Scale (TES) was created which was a 30-item instrument that combined RAND's GTE and PTE. Their instrument was used in various forms in the advancement of efficacy research (Henson, 2001). The validity issues with the research, along with the identification of the cyclical tendencies of teacher efficacy, lead Tschannen-Moran et al. to develop an integrated measurement tool based on the tools that were currently in use in existing research (Tschannen-Moran, et al., 1998). The resulting instrument was found to be more valid in measuring context-specific efficacy. This instrument was named The Ohio State Teacher Efficacy Scale.

The Ohio State Teacher Efficacy Scale (OSTES), now called the Teachers' Sense of Efficacy Scale (TSES), incorporated contextual items, making the instrument specific to actual teaching (Henson, 2001). The inability to remove external variables has been one of the most controversial aspects of measuring teacher-efficacy, and the impact of environmental and social factors led to studies in collective efficacy (Henson, 2001).

While refined efficacy measurement tools have offered volumes of information about teacher efficacy, the current measurement tools are specific to teaching tasks rather than teacher leadership tasks. Case study in teacher leadership has provided insight related to the establishment of informal and formal teacher leadership roles (Curtis, 2013). The difficulty of, "drawing a direct correlation between teacher leadership efforts and student achievement" further complicates evaluation of teacher leaders (Curtis, 2013, p. 15). Darrington and Angelle

(2013) have contributed to the research in teacher leadership and efficacy by researching the connections between teacher leaders with the "theoretical frame of collective efficacy" (p. 5). They used the Teacher Leadership Inventory and the Teacher Efficacy Belief Scale to determine the relationship between school collective efficacy and the extent of teacher efficacy in a school. Research about the relationship between teacher leader efficacy and student achievement assists in the design of future teacher leadership programs. Additionally, further study that examines the relationship between teacher efficacy and teacher leader efficacy could further emphasize benefits of using teacher leaders.

Building Teacher Efficacy

The sources of teacher-efficacy identified by Bandura were the starting points for focusing on increasing teacher efficacy in both preservice and in-service teachers. Hoy and Miskel (2013) identified two primary questions for teachers in reference to self-efficacy. The first is a task question: "How difficult is the teaching task at hand and can I do it?" The second is a competence question: "Given the task and situation, do I have the needed skills and knowledge?" (p. 164). Teacher education programs that shifted to incorporate successful experiences through internships or other classroom experience into preservice training have helped to build teacher efficacy prior to employment (Pajares, 1997). Many teacher education programs strive to provide varied classroom experiences early in preservice education. This allows for both mastery and physiological experiences and the time to relfect on these learning experiences prior to classroom ownership (Ashton, 1984). In-service teachers benefit from mastery experiences while examining their success data-driven educational culture. Mentoring, coaching, and workshop models seek to provide vicarious experiences for teachers. When respected experts provide authentic feedback, social persuasion can be a powerful tool for increasing efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). Implications from this research provided information for leaders about the amount of support, autonomy, and feedback that should be carefully balanced to build efficacious teachers. A professional development apporach that used coaching has shown correlationtions to increased self-efficacy beliefs (Tschannen-Moran et al., 1998). Further research on the supports that are specific to teacher leader efficacy, such as this case study, provide details that can help shape future teacher leadership initiatives.

Leadership and Efficacy

Few studies have connected leadership behaviors with teachers' perceptions of efficacy (Balyer, 2012). Primarily, research has focused on the principal as the sole leader of the school. In describing the support that principals provide as instructional leaders. Hoy et al., (1992) wrote, "supportive principals respect the competence of their faculty and exhibit both a personal and professional interest in the well being of their teachers" (p. 38). Bandura (1997) found that supportive behanviors from the shool principal such as feedback affect the sense of collective efficacy in a school. Demir (2008) found that transformational leadership behaviors of principals did provide predictive value for collective teacher efficacy. Fullan (2002) wrote that the leadership expectations placed upon the principal were unreasonable for a single individual and that teacher leadership could be a valuable tool for effective schools. Derrington and Angelle (2013) found a relationship between collective efficacy in a school and the extent of teacher leadership. As the number of formal teacher leadership roles increase, continuing research of

efficacious teacher leaders will help to strengthen understanding of supports needed for successful development of teacher leadership.

In 2004 the McREL organization released the Balanced Leadership meta-analysis and followed with the Balanced Leadership framework (2007). This comprehensive analysis of student achievement and leadership included over 69 studies foucsed on leadership traits that affect achievement (Marzano, Waters, & McNulty, 2005). In the study 21 leadership responsibilities and 66 practices were identified with significant positive correlations to student achievement. Of those 21 responsibilities many are similar or identical concepts to Bandura's four sources of collective efficacy. Affirmation is one of the responsibilities that resembles social persussion. The principal's ability to build relationships and engage in outreach, two leadership responsibilites tied to student outcomes, can shape teachers' mastery experiences and create emotional impacts. In the process of communicating a clear vision and purpose, and fulfulling Marzano et al. (2005) definition of "optimizer," the leader engages in activities that contribute to all four sources of efficacy (p. 153). The analysis further supports building leadership habits that are related to efficacy in order to increase student achievement.

Research about the ways that teachers percieve change provides some insight in school collectivce efficacy. Fullan (2002) has written extensively on an "implementation dip," or a lowered effectiveness that occurs when teachers faced with change and new initiatives (p. 136). The implimentation dip, which can cause lowered student outcomes as well, is similar to the changes Bandura (1986) describes when collective efficacy affected by negative experiences. Waters and Cameron (2007) sought to address the teacher implementation dip with conversations

and continued positive practices. This is also similar to Bandura's sources for building efficacy. Exposure to mastery experiences mentoring and vicarious experiences observational learning are some of the reccommended practices that are similar in the social cognitive and leadership research. The Waters and Cameron (2007) McREL study directly identified collective teacher efficacy as characteristic of a purposeful community. They define purposeful community as, "one with the collective efficacy and capability to use all available assets to accomplish purposes and produce outcomes that matter to all community members through agreed-upon processes" (Waters & Cameron, 2007, p. 45). These findings may be used to develop a foundation from which teacher leadership may be viewed as a way to increase individual and collective efficacy.

Teacher Leadership

Distributing leadership among teachers is not new concept. Louis, Dretzke, and Wahlstrom (2010) write, "for over three decades, reform proposals in many countries have recommended the inclusion of teacher in leadership roles" (2010, p. 318). Silva, Gimbert, and Nolan (2000) describe three phases of development of teacher leadership over the last few decades. The first phase defined teacher leaders as managers who infrequently deal with curriculum or instructional expertise. They assisted principals with administrative organizational tasks. These leaders earned their positions through seniority and often served as department chairpersons or union representatives. They were spokespersons between teachers and administrators. The second phase of teacher leadership took greater advantage of teachers' instructional expertise. In this phase teachers were selected formally and informally to assist with curriculum and staff development (Silva et al., 2000). In the second phase teachers worked in shared leadership committees to inform curriculum and decision-making in the school. These teachers served as mentors and led professional development for collegues. Though their influence in the school increased, they still were not heavily involved in decision making. In the third phase of teacher leadership, the focus on collaboration and informal roles of leadership through professional learning communities increased (Silva et al., 2000). Teacher leaders during phase three experienced higher levels of influence and involvement with curriculum and instruction. These teachers had fewer mangerial roles associated with administrative tasks. The rise of formal leadership opportunites, which are defined and sometimes compensated, has occurred during phase three. The research regarding teacher leadership is most plentiful from phases two and three focused on teacher leaders serving as a coach that provide an effective model for professional development. Teacher leaders have a connection to improving teacher effectiveness and overall school improvement (Riveros et al., 2013).

York-Barr and Duke (2004) offered the following definition of teacher leadership in their meta-analysis of the concept, "Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of the school communities to imporve teacing and learning practices with the aim of increases student learning and achievement" (p. 278-288). School culture, administrative support, and even parental support help to define both formal and informal teacher leadership roles. However, the expectations and job description of teacher leaders can vary from school to school, and the emphisis on the effect of teacher leadership on student outcomes could strengthen school and district leadership initiatives.

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Teacher leaders are more often respected and experienced teachers willing to take risks and accept responsibility (York-Barr & Duke, 2004). Teacher leaders share common traits such as a sense of purpose, collegial relationships, and influence beyond the classroom without using overt power (Riveros et al., 2013). Teacher leaders have a strong work ethic, colloborative skills, and vision. Teacher leadership tasks can include administrative collaboration, peer coaching, and involvement in school improvement efforts. Teacher leaders often have the opportunity to gain understanding in policy and multiple school contexts and move into broader leadership roles based upon their interests (Riveros et al, 2013). Curtis (2013) suggests that these characteristics are important, but new evaluation systems should be used to help administrators identify teachers who demonstrate characteristics that will help them become successful leaders.

Teacher leadership has many beneficial aspects such as a greater reach, persuasion, and sustainability. Greenlee (2007) writes, "Teacher leadership is not about empowering teachers by merely decentralizing decision-making authority." (p. 47). The ways teacher leaders interact with other teachers can impact the effectiveness of a teacher leadership initiative. Often teacher leaders are not given supervisory obligations such as evaluation of classroom teachers. This allows teachers to build relationships with teachers that are parallel and absent of subordinate power issues. These relationships can foster trust that allows classroom teachers to take greater risks or consider new methodology. This extended reach and persuasion can also help to sustain educational change priorities. Goodwin (2013) reports that teachers serving as a coaches provide a much greater impact on professional development for other teachers. The possibilities for

positive growth using teacher leaders to provide professional development, practice focused goal-setting, share their expertise from their own classroom, and build relationships are worth consideration as administrators create optimal environments for shared leadership (York-Barr & Duke, 2004).

Preparing Teachers to Lead

Teacher leadership development programs have been administered within school districts, in cooperation between school districts and higher education institutions, and by higher education institutions. All types of leadership development programs focus largely on the themes of, "continuing to learn about and demonstrate advanced curricular, instructional and assessment practices; understanding the school culture and how to initiate and support change in schools; and developing the knowledge and skills necessary to support the development of colleagues in individual, small group, and large group interactions" (York-Barr & Duke, 2004, p. 282). The leadership programs that are administered by school districts diplayed the greatest variety (York-Barr & Duke, 2004). Some informal district or school programs include job-embedded coaching by administrators and district based leadership cadres. Joyce and Showers (2002), suggest that teachers learn from other teachers who are effective. Goodwin (2013) states, "teacher coaching is most effective when it's differentiated according to teacher needs" (p.2). Some programs prepare teachers to move into administrative roles while others support teacher as leaders of smaller groups within schools. Regardless of the variety, these leadership programs are important and necessary to build the expertise and support of teacher leaders (York-Barr & Duke, 2004).

Barriers to Teacher Leadership

There are few opportunities for advancement within a teaching career. When teachers pursue leadership opportunties in an effort to share successful classroom experiences they can be faced with barriers that are discouraging. Depending on the school or district, it can imply informal or formal role (Curtis, 2013). Similiarly, Curtis (2013) writes,

"The job is percieved as low-status, excellent performance is not recognized, the working conditions are unsatisfying, and opportunities for greater impact and advancement are limited. Overcoming this requires an ambitious and cohesive change agenda. Systems must define the processes that are most critical to student learning and then design teacher leadership in service of them, rather than defining teacher leadership roles first and then figuring out how they can support the most important work." (p.3).

This not only effects the influence of the teacher leader but the ability to study teacher leadership as well. The difficulty in the study of teacher leadership, according to Goodwin (2013), is that, "the concept itself [of teacher leadership] remains ill-defined. Lack of a clear role definition, for both the teacher leaders and the colleagues they serve, can can create ambiguity for teacher leaders" (p. 82).

Johnson and Donaldson (2007) found that, "the norms of school culutre – autonomy, egalitariainsm, and deference to seniority" were obstacles that teacher leaders also had to overcome (p. 8). Teachers, often accustomed to an isolated environment, can feel threatened by the teacher leader's presence (Johnson & Donaldson, 2007). The isolated aspects required in teaching also reduced the amount of time that teacher leaders can spend with their collegues. If

teacher leaders maintian a full-time teaching assignment in addition to their leadership responsiblities, it can be difficult to balance the attention needed to facilitate both effectively. Teachers with more years of teaching experience were less likely to accept information or coaching from teachers with fewer years of experience (Johnson & Donaldson, 2007). Structures that support seniority can limit access for enthusiastic teacher leaders. The school principal is often faced with balancing needed coaching from leaders with autonomy from classroom teachers. It is important to recognize obstacals to teacher leadership in order to build and support school structures that enable teacher leaders to become effective.

Conditions That Support Teacher Leadership

Several qualatative studies have identified supports that could help to strengthen teacher leadershp initiatives. York-Barr and Duke (2004) identified school culture, roles and relationships, and structures as three categories that shape and define teacher leaders. School culture and context had the largest influence on teacher leadership, "The school whose expereience was more negative upheld individualism and isolation as prevailing norms...the principal was not visible, the teacher leaders were left on their own to succeed or fail" (York-Barr & Duke, 2004, p.269). In contrast, schools with more positive outcomes in teacher leadership had a culture of teamwork and openness. Building relationships with principals and colleagues is another necessary component for the effectiveness of teacher leaders. Teacher leaders further define their roles while building relationships and examining their levels of influence. The confidence that teachers have in the leaders knowledge also contributes to the ability to build relationships by the leader. Structures such as top-down leadership challenge teacher leadership (York-Barr & Duke, 2004). Conversely, professional development that is embedded in teacher leadership is a supportive structure that leads to sustained leadership opportunities. Collaborative planning opportunties are another example of a supportive structure (York-Barr & Duke, 2004). Limited time for collaboration, professional development, and leading as well as a lack of incentives are often counterproductive for leadership development (York-Barr & Duke, 2004). Many school principals have engaged in Professional Learning Communities (PLCs) to help create purposeful and focused collaborative opportunities. Providing the time and space for teachers to create PLCs can define a teacher leader role, support relationship building, focus on strong instructional practices and goals, and sustain shared leadership (York-Barr & Duke, 2004).

Leverging formal titles and compensation can affect the influnce of teacher leaders. Riveros et al., (2013) found that formal pathways for leadership were often necessary and that support, additional training, and added skills are required for effective teacher leaders Curtis (2013) also found that, "most systems with a compensation system based on years of service and credits earned simply added compensation for teacher leadership work to the existing pay schedule" (p. 4). The leadership training, administrative support, time, and compensation were most often reccommended as supports to increase teacher leader effectiveness (Bangs & Frost, 2012; Curtis, 2013; Riveros et al, 2013; York-Barr & Duke, 2004). In addition to these conditions that support teacher ledership, principals of teacher leaders can be influential (Curtis, 2013).

Principals and Teacher Leadership

Shared leadership and distributed leadership are common terms used to describe the way a principal delgates leadership responsibilities throughout a school (Curtis, 2013; Wilhelm, 2013). The role fullfilled by the principal has evolved from a leader who makes all decisions to a leader who finds teacher leaders within the school to assist in decision making (Knapp, Swinnerton, Copland, & Monpas-Huber, 2006). Additionally, Louis et al. (2010) found that "collective leadership" is valuable as a tool to improve student learning, and that school and district personnel should provide supports that assist in extending leadership opportunities (p. 2). It is beneficial for principals to distribute leadership when, "the average principal tenure was little more than three-and-a-half years" (Louis et al., 2010, p. 2). In schools where principals distribute leadership there was higher student achievement (Waters, Marzano, & McNulty, 2003). Miller (2003) found that, "effective leadership adds value to the impact of classroom and teacher practices and ensures that lasting change flourishes" (p 1). Sharing leadership responsibilities is not only beneficial for principals but can have benefits for teachers and students as well.

Principals can support teacher leaders by protecting relationships between leaders and their colleagues (Moller & Pankake, 2006). This can be done by clearly defining the leader's responsibilities to the entire faculty and setting clear expectations for outcomes. Principals can also support teacher leaders by aligning the leadership initiatives with professional learning and student learning goals (Moller & Pankake, 2006). Principals can encourage collegiality among leaders and other faculty members as a mode of support. Fabar (1991) suggests this is best

accomplished when the principal is seen at the top of a leadership hierarchy. Regular, concise communication is a tool that principals can use to address role definition and clear expectations that support teacher leaders and build meaningful relationships for all members of the faculty.

Teacher Leadership and Student Outcomes

It is important to consider the effects of teacher leadership throughout a school. "The purpose of leadership is to facilitte group goal attainment by establishing and maintaining an environment favorable to group performance" (Tschannen-Moran & Gareis, 2004). The existing scholarship related to teacher leadership is reported in terms of the effects that teacher leaders have on colleagues, the effect of teacher leadership on teacher leaders, and the effects of teacher leadership on student achievement. Relationships most often frame the effect of teacher leaders on their colleagues (York-Barr & Duke, 2004). "One known challenge to teacher leadership is the changing nature of relationships between teachers when some teachers assume leadership responsibilities. Most of the reported relationship effects involve an element of distancing and conflict, such as lower levels of trust and even resentment among colleagues" (York-Barr & Duke, 2004, p. 283). This suggests the importance of culture and the teacher leader's ability to foster a positive and supportive culture. When teachers understand the culture, have well defined roles, and practice collective decision making colleagues can also feel empowered.

York-Barr and Duke (2004) found that, "By far, the strongest effects of teacher leadership have been on teacher leaders themselves" (p. 282). The process of learning about leadership, gaining new perspectives, and decision making increase self-efficacy of the leader. Exposure to other teaching methods that come with some leadership opportunities can increase the teaching skills of the leader (York-Barr & Duke, 2004). Teacher leaders can also benefit from reduced isolation and increased engagement. Though some teacher leaders experience difficulty when moving between their teacher and leadership roles, supportive environments that define the leadership responsibilities can reduce stress and contribute to a positive culture (York-Barr & Duke, 2004).

The ultiamte goal of building the capacity of effective teachers is the probability of positive effects on student achievement. York-Barr and Duke (2004) found studies that linked teacher leaders to student achivment in indirect pathways, "the teacher leaders were perceived to be having a positive effect on students because they influenced instructional practices of colleagues and participated in school-level decision making" (p. 285). It is likely that the ambiguity in teacher leadership and the constraining stuctures that operate in schools make it difficult to make direct connections between teacher leaders and student achievement (Leithwood & Jantzi, 2000). If teacher leaders programs can be designed with a focus on student achievement goals, they will be more likely to produce results that help to bolster leadership programs (Curtis, 2013).

Conclusion

It is important to understand the impact that efficacy has on teacher leaders and teacher leadership initiatives. High levels of efficacy are a stronger predictor of academic achievement than socioeconomic status (Bandura, 1997). Efficacy can be developed in students, teachers, and schools (Hoy, 2014). If teacher leadership roles positively influence efficacy successful models should be shared to increase school achievement. To understand a relationship between leadership and teacher efficacy, the preceding review provided a report of the historical and current study of teacher efficacy. The literature supports specific measures of leadership capacity and teacher efficacy will strengthen information that school leaders can use to address student achievement.

The education system that encompasses public schools is a complex system that depends upon many factors for both change and success, thus more research on individual constructs that combine to build successful, high-achieving schools during times of change is essential for increasing academic success. School leaders who become intentional about developing and strengthening efficacy of teacher leaders could reap the benefits of increased student achievement while also experiencing lower teacher turnover and more positive work environments. It is a worthwhile endeavor for additional study in educational settings.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

A case study was used to describe the phenomenon of self-efficacy as it relates to teacher leaders. Efficacy was operationalized using the conceptual framework of the Triadic Reciprocal Causation Model (Bandura, 1986) and the Self-efficacy model (Bandura, 1997) that categorizes the sources of self-efficacy by: (1) past experiences, (2) vicarious experiences, (3) social persuasion, (4) emotional/physiological impact. Bandura (1997) found that the self-efficacy beliefs of teachers relate to the effort that teachers invest in teaching, goal setting, and persistence in difficult tasks. The study of the sources self-efficacy in the context of teacher leadership is important to determine variables linked to higher self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001).

Statement of Purpose

The purpose of this case study is to understand the dynamics of self-efficacy as it pertains to teacher leaders in the Oak Ridge, TN school system. For the purpose of the study selfefficacy is defined as the belief in the capability to execute tasks successfully (Bandura, 1997), and the sources of self-efficacy include past experiences, vicarious experiences, social persuasion, and emotional/physiological impacts (Goddard et al., 2000).

Research Questions

The following questions related to teacher leadership and efficacy include:

1. What are the experiential sources of self-efficacy for teacher leaders?

- 2. What external dynamics contribute to the self-efficacy of teacher leaders?
- 3. How do teacher leaders describe the internal dynamics that contribute to self-efficacy?

Qualitative Research Design

Qualitative research design allows for inquiry and analysis of phenomena with depth and detail (Watkins, 2012). Qualitative research assumes that behavior is dependent upon social and cultural contexts (McMillian & Schumacher, 2010). Using qualitative methods allows for the generation of tentative explanations and the addition of new understandings (Patton, 2002).

Case Study

A holistic case study was used to collect in-depth information about the phenomenon of self-efficacy as it pertains to teacher leaders (Cresswell, 2003; McMillan & Schumacher, 2010; Merriam, 1998). Case studies involve "organizing data by specific cases for in-depth study and comparison" (Patton, 2002, p. 447). They are designed to provide detailed accounts of particular themes such as self-efficacy or teacher leadership (McMillian & Schumacher, 2010). This type of research should be used to answer "how" and "why" questions (Baxter & Jack, 2008; Yin, 2005). Case study is an appropriate research design to explore the experiences of teacher leader efficacy because in-depth interviews and observations can be used to explore and understand teacher leadership roles and teacher leader sources of efficacy.

Case study is set "within its real-world context" (Yin, 2009, p.18). This further reinforces the appropriateness of the method to study formal teacher leadership roles. Teacher leadership has previously grown from informal channels (Curtis, 2013). As more school districts purposefully plan to build the leadership capacity of the most efficacious teachers, various types of teacher leadership opportunities have emerged (Tennessee DOE, 2014). The amount of administrative support, the expectations of workload, and the autonomy of the teacher leader create specific contexts that are important when analyzing the teacher leadership role. A case study approach provided in-depth research about one type of formal teacher leadership within a context that allowed for analysis of its distinctiveness. The ways in which teachers make sense of their leadership experiences and the challenges they encounter as teacher leaders could impact formal teacher leadership practices, support, and future planning.

Role of Researcher

In qualitative research the researcher acts as the research instrument (Patton, 2002). Throughout all phases of research, biases must be acknowledged (Merriam, 1998). For this case study, in the interest of full disclosure of bias, the following discussion reveals my personal experiences with teacher leadership and my current leadership role.

For the last 16 years I have worked in the field of education. I have served as an elementary and middle school classroom teacher and an intervention specialist. Currently, I serve as a district K-12 Literacy Coordinator. I have had many opportunities and experiences in informal teacher leadership throughout my career including curriculum and instruction coach, school improvement committee chairperson, and intervention specialist. I have had the opportunity to work with multiple school systems throughout East Tennessee in intervention training. The experiences in these roles contributed to my perceptions of teacher leadership. I intentionally searched for a formalized leadership role.

My current role as district Literacy Coordinator has helped to broaden my view of the critical systems in school operation as well as increased my capacity to share my efficacious classroom experiences. I train and collaborate with the teacher leaders in this study as well as the administrators who support them. I do not serve in an evaluative or supervisory role to teacher leaders. This established trust and collaboration leading to open and honest responses throughout the case study interviews. In addition, I served as a participant observer during meetings led by the teacher leaders.

Effort was made to express confidentiality and maintain a secure and trusting environment between the investigator and the participants. Participants were informed of the interview process and the potential power dynamics in an effort to maintain trust and elicit honest and detailed illustrations of experiences.

Ethics

Responsibilities of a researcher include ensuring human safety and conducting ethical research that is trustworthy, credible, and free from bias (McMillan & Schumacher, 2010). University guidelines pertaining to the use of human subjects in case studies as specified by East Tennessee State University's were followed.

Human Safety involves a respect for all research participants and a minimal risk of harm. Human subject training was completed prior to the investigation. Information obtained remained confidential, and privacy was respected. Informed consent was obtained from the school district and survey participants (see Appendix B). The identities of the participants were protected by using fictitious names of schools and individuals. Interviews were conducted in the privacy of a classroom or office to ensure the comfort of the participant. Interview recordings were transcribed and destroyed at the completion of the research. The school district superintendent received a copy of the research upon completion.

Setting

The Oak Ridge School District is located in the city of Oak Ridge in East Tennessee. Oak Ridge is known as the "Secret City" due to its beginnings as a secret town built specifically for the war effort following the 1941 attack on Pearl Harbor. The school system was started in 1943 as the town population rapidly grew to 75,000. For many years, the city of Oak Ridge boasted one of the highest numbers of Ph.D. graduates per capita due to Oak Ridge National Labs (Oak Ridge Convention and Visitors Bureau, 2014). Oak Ridge schools have a heritage of excellence as well. The school district and individual schools within the district have received high rankings in Tennessee and the Southeastern region.

Currently, Oak Ridge schools serve 4,500 students in one preschool, four elementary schools, two middle schools, and one high school. Of the 411 certified staff members, 82% hold graduate degrees (Oak Ridge Schools). The population of economically disadvantaged students is 53.4%, and the population of English Learners is 3.6%. Seventy percent of Oak Ridge students are white, 16.4% are black or African-American, and 8.1% are Hispanic or Latino (Tennessee Department of Education, 2014). Both the scientific heritage and the East Tennessee setting shape the educational setting for students and teachers of Oak Ridge Schools.

Population

The population for this qualitative study includes teacher leaders serving in formal teacher leadership roles. Formal leadership roles are defined and filled by an organization (Hiray, 2007). Teacher leaders are members of the school faculty who work to influence other teachers in order to achieve school goals.

Sampling Frame

The sampling frame includes all teachers serving in formal teacher leadership roles in the Oak Ridge School District. Participants for this study were selected from the 30 teacher leaders serving the Oak Ridge School District. Teachers Leaders in Oak Ridge that have been selected as Professional Learning Community leaders (PLC), Science, Technology, Engineering, and Mathematics leaders (STEM), or Data leaders from the Oak Ridge School system meeting the criteria of teacher leaders in formal leadership roles.

Sampling Strategy

Formalized teacher leadership roles vary from one school district to another, and teacher leaders from a singular school district were selected in effort to understand the teacher leadership roles. Criterion sampling (Patton, 2002) of a homogenous group of teachers serving in formal leadership roles in the Oak Ridge, Tennessee School District was used to conduct intensive study of formal teacher leadership. Maximum variation sampling (McMillan & Schumacher, 2010) was used to provide data from three different types of teacher leaders in the Oak Ridge School system; Professional Learning Community (PLC), Science, Technology, Engineering, and Mathematics (STEM), and Data. This criterion sample enabled intensive study of a specific population of teachers in formal leadership roles. In addition, the sample criteria were varied with the selection of both elementary and secondary teachers.

Sample

The study participants included five teacher leaders in the Oak Ridge School district and two supervisors of teacher leaders. Of the five teacher leaders, two were PLC leaders, two were STEM leaders, and one Data leader for their respective school buildings. In order to provide maximum variation sampling, three teacher leaders were elementary school teachers and two were middle school teachers. Each teacher leader was employed in a different elementary or middle school. The supervisors of teacher leaders worked in a separate location from all interviewed teacher leaders. All of the teacher leaders were selected for their position in May, 2014. They meet with the supervisor of teacher leaders. Once per month teacher leaders received an additional stipend for their work as teacher leaders. Training opportunities for teacher leaders varied by the type of leadership role. All leaders received some training in leadership strategies. In addition to the supervisor of teacher leaders, the teacher leaders worked under the direction of their building principals.

Data Collection

In-depth interviews of teacher leaders, the supervisors of teacher leaders, and observation of meetings facilitated by teacher leaders were used to collect information for this case study. An initial invitation to participate was sent to all teacher leaders in the Oak Ridge School system by email (see Appendix) requesting participation with study information and researcher contact information. Five volunteers were selected using the study sampling strategy, and participants were contacted through email to set interview times and locations. Semistructured interviews lasting between 1 and 2 hours with open-ended questions provided information for analysis of the sources of self-efficacy in the teacher leadership role. The same questions were asked of each participant. When necessary follow-up questions were asked and varied by participant. In an effort to provide triangulation supervisors of teacher leaders were also interviewed. The supervisors' interviews were a valuable tool for comparison of the teacher leaders' perceptions and actions. The interview protocol is provided in Table 1:

Table 1

Research Question	Teacher	Supervisor
1. What are the	1. What would be an area of success	1. What is the evidence of
experiential sources	in your leadership experience?	successful teacher leadership?
of self-efficacy for		
teacher leaders?	2. What do you do when a teacher	2. What types of training are
	doesn't understand what you are	most helpful for teacher
	facilitating?	leaders?
Conceptual		
Framework	3. What is the evidence of successful	3. What prior experiences do
Alignment: Mastery	teacher leadership?	you believe are important for
Experiences		teacher as they emerge as
(Bandura, 1997)	4. What items should be included in	teacher leaders?
	an evaluation of teacher leaders?	
		4. How do teacher leaders
	5. What have you learned from other	improve their leadership
	leaders that has been helpful for your	skills?
	leadership experiences?	

Research Questions and Interview Protocol Alignment

Table 1	l cont.
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2. What external	6. What encourages you to continue	Question 3, 4
dynamics contribute	to do the leadership work?	
to the self-efficacy of		5. What kinds of support do
teacher leaders?	7. What kinds of support do teacher	teacher leaders need?
	leaders need to do their work?	
Conceptual		6. How should administrators
Framework		assist teacher leaders?
Alignment: Vicarious		
Experiences and		7. How should teacher
Social Persuasion		leaders respond to negative
(Bandura, 1997)		experiences?
		-
3. What internal	Question 6, 7	Question 4, 7
dynamics contribute		_
to self-efficacy of	8. What kinds of things do you tell	8. Describe the characteristics
teacher leaders?	yourself before a meeting with	needed to be a successful
	teachers? After a	teacher leader.
Conceptual	successful/unsuccessful meeting?	
Framework		
Alignment:	9. Describe the characteristics	
Emotional/	needed to be a successful teacher	
Physiological Impacts	leader.	
(Bandura, 1997)		
(,,,)		

The final phase in data collection included observation of teacher leaders as they facilitated team meetings. Upon completion of the interview, the observation of the teacher leader during a team meeting was scheduled. One meeting of teacher leaders was also observed in order to record interactions among teacher leaders. An observation protocol was developed using criteria established from the supervisor interviews. During the team meeting scripting was used to record the teacher leaders' words and actions. Reflexive records were, "written immediately after leaving the site, [in an effort to] synthesize the main interactions and scenes observed and, more important, assess the quality of the data and suggest questions and tentative interpretations" (McMillan & Schumacher, 201, p. 354). In addition to the observation field notes, the Observation Protocol (Table 2) allowed me to compare the perceptions of the teacher leaders with the actions of the teacher leader during an authentic leadership activity.

Table 2

Observation Protocol

	Research Question	Confirm	Disconfirm
Evidence of Teacher Leader preparation	RQ1, RQ3		
Teacher Leader shares successful classroom experiences	RQ1, RQ2		
Teacher leader shares personal experiences	RQ1, RQ2		
Teacher Leader uses norms and/or SMART goals	RQ1, RQ2		
Teacher Leader to Administrator Interactions	RQ1, RQ2		
Non-Verbal (anxiety, posture, pause)	RQ3		

Table 2 cont.		
Evidence of	RQ2	
relationship		
building		
Post meeting	RQ1, RQ2,	
verbal/nonverbal	RQ3	

Data Management

Interviews of teacher leaders, observations of meetings led by teacher leaders, and interviews with supervisors of teacher leaders were the three sources used to collect data for this case study. Data were collected confidentially and protected using fictitious names of schools and individuals. Recorded interviews, interview notes, and observation scripts were stored in a password protected home computer. Interviews were conducted in the privacy of a classroom or office. To decrease error the in-depth interviews were recorded with participant permission to provide verbatim accounts of experiences. Interview recordings were transcribed. Recordings were destroyed at the completion of the research. The school district superintendent received a copy of the research upon completion.

Measures of Rigor

In order to identify themes and patterns in perceptions of efficacy of teacher leaders, I employed the process of triangulation or validation among multiple data sources at different time periods (McMillian & Schumacher, 2010). Triangulation provided greater depth of understanding of teacher leadership by providing multiple perspectives of the formal leadership roles through interviews with and observations of the teacher leaders. The teacher leader coordinator was also interviewed. The combination of interviews and observations provided multiple data sources contributing to the trustworthiness, credibility, and dependability of the data (Patton, 2002).

Field notes of biases and key events were recorded in a journal and used in the case analysis for the study. The notes contributed to the confirmability of the study (Anfara et al., 2002). In addition to the journal notes, the detailed description of the research and the addition observation protocols allowed for transferability.

Data Analysis

A holistic analysis was used to complete the study in an effort to provide a detailed description of the case and setting with a structured approach for analyzing data (Creswell, 1998). McMillian and Schumacher (2010) state that "Qualitative data analysis is primarily an inductive process of organizing data into categories and identifying patterns and relationships among the categories" (p. 367).

Data transcription was completed in an effort to organize interview recordings and observation notes for analysis. Inductive analyses of themes related to the purpose of study were categorized. Following this, line-by-line coding was completed independently to identify initial codes (Creswell, 2003). Codes, or words that describe the transcribed segments, were compared and used to form categories (McMillian & Schumacher, 2010). During the inductive analysis constant comparison was used to evaluate codes and categories. Following the categorization of information, cross-categorical comparisons were made in an effort to build patterns. Finally, in the process of pattern matching (Yin, 2014) the themes identified through coding were compared

with the initial case propositions. The process of pattern matching assisted in identifying perceptions of efficacy among teacher leaders while also "strengthening internal validity" (Yin, 2014, p.143).

Data Presentation

For this case study a linear-analytic structures approach was used to report the data narrative (Yin, 2014). This approach "is applicable to explanatory, descriptive, or exploratory case studies" (Yin, 2014, p. 188). The presentation of data was organized by themes. Within each theme descriptions, naturalistic summaries, and analysis were presented. A rich description was provided in an effort to provide transparency and validate themes identified within the case study.

Summary

This chapter is an overview of methods used in the case study. The propositions that guided the case study were presented in this chapter. The rationale for qualitative case study was presented along with a description of the role of the researcher in this case. A description of the population and setting along with details of the selection process followed. The procedures used to gain access and conduct interviews and observations were presented in an effort to increase trustworthiness, credibility, and transferability of the study. Following the measures of rigor data management and data analysis were described to increase trustworthiness and transferability of the study. The format for data presentation was detailed. Chapters 4 and 5 include the presentation of teacher leaders' perceptions of self-efficacy, data analysis, findings, conclusions, and recommendations for future research.

CHAPTER 4

ANALYSIS OF THE DATA

Introduction

The purpose of this study was to examine the sources of self-efficacy as it pertains to teacher leaders. Interviews with teacher leaders and supervisors of teacher leaders as well as observations of teacher leaders were analyzed to provide triangulation and credibility to the study. Data from the three sources were coded in an effort to build concepts, categories, and themes that aligned to the study questions.

The semistructured interview questions and observation protocol provided opportunities for participants to describe the sources of efficacy in their formal leadership roles. Teacher leaders described the supports that allowed them to complete work successfully or continue their work as leaders throughout difficult situations. Observation of the teacher leaders in the leadership role reinforced and sometimes contradicted the strategies that teacher leaders attributed to their sources of efficacy. The supervisors provided insight to the personalities of the teacher leaders as well as the purposeful collaborative and administrative tasks that were put in place to support leaders. The research analysis and findings are presented in Chapter 4.

Case Profiles

The seven participants in the study were employed as teachers and administrators in the Oak Ridge School System in the 2014-2015 school year. The five teachers served in their individual school locations as PLC, STEM, or Data leaders. Of the two administrators, one served the school district as an assistant principal and as the supervisor of teacher leaders. The

second supervisor was an elementary school principal in the district. The seven semi-structured interviews and five observations, conducted from February 5-27, 2015, provided insight into the perceptions of teacher leaders in formal leadership roles. For the purpose of confidentiality in this study, the teachers who were interviewed were referred to as Paige, Bill, Molly, Randall, and Lee. Supervisors were referred to as Sally and Lilly. Each participant received a copy of the interview transcript for review via email. The observations of teacher leaders occurred as the teacher leaders facilitated team meetings at their respective schools. The following case profiles provide descriptive information about the teacher leaders selected for the study.

Paige

Paige was a middle school teacher and served her school as the Data leader. She had been teaching for more than 10 years. This teacher applied for the Data coaching position for her school in May 2014 and was also involved with educational leadership opportunities at the state level. She had a calming personality and was a vocal student advocate who often spoke to other teachers about improving educational opportunities. She preferred to work collaboratively in her leadership role. Paige was planning to continue to serve her school as data coach in the following school year.

Paige's interview and observation took place during February, 2015. She was interviewed in her classroom. The observed meeting, led by Paige, was a team meeting that included seven seventh grade teachers. The observed meeting was held during a planning period and lasted 45 minutes. Bill

Bill was an elementary school teacher and PLC leader who had worked in the classroom for less than 10 years. He expressed deep concern for students in his classroom and his school. He moved into the PLC leadership position after experiencing success in the classroom. He is considering returning to school for an advanced degree. Bill is planning to continue his leadership work in the next school year.

The interview and observation with Bill was conducted in February 2015. During the observation Bill worked with second grade teachers. There were four teachers and one administrator who attended Bill's team meeting.

Molly

Molly was a middle school PLC leader and has more than 10 years of teaching experience. She had been a teacher leader through informal channels in other school districts. She enjoyed teaching and working with teachers. Molly had been serving her school in a leadership capacity since August 2014 and expressed that she would like to continue working as the PLC leader for the next school year. She was on several additional committees at her school and within the district.

Molly's interview and observation were completed in February 2015. Molly was observed during a team meeting with the science department in her school. There were nine teachers present at Molly's observed PLC meeting.

Randall

Randall was an elementary school teacher serving as the interim STEM leader for his school. He had more than 10 years of elementary teaching experience. He began the position in September 2014. He did not plan to remain in the position for the following school year. He had been serving his school as a grade level leader when he was selected for the position. Although he had enjoyed his role, he expressed concern over the amount of time needed to fulfill the formal role. He felt that he had too many additional commitments to continue to serve his school as the STEM leader during the following school year.

Randall was interviewed and observed leading a STEM meeting during February 2015. He worked with three fourth grade teachers to deliver professional development focused on STEM during the fourth grade planning period.

Lee

Lee was the STEM leader for his elementary school. He had less than 10 years teaching experience. Although he was a confident classroom teacher who wanted to share his knowledge, Lee was nervous about leading teachers with more experience than she had. He participated in special trainings for STEM teachers prior to her selection as the STEM Leader. He worked to infuse STEM learning in all aspects of her classroom because she believed that it was beneficial for student achievement. Lee often invited other teachers to view STEM lessons in his classroom.

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Lee was interviewed and observed during February 2015. His observed meeting included redelivery of professional development that he had previously received. He worked with four second grade teachers during his team meeting.

Supervisor: Sally

The supervisor of teacher leaders was Sally who has been a high school classroom teacher and a high school assistant principal. She holds both bachelor of science and master in education degrees along with an education specialist degree. Sally expressed confidence in her roles as an administrative leader and the supervisor of teacher leaders. She was eager to continue to seek district administrative responsibilities. Sally planned the collaborative time and professional development for the teacher leaders. She attended many offsite professional development opportunities with the teacher leaders. She communicated district teacher leader initiatives to building principals and district teams. Sally was selected as the supervisor of teacher leaders at the beginning of the program in May 2014. She planned to remain in the supervisory position for the following school year.

Sally facilitated the observed teacher leader meeting that took place in February, 2015. There were 30 teacher leaders from seven schools in the Oak Ridge School District who attended the teacher leader meeting. Teacher leaders received professional development on the topic of coaching and leadership during this meeting.

Supervisor: Lilly

Lilly was an elementary school principal with more than 10 years of experience. She worked with the three teacher leaders in her building. She monitored their work within school teams and used teacher leaders when planning building specific faculty meetings and professional development. She attended some grade-level meetings facilitated by teacher leaders, and she met at least monthly with each leader in her building. Lilly planned to continue serving as the school principal for the following year.

Interview Analysis

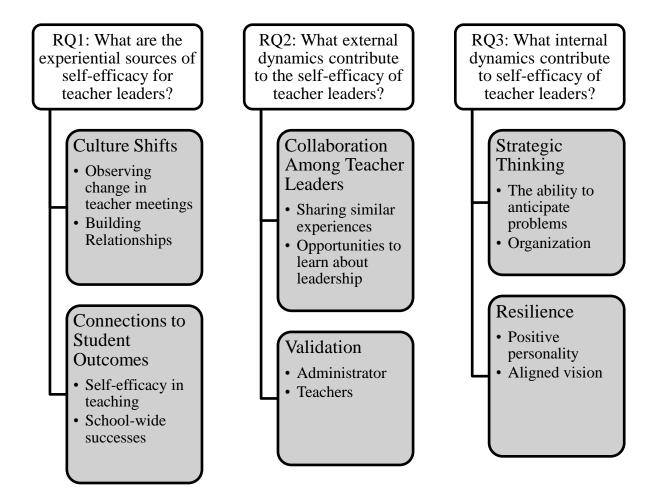
Qualitative analysis of semi-structured interviews was completed to gain an understanding of teacher leaders' thoughts, feelings, behaviors, and interpretations. Trochim (2006) writes, "There is no single way to conduct a case study, and a combination of methods can be used" (para. 5). An inductive approach for examining data, also known as grounded analysis, allowed the researcher to identify general themes from the participant responses (Creswell, 2003). With grounded analysis:

The research begins with the raising of generative questions which help to guide the research but are not intended to be either static or confining. As the researcher begins to gather data, core theoretical concepts are identified. Tentative linkages are developed between the theoretical core concepts and the data (Trochim, 2006, para. 7). Initial research on the sources of efficacy (Goddard et al., 2000) framed the research and allowed for organization of codes generated from interviews.

The coding process used in this study began with open coding of transcribed interviews and field notes. This allowed for initial evaluation of the data in detail. Following initial coding saturation, connections between codes were analyzed. Axial coding (Charmaz, 2003) was used as subcategories were organized by relationships to four sources of efficacy: past experiences, vicarious experiences, social persuasion, and emotional/physiological response (Goddard et al., 2000). Study themes emerged during the interview and observation coding. The themes are supported by the triangulation of data between interviews and observations. The matrix of codes and themes can be found in Table 3.

Table 3

Code Matrix for Study Research Questions



Observation and Researcher Notes

Observations were scheduled following each interview. The observations lasted from 45 to 90 minutes. The observation protocol provided guidelines for indicators meaningful to the research questions and interview responses. One teacher leader collaborative meeting was also observed to collect data on the interactions between teacher leaders. During observations field notes were also maintained to capture rich detail about the reactions and emotions exhibited by teacher leaders. From these field notes the comments and thoughts of the primary investigator were coded into categories and then themes. These themes were compared with codes and categories that emerged from the interviews. Researcher notes were taken during and immediately following the observed meetings to record specific actions and responses of the participants. The observation protocols and researcher notes were then compared to the initial codes that emerged through both teacher and supervisor interviews. The data were used to identify themes for the purpose of the study.

Interview and Observation Results

Semi-structured interviews were recorded and transcribed. The process of multiple reviews provided insight regarding emotions and comments that were relevant to the initial study propositions. The following section of the study provides emergent themes with supporting evidence through relevant quotes found in interview transcripts. Observation data aligned to emergent themes follows relevant interview data. Oral and written explanations of the study's purpose that identified sources of efficacy for teacher leaders were provided for the seven study participants. Informed consent was also obtained from each study participant. The seven participants completed the interview by answering all questions. Upon completion of the interview, teacher leaders provided opportunities to be observed while facilitating a leadership meeting. The following research data are presented by research question and emergent themes. *Research Question 1*

What are the experiential sources of self-efficacy for teacher leaders?

Culture Shifts. Teacher leaders and supervisors spoke of the changes they have witnessed during their time as leaders and their efforts to build relationships. The culture shifts described were primarily occurring in collaborative team meetings. Teacher leaders described teacher movements from resistance to acceptance by participants. Sally described the cultural changes in collaborative meetings that an administrator would like to see following the implementation of formal teacher leadership:

I would see more open communication among professionals, more collaboration, a forum for sharing ideas, and a sense of relief of stress especially in times of change, in times of a new initiative or new endeavors because we change all the time.

When asked about the evidence of successful teacher leadership, many participants mentioned the culture changes that were occurring in the collaborative teacher meetings. Bill responded:

People are trying new things. They were looking at data and kids differently, they were talking about kids differently, and people were more open about it....you can see that teacher leadership is working when teachers are working more collaboratively. You know, they're spending more time together on their common planning times, and when you see them collaborating around data...to help students grow and then, eventually, you see student success from that.

Lee's comments aligned with other leaders:

It's starting to feel different. I know you can't easily measure change, not a change in feeling anyway, but I, well I'm also positive, but I do believe that the feeling of the whole building is starting to change. People really are working together in more meaningful and purposeful ways. It's not everywhere, but there are people talking about kids and focused on kids that weren't always that way before.

Paige also spoke about changes that illustrate evidence of success.

I would say that you should look at the shift of the PLC, and we do formal minutes here. By evaluating those, and we did that recently when we worked on our accreditation piece, you can see a lot of the PLCs starting to implement some of the strategies. So that, to me, means that it's working.

Lilly described the changes that she has seen when she stated:

It hasn't been easy. Um, in fact, it's been quite difficult for some grade levels, but I can already see changes in the work that is going on during grade-level meetings. [The teacher leader] has done a good job of sticking with it and reminding people of the vision and purpose. One group used to only meet to plan parties or complain about specific students. When I went in the other day, I saw them using data to talk about their students, and to plan what they wanted to do next. I couldn't wait to give [teacher leader] a pat on the back for that. I know that change happened because of her continuous work with that group. And relationships too. It's important to know that this group of teachers would not change for someone they don't like or don't trust. I know it's important to [teacher leader] to have the teacher groups focused and on task. I do think that I am seeing more of that, and I think she's been able to accomplish that partly because of the relationships she has with the teachers. They are much more accepting of her role in that meeting than in the beginning before they knew what this teacher leader thing was about.

Molly summed up her thoughts on the changes in her building by saying, "Like right

now, if I were to walk out, I would see many of them sitting together with each other having conversations with the right person, and they're good conversations, so I like going out!"

Opportunities to observe cultural shifts were available in all teacher leader facilitated meetings. The Observation Matrix in Table 4 contains observation and field notes that align with the theme of cultural shifts.

Table 4

RQ1: What are the experiential sources of self-efficacy for teacher leaders? Theme: Cultural Shifts		
Categories	Observing Change	Building Relationships
Observations and Research Notes	-Collaborative meeting was focused and on task for entire period. -Collaborative meeting used	- Molly is smiling and has an appearance of confidence when teacher team asked for her advice.
	protocol and meeting norms. -Teacher thanked Bill after the meeting ended, and claimed that a particular student would not have been considered for intervention if they had not followed the new PLC process.	 -Molly offered to take a group of students through transition time to let a teacher finish a paperwork task. - Lee asked the team what they needed in order to have a better intervention period.

Observation Matrix 1A

Table 4 cont.		
	-Collaborative time used to create a data wall visual of student growth.	-Lee offered to teach sample STEM related reading lesson to a collaborative group.
		-Paige brought decorative dry- erase stickers to hang in the teacher workroom. She asked teachers to write notes of

appreciation, happy thoughts, and goals met on the stickers.

Connections to Student Outcomes. Teacher leaders are motivated to create positive change in the schools they serve. The following interview data illustrate the way that teacher leaders use their self-efficacy as a classroom teacher to enhance their leadership experiences. Teacher leaders also described their goals of building capacity so that isolated classroom success transfers to all classrooms. Paige used examples of successful student outcomes in her own classroom that she has either seen or would like to see throughout her school as a result of her leadership:

They [observers] would see kids working hard, they would see a lot more project- based learning, which we want to move more towards, and maybe problem solving. We want them [the students] to do more of that. And maybe a lot more kids working together, and then sometimes using a lot more technology. But what I want to see them really doing, is that, is work together and working hard, engaging. I don't care if it's noisy in the hallway, be noisy in the hallway! I think it's for the good of our school and for our students.

Bill echoed, "Well, ultimately it is student success I would say." Sally also reinforced the importance of students with her comments when she related:

So at the student level, uh, well, ideally that would be, you would see student growth. You would see student achievement, um students, mastering the learning objectives. Um, and, I guess, I know the way we use our coaching is, is kind of encourage deeper thinking among students.

Lilly's supervisory perspective was focused on reaching students by changing teachers. She commented:

These teacher leaders have so much to offer. They have expertise in their specific grade or subject area, and they have the right communication skills to bring others along. We'll know it has all been worthwhile when we see the effect on students. Not just learning outcomes, but climate outcomes, intervention outcomes, even classroom environments. It is, um, it is important to keep the big picture in mind. We want student achievement to continue to grow most of all, but we want all kinds of things to improve in classrooms. The teacher leaders have the kind of classrooms that we want everyone in our school to have. That doesn't mean that every day is perfect. Nothing is perfect every day, but they have exemplary classrooms that we would love to replicate throughout the building. The beauty of it is, some teachers will buy in more if it is coming from a teacher leader instead of me [a supervisor]. Um, some teachers will be jealous of the teacher leader, and they can get on board by hearing it from me, but other teachers appreciate and feel like they have more voice by having the teacher leader. So, if the teacher leaders can expand what they do in the classroom, using their skills as group leaders, then we should see all kinds of positive student outcomes.

Lee specified her beliefs about student outcomes in terms of her STEM role when she stated:

Because I'm a firm and solid believer in the fact that STEM makes a huge difference. Um, the research shows that, my own research shows that, what I'm pushing for is worthwhile, and it's important, and it makes a huge difference. I mean, obviously, test scores are important, but that's not – it makes kids better thinkers. It's best for the kids. It's not about whether, uh, adults like it or not. It's –jump on the train with me! Randall also emphasized student outcomes while describing motivation to continue leadership work.

If you look at the students, you know student progress over the course of when it started until now. Looking at whether or not that's a component too, you know increased test scores or increased student performance. Or, you know, thinking, even getting their

SMART goals and thinking about how, how that has an impact on students. Field notes and observations from the teacher meetings of Randall, Paige, Molly, and Lee provided alignment with teacher leaders desire to connect to student outcomes. The Observation Matrix in Table 5 contains observation and field notes that align with the theme of connections to student outcomes. Table 5

Observation Matrix 1B

RQ1: What are the experiential sources of efficacy for teacher leaders?			
Theme 2: Connections to Student Outcomes			
Categories	Self-efficacy in teaching	School-wide success	
Observations	-Randall shared a new	-While creating a data wall, teachers	
and Research	way that he is grouping	commented on the changes that many	
Notes	guided reading students	students have made throughout the	
	with teachers.	year.	
	-Paige shared a new	-Lee recognized teacher's SMART	
	website that her students	goals that had been met since the last	
	have been using along with a post-test that	meeting.	
	shows improvement on a	-Randall reviewed the team SMART	
	recent skill.	goals.	
	-Paige shared a tip for consolidating some required paperwork.	-Team discussed the pros and cons of a new math resource and asked Molly for the overall school and district perspective.	
	-Molly discussed one of		
	her students that have	- Molly asked for a progress report	
	made dramatic	from a team having trouble creating	
	improvements in writing.	common assessments.	
	-Lee shared an		
	assessment she created		
	with the teacher team.		

Research Question 2

What external dynamics contribute to the self-efficacy of teacher leaders?

Collaboration among Teacher Leaders. Every teacher leader talked about the opportunities for collaboration with other teacher leaders. Supervisors also focused on the collaborative relationships forged between the teacher leaders. Teacher leaders had opportunities to share similar leadership experiences and learn about coaching together.

Randall repeated a statement similar to many of the participants when he spoke of his collaborative leadership experiences. He stated:

It has been great, I think, to have the monthly meetings that we have with teacher leaders and the supervisor. You hear what's happening in other schools, you hear what's been effective in other schools, or maybe things that need to be changed. So, I think just talking with them and seeing what's working and what's not really working and finding out what's the best balance for our particular school.

Randall also elaborated on working with a former mentor/leader when he said:

I had a wonderful mentor teacher that was a great example of leadership and how she dealt with her teammates, and how she dealt even with parents, and, you know, others. It was a huge elementary school, and she was the leader.

Paige extended her definition of teacher leader to include teachers outside of the formal leadership role, and she commented on how collaboration with these teachers has affected her work:

We have a lot of wisdom in our building with leadership, teacher leaders, I'd say. And some of that stems from the varying roles that they've had, those who have served as teachers, and some who have served as administrators and at different grade levels too. So, I see myself as being young in terms of their experience. And so I feel like they have a much longer range view than what I've been able to see. I've been in education for [several] years. I've always kind of been a kind of 35,000 foot view kind of person. And when I taught high school in my earlier position, um, I saw that. I thought that science was important, but I didn't think that was the only subject that was important. Like some subject area teachers feel very passionate about their own, and I thought – I was only as important as the others put together.

Bill expanded on the motivation he received from working and training with other teacher leaders. "When we went to the PLC summit, we all came back raring to go. We were motivated, we were energized, we were knowledgeable. And we've talked about this in our meetings."

Lilly was expressed happiness and gratitude for the growing collaborative culture in her building:

I couldn't be happier about the way that my leadership coaches, my leadership team, and my overall staff is working together when it comes to these school leaders. Yes, there is some resistance, and there will always be some resistance. I don't think you can ever completely get rid of or eliminate all resistance. But, I really believe that good things are happening because of the opportunities that these leaders have had to work together with priorities. You know they are focused. They are working with a mission instead of everyone creating their own agenda. I guess it's a communication thing too. You can clearly see that is more powerful when they speak with one voice. I know there is still

grumbling but I don't seem to hear it as much. I think that the opportunities to be strategic come from the leaders time working together.

Sally offered her administrative view of the collaborative opportunities among teacher leaders:

Experience is the greatest teacher, but also, I think it's an important, an important piece of our, the way we do our leadership here in the, in our district, uh, a huge piece is our monthly meeting that we have together as coaches, where we talk about current issues, what they're saying in schools, current, uh, questions that they're having, questions that are popping up among the staff. Um, and then also just, we, we made sure that we are redelivering, so we've all been to different learning experiences and have different learning experiences. So, a portion of our meeting every month is a redelivery of what they need, a redelivery of some research or a conference session they've been to so, just re-sharpening skills, and vocabulary, and research, but then just also being there for each other. To kind of – not complain or commiserate, but just to share some of the troubles they're having, and I've seen more than one example in more than one monthly meeting, where someone would bring a concern they were having and someone else would say, "Oh, I had that same problem. Here's how I handled it." And just to share coaching strategies.

The Teacher Leader Committee meeting facilitated by Sally provided opportunities to observe interactions between teacher leaders. The Observation Matrix in Table 6 contains observation and field notes that align with the theme of collaboration among teacher leaders.

Table 6

Observation Matrix 2A

RQ2: What external dynamics contribute to the self-efficacy of teacher				
leaders?				
	Theme A: Collaboration Among Teacher Leaders			
Category	Sharing similar	Opportunities to learn about		
	experiences	leadership		
Observations	-Teachers comfortable	-Teachers followed the coaching		
and Research	and laughing together	activity with a lot of questions or		
Notes (from the	before the meeting.	examples that relate to personal		
district		experiences.		
collaborative	-Teacher leaders were			
coaching	eager to share the event	-Teacher leaders had questions about		
meeting)	from their building. The	the posture and presence		
	conversation extended	presentation part of the meeting.		
	the meeting for an extra			
	hour.	-Teacher leaders set reading goals for		
		the next meeting.		
	-Teacher leaders			
	discussed additional			
	(outside of requirement)			
	time that they could			
	continue their work.			
	-A small group of leaders			
	remained after the			
	meeting to continue to			
	discuss a school issue.			

Validation. Teacher leaders looked for validation from administrators and peers. While administrators were focused on praise and feedback from administrative sources, teacher leaders

expressed value for validation from their peers. When asked about the motivation to continue leadership work Paige responded:

I like, and not everybody is like this, I like to be, I like to know, I like to be told that I'm doing a good job and feel that. So a lot of times when I'll be meeting with teams and somebody comes the next day, or if I do like a presentation and somebody comes and says, "you know that was really powerful, or this I like," I think, [smiles, thumbs up]. I say all the time that we spend a lot of time filling other people's bucket, so when somebody fills your bucket it kind of motivates you a little bit.

Randall echoed Paige's comments and added:

I think it's being asked, and someone having that confidence in me that I can do it. Or that, you know, like when my teammates say, "You know we really appreciate..." or "I like the way that you handled that." I think we work great as a team, especially at my grade level. And so I don't think they see me as the leader, but I think we all just see each other as co-teachers. I think that's what encourages me the most.

As a supervisor Lilly talked about the administrative support that she believes is helpful for teacher leaders:

It is important to have the back of our teacher leaders. Um, well, it's critical to support them in front of other faculty. There can be a lot of jealousy in a school. It's hard. I have talked to my teacher leaders about their purpose in the building. I want to make sure they're clear, but I need to talk to the whole faculty about it some more, I think. That would be some extra support. It help if we can be transparent and on the same page. We have to communicate the same message. What they say should always support the school goals and vision. I don't think teacher leaders would be able to do very much in a building where the administrators don't support them or allow them to play an important part.

When asked about administrative support, Paige said that her support was present and, "whole-hearted." She continued, "That makes a huge difference, and our administrator was seen as part of the process from the beginning."

Sally's administrative viewpoint reflected her beliefs in the importance of her role: I whish I could clone myself. I wish they had, um, more direct leadership in their coaching. I think the way our system is set up currently, um, there are so many, uh, cooks in the kitchen. I think that they don't really know who to go to for what, and I, I wish there were maybe another, someone else in my capacity who could go to the schools, and check in on Wednesdays. I feel like I can't be everywhere at once. It's just two hours and I have responsibilities here in my building to monitor my collaborative teams, but I wish I could get out to the buildings more and observe them in their coaching roles and give them coaching pointers.

Molly's comments contradicted the value of administrative support when she spoke of her leadership mentors:

Honestly, it was never a principal. That's what it was supposed to be, and I know that's a harsh thing to say, but in my career, principals have come and gone. You know they've never stuck around. So it's hard to learn from someone who doesn't stick around, I think.

Because just one or two years of leadership is not really what it's supposed to be.

Sticking around is kind of important.

Both administrators and teachers were observed and field notes align with teachers'

comments about the need for validation. The Observation Matrix in Table 7 contains

observation and field notes that align with the theme of validation.

Table 7

Observation Matrix 2B

RQ2: What external dynamics contribute to the self-efficacy of teacher				
leaders?				
Theme B: Vali	Theme B: Validation			
Category	Administrator	Teachers		
Observations	-Principal attended teacher	-Teacher thanked Paige at the end of		
and Research	leader's meeting.	the meeting.		
Notes				
	-Teacher leader asked team	- Teachers discussed success		
	to turn in common	following a modeled STEM lesson.		
	assessment to the principal			
	by the end of the week.	- Randall's posture became more		
		relaxed as team asked for his advice		
	-Principal referred to leader	concerning an intervention student.		
	when a teacher asked a			
	question during the	-Molly stiffened and her face became		
	meeting.	red as a negative teacher began		
		asking why she had to complete a		
		task and if everyone at every school		
		was asked to do the same thing. She		
		answered the teacher confidently but		
		had a frustrated appearance until the		
		subject changed.		

Research Question 3

What internal dynamics contribute to self-efficacy of teacher leaders?

Strategic Thinking. Teacher leaders expressed a realistic understanding of the difficulty of their tasks and the skills necessary to be successful. Sally and Lilly, from the administrative perspective, both expressed the importance of the teacher leader's ability to influence others. Sally commented:

So, um, the perfect teacher leader, ideally, it would be someone who has a lot of influence in the building. Maybe someone who's been there for several years, already a leader among the staff, uh, kind of by default. Just kind of the person people turn to for guidance; what to say or what to think. Um, it helps if that person is positive, um so, someone who already has that influence among the staff. Also, someone who is warm, friendly, thoughtful, encouraging, but at the same time someone you never want to disrespect or disappoint. I guess what I'm saying is someone who's proven themselves to be a strong teacher. Has the respect of their students and their fellow staff members. Oh, someone very organized because it does take a certain level of organization. Um, a new teacher, uh couldn't do it because they're still trying to figure out how to run a classroom, how to manage, get papers graded, record keeping, and all that. Classroom management, all of that stuff that comes with time and becomes second nature. Teacher leaders already have that down so they can dedicate more time to helping others.

Teacher leaders' comments aligned with Sally's assessment of the skills and personality needed to be a successful teacher leader. Paige stated:

I think you need to be organized. I think you need to be, I don't think the right word is empathetic or sympathetic, but I feel like you need to understand where teachers are coming from. You need to understand the demands put on them, and, you know, where you might want them to go as far as what you are asking of them, but, what they need in order to get there, to make it easier on them.

Bill offered learned traits that have been essential to success in his leadership role:

[I learned] how to kind of separate what's the monkey on your back and what's the real issue. So, not taking things personally. Trying to balance this professional life with actually having a personal life. I learned that from good leaders. How to communicate effectively, when to take people's time and when not to take people's time, just spend their time and what to do and what not to do.

Randall reiterated the need for intuitive skills when he stated:

I think it's somebody that has to be mindful of the different personalities and be accepting of those personalities and know that not everybody's going to be like you, which is sometimes hard for me. Not everybody's going to have the same mindset as me. The teacher leaders' strategic thinking comments were summarized by Paige's statement:

Somebody who can put themselves in the shoes of whoever they're speaking to and see both points of view and not be defensive and shut off, so I guess, open and accessible, available and flexible. All of those things are needed to be a successful leader."

Randall described his reflections prior to a particular meeting:

Well, I think I kind of role play, in my head sometimes, how it's going to go. Now there's one particular team that is more of a challenge than the other teams. And there are a couple of personalities in that group that are more of a challenge than the others. And, so even before going in [to the meeting] anticipating what some of the pushback may be or what some of the conversations may come. Even talking with that team leader ahead of time and saying, "What's been a challenge?" or, "What are some things that we might need to address?" and let it come from me instead of from that team leader. So, that's kind of helmod in that situation

that's kind of helped in that situation.

The Observation Matrix in Table 8 contains observation and field notes that align with

the theme of strategic thinking.

Table 8

Observation	Matrix 3A
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RQ3: What are	RQ3: What are the internal dynamics that contribute to the self-efficacy of		
teacher leaders?			
Theme 1: Stra	Theme 1: Strategic Thinking		
Categories	The ability to anticipate	Organization	
	problems		
Observations and Research Notes	-All teacher leaders created an agenda for their meetings.	-Agendas were followed during team meetings.	
	-Team norms were reviewed at the beginning of each meeting.	- Bill keeps a notebook for each grade level meeting containing grade-level standards, group SMART goals, meeting agendas, and other products created by the team.	
		-Paige's meeting began and ended on time.	

Table 8 cont.		
	- Molly prepared a sample	-Randall's team had all needed
	schedule prior to the	materials during the meeting.
	discussion about	
	intervention. The team	-Teacher leader team worked to
	used this sample to create a	define mastery in their leadership
	schedule for their team.	group so they could take a unified
		district message to their school sites.
	-The teacher leader	
	meeting allowed time for	
	discussion about what is	
	going on in schools and	
	how events have been	
	handled.	
	-The teacher leader team	
	simulated various	
	communication postures as	
	they learned about	
	responsive communication.	

Table 8 cont

Resilience. All of the teacher leaders spoke of the thick skin and positive attitude that is needed to face the inevitable difficulties that arise as they do their work. Lee stated that teacher leaders must be, "positive, willing to put in work, a good listener, somebody who can be empathetic and sympathetic." Similarly, Bill said, "I think you need to be positive and organized and an effective communicator, and passionate."

Molly expanded on the things she tells herself to be a successful teacher leader and continue her leadership efforts:

I think if you're real meek this would be rough for you. If you're real mild, this would be rough for you because people come at you and it isn't always very positive. I think you have to have tough skin and sometimes you've got to be okay saying, "I hear you" and that's it. I don't have to offer you anything or give you advice, and you have to be able to say it and not worry about it. Although, you go home and think about it for four or five hours and then you start to feel better. But tough skin is good...One thing I coach myself on, "Molly, move on, Molly move on!" You know, you don't stay in that bad place don't spend a lot of time in that. Move forward! And when people give you gripes, you listen and say, "Okay, Okay, now let's move on." And I think that's been successful for me. I'm still going to, I've still got this agenda forward for us. I've got this idea of what our goal is going to be and we're just going to go. And we're just going to keep going, and I think that's a good thing. When I'm uncomfortable, I'm not afraid to say I'm uncomfortable. I think that's a good thing too. And I am also not afraid to disagree.

Lilly with an administrative perspective emphasized the importance of being able to continue to be positive in the face of challenge:

Teacher leaders, not to sound like a song, but they have to be able to shake it off. It is essential to their success. I have to use that advice on a regular basis as well. I try to help the situation by communicating clearly. If we can align our vision and mission, then it is much easier for coaches to continue their work when people are not nice. There are people that do not handle change very well, and change is constant in education. If we can understand clearly, the need and reason for change, the students, then it will be easier for leaders to do the things they have to do to bring about change in the face of uncomfortable challenge.

Sally also acknowledged the difficulty of the role:

These folks have to um have a continued commitment. You know, to get through the hard stuff and keep working toward and refine the goals. And, if you build good relationship, you know, you know the people in your back yard, then you can kind of anticipate some of the problems that are going to come and get yourself ready for that in advance. You have to remind yourself of the goal and the importance of the work often. All the time. You just kind of have to have that positive-keep-going attitude and ignore the rest.

The Observation Matrix in Table 9 contains observation and field notes that align with the theme of cognitive reasoning and mindfulness.

Table 9

Observation Matrix 3B

RQ3: What are the internal dynamics that contribute to the self-efficacy of teacher leaders? Theme 2: Resilience		
Categories	Positive Personality	Aligned Vision
Observations and Research Notes	 -Lee listened to negative feedback, acknowledged problem, and offered ideas for solutions. -Molly smiled and conveyed optimism throughout her interview. Her voice was lifted and positive even when talking about some difficult scenarios. 	 -All leaders used norms to begin the meeting. -Paige reviewed PLC questions four times during the meeting. -Teacher team agreed easily on the revision of SMART goals for their team.

Summary of Data Analysis

Creswell describes holistic analysis as, "a process-approach to data analysis" (1998, p.4). A holistic analysis was used to complete the study in an effort to provide a detailed description of the case and setting with a structured approach for analyzing data. Holistic analysis allowed for connections between the research framework and methods used to reach study conclusions (Creswell, 1998). Sources of self-efficacy identified in previous research guided the formulation of study questions focused on the sources of efficacy specifically related to teacher leaders.

An inductive analysis methodology was employed to generate codes, reanalyze data, refine codes, and identify themes. During the inductive analysis, constant comparison was used to evaluate codes and categories. Following the categorization of information, cross-categorical comparisons were made in an effort to build patterns. Throughout the process of pattern matching, the themes identified through coding were compared with the initial research findings in efficacy research (Yin, 2014). The process of pattern matching assisted in identifying perceptions of efficacy among teacher leaders while also "strengthening internal validity" (Yin, 2014, p.143).

Data transcription was completed in an effort to organize interview recordings and observation notes for the first stage of analysis. Following transcription the process of coding was used to sort and categorize data. Initial codes involved single words or phrases connected to each line of the interview transcriptions and observation notes. The second stage of analysis involved axil coding, or a review of the transcripts and notes in an effort to identify similarities and differences among the study participants. Codes were refined until study themes emerged. The themes were aligned with the research questions and compared with the literature on selfefficacy. The following chapter contains the presentation of findings, conclusions, and recommendations of the study.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

An overview and analysis of data collected from teacher leaders and supervisors of teacher leaders in the Oak Ridge School District in Oak Ridge, Tennessee is provided in Chapter 5. The primary investigator completed all interviews and observations detailed in the study of sources of efficacy for teacher leaders. Discussion of themes that emerged from the data, the relation of themes to the literature, and implications for practice and future research are presented.

The purpose of this study was to understand the dynamics of self-efficacy for teacher leaders in the Oak Ridge, TN school system. For the purpose of the study self-efficacy was defined as the belief in the capability to execute tasks successfully (Bandura, 1997), and the sources of self-efficacy include past experiences, vicarious experiences, social persuasion, and emotional/physiological impacts (Goddard et al., 2000).

Self-efficacy shapes learning, motivation, and decision-making (Bandura, 1989). The results of the study provide information pertaining to the experiential, external, and internal sources of efficacy specific to teacher leaders. The sources of efficacy align with findings in the literature and are used to provide recommendations for practice and further research. There are numerous obstacles faced by teacher leaders including ill-defined roles, resistance from peers, and limited time (Johnson & Donaldson, 2007). Knowledge of the sources of efficacy assists in

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strengthening the supports provided to teacher leaders leading to more successful leadership opportunities.

Conclusions

The following section contains the analysis of data presented in Chapter 4. The analysis is organized by the study research questions. The three study research questions guided the interviews and observations that allowed for in-depth insight to the sources of efficacy for teacher leaders in the Oak Ridge School system. The conclusions provide evidence for strengthening supports for teacher leaders in an effort to build the capacity of highly efficacious teachers.

Research Question 1: What are the experiential sources of self-efficacy for teacher leaders?

Two primary themes emerged related to experiential sources of efficacy for teacher leaders, cultural shifts and connections to student outcomes. In alignment with the literature, these sources of efficacy took the shape of mastery experiences. Much like the literature, the mastery experiences described by the teacher leaders are reciprocal and grew stronger with each successful endeavor. All of the teacher leaders and supervisors were eager to talk about the changes that were becoming noticeable in their schools. Teacher leaders most often observed changes during their team meetings and described the changes as experiences that motivated them to continue to do work even under stressful conditions. Most participants indicated that the primary reason for doing any leadership work was attributed to the possibility of positive changes in school culture and student outcomes. The teacher leaders communicated an understanding that making a positive impact on school culture takes time and patience. When they began to see small changes in the way that teams interacted under their leadership, they were highly motivated to continue to do leadership work. Patterson and Deal (1998) provide insight into the ways in which school leaders influence the culture:

- They communicate core values in what they say and do.
- They honor and recognize those who have worked to serve the students of the school.
- They observe rituals and traditions to support the school's heart and soul.
- They recognize heroes and heroines and the work these exemplars accomplish.
- They eloquently speak of the deeper mission of the school.
- They celebrate the accomplishments of the staff, the students, and the community.
- They preserve the focus on students by recounting stories of success and achievement (p.31).

These positive actions were easily observable in the various team meetings. Teams were working in a focused and orderly fashion, and the teacher leaders were constant reminders of the mission to improve. All teacher leaders had an example of a collegial relationship that had strengthened as a result of collaboration. This gave them hope for working with the teachers who were more resistant to change and less trustful of teacher leaders. Acknowledgment of the changes in relationships, team meetings, and attention to the mission were powerful experiential sources of efficacy for the teacher leaders.

School-wide student academic success provided another experiential source of efficacy for Oak Ridge teacher leaders. Odell (1997) found that, "a teacher cannot be an effective teacher leader if one is not first an accomplished teacher" (p. 122). The perception of teaching efficacy was apparent in all of the teacher leaders. Many expressed the desire to share the knowledge they gained or the success from their own classroom with as many teachers as possible. Whenever teacher leaders were recognized in the classroom, it provided additional confidence in support of their leadership role. Because some teacher leaders shared the school goal of recognizing and celebrating success with the school principals, they had greater opportunities to observe the way team meetings were affecting student outcomes. These experiences also bolstered teacher leaders' sense of efficacy and connection to school-wide success. As with Bandura's (1996) findings, each time teacher leaders experienced success their perceived sense of efficacy strengthened. They were motivated to continue to do their leadership work even though they experienced a lack of time needed for both jobs, increased stress as a classroom teacher, and resistance from some colleagues. Changes in both school culture and student outcomes provided teacher leaders with a sense that they could influence their school in a positive ways and that the work they were doing was important.

Research Question 2: What external dynamics contribute to self-efficacy of teacher leaders?

Bandura (1997) found that vicarious experiences and social persuasion were significant sources of self-efficacy. For teacher leaders in Oak Ridge those external sources of efficacy

were gained through collaborative opportunities with other teacher leaders and from the validation offered by peers and administrators. Teacher leaders collaborated in a monthly teacher leader district meeting. They also worked as a smaller leadership team within their own schools despite their varied leadership titles. In some cases teacher leaders also had opportunities to regularly meet with the school administrator. They related that this was highly beneficial for maintaining clear and transparent goals.

Both teacher leaders and administrators commented on the value of the collaborative leadership meetings for all teacher leaders in the district. During the leadership meetings participants had the opportunity to discuss the events of their school, ask advice from other leaders, and learn coaching and communication strategies. All of the study participants spoke about the value of leadership collaboration to decrease feelings of isolation, to allow time for problem solving, and to provide reassurance of their mission. Through collaboration teacher leaders learned from the positive and negative experiences as others attempted similar tasks. The feedback provided information and sometimes courage as teacher leaders planned their goals.

Appreciation for their work was a frequently cited source of efficacy that compliments the literature on the power of social persuasion. Participants of the study more often commented on validation and acknowledgement from their colleagues over validation from their administrators. Validation from an administrator sent the cue to continue with the mission and goals, while validation from peers sent a message of positive goal attainment. The participants viewed any expression of acknowledgement from resistant colleagues as the most meaningful because it was the most difficult to obtain. The recognition could be in the form of an expressed offer of thanks or a positive comment about professional development delivery. Teacher leaders not only wanted to make a difference in their schools, but they wanted others to know that they were doing the leadership work to make a positive difference.

Research Question 3: What internal dynamics contribute to self-efficacy of teacher leaders?

Emotional impact, or physiological states such as stress, anxiety, and the ability to tolerate change, provide cues that affect the human body and perceptions of efficacy (Bandura, 1997). The teacher leaders in the study were faced with stressful tasks and limited time. The internal dynamics that strengthened the participants' sense of efficacy were strategic thinking and cognitive reasoning. Their ability to set realistic goals and maintain a positive outlook was valuable for both motivation and persistence in the face of difficult situations.

All of the study participants felt that leaders should be able to anticipate problems and remain organized. This type of strategic thinking provided reassurance for leaders when tasks from administrators were ill-defined or poorly communicated. Teacher leaders expressed the need to be realistic in the face of their challenges so that they would not get discouraged when setbacks occurred or if the progress moved too slowly. The ability to remain organized while balancing a classroom, a personal life, and leadership efforts was also referenced as an essential tool from both teacher leaders and administrators. Organization helped to balance their perceived levels of stress and offered a tool that helped in goal setting and attainment. Many participants used organized goal setting to assist in meeting planning, anticipating outcomes, and influencing colleagues.

Study participants demonstrated resiliance as they purposefully adopted a positive outlook in the face of challenge. Brown and Ryan (2003) describe mindfulness as the act of examining thoughts without attaching judgments to them and then consciously letting those thoughts go. Teacher leaders often used mindfulness when they frequently reminded themselves to keep moving forward and remain positive when faced with stressful encounters. Teacher leaders reframed stressful encounters as learning opportunities and the emotional cues helped them to perceive a difficult scenario as a mastery experience. Teacher leaders revealed their positive thoughts and how those thoughts helped them to work with other teachers. A positive outlook gave encouragement when change did not come quickly.

A purposeful vision and goal setting process was another indication of cognitive reasoning in teacher leaders. The study participants commented that when they had the opportunity to align the vision and goal setting with an administrator they saw the greatest benefit. This internal organization of thinking guided the teacher leaders in their attempts to be a positive influence in their schools. When teacher leaders felt that their vision aligned with their administrator and district leaders they felt more confident when speaking to or directing their colleagues. This was evident in the confidence and comfort level that each teacher leader displayed during observed team meetings. Participants' speech patterns and facial expressions were relaxed when addressing the reasons behind a requested tasks and additional concerns presented by the teacher teams. Though participants may have felt anxious, their descriptions of the internal cognitive processes appeared to help them maintain an internal balance that contributed to their sense of efficacy while leading teacher teams.

Recommendations for Practice

School leadership has been frequently scrutinized due to school reform efforts aimed at increasing student achievement. Effective school leadership has a positive impact on student achievement (Leithwood et al., 2004; Marzano et al., 2005; Murphy & Hallinger, 1988). High stakes accountability measures have spurred the inclusion of teachers in school leadership efforts. In 2014 Secretary of Education Arne Duncan proposed an initiative to promote teacher leadership in cooperation with the National Board for Professional Teaching Standards (As cited in Sawchuck, 2014). Duncan also acknowledged that there were few opportunities for leadership advancement in the teaching profession (As cited in Sawchuck, 2014). In response to accountability measures, some schools are turning to a distributed or shared leadership model (Natsiopoulou & Giouroukakis, 2010). Natsiopoulou and Giouroukakis (2010) defined distributed leadership model as an atmosphere in which, "the principal shares authority and power; teachers take leading roles, assume responsibility, and act independently as individuals or groups" (p. 26). The benefits of using teacher leadership include increased collegiality and collaboration, increased capacity of the most successful teachers, reduced isolation, and greater student achievement (Johnson & Donaldson, 2007; Marzano et al., 2005). In order to sustain successful teacher leadership initiatives it will be essential to support teacher leaders as they define a new model of teaching that includes a classroom of students and a school of colleagues. An understanding of the sources of efficacy for teacher leaders can assist in planning professional development, school schedules, and collaborative groupings that strengthen supports for those leaders.

Interview and observation data collected from teacher leaders in the Oak Ridge School district along with interview data from the supervisors of Oak Ridge teacher leaders offers suggested practices for school systems considering supports for teacher leadership initiatives. The following recommendations are associated with the experiential, external, and internal supports that can serve to strengthen teacher leaders' sense of efficacy:

- School and district leaders should clearly define teacher leaders' purpose and responsibilities for an entire faculty. As the responsibilities of teacher leaders expand, administrators should continuously communicate changes to all stakeholders.
- Administrators should seek frequent opportunities to acknowledge and celebrate the work in which teacher leaders are engaged.
- The use of measureable goal-setting, informed by data and tied to the school vision, can help to communicate common goals, organize the work of teacher leaders, increase collaborative opportunities, and provide opportunities for teachers to acknowledge the work of teacher leaders.
- For the purpose of building relationships and sustaining change efforts teacher leaders need sufficient time to meet with various collaborative teams within a school.
- Teacher leaders need opportunities to collaborate with other teacher leaders. Teacher leader collaborative meetings should provide opportunities to share experiences in leadership, learn from others, build relationships, and learn about leadership and coaching.

• An understanding of cognitive reasoning skills such as mindfulness could be a useful topic of study for teacher leaders in order to establish healthy methods of dealing with stress encountered with teacher leadership tasks.

Schools and districts can make small, intentional shifts that support the establishment of sustainable teacher leadership initiatives. Time, communication, and collaboration are three key elements needed to strengthen leadership efficacy. As more models of teacher leadership emerge, professional development for both administrators and teacher leaders will be a useful avenue for sharing and building support systems.

Recommendations for Research

There is limited research surrounding the sources of efficacy pertaining specifically to teacher leaders. Research on larger samples of teacher leaders could yield additional insight into the sources of efficacy for teacher leaders along with the supports needed to sustain successful teacher leadership. A variety of school demographics differing from the demographics present in the Oak Ridge School system could also provide information about the sources of efficacy for teacher leaders. Extending the scope and variety of settings would allow greater transferability of the study results and recommendations.

Prior research indicated that efficacy levels changed as individuals encountered different tasks at various times (Tschannen-Moran & Hoy, 2001). Due to the contextual dependency of self-efficacy, examination of different models of teacher leadership could also indicate additional sources of teacher leader efficacy. As formal teacher leadership models are created in response

to leadership research or educational reform efforts, opportunities to analyze different models in terms of effectiveness and sustainability will provide useful information for educational leadership study.

Further examination of the levels of efficacy in teachers before becoming teacher leaders could provide useful data for school leaders as they attempt to select effective teacher leaders. It could also be useful to examine the effects on students when a teacher takes on additional leadership responsibilities. The relationships between classroom efficacy beliefs and leadership efficacy beliefs could inform administrators attempting to build the capacity of the most effective teachers.

Continued analysis is needed to evaluate the impact of teacher leadership on the school culture, individual classrooms, collective efficacy, and student achievement. If stronger supports for teacher leaders can be established through the study of teacher leader efficacy, thus promoting sustainable leadership initiatives, it will become easier to determine the effect of teacher leaders upon schools.

Closing

As the number of formal leadership opportunities increase it is essential to evaluate the overall effectiveness of teacher leadership initiatives and the relationship of these initiatives to positive student outcomes. Self-efficacy of teacher leaders can be nurtured through various structures, climates, and learning opportunities. School districts can purposefully design teacher leadership opportunities with a clearly defined vision for all stakeholders. A transparent vision aimed at increasing the capacity of the most efficacious teachers could have a positive impact for

students. Teacher leadership will become increasingly accessible for study if a common definition of the role grows from examination of successful teacher leadership models. The purpose of this study was to provide information that is useful for school administrators and teacher leaders in their effort to increase capacity of the most effective teachers through teacher leadership. The findings of the study support and extend the literature on the sources of self-efficacy. Attention to the sources of efficacy for teacher leaders could help administrators plan successful leadership opportunities and assists in sustaining teacher leadership roles. Efficacious teacher leaders could positively influence a greater number of teachers and students. Supporting self-efficacy can lead to teachers who are not only motivated to share leadership responsibilities but who also have the belief in their ability to lead successfully.

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APPENDICES

APPENDIX A Institutional Review Board Approval Letter



Office for the Protection of Human Research Subjects • Box 70565 • Johnson City, Tennessee 37614-1707 Phone: (423) 439-6053 Fax: (423) 439-6060

IRB APPROVAL – Initial Expedited Review

February 5, 2015

Kelly Williams

Re: Sources of Self-Efficacy Beliefs as it Pertains to Teacher Leaders: A Case Study IRB#: c0115.16s

ORSPA #: n/a

The following items were reviewed and approved by an expedited process:

 xform New Protocol Submission; External Site Permission; Informed Consent Document (version 1/12/2015, stamped approved 2/5/2015); Video Release (stamped approved 2/5/2015); Email Invite; Interview Questions; Bibliography; CV

On **February 5**, **2015**, a final approval was granted for a period not to exceed 12 months and will expire on **February 4**, **2016**. The expedited approval of the study will be reported to the convened board on the next agenda.

The following **enclosed stamped**, **approved Informed Consent Documents** have been stamped with the approval and expiration date and these documents must be copied and provided to each participant prior to participant enrollment:

- Informed Consent Document (version 1/12/2015, stamped approved 2/5/2015)
- Video Release (stamped approved 2/5/2015)

Federal regulations require that the original copy of the participant's consent be maintained in the principal investigator's files and that a copy is given to the subject at the time of consent.

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.



Accredited Since December 2005

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely, Stacey Williams, Chair ETSU Campus IRB

APPENDIX B

Informed Consent

EAST TENNESSEE STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD INFORMED CONSENT DOCUMENT (ICD)

This Informed Consent will explain about being a participant in a research study. It is important that you read this material carefully and then decide if you wish to be a volunteer.

<u>PURPOSE</u>: This study is a dissertation study necessary to fulfill the requirements of the doctorate degree in Educational Leadership and Policy Analysis. The purpose is to discover the sources of efficacy beliefs pertaining to teachers serving in leadership roles.

The purpose(s) of this research study is/are as follows:

The purpose of this case study is to understand the dynamics of self-efficacy as it pertains to teacher leaders in the Oak Ridge, TN school system. For the purpose of the study self-efficacy is defined as the belief in the capability to execute tasks successfully (Bandura, 1997), and the sources of self-efficacy include past experiences, vicarious experiences, social persuasion, and emotional impacts (Goddard, Hoy, & Hoy, 2000).

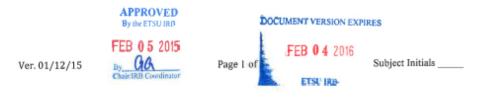
After collecting data through interviews, analysis should identify how teachers perceive the sources of efficacy related to leadership. The results should help to support research in teacher leadership, and assist in establishing successful supports for teacher leaders.

DURATION

The interview will last from 45 minutes to one hour to complete. You are not required to prepare for the interview. Following the interview, you will be observed in one meeting that you facilitate with other teachers as the teacher leader.

PROCEDURES

The procedures, which will involve you as a research subject, include: I will ask you to explain you perceptions of various sources of efficacy related to teacher leadership. I will request permission to record the interview so the script can be coded and categorized for qualitative analysis. I will also be taking notes to associate emotions and expressions with comments. Following the interview, I will observe one meeting in which you facilitate for other teachers. This meeting will not be recorded. I will take notes of your actions related to sources of self-efficacy. Other teachers in the meeting will not be recorded or observed for the purpose of the study.



PRINCIPAL INVESTIGATOR: Kelly M. Williams

TITLE OF PROJECT: Sources of Self-Efficacy Beliefs as it Pertains to Teacher Leaders

Your decision to not participate in the study will a not affect you in any way. You can stop the interview and withdraw from the study at any time before the completion of the dissertation.

POSSIBLE RISKS/DISCOMFORTS

The possible risks and/or discomforts of your involvement include:

There are no foreseeable risks or discomforts to those who participate in this study.

POSSIBLE BENEFITS

The possible benefits of your participation are:

There are no direct benefits for participation in this study. The possible benefits from participation include the improvement of the teacher leadership supports available in your school district.

FINANCIAL COSTS

There are no additional costs to participants that may result from participation in the research.

VOLUNTARY PARTICIPATION

<u>Participation in this research experiment is voluntary</u>. You may refuse to participate. You can quit at any time. If you quit or refuse to participate, the benefits or treatment to which you are otherwise entitled will not be affected. You may quit by calling Kelly Williams, whose phone number is 865-253-2105. You will be told immediately if any of the results of the study should reasonably be expected to make you change your mind about staying in the study.

CONTACT FOR QUESTIONS

If you have any questions, problems or research-related medical problems at any time, you may call Kelly Williams at Oak Ridge Schools at 865-253-2105, or alternatively at 865-425-9016. You may call the Chairman of the Institutional Review Board at 423/439-6054 for any questions you may have about your rights as a research subject. If you have any questions or concerns about the research and want to talk to someone independent of the research team or you can't reach the study staff, you may call an IRB Coordinator at 423/439-6055 or 423/439/6002.

	APPROVED By the ETSU IRB		DOCUMENT VERSION EXPIRES	
	FEB 0 5 2015	FEB 0 4 2016		
Ver. 01/12/15	By Chain/IRB Coordinator	Page 2 of 3	ETSU IRB	Subject Initials

PRINCIPAL INVESTIGATOR: _ Kellv M. Williams

TITLE OF PROJECT: Sources of Self-Efficacy Beliefs as it Pertains to Teacher Leaders

CONFIDENTIALITY

Ver. 01/12/15

Every attempt will be made to see that your study results are kept confidential. A copy of the records from this study will be stored in Warf-Pickel, room 501 for at least 5 years after the end of this research. The results of this study may be published and/or presented at meetings without naming you as a subject. Although your rights and privacy will be maintained, ETSU IRB, and personnel particular to this research, members of the dissertation review committee have access to the study records. Your records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

By signing below, you confirm that you have read or had this document read to you. You will be given a signed copy of this informed consent document. You have been given the chance to ask questions and to discuss your participation with the investigator. You freely and voluntarily choose to be in this research project.

SIGNATURE OF PARTICIPANT	DATE
PRINTED NAME OF PARTICIPANT	DATE
SIGNATURE OF INVESTIGATOR	DATE
SIGNATURE OF WITNESS (if applicable)	DATE



APPENDIX C

Audio Consent Form

Administrative Consent Form

Audio Tape Release Form

I voluntarily agree to be audio taped during the interview being conducted by Kelly Williams. I understand that the tapes will be used to gather information about teacher leaders, and such information will be used to generate a dissertation. The tape will be kept for approximately one year and will be securely stored at the home of Kelly Williams. After the data is collected and transcriptions are made, the tapes will be destroyed.

My Signature	Date
Signature of the Investigator	Date

Refusal to be Taped

I do not agree to be audio taped during the interview conducted by Kelly Williams I understand that I will not receive compensation. By refusing to be audio taped, I understand that I may not continue to participate in the study.

My Signature	Date	
Signature of the Investigator	Date	-



APPENDIX D

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Teacher Leader Interview Protocol

You have been selected to interview today because you have been identified as a teacher leader. My research project focuses on the perceptions and experiences of teacher leaders in a formal leadership role. My study does not aim to evaluate your techniques or experiences. Rather, I am trying to learn more about teacher leadership, and hopefully learn about leadership practices that help improve student learning.

I would like to digitally record our conversations today for note taking purposes. Please sign the release form. No one else will have access to the recording and it will be eventually destroyed after it is transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm. Thank you for your agreeing to participate.

APPENDIX E

Interview Questions

- 1. What would be an area of success in your leadership experience?
- 2. What do you do when a teacher doesn't understand what you are facilitating?
- 3. What is the evidence of successful teacher leadership?
- 4. What items should be included in an evaluation of teacher leaders?
- 5. What have you learned from another leader that has been helpful for your leadership

experiences?

6. What encourages you to continue to do the leadership work?

7. What kinds of support from others do teacher leaders need to do their work?

8. What do you reflect upon before a meeting with teachers? After a successful/unsuccessful meeting?

9. Describe the personality characteristics needed to be a successful teacher leader.

APPENDIX F

Supervisor of Teacher Leaders Interview

1. What is the evidence of successful teacher leadership?

2. What types of training are most helpful for teacher leaders?

3. What prior experiences do you believe are important for a teacher as they emerge as teacher leader?

4. How do teacher leaders improve their leadership skills?

- 5. What kinds of support do teacher leaders need?
- 6. How should administrators assist teacher leaders?
- 7. How should teacher leaders respond to negative experiences?
- 8. Describe the personality characteristics needed to be a successful teacher leader.

VITA

KELLY McGILL WILLIAMS

Education:	B.S. Early Childhood Education, University of Tennessee, Knoxville, Tennessee 1997
	Master of Teaching, Lee University, Cleveland, Tennessee 2000
	Ed. S. Theory and Practice in Teacher Education, University Of Tennessee, Knoxville, Tennessee 2002
	Ed.D. Educational Leadership, East Tennessee State University, Johnson City, Tennessee 2015
Professional Experience:	Teacher, Philadelphia Elementary School; Philadelphia, Tennessee, 1998-2011
	Educational Consultant; Connections for Education Outreach, University of Tennessee; Knoxville, Tennessee, 2011-2013
	Literacy Coordinator, Oak Ridge Schools; Oak Ridge, Tennessee 2013 – Current
Presentations:	Williams, K. M. Writer's Workshop. Tennessee Department of Education: LEAD Annual Conference, Nashville, Tennessee October, 2004, (Oral Presentation).
	Moore, T.C., Chaudhary, R.S., Martin, S.V & Williams, K. M. Tennessee's positive behavior support initiative: Professional development and technical assistance to schools in east Tennessee. Tennessee Department of Education: Division of College and Career Readiness Annual Conference, Nashville, Tennessee February 2012, (Oral Presentation).
	Long, J. & Williams, K. M. Literacy in Science and Social Studies: The English Language Learner. University of Tennessee: ITS4ELL's, Oak Ridge, Tennessee, April 2014, (Oral Presentation).

	Williams, K. M. Cross-Curricular Collaboration. Learning Forward Annual Conference, December 2014, (Oral Presentation).
Honors and Awards:	Philadelphia Elementary School Teacher of the Year, 2002
	Excellence in Service to Educators Award, 2014