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The self-perception of leadership efficacy of teachers and the effects on student achievement

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Dissertation

The Self-Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement

by

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Submitted to the Department of Leadership and Counseling

at Eastern Michigan University

in partial completion of the degree of

DOCTOR OF PHILOSOPHY

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Dedication

Thank you to my wonderful parents. You raised me to pursue my dreams and have been a

constant source of love and inspiration. To my amazing husband, Justin, thank you for your

unconditional love and unwavering support throughout this journey. I love you with all of my

heart. And finally, to Baby Clark, due January 2017, I can't wait to meet you and am so excited

that you will give me the title I will cherish most: *Mom*.

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The members of my cohort for their friendship, support, and encouragement throughout the entire program. Now, it's your turn!

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Abstract

Decades of research and the unprecedented demands being placed on our nation's schools have revealed changing conceptions in school leadership. Increasingly, teachers are taking a more central role in the daily functions of their schools and are becoming more involved in important decision-making that was once reserved for principals. While the topic of teacher leadership continues to garner support in the literature, little attention has been given to studying teacher leadership through an organizational lens. Closely related to the idea of teacher leadership is collective efficacy, an organizational concept that has previously been linked to student achievement. This study utilized the 17-item Teacher Leadership Inventory [Angelle, P. S., & DeHart, C. (2010). *A four factor model of teacher leadership: Construction and testing of the Teacher Leadership Inventory.* Paper presented at the annual meeting of the American Educational Research Association, Denver, CO] and the 10-item Teacher Efficacy Belief Scale – Collective Form [Olivier, D. F. (2001). *Teacher personal and school culture characteristics in effective schools: Toward a model of a professional learning community* (Ph.D.). Available from ProQuest Dissertations & Theses Global. (275848775)] to analyze correlations between teacher leadership, collective efficacy, and student achievement as measured by the Michigan Educational Assessment Program (MEAP). Findings showed a moderately strong, positive correlation between teachers' perceptions of teacher leadership and collective efficacy at both the individual and school-level. No significant relationship was found between teacher leadership and student achievement and collective efficacy and student achievement.

Keywords: teacher leadership, collective efficacy, student achievement

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CHAPTER ONE

Introduction and Background

Teachers who choose the path of teacher leadership…become owners and

investors in their schools, rather than mere tenants.

Linda Lambert, 2003, p. 32

For years, educators have acknowledged the increasing demands placed on principals and

other school leaders and the important role leadership plays in raising student achievement

(Waters, Marzano, & McNulty, 2004). Not only are building principals responsible for the daily

administration of school functions, they also serve as instructional and community leaders, are

responsible for student behavior and teacher evaluations, and must help implement reform

efforts, all while acting as visionaries that inspire and motivate the members of their staff. As

the standards and accountability movement has taken hold with unprecedented demands being

placed on schools, it is clear that the role of principal has expanded. Some might even contend

that the job of principal has become so complex that it almost seems impossible for any one

person to successfully fulfill all of the duties required of the position (Rutherford, 2006).

Many studies have documented the influence that effective school leadership can have on

both the achievement of students and overall school success (Leithwood, Jantzi, & Steinbach

1999; Marzano, Waters, & McNulty, 2005). Yet, as public schools face increasing pressure and

scrutiny to close the achievement gap and prepare students to be career and college ready, it is

evident that many of the traditional hierarchical models of school leadership may fall short in

producing needed change (Copland, 2003). In turn, the concept of teacher leadership has

garnered support as a productive model for school improvement. As Riordan (2003) states,

"Contemporary conceptions of school leadership have moved away from the notion of a single

leader in a traditionally hierarchical school organization to the more complex idea of distributed leadership shared by multiple individuals at different levels of the organization" (p. 3).

While the body of literature surrounding teacher leadership continues to grow and develop momentum, one thing is clear: teacher leadership has the potential to make a profound impact on instruction and student learning. Research has shown that the efforts of teacher leaders can have a positive effect on school improvement, school effectiveness, and teacher morale (Frost & Harris, 2003; Gronn, 2000; Leithwood & Jantzi, 2000). When teachers are empowered as instructional leaders and decision-makers, students and the public schools they attend will benefit. However, teacher leadership is still more of an idea than a reality ready to be put into practice (Helterbran, 2010). Some have even categorized teacher leadership as simply a "feel-good factor"—a model for school leadership that *sounds* promising, but one that has not truly been *proven* to make a difference (Harris, 2005). It was along this venue that this study was based.

Statement of the Problem

Even a cursory review of the literature reveals a multitude of studies pertaining to teacher leadership. Research on teacher leadership has addressed everything from its evolution (York-Barr & Duke, 2004) and reform (Silva, Gimbert, & Nolan, 2000) to teacher leader roles (Danielson, 2007; Fullan & Hargreaves, 1996; Katzenmeyer & Moller, 2001), responsibilities (Smylie, 1992), skills (Danielson, 2007; Katzenmeyer & Moller, 2001), and the personal benefits teachers may find in being leaders (Frost & Harris, 2003; Harris & Muijs, 2005; Katzenmeyer & Moller, 2001; Smylie, 1994). While all of this work has sparked interest surrounding teacher leadership, the majority of the literature examines this form of leadership from a teacher perspective with conclusions that are quite often most relevant to the teachers assuming the

leadership roles. What is missing are studies that view teacher leadership through an organizational lens. As Harris (2005) states, "We do not know the ways in which teachers positively influence instructional and organizational development; the existing studies are not fine grained or detailed enough" (p. 214). Thus, in order to help cultivate teacher leadership, we need to measure its collective effect, for the implementation of distributed leadership in the form of teacher leadership cannot be accomplished successfully without focusing on the relationship between teacher leadership and student learning.

Purpose of the Study

Over the years, as the role of the principal has expanded and school leadership has become more complex, researchers have begun to study the concept of teachers as leaders. However, while the literature supports the idea of teacher leadership, it is hard to break free from the hierarchical organizational system—in which the principal is the sole authoritative figure in the building capable of influencing others—that has for years been the tenet of our educational system (Murphy, 2005). As Barth (2001) states, "Most would agree that schools are full of an over abundance of underutilized talent" (p. 449). In an effort to move our schools toward meeting the heightened standards that have thus far been unmet, it is time for teachers to assume some of the roles and responsibilities previously held by the principal. This study sought to cultivate teacher leadership by examining the potential organizational benefits of teacher leadership on student achievement.

Closely related to the idea of teacher leadership, and a central theme in the literature surrounding the topic, is the organizational concept educators refer to as *leadership capacity*. Organizations with high levels of leadership capacity promote "broad-based, skillful participation in the work of leadership that leads to lasting school improvement" (Lambert, 2005,

p. 38). As noted by DiRanna and Loucks-Horsley (2001), the beliefs of teacher leaders in their abilities to bring about change, their desire to work for change, and their knowledge and skills to be able to do so greatly increase a school's leadership capacity. Thus, it follows that teachers' *collective efficacy*, or "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive impact on students" (Goddard, Hoy, & Hoy, 2000, p. 480), promotes leadership capacity, teacher leadership, and, in turn, student achievement. Indeed, Bandura (1993) hypothesized, "Faculties' beliefs in their collective instructional efficacy contribute significantly to their schools' level of academic achievement" (p. 117).

The purpose of this study was to build on a previous study conducted by Derrington and Angelle (2013) in which the constructs of teacher leadership and collective efficacy were explored. Findings from that study indicated a strong relationship between the collective efficacy of a school's faculty and the extent of teacher leadership. This study expands the literature by adding in a component of student achievement, thus providing empirical evidence that is greatly needed.

Significance of the Study

Because teachers work directly with the students they teach, educators and researchers alike understand that there is untapped potential for bringing about necessary change within this body of professionals. It is time to harness the power and expertise that can be found right within our nation's classrooms—*teachers*. Ellen Moir (2009), the founder and executive director of The New Teacher Center based at the University of California, Santa Cruz, states, "The single most important element in a child's education is the teacher" (p. 15). During their most impressionable years, teachers have a profound impact on students' learning and success. Even in an educational system that seems unfit to meet the needs of our nation's changing student

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population, teachers press on, committed to facing the challenges of teaching in the 21st Century (Katzenmeyer & Moller, 2009). As a large, dedicated group at the center of the educational process, the future of school leadership must recognize the potential for teachers to bring about needed change (Katzenmeyer & Moller, 2009; Rutherford, 2006). In order to help cultivate teacher leadership, it is necessary to study its impact on student achievement. Studying how teacher leadership and teachers' collective efficacy beliefs are associated with one another and student achievement may help enhance leadership efficacy. As noted by Tschannen-Moran and Gareis (2004), "enhancing leadership self-efficacy should be an important objective for those responsible for improving the quality of leadership in school" (p. 583). Not only does this study have the potential to provide insight into the relationship between teachers' perceptions regarding teacher leadership and collective efficacy, of particular value is the potential of this study to contribute empirical findings to the existing literature base.

Research Questions and Hypotheses

The research questions for this study were as follows:

1. What are teachers' perceptions of the degree of teacher leadership practiced in their schools, as measured by the Teacher Leadership Inventory (TLI)?

2. How efficacious are the staff members in the school, as measured by the Teacher Efficacy Belief Scale – Collective Form (TEBS–C)?

3. Is there a relationship between teachers' perceptions of the degree of teacher leadership and collective teacher efficacy?

4. What relationship exists between the degree of teacher leadership and the collective efficacy of elementary school teachers and the achievement levels of students as

evidenced by performance on the Michigan Educational Assessment Program (MEAP)?

The following null hypotheses will serve as a guide for analyzing the results:

1. There will be no relationship between teachers' perceptions of the degree of teacher leadership practiced in their schools and the collective efficacy of the staff.

2. There will be no relationship between teachers' perceptions of the degree of teacher leadership practiced in their schools and student performance on the MEAP.

3. There will be no relationship between the collective efficacy of elementary school teachers and student performance on the MEAP.

These questions, along with a conceptual framework, will provide the basic outline for exploring the concept of teacher leadership. Chapter Three provides a more detailed explanation of the study design and methodological processes that were used to answer these questions.

Theoretical Base

To fully understand the paradigmatic shift to fostering teachers as leaders, it was important to explain the theoretical underpinnings that served as a foundation for the research design and to encapsulate the work of teacher leaders within a conceptual framework. Not only did a conceptual framework provide common vocabulary and help to set the parameters for working in the field, it was also useful when discussing teacher leadership and collective efficacy as part of the results.

The primary theory that framed this study is built on Bandura's (1977, 1986) theory of self-efficacy, a concept central to his social cognitive theory. According to Bandura, self-efficacy is the "belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1995, p.2). Since Bandura's seminal paper (1977),

"Self-Efficacy: Toward a Unifying Theory of Behavioral Change," self-efficacy in human behavior has become a widely studied topic, and it is clear why: self-efficacy beliefs determine how people feel, think, motivate themselves, and behave—especially in the face of difficult tasks or challenging situations. As Bandura states, "To fully understand personal causation requires a comprehensive theory that explains, within a unified conceptual framework, the origins of beliefs of personal efficacy, their structure and function, the processes through which they operate, and their diverse effects. Self-efficacy theory addresses all of these sub-processes both at the individual and collective level[s]" (Bandura, 1995, p. 2).

In addition to Bandura's theory of self-efficacy, theories of school leadership also contributed to the conceptual underpinnings that framed this study. Exploration and experimentation with changing leadership roles in schools is still relatively new and in the early stages (Copland, 2001). However, the emerging conceptions of leadership have the potential to redefine how educators establish and maintain a positive school climate, motivate and empower staff members, implement curriculum, improve instruction, and collaborate with one another. Rather than emphasize the sole authority and monopoly of the principal, new leadership theories define leadership as a *shared* function among the individuals within a school. These theories stand in stark contrast to the idea that leadership must be conceived around a single individual. Instead, this new line of thinking supports the idea that "two heads are better than one." As Bergmann, Hurson, and Russ-Eft (1999) state, "Organizations need people at every level with the courage and skill to step up to leadership opportunities, whether they're formally designated leaders or not" (p. x). Below, collective teacher efficacy and leadership theories that support teachers as leaders will be explored and developed into the conceptual framework on which this study was built.

Collective teacher efficacy. Bandura introduced the idea of self-efficacy in 1977 with the intent of explaining human motivation and behavior, noting, "among the mechanisms of personal agency, none is more central or pervasive than people's beliefs about their capabilities to exercise control over events that affect their lives" (Bandura, 1986, p. 1176). As outlined by Bandura (1977), individuals employ four sources of information to judge their efficacy: performance outcomes (also called mastery experience), vicarious experiences, verbal persuasion, and physiological and affective states (or the emotional response to situations). Together, these components help individuals determine if they *believe* they have the capability to achieve or accomplish a specific task. Among educators, the idea of self-efficacy has also garnered much attention. Building on the work of Bandura, researchers such as Woolfolk & Hoy (1990), Goddard, Hoy, & Woolfolk Hoy (2004), Henson (2001), Tschannen-Moran & Woolfolk Hoy (2002), and Jerald (2007) have explored teachers' efficacy beliefs in their abilities to positively influence student learning. As defined by Woolfolk Hoy, "Teachers' self-efficacy for teaching—their perceptions about their own capabilities to foster students' learning and engagement—has proved to be an important teacher characteristic often correlated with positive student and teacher outcomes" (Shaughnessy, 2004, p. 154). While researchers have found links between teachers' individual levels of confidence in their ability to promote student learning (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998), the primary focus of this study concerned the organizational construct known as collective efficacy.

Whereas self-efficacy is associated with the individual, collective efficacy is related to the group. Defined by Goddard & Goddard (2001), collective efficacy is "the perception[s] of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (p. 809). Though inquiry into collective efficacy

in schools is still growing and building momentum, many studies have documented a strong relationship between student academic outcomes and teachers' efficacy beliefs. Just as Bandura (1986, 1997) described the four sources of efficacy-shaping information for *individuals* noted above, he also explained how those sources are critical to the development of *collective* efficacy beliefs: "[p]erceived personal and collective efficacy differ in the unit of agency, but in both forms efficacy beliefs have similar sources, serve similar functions, and operate through similar processes" (p. 478). Bandura (1993) also established a link between collective efficacy and student achievement, proving teachers' beliefs about the capability of their faculty were stronger than the link between student achievement and socio-economic status (SES). What's more, even after controlling for students' prior achievement, race/ethnicity, SES, and gender, Goddard and his colleagues found that the collective efficacy beliefs of the faculty members in a school have stronger effects on student achievement than SES and race (Goddard et al., 2000). Thus, teachers' beliefs in their joint abilities to influence students can have a profound effect in terms of student learning.

The shared beliefs at the organizational level are also directly related to the collective responsibility of the group and group goal attainment. The idea that a school faculty collectively takes responsibility for student learning is essential in highly efficacious organizations. Regarded as an outcome of collective efficacy, Wahlstrom and Louis (2008) state, "Here the emphasis is on teachers' belief that they not only have the *capacity* to influence student learning but the *shared obligation* to do so" [emphasis added] (p. 466). Drawing on research from various fields, Goddard et al. (2000) found many examples demonstrating the impact collective efficacy has on group goal attainment citing, "across settings, perceptions of group capability tend to be strongly and positively related to group processes and outcomes" (p. 8).

The evidence relating collective efficacy beliefs to the attainments of the organization is very compelling. The question remains: why? *Why* does collective efficacy matter? The answer is straightforward: collective efficacy fosters groups' motivational commitment to their missions, resilience to adversity, and performance accomplishments (Bandura, 2000). As summed up by Goddard et al. (2000), "Organizations with strong beliefs in group capability can tolerate pressure and crises and continue to function without debilitating consequences; indeed, such organizations learn to rise to the challenge when confronted with disruptive forces" (p. 6). In an era where there is no shortage of challenges facing schools, the research surrounding collective efficacy is another strong indicator highlighting the importance of the group and the need for more people to be in leadership positions.

Teacher leadership. For the past three decades, scholarly research and subsequent reform efforts have called for the inclusion of teachers in shared leadership roles (Lambert, 1998). These new conceptions of school leadership promote active participation from all levels of the organization—especially from teachers. The excitement surrounding teacher leadership has continued to build and develop momentum. Yet, while the literature is replete with information pertaining to teacher leadership and its importance in practice and educational reform, researchers have failed to encapsulate the concept of teacher leadership within a single, widely accepted definition. For example, Katzenmeyer and Moller (2001) define teacher leadership in terms of influence while Danielson (2006, 2007) emphasizes teachers' leadership roles and skills. Still further, York-Barr and Duke (2004) assert that teacher leaders hold an important and central position within a school while Childs-Bowen, Moller, and Scrivner (2000) maintain that teachers become leaders when they work effectively with their colleagues in professional learning communities.

Though there is no agreed-upon definition of the concept, teacher leadership is grounded in several leadership theories that assist in explaining and understanding it. Each of these theories, such as participative leadership (Leithwood & Duke, 1999), leadership as an organizational quality (Ogawa & Bossert, 1995), distributed leadership (Spillane, Halverson, & Diamond, 2001; Spillane, 2005; 2006), and parallel leadership (Crowther, Kaagen, Ferguson, & Haan, 2002; Crowther, Ferguson, & Haan, 2009), are distinct in their own right. However, they are aligned in the fact that they support the practice of sharing leadership activities with teachers. For example, Leithwood and Duke's (1999) participative leadership emphasizes the importance of group decision-making. Meanwhile, Ogawa and Bossert's (1995) view of leadership as an organizational quality states, "The parameters of leadership [are] at the organizational level. If leadership affects the survival of organizations, then it is a phenomenon of nothing less than organizational proportions" (p. 233). Spillane (2005; 2006) promotes distributed leadership viewing leadership as *practice*—defined as the interactions between people and their situations—rather than merely focusing on leadership roles, functions, and routines. Finally, Crowther et al. (2002; 2009) emphasize the parallel and collective action between teacher leaders and school principals. These theories are discussed in more detail in the review of the literature. At present, they serve to provide context in support of the study.

   Components of teacher leadership. The body of literature surrounding teacher leadership is expansive. However, certain themes arose that were essential when considering teacher leadership as a foundational construct on which to build a research study. A review and synthesis of the research surrounding the topic revealed five main components that form the core of teacher leadership. They are:

- *Teacher Leaders*

- *Structures & Resources*

- *School Culture*

- *Principal Support*

- *Leadership Focus*

Below, a brief explanation of each component will set the stage for understanding the conceptual framework used in this study.

Teacher leaders. Teacher leaders' roles and characteristics as documented in the literature are many and varied. Though teachers may serve in formal roles, such as department head, grade-level team leader, subject leader, or mentor, many teachers taking on leadership roles do not view themselves as leaders (Angelle & DeHart, 2010). Rather, they value the informal and organic nature of leading by example, collaborating, and sharing experiences with their colleagues (Moller, Childs-Bowen, & Scrivner, 2001). Other teacher leader roles, as cited in Angelle and DeHart's work (2010) include sharing knowledge with others, mentoring, analyzing data, nurturing relationships, modeling best teaching practices, taking part in action research, thinking innovatively to challenge the status-quo, to name a few.

In addition to the various roles teacher leaders may assume, they also demonstrate certain characteristics that allow them to navigate the school structure to positively affect their students and colleagues. In many ways, good teacher leaders exemplify the traits of good teachers—they are open-minded, flexible, confident, and are experts in their fields (Danielson, 2007). Jackson, Burrus, Basset, and Roberts (2010) concur with their own list of teacher leader qualities:

- Exemplary work ethic

- Ability to work in a team

- Natural leadership propensities

- Openness

- Vision

- Positive affect and communication skills

- Master teaching skills

Teacher leaders exude passion for their work, have the ability to build relationships with all stakeholders, and are willing to reach beyond their comfort zones as they work to bring about school change. However, teacher leaders need to be more than just good teachers. They must also be able to work successfully with colleagues (Crowther et al., 2009).

Structures and resources. The need for space, building configurations, and systems that support teacher leadership and collaboration among staff members is very important. As described by Bolman and Deal (2003), "Structures must be designed to fit an organization's circumstances (including its goals, technology, workforce, and environment)" (p. 45). Often considered a barrier of teacher leadership, the physical structure of a building, including the physical layout, access to classrooms, and space for collaboration, can greatly inhibit the work of teacher leaders or promote it. As Morgan (1997) explains,

> Where hierarchical and horizontal divisions are particularly strong, information and knowledge rarely flow in a free manner. Different sectors of the organization thus often operate on the basis of different pictures of the total situation, pursuing subunit goals almost as ends in themselves…The bounded rationality inherent in organizational design thus actually *creates* boundaries! Employees are usually encouraged to occupy and keep a predefined place within the whole, and are rewarded for doing so (p. 88).

In addition to the physical structure of an organization, resources should be used to their fullest potential to support teacher leadership. In their qualitative case study of teachers, Beachum and

Dentith (2004) identified three central themes that support teacher leaders: school structure and organization, processes and identities shared among the staff members, and a deliberate use of outside resources. If we seek to promote shared leadership within our schools, it will be imperative to challenge the "flat, compartmentalized school structure in which classroom teachers continue to work alone" (Johnson & Donaldson, 2007, p. 10).

School culture. School culture is another essential component of teacher leadership. In their reference to the Annenberg Institute for School Reform (n.d.), Khourey-Bowers, Dinko, and Hart (2004) state, "*Shared leadership* is operationally defined as the culture of collegiality among peers, along with administrative and parental support for a jointly designed vision of the purposes of schooling" (p. 4). Though traditional aspects of school culture promote autonomy within one's own classroom, reform efforts have spurred educators to challenge this belief. Supplanting the idea that teaching is restricted within the classroom's four walls, new approaches in teaching, learning, and leading promote school cultures that value collaboration and interaction. Indeed, Derrington and Angelle (2013) note that teachers thrive in environments that emphasize collaboration, collegiality, and communication between members of the staff. Furthermore, teachers are more likely to take on the added responsibilities associated with leadership in an environment that supports risk-taking and power sharing (Angelle & Beaumont, 2007).

Principal support. Principal support of teacher leadership is directly related to school culture and is essential if teachers are to step up and take on more leadership roles. Many studies have cited the importance school culture plays in cultivating teacher leadership (Danielson, 2006; Katzenmeyer & Moller, 2001; York-Barr & Duke, 2004), and there can be no doubt that environments where teachers are encouraged to take initiative, are valued and respected as

examples, and are made aware of leadership opportunities are led by principals who understand

and embrace this new conception of leadership. From their comprehensive meta-analysis of

empirical studies of leadership and student achievement, Marzano, Waters, and McNulty (2005)

found four key leadership behaviors of principals that help foster an effective, collaborative

school culture:

(a) Promote cohesion among all staff;

(b) Promote a sense of well-being among all staff;

(c) Develop an understanding of purpose among all staff; and,

(d) Develop a shared vision of what school should be like (p. 48).

Each of these leadership behaviors, Marzano and his colleagues (2005) concluded, are directly

related to school culture and student achievement.

In order for teacher leadership to succeed, teachers must be given opportunities to

participate in shared decision-making and principals must recognize its importance. As Angelle

and DeHart (2010) state, "Principals must change their perception of the teacher from a follower

to a facilitator" (p. 8). The significance of this statement is demonstrated throughout the

literature. In a case study that focused on the relationship between teacher leaders and the

principal in a suburban high school, Wright (2005) found principal leadership works in tandem

with teacher leadership. As noted by Wright, principal support of teacher collaboration affords

faculty members more opportunities to work together and explore their own areas of interest.

Mangin (2005) reported similar findings stating, "Teacher leaders reported that the level of

support they received from administrators directly affected their ability to access classrooms and

implement the teacher leadership position as intended" (p. 15). Conversely, some studies have

found that the actions of the principal may, in fact, hinder teacher leadership. Of this barrier to

teacher leadership Barth (2001) states, "It is disheartening that many teachers experience their school administrator, and especially their principal, as an obstacle to their leadership aspirations" (p. 447). Clearly, principal support of a collaborative school culture and willingness to involve teachers in shared learning and decision-making help to avoid the top-down managerial structure that inhibits organizational improvement and learning.

Leadership focus. A final component of teacher leadership is the focus that is placed on teaching practice, student learning, and ultimately, school improvement. From the ten teacher leader roles identified by Harrison and Killion (2007)—resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, catalyst for change, and learner—it is clear that teacher-centered leadership practices take into account the tangible ways in which teachers can make an immediate and direct impact on students. As Meredith (2006) points out, the goals of teacher leaders to improve student achievement, extend their own learning, collaborate with colleagues, and support the mission and vision of the school come from knowledge and dedication to the profession. Therefore, it is essential that teachers become the central focus when seeking to implement this leadership style.

Summary. Theories supporting teacher leadership and collective efficacy served as the foundation for this study. Grounded in leadership practices that share decision-making and responsibilities among all members of the school faculty, teacher leadership reflects a new conception of school culture and organizational capacity. Furthermore, research and theory surrounding collective efficacy provide the essential components for understanding human behavior and teacher agency. Together, these concepts formed the lens through which this study was conducted.

Conceptual Framework

Developed by the researcher, an analytic framework derived from the aforementioned concepts and theories served as a guide for examining teachers' collective efficacy beliefs, teacher leadership, and student achievement. It was assumed that teachers' beliefs in their collective ability to influence student learning are directly related to teacher leadership, and vice versa. That is, highly efficacious school organizations are more likely to have teachers ready and willing to step into leadership roles, maintain a supportive culture and environment conducive for collaboration, thus allowing them to focus on student achievement. At the same time, schools that support teacher leadership are more likely to have staff members who believe that, together, they can positively influence student achievement. Figure 1 illustrates this reciprocal relationship, and it was through this lens that the variables were studied.
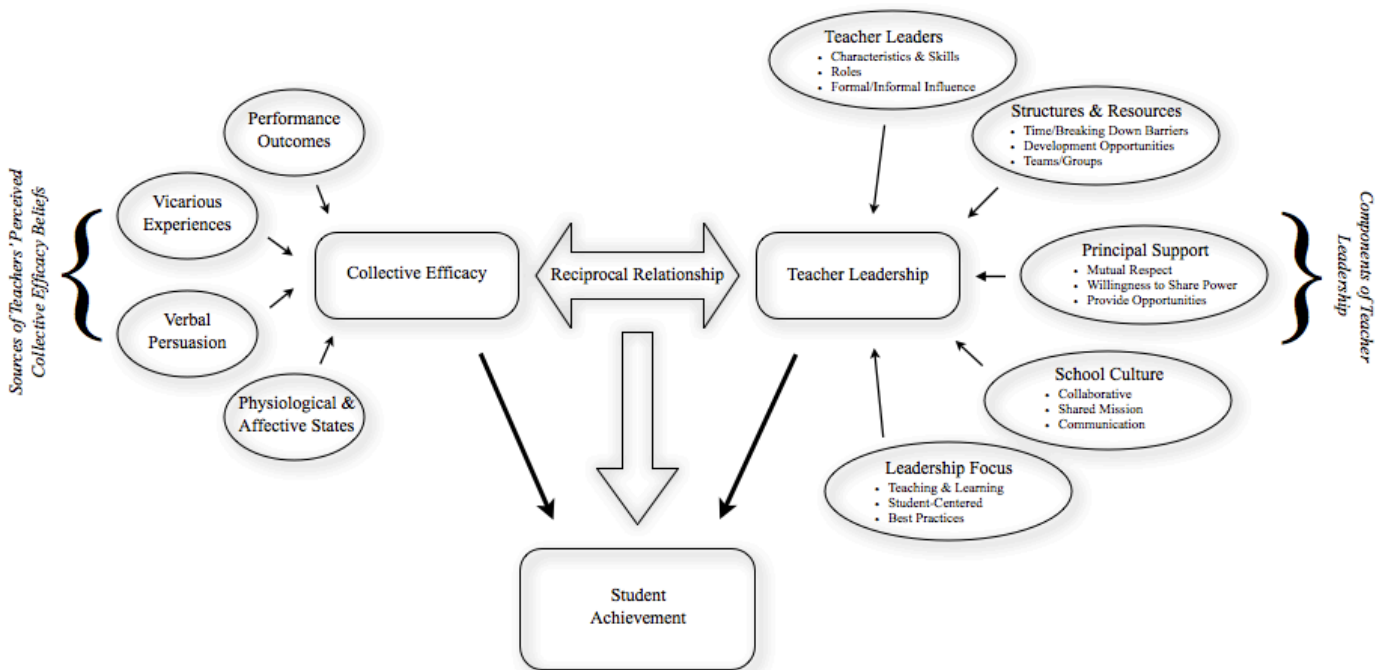
Figure 1. Conceptual framework relating collective efficacy with teacher leadership and student achievement.

Operational Definitions

The theories and concepts on which this study was based employ a unique vocabulary. Accordingly, the following terms were defined to increase understanding of the study:

- *Collective Efficacy* – Refers to "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1997, p. 477).

- *Collective Teacher Efficacy* – A characteristic of teacher groups referring to "the perceptions of teachers in a school that the faculty as a whole will have a positive effect on the students" (Goddard, Hoy, & Hoy, 2000, p. 480).

- *Leadership Capacity* – Organizations with high levels of leadership capacity promote "broad-based, skillful participation in the work of leadership that leads to lasting school improvement" (Lambert, 2005, p. 38).

- *Teacher Leader* – A teacher who willingly undertakes added roles, responsibilities, or other actions (Danielson, 2007) in an effort to improve the quality of education for students (Silva et al., 2000), to enhance the practice of fellow teachers by modeling, sharing, and influencing others (Lieberman & Miller, 2005), and to create a more enriching educational environment throughout the school (Crowther et al., 2002).

- *Teacher Leadership* – The "set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere" (Danielson, 2006, p. 12).

- *Self-Efficacy* – The "beliefs in one's capacity to organize and execute the courses of action required to produce given attainments" (Bandura, 1977, p. 3).

Overview and Organization of the Study

This quantitative study followed a non-experimental, correlational design. Participants were selected from elementary schools located in western Michigan using a convenience-sampling method. In order to study the variables of collective efficacy, teacher leadership, and student achievement, two survey instruments were utilized. Angelle and DeHart (2010) developed the first instrument, the Teacher Leadership Inventory (TLI), in an effort to measure the extent of teacher leadership in a school setting. Olivier (2001) developed the second survey, the Teacher Efficacy Belief Scale – Collective Form (TEBS-C), to measure the strength of teachers' collective efficacy beliefs. After examining several instruments, these surveys were deemed best for this study, especially since they measure the variables at the organizational level of analysis.

Once the data were collected, multiple regression analysis using Pearson's r was employed. These test statistics were used to determine the relationships among the variables of teacher leadership and collective efficacy. After determining relationships between the instruments themselves, the results were compared to student achievement data. For the purposes of this study, test results from the standardized Michigan Educational Assessment Program (MEAP) were used. As of the spring of 2015, the Michigan Department of Education replaced the MEAP with the Michigan Student Test of Educational Progress (M-STEP). Though the MEAP is not the current test used to assess students in the state of Michigan, the unknowns that could have emerged by using a new test, such as gaining access to the data and overcoming the glitches associated with a first-year test, the forty-four year-old MEAP test was selected as the better choice for measuring student achievement.

Limitations

This research study was limited by several factors. First, the nature of the survey instrument used in this study acted as a limitation. Participation in the study was not required, thus, those that responded represented a group of individuals willing to take part in the research. What's more, the Teacher Leadership Inventory and Teacher Efficacy Belief Scale – Collective Form are self-report instruments, and the teachers who completed the survey may have been biased in favor of or against their colleagues, principal, or school system. According to Donaldson & Grant-Vallone (2002), self-reporting responses can threaten the validity of the research conducted because:

> research participants want to respond in a way that makes them look as good as possible.
> Thus, they tend to under-report behaviors deemed inappropriate by researchers or other
> observers, and they tend to over-report behaviors viewed as appropriate. Self-report bias
> is particularly likely in organizational behavior research because employees often believe
> there is at least a remote possibility that their employer could gain access to their
> responses (p. 247).

Although reporting responses in aggregate form ensured anonymity of survey respondents, the belief of possible loss of anonymity posed other study limitations. Furthermore, because principals had the option to either send the link to the online survey to their faculty members or have their staff members complete the survey in person using a paper/pencil format, there was no guarantee of the consistency in the administration of the survey other than the instrument itself. The topic of the study created another limitation. Teachers who were more likely to respond to a principal's request to complete an online survey may have been more prone to teacher leadership

behaviors. Because the surveys were not required of all faculty members in the schools involved in the study, the responses may have been skewed in favor of leadership propensities.

Delimitations

Delimitations are limitations imposed by the researcher that serve as boundaries and limit generalization (Glatthorn & Joyner, 2005). For the purposes of this study, the following delimitations were set in place:

1. This study included teachers from elementary schools western Michigan.

2. Data collection occurred during the fall and winter of the 2015 - 2016 school year.

Summary

With the growing concerns surrounding school improvement and the increasing societal pressure placed on schools to "fix" our nation's problems, effective school leadership is of utmost importance. According to Crowther et al. (2002), "Educational leadership is at a crossroads… In the early years of a new century, leadership matters more than ever" (p. ix). It is time to redefine what it means to "lead" and employ the expertise of teachers in the complex dynamics of schools. As, Lieberman and Miller (2004) found, "It is clear that as a profession, we must refashion the old realities of teaching into new ones if we are to meet the demands of the new century" (p. 10).

It is also clear that to help cultivate teacher leadership, we must be able to draw empirical connections to student achievement. The research supports the implementation of distributed leadership in the form of teacher leadership. However, there are few studies in the literature that analyze teacher leadership from a quantitative standpoint. The purpose of this study was to expand the literature while investigating the relationship between teacher leadership within schools, the collective efficacy of the staff members, and student achievement. Chapter Two

will provide a review of the current literature related to the constructs of teacher leadership and collective efficacy. Following this review, Chapter Three will provide a complete description of the study's design, sample population, and data analysis. Chapter Four will include findings from the data collected. Finally, Chapter Five will contain a discussion of the results, conclusions, and suggestions for future research.

CHAPTER TWO

Review of Related Literature

"Teachers who are leaders lead within and beyond the classroom, identify

with and contribute to a community of teacher learners and leaders, and influence

others toward improved educational practice."

Katzenmeyer & Moeller, 2001, p. 5

Introduction

There is no question that leadership is a profound issue in the world of education.

Teaching is one of the largest and most visible professions, and educational professionals are

increasingly subject to societal pressures to fix and reform our nation's schools. The

responsibilities of educating students in all subject and skill areas, providing enrichment

activities, meeting the individual needs of all students, and encouraging moral and ethical

development while at the same time meeting all state and national expectations undoubtedly

requires great leadership. Many schools still rely on traditional models of leadership in which

the principal is the sole authoritative figure in the building capable of influencing others.

However, as we continue learning more about what leading and teaching in the 21st Century

entails, it is apparent that the status quo, in which principals lead and teachers follow, is not

enough. Disregarding the importance of teacher leadership and the potential it has in affecting

true change within our school systems is detrimental to the school system, teachers, and

ultimately, the students they teach.

While many studies have analyzed the qualities and characteristics of teacher leaders, few

have established a direct connection between the practice of teacher leadership and student

performance (Harris, 2005). Equally as important in the discussion of teacher leadership is

understanding how organizations build leadership capacity. As an advocate for teacher leadership, Lambert (1998) suggests that teacher leadership is at the heart of schools with high levels of leadership capacity. Teacher leaders demonstrate beliefs that they can bring about change, desire to work for change, and have the knowledge and skills to do so (DiRanna & Loucks-Horsley, 2001). This suggests that efficacy plays an important role in teacher leadership, as well. In order to successfully implement teacher leadership in schools, it is necessary to understand the potential impact of teacher leadership and teacher efficacy on student achievement and the organization as a whole.

The purpose of this study was to determine if there is a relationship between the aforementioned variables in support of effective teacher leadership. This review of the literature provides the background information that was necessary for understanding teacher leadership leading to school improvement, and is structured as follows: First, the traditional models of leadership and how effective they are in meeting the increasing standards of current reform efforts are examined. An analysis of these reform efforts and the increasing societal pressures felt by schools explain the present climate in which our nation's schools must operate. Through this analysis, the reader will become aware of the shortcomings of the prevailing, role-bound model of principal leadership. The discussion then shifts toward presenting new forms of leadership in which power and decision-making are distributed to teachers. Here, the various ways in which teacher leadership is defined will be presented. Within this review of teacher leadership, the reader will become aware of the ways in which districts can support teacher leadership and the barriers that may prevent it from becoming a reality. Gaps in the literature are revealed and conclusions drawn to show the importance of these findings in support of this study.

Next, because an underlying assumption in this study was that teacher leadership and collective teacher efficacy are related, the focus changes to the role efficacy plays in teacher behavior. Finally, collective efficacy is explored through a leadership lens and connections are drawn between the two constructs.

A Review of Recent School Reforms – The Need for Leadership Change

Since the National Commission on Excellence in Education's (NCEE) release of the 1983 report *A Nation at Risk*, public K-12 schools across the United States have been required to respond to reform efforts and make more changes than at any other point in our nation's history (Guthrie & Springer, 2004). The report's findings of a flawed educational system put public school education at the forefront of concerns facing our nation, and K-12 education became a central focus for the federal government (Good, 2010; Guthrie & Springer, 2004). T. H. Bell, then Secretary of Education, charged the Commission to "provide leadership, constructive criticism, and effective assistance to schools and universities" (NCEE, 1983, p.1). In response, heightened expectations on student achievement outcomes changed the landscape of school accountability as school leaders became responsible for teacher and student performance (Leithwood & Riehl, 2003). What's more, as control shifted from local education agencies to the more rigid requirements imposed by the federal government, a number of school reforms were implemented. The reforms of the 1980s changed school calendars to lengthen the school day and increase the number of days in the academic year (Goldberg & Harvey, 1983) while also reducing student elective choices and placing an emphasis on standardized tests (Guthrie & Springer, 2004). More rigorous requirements were also instituted in math and science while professional development of both teachers and administrators was seen as key to implementing change (Meadows, 2007).

The 1990s and early 2000s also saw a number of reform efforts. The *No Child Left Behind Act of 2001* (NCLB) pushed schools to align their curriculum to state content expectations while the standardization of teacher and administrator credentialing required all educators to be highly qualified. As a result of these reforms, schools also began to receive report cards and ratings, with both positive and negative consequences tied directly to student testing (Guthrie & Springer 2004). In some cases, this caused school districts to "teach to the test," essentially encouraging educators to restructure classroom time and emphasize tested subject areas like reading and mathematics. Other teachers became excessive in their test-taking preparation, sacrificing creativity and neglecting the actual subject matter. Whatever the case, the high-stakes atmosphere resultant from tying funding to Annual Yearly Progress (AYP) as outlined in NCLB left schools frantically trying to stay ahead of the curve.

The most recent education reforms follow President Obama's historic *Race to the Top* initiative of 2009 and the 2010 release and subsequent implementation of the *Common Core State Standards* in forty-six states or territories. These initiatives have spurred systemic reform efforts to improve teaching, learning, and assessment by aligning policies and school structures to the goal of college and career readiness (The White House, United States Government, 2013). This newest implementation of standards has subsequently placed the spotlight on developing curriculum that is *rigorous* and *relevant* to living and working in the 21st Century. Tests are no longer closed-response items, as with multiple-choice questions. Rather, these "Next Generation" assessments include performance-based tasks in which students are required to demonstrate their skills across the disciplines, showing deeper levels of learning.

In the midst of the numerous changes our public schools have experienced over the last thirty years, leadership has become a major focus of educational researchers and practitioners

who seek to establish a connection between school leadership and student success. Historically, the school principal has been viewed as the primary leader in the school. Yet, in this era of school accountability, reform, and competition, the responsibilities of the school principal have changed (Fullan, 2001; Hargreaves & Fink, 2003 Wasley, 1991). The top-down managerial style of leadership no longer fits the bill. School leadership is shifting, and the implications of leadership changes in schools are profound.

The Shift in School Leadership

Vast amounts of information pertain to leadership and its importance in school organizations. The literature highlights and reinforces the idea that school leadership is paramount for developing schools and affecting change (Fullan, 2001). In his groundbreaking book "*Leadership*," Burns (1978) defined leadership as "leaders inducing followers to act for certain goals that represent the values and the motivations—the wants and needs, the aspirations and expectations—of both leaders and followers" (Burns, 1978, p.19). At the center of most commonly held definitions of leadership are two basic tenets: (1) successful school leaders create a vision and provide direction while (2) mobilizing others toward achieving shared goals (Leithwood & Riehl, 2003).

Traditional theories of leadership. Historically, traditional styles of leadership fall in one of two categories: transactional or transformational leadership (Burns, 1978). In both of these models, leadership responsibilities rest upon the shoulders of a single individual: the principal (Blase & Kirby, 2000). However, the transactional leadership model tends to follow a more hierarchical, top-down approach. As noted by Burns (1978), transactional leadership is role-bound and grounded in bureaucracy. Transactional leaders are task-oriented and concerned with work standards, often using incentives and extrinsic rewards to garner support from those

they lead. Their followers are more motivated by self-interest than their desires to act toward a greater goal (Burns, 1978). The threat of consequences or discipline in the form of criticism or demotions also is inherent in this leadership style. Described by Bass and Riggio (2006) as management-by-exception, transactional leaders will intervene when standards are not being met. As Smith (2011) notes, "Transactional leadership does not easily accept deviation from the operating systems and procedures that already exist, and the organisation is regarded as highly mechanistic rather than organic and evolving" (p. 58). Though this form of leadership might seem rather "cold" (Bass & Riggio, 2006, p. xi) and limited in its ability to connect a leader with his or her followers, it does seem to accurately describe the norm in our society.

In contrast, transformational leadership emphasizes a leader's role in inspiring others to act. Leaders become change agents, seeking to motivate their followers by tapping into their individual desires for personal development (Burns, 1978; Leithwood, 1992). As Burns states, transformational leaders look to "raise the level of human conduct and ethical aspiration of both the leader and led, and thus it has a transforming effect on both" (Burns, 1978, p. 20). The characteristics of transformational leaders have been well documented in the literature. According to Bass and Avolio (1994), transformational leadership is present when leaders:

- stimulate interest among colleagues and followers to view their work from new perspectives,
- generate awareness of the mission of vision of the team and organization
- develop colleagues and followers to higher levels of ability and potential, and
- motivate colleagues and followers to look beyond their own interests toward those that will benefit the group (p. 2).

Through a commitment to the organization's mission and vision, transformational leaders work to create a culture of trust and respect, acknowledging individual needs and differences while also motivating followers to work toward achieving shared goals. Unlike transactional leadership, where emphasis is placed on maintaining the status quo, transformational leaders seek to provide a stimulus for change (Bass & Avolio, 1994).

The concept of transformational leadership provides a foundation for creating a school culture in which positive change is possible. However, we cannot ignore that a majority of schools still follow the prevailing system of school leadership in which principals lead and teachers merely follow (Helterbran, 2010). What's more, despite strong support for transformational leadership, it still places more emphasis on the *leader* or, in a school setting, the *principal*. Yet, with increasing societal pressures and administrative demands placed on school leaders—to the point where the responsibilities become too complex for one individual to oversee—many educators seeking change and reform believe it is time to start looking for new leadership structures that share leadership opportunities with teachers and effectively address teaching and learning in the 21st Century (Rutherford, 2006).

New conceptions of leadership. Understanding shared leadership is a rather difficult task as it is still a vague and imprecise concept. Complicating our primitive understanding, the conceptualization of shared leadership is often associated with multiple terms and definitions (Spillane, 2005). Among the terms frequently interchanged with shared leadership are: collective leadership, distributed leadership, democratic leadership, and team leadership, to name a few (Avolio, Walumbwa, & Weber, 2009; Spillane, 2005). Yet, despite the confusion surrounding shared leadership, there is certainly a degree of earnestness to understand the concept further (Pearce & Conger, 2003). This is especially true when considering the reform

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movement and the growing demands placed on schools. Though there are many definitions of

shared leadership, Avolio et al. (2009) consider Pearce and Conger's (2003) definition to be the

most widely accepted. As Pearce and Conger state, "We define shared leadership as a dynamic,

interactive influence process among individuals in groups for which the objective is to lead one

another to the achievement of group or organizational goals or both" (2003, p. 1). In contrast to

the traditional, top-down models of leadership, they further note that, "The key distinction

between shared leadership and traditional models of leadership is that the influence process

involves more than just downward influence on subordinates by an appointed or elected leader"

(Pearce & Conger, 2003, p. 1). There are many components to shared leadership and, as noted

above, the construct has been described in various ways throughout the literature. From Senge's

(1990) *learning organization* to Spillane's (2006) *distributed leadership* and Crowther et al.'s

(2009) idea of *parallel leadership,* it is clear that shared leadership can take many forms.

Though distinguishable from one another, the ideas inherent in these various forms of shared

leadership do overlap and are certainly compatible in many ways. Below, a brief description of

these forms of shared leadership will set the stage for thinking about teacher leadership.

   Learning organizations. The term *learning organization* was first described through the

research and work of Peter Senge. In his book, *The Fifth Discipline*, Senge challenged

organizations to facilitate a culture of life-long learning in order to transform and to cultivate

change (1990). For any business, company, or group, he attested, it is essential to forego the

traditional methods of leadership, in which one individual is the sole learner and decision-maker.

Rather, Senge implored us to accept the idea that we are all interconnected, that our world is

complex, and that we must learn to work together. As he states,

"When we give up this illusion [that the world is created of separate, unrelated forces] –
we can then build 'learning organizations,' organizations where people continually
expand their capacity to create the results they truly desire, where new and expansive
patterns of thinking are nurtured, where collective aspiration is set free, and where people
are continually learning how to learn together" (Senge, 1990, p. 3).

In their review of the research, Leithwood and Duke (1998) found similar research about
leadership being *participatory* in nature. In this school of thought, an organization's
effectiveness is enhanced when the decision-making processes of the *group* or *team* are the
central focus. As they note,

"In the case of this [participatory] form of leadership, authority and influence are
available potentially to any legitimate stakeholders in the school based on their expert
knowledge, their democratic right to choose, their critical role in implementing decisions,
or a combination of the three" (Leithwood & Duke, 1998, p. 38).

There are many schools that try to implement this team approach, especially through the use of
professional learning communities (PLCs). Richard Dufour, an American educational researcher
noted for developing strategies to create collaborative teaching environments, notes that we can
improve our nation's K-12 schools by turning our focus away from teaching to *learning*, by
working with one another, and to hold ourselves accountable for results (Dufour, 2004). Clearly,
the literature supports the idea that the increasing demands placed on school leaders through
changing cultural, political, and social contexts could best be met by moving towards forms of
shared or team leadership.

Distributed leadership. Distributed leadership has been described as giving each person
on staff a voice and opportunity to be involved in decision-making (Silins & Mulford, 2004). In

contrast to the leadership models that are role-bound, distributed leadership focuses on the organization as a whole (Smylie, Conley, & Marks, 2002). However, though distributed leadership has received a lot of attention in recent years, it can also be rather convoluted and confusing. Not only is the term often used interchangeably with other contemporary constructs, some think it is merely intended to be used in a normative way, such as simply advocating for more democratic leadership without true action (Harris & Muijs, 2005). James Spillane, a leading voice on distributed leadership, acknowledges the confusion that some may feel when thinking about this leadership perspective (Spillane, 2006). In fact, he attests that distributed leadership's popularity may be due to the fact that it encompasses many leadership approaches—from those involving multiple leaders, to the idea that leadership is an organizational quality. In many cases, the idea of distributed leadership may seem like putting "old wine into new bottles" (Spillane, 2006, p. 144). However, Spillane does begin to take an analytic perspective by describing how leadership can be distributed. In his definition, distributed leadership is about leadership *practice* rather than only focusing on leaders and their roles. As he notes, "A distributed perspective frames leadership practice in a particular way; leadership *practice* is viewed as a product of the interactions of school leaders, followers, and their situation" (Spillane, 2006, p. 144). Schuermann's (2005) review of the literature on shared leadership and student achievement highlights five principles that serve as a foundation for a distributed leadership model. They are:

- The purpose of leadership is the improvement of instructional practice and performance, regardless of role.
- Instructional improvement requires continuous learning.
- Learning requires modeling.

- The roles and activities of leadership flow from the expertise required for learning and improvement, not from the formal dictates of the institution.

- The exercise of authority requires reciprocity of accountability and capacity (p. 3).

In this way, it is clear to see how schools might become less bureaucratic because staff members begin to work together as an organizational entity, rather than relying too heavily on the skills of one individual (Balyer, 2012).

Parallel leadership. As with Senge's learning organization model and Spillane's description of distributed leadership, Crowther et al's. (2009) idea of parallel leadership focuses on collaboration. However, the key difference between these contemporary leadership constructs is that parallel leadership emphasizes the interaction of *teacher leaders* and administrators. As Crowther et al. (2009) define it, "Parallel leadership…is a process whereby teacher leaders and their principals engage in collective action to build school capacity. It embodies three distinct qualities—mutual trust, shared purpose, and allowance for individual expression" (p. 53).

Summary. With the wealth of information and opinions surrounding the best forms of school leadership, it is no wonder that school leadership can be a daunting task. Though it is not a prescription for the most effective form of leadership, it is clear that many in the field have endorsed a distributed leadership approach as an appropriate model to utilize in schools. Drawing from the strengths of traditional leadership theories, distributed leadership also ushers in the benefits of collaboration and knowledge sharing. In an era where school principals are facing increasing demands, it is time to recognize the leadership potential of other school staff members, including teachers.

Teachers as Leaders

Since becoming one of the defining characteristics of school reform, district and state education agencies across the United States have explored the idea of teacher leadership through career enhancement and leadership programs specifically designed to develop teacher leaders (Smylie, 1995). According to Mark Smylie, a leading voice on the new perspectives of teacher leadership, efforts to create teacher leadership programs to improve our nation's schools have focused on three specific goals:

1. Enhance the quality of the teacher workforce by expanding and diversifying the nature of teachers' work, providing a wider array of incentives to attract and retain the most talented teachers in the profession;

2. Establish new incentives, controls, and opportunities for professional learning and development aimed to improve the performance of practicing teachers; and,

3. Enhance the institutional capacity and performance of schools by placing teachers in positions of leadership and decision-making, thereby increasing resources and expertise available for improvement (Smylie, 1995, pp. 3-4).

These goals are certainly worthy of our attention. In fact, many researchers and practicing educators believe that a complete change *must* occur to our leadership structures and systems of accountability in order to significantly transform our nation's schools (Copland, 2001; Hargreaves, 2003). That being said, while the literature is rife with accounts and studies surrounding the topic of teacher leadership, establishing a clear definition of teacher leadership and how it is employed in schools is difficult (York-Barr & Duke, 2004). What is clear is this: the ways in which we have traditionally viewed educational leadership have changed. Leadership activities are no longer seen as residing in the hands of one individual. Rather,

quality leadership has become a construct in which leadership activities are the responsibility of multiple members of a school organization—including teachers (Hargreaves, 1997).

Definitions and forms of teacher leadership. Though the literature points to teacher leadership as a mechanism for school reform and as one way to improve teacher quality, Wigginton (1992) notes, "The issue of teacher leadership is devilishly complicated. And it doesn't help matters that the phrase itself is frustratingly ambiguous" (p. 167). While it is easy to infer the importance placed on teacher leadership, it is much more difficult to obtain a straightforward definition of what teacher leadership truly *is*. Smylie and his colleagues echo Wigginton (1992) stating that teacher leadership is a subject "cloaked in ambiguity" (Smylie et al., 2002, p. 162). Others contend that the numerous and overlapping definitions can be bewildering (Harris, 2003). Still, some wonder whether or not teacher leadership is some sort of heresy, fantasy, or oxymoron (Harris, 2003). Whatever the notions about teacher leadership, most educators would agree that the definitions, strategies, and employment of the concept are not consistently agreed upon in the literature, thus making it difficult to secure "common or complementary theoretical underpinnings" (York-Barr & Duke, 2004, p. 287). For example, some definitions recite lists of adjectives describing the qualities of teacher leaders, while others merely rely heavily on distinguishing the roles that teacher leaders may assume. As noted by Danielson (2007),

> A number of values and dispositions make certain individuals ideally suited for teacher leadership. Effective teacher leaders are open-minded and respectful of others' views. They display optimism and enthusiasm, confidence and decisiveness. They persevere and do not permit setbacks to derail an important initiative they are pursuing. On the

other hand, they are flexible and willing to try a different approach if the first effort runs into roadblocks (p. 15).

Other definitions leave much to the imagination, as in this example from Clemson-Ingram (1997): "The concept of teacher leadership refers to a variety of roles for classroom teachers in staff development, management, and school improvement" (p.95, as cited in Murphy, 2005). Pellicer and Anderson's (1995) definition is just as vague: "Teacher leadership is concerned with teachers helping teachers so that teachers can, in turn, better help students. Teacher leadership is helping teachers work together to establish and achieve the goals and objectives of the school" (p. 22). These extreme examples help to illustrate the wide variety of existing definitions. However, we should by no means judge the work of the many educational scholars who have worked hard to develop the construct of teacher leadership and bring it to the forefront of our minds. Instead, these examples point to the simple truth that there is much work to be done to further our understanding of teacher leadership. Table 1 on the next page illustrates just a few of the varying definitions of teacher leadership that have emerged in the literature over the past few decades.

While there may be many definitions of teacher leadership, it is clear that teacher leaders recognize their roles as leaders and work to influence other educators to improve their teaching practices (Katzenmeyer & Moller, 2009). In this type of distributed leadership, schools rely on the growth and development of teacher leaders (Smylie et al., 2002). The principal is just one part of the leadership equation as the collective capacity of the group is central to school success. Rather than simply relying on the principal for direction, teacher leadership supports a reciprocal relationship—an equitable and paralleled alliance—between principals and teachers (Helterbran,

2010). Thus, to be fully effective, principals must understand the benefits of sharing leadership

with teachers (Helterbran, 2010).

Table 1

Definitions of Teacher Leadership

Definition	Source
"The term teacher leadership refers to that set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere."	Danielson (2006, p. 12)
"Being a teacher leader means sharing and representing relevant and key ideas of our work as teachers in contexts beyond our individual classrooms so as to improve the education of our students and our ability to provide it to them."	Katzenmeyer & Moller (2009, p. 16)
"Teacher leadership is concerned with teachers helping teachers so that teachers can, in turn, better help students. Teacher leadership is helping teachers work together to establish and achieve the goals and objectives of the school."	Pellicer & Anderson (1995, p. 22)
"Teacher leadership is defined as influencing and engaging colleagues toward improved practice."	Wasley (1992, p. 21)
"Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of the school community to improve teaching and learning practices with the aim of increased student learning and achievement."	York-Barr & Duke (2004, p. 287)

The works of a few researchers in particular have stood out in attempting to understand

and describe this rather broad concept. In *Sliding the Doors: Locking and Unlocking*

Possibilities for Teacher Leadership, Silva et al. (2000) presented the evolution of teacher

leadership in three distinct *waves* and sought to describe the changing roles of teachers over the

past two decades. Historically speaking, teacher leadership is not a new concept. For years,

professionals in the field of education have recognized both the informal and formal leadership

roles teachers may assume (Smylie, 1997). Though somewhat limited in their scope and rather

role-bound in nature, teachers have served as department chairs, head teachers, and union

representatives for many years, with some even becoming involved in advisory or curriculum

committees (Smylie, 1997). This, as noted by Silva and her colleagues, is the first wave of

teacher leadership. Yet, while these managerial positions helped to support the daily functioning

of schools, they did not afford teachers opportunities to make truly significant contributions

(Silva et al., 2000). In most cases, early forms of teacher leadership still confined teachers to the

four walls of their classrooms. However, the reform efforts of the late 1970s and early 1980s

ushered in a new school of thought in our understanding of teacher leadership and its potential to

transform our nation's schools (Firestone & Bader, 1992).

In response to *A Nation at Risk* and the famous line from the report that declared: "the

educational foundations of our society are presently being eroded by a rising tide of mediocrity

that threatens our very future as a Nation and a people" (National Commission on Excellence in

Education [NCEE], p. 13), early reform efforts sought to solve our nation's glaring education

deficiencies. Based on recommendations of the report, the subsequent reform efforts required

school districts and state education agencies to establish core curricula, set higher standards, and

institute more rigorous systems for student testing and school accountability (Smylie, 1997;

Editorial Projects in Education Research Center, 2004). In addition to these higher standards for

curriculum and students, reforms also chartered efforts to improve teacher quality. The NCEE

recommended higher standards for teacher-preparation programs, teacher salaries based on

performance, career ladders that recognized experience and differentiated teachers based on their

skills, and mentoring programs for novice teachers (Editorial Projects in Education Research

Center, 2004; Silva et al., 2000). A report released by the Carnegie Forum on Education and the

Economy (CFEE) entitled *A Nation Prepared: Teachers for the 21st Century* proposed similar

plans for restructuring schools and redefining teaching by raising teaching standards,

strengthening teacher preparation, revamping compensation, and creating a professional

environment in which teachers are respected (CFEE, 1986). In addition to highlighting and

promoting higher standards, the Carnegie Forum report also initiated the discussion for

redesigning schools to promote and provide teachers with active leadership roles (CFEE, 1986).

In this way, teachers would be provided with new opportunities to be involved in the

development of programs and policies directly linked to the classroom and student improvement.

Departing from the traditional, managerial-type leadership roles with which teachers

leaders were once associated, these new initiatives drastically expanded the roles and

responsibilities of teachers and represented a new perspective on teacher leadership (Firestone &

Bader, 1992). This second wave moved past the managerial to focus on teachers as instructional

leaders. Teachers assumed roles as curriculum specialists, team leaders, staff developers, and

mentors for novice teachers (Silva et al., 2000). However, in all of these capacities, teachers'

roles and responsibilities were still quite prescribed and centralized in nature (Berliner & Biddle,

1995), thus affecting the communication and collaboration between teacher leaders and their

mainstream counterparts (Silva et al., 2000). Whatever the case, the reform efforts of the early

1980s and initiatives resultant of the critique of our nation's schools served as the initial "bugle

call" for teacher leadership.

The most recent form, and arguably the current view of teacher leadership, is associated

with Silva et al.'s third wave and places teachers at the center of organizational development and

change. According to Pounder (2006), the third wave introduces the idea that teacher leadership

is a *process* independent of formal organizational hierarchy. In this way, teaching and leading

functions are not separate, but deeply rooted in one another. Central to this construct of teacher

leadership is collaboration (Danielson, 2007) and task completion (Heller & Firestone, 1995).

There is no requirement for a leader to be "in charge" or an emphasis placed on *who* is doing the

work (Heller & Firestone, 1995). Instead, the collaborative culture inherent in a school that

values teachers as leaders provides opportunities for individuals to use their expertise and assets

to accomplish the goals that matter to all community members (Marzano et al., 2005).

When not characterized by a title or position, there are many avenues in which teachers

may lead. Danielson (2007) noted that many teacher leaders rise up from the ranks in

unintentional ways by helping to solve problems, provide resources, review data, mentor

colleagues, and engage in professional development opportunities. Silva et al. (2000) have also

helped to conceptualize this more spontaneous and organic form of teacher leadership. As they

note, teacher leaders have natural abilities to, "navigate the structures of school, nurture

relationships, model professional growth, encourage change, and challenge the status quo" (p.

22). Harris and Muijs (2007) further articulate the characteristics of the third wave of teacher

leadership. To them, leadership is "fluid and emergent rather than a fixed phenomenon" (Muijs

& Harris, 2007, p. 113), and teacher leadership, in particular, is "characterised by a form of

collective leadership in which teachers develop expertise by working collaboratively" (Harris &

Muijs, 2003, p. 40). For Harris and Muijs (2003), teacher leadership is comprised of the

following activities:

- the leadership of other teachers through coaching, mentoring, leading working
  groups;

- the leadership of developmental tasks that are central to improved learning and
  teaching; and

- the leadership of pedagogy through development and modeling of effective forms of teaching (p. 40).

This new wave of classroom-based teacher leadership (Lieberman & Miller, 2005) highlights professionalism and a sense of collegiality. Instead of emphasizing the role of the principal, the concept of teacher leadership opens doors and affords opportunities for *all* members of an organization to assist in leading for change and school success (Fullan, 1994; Katzenmeyer & Moller, 2001). As Katzenmeyer and Moller (2009) assert, "Being a teacher leader means sharing and representing relevant and key ideas of our work as teachers in contexts beyond our individual classrooms so as to improve the education of our students and our ability to provide it to them" (p.16). Teacher leaders recognize their roles as leaders and work to influence other educators to improve their teaching practices (Katzenmeyer & Moller, 2009). What's more, as staff members learn more, they help to increase the entire school's capacity for improvement and change (Silins & Mulford, 2004). The principal is just one part of the leadership equation as the collective capacity of the group is central to school success. Rather than merely relying on the principal for direction, teacher leadership supports a reciprocal relationship—an equitable and paralleled alliance—between principals and teachers (Helterbran, 2010). To be fully effective, educators must understand the benefits of sharing leadership responsibilities with teachers (Helterbran, 2010).

Roles and Characteristics of Teacher Leaders

The power of a teacher in a child's school career is undeniable. Across the literature, research points to the important role that teachers play in influencing students' academic achievement and personal growth. Highly effective teachers recognize their leading role in motivating and encouraging students through the process of learning (Muhammad & Hamid,

2012). They have developed a toolkit of best practices and serve as a role model for the type of learning they wish to see in their students (Agsuga-Gage, Simonsen, & Briere, 2012). Effective teachers promote academic achievement, manage classrooms that encourage appropriate behavior, and build positive relationships with students and their families (Agsuga, et al., 2012). Indeed, effective teachers leave a lasting impression on their students, having contributed so greatly to lives and minds. As Muhammad & Hamid (2012) state,

> Effective teachers are caring and kind. They have the ability to establish a shared environment which helps in developing cordial and friendly relationships between teachers and students. The effective teachers are open to students' ways of being imaginative and also utilized many approaches to learning. Such practices motivate and inspire students to participate in the learning process willingly (p. 31).

Though effective teachers have an arsenal of skills for successfully working with students, Crowther et al. (2009) distinguish effective teachers of students from effective teacher leaders, for the latter have the capacity to be good teachers of *teachers*. While many attributes of exemplary teachers are directly linked to teacher leaders, teacher leaders do possess another set of skills that allows them to work successfully with their adult peers, for working with colleagues is profoundly different than working with students (Bowman, 2004; de Villiers & Pretorius, 2011). The literature reveals that a teacher leader's ability to develop collaborative relationships is at the core of teacher leadership. Strong interpersonal skills are a must because a teacher leader works to influence his or her colleagues toward a shared vision for improved teaching and learning (Katzenmeyer & Moller, 2009). Therefore, good teacher leaders are those that are able to garner support and communicate clearly with adults. Teacher leaders are also proactive, confident, well versed, and are able to lead a diverse group of people. At times, teacher leaders

must be assertive as they seek to solve problems, resolve conflicts, and negotiate tough issues (de Villiers & Pretorius, 2011). Finally, as noted by Danielson (2007), teacher leaders are experts in curriculum planning, assessment design, progress monitoring, and data analysis.

Recently, efforts have been made to more formally define the qualities of teacher leaders. In 2011, the Teacher Leadership Exploratory Consortium released the *Teacher Leader Model Standards* in an effort to foster more conversations amongst stakeholders regarding what teacher leaders need to know and be able to do to assume leadership roles (Teacher Leadership Exploratory Consortium, 2011). The Consortium identified seven domains to serve as a framework towards better preparing and supporting teachers in leadership roles (See Appendix A). Teacher leaders possess skills that have the potential to make drastic impacts on a school's programming that will lead to positive gains in student learning. Thus, helping teachers to realize their capacity for leadership should be of utmost importance.

Helping Teachers Become Leaders

Though the research is clear about the potential of teacher leadership, helping make the concept a reality may be more difficult than expected (Helterbran, 2010). In traditional school structures, teachers and their administrators often work in isolation from one another (Camburn, Rowan, & Taylor, 2003). Teachers tend to find comfort in the four walls of their classrooms, essentially working from behind a closed door (Bowman, 2004). This isolation perpetuates the disconnect between administrators and teachers, perpetuating what Helterbran (2010) calls the "I am just a teacher" syndrome. It is not difficult to see why a teacher may be hesitant to step out of the comfort of their individual classrooms. Teaching has long been a private profession in which educators are not necessarily privy to the lessons, techniques, and instructional strategies used in other classrooms. Teacher leadership challenges this practice. As noted by Margolis

(2008), teaching is now much more of an "outward and public profession" (p. 293), and teachers must be willing to engage in collaborative efforts with one another. Bowman (2004) takes this further by stating, "Learning how to accumulate informal power, exercise influence, and reconcile conflicting collegial interests requires nothing less than a profound identity shift for contemporary classroom teachers" (p.187). If teachers shy away from the call for leadership, they are disregarding their responsibilities as educators. Until teachers recognize their own leadership potential, teacher leadership may continue to remain more of a theory than reality (Helterbran, 2010).

Identifying and overcoming barriers. Effective classroom teachers know that they make a positive impact as leaders in their own classrooms. However, as noted by Bowman (2004), quite often, these same teachers will shy away from leadership opportunities. Though research has proven a connection between teacher leadership and student achievement, Katzenmeyer & Moller (2009) also recognize that the structure and culture of our nation's schools inhibit teachers from stepping up to the plate. Instead of being valued for their knowledge and expertise, teacher leaders can often be threatening to their fellow colleagues. Furthermore, teachers may feel apprehensive in accepting leadership roles because the demands often require them to confront hard issues and raise difficult questions (Heifetz & Linsky, 2004). In their article, *When Leadership Spells Danger*, Heifetz and Linsky (2004) highlight the difficulties that many people face when they agree to exercise leadership opportunities. As they note,

> Leadership often involves challenging people to live up to their words, to close the gap between their espoused values and their actual behavior. It may mean pointing out the elephant sitting on the table at a meeting—the unspoken issue that everyone sees but no

one wants to mention. It often requires helping groups make difficult choices and give up

something they value on behalf of something they care about more…Most of us, most of

the time, pass up these daily opportunities to exercise leadership…Doing otherwise

would be personally difficult and professionally dangerous (pp. 33-34).

In addition, as recognized by the Teacher Leadership Exploratory Consortium (2011), the current

methods for teacher evaluations may negatively affect the collaboration so ingrained in teacher

leadership because of the ways in which these systems focus on the individual. Accountability

systems that do not take into consideration the importance of teachers working together as an

entity devalue teacher leadership and its efforts. Finally, it is essential that we transform the

relationship between authority and influence and look to foster reciprocal relationships between

principals and teachers.

Gaps in the Literature: Models & Effects of Teacher Leadership

The concept of teacher leadership has certainly gained momentum, as seen through the

aforementioned research. The literature is laden with information pertaining to the

characteristics of teacher leaders and the conditions needed to help foster the idea. As explained

previously, there are many formal roles for teacher leadership already well established in the

traditional structure of schools. For example, teachers assume positions such as department chair

or instructional coach, and these positions have traditionally decentralized school structures

giving more leadership responsibilities to teachers (Danielson, 2007; Firestone & Martinez,

2007). It has also been illustrated that teacher leadership rises organically from within the ranks

as teacher leaders emerge to influence their colleagues (Danielson, 2007; Helterbran, 2010).

Harrison and Killion (2007) indicate that the ways in which teachers can lead can be as varied

and unique as individual teachers themselves. They identified ten roles teachers can assume to

help contribute to their schools: resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, catalyst for change, and learner. Undoubtedly, there are many avenues and paths that teachers can take to become more involved in leadership activities.

However, though it is clear that much is known about what teacher leaders are *like* and the *roles* they might assume, less is known about truly putting teacher leadership into practice through an organizational model. Questions abound when considering how to create a truly sustainable model of teacher leadership that is effective, replicable in other schools, and sustainable for the future. How do we implement and facilitate teacher leadership in our schools? What models might make teacher leadership a reality? How do we develop teacher leaders, especially those in underutilized and underrepresented populations? What teachers are ready to lead? Quantifying the effects of teacher leadership is even more difficult. This is largely because teacher leadership is still an ideological construct. How do we measure if teacher leadership programs are working? Are teacher leaders making an impact on their fellow colleagues and the student population as a whole? What evidence supports teacher leadership? As noted by York-Barr & Duke (2004), operationally defining teacher leadership and targeting its specific effects will require future research, a goal of this study.

Collective Efficacy

Research surrounding school leadership has demonstrated that transformational leadership approaches—where leaders work in tandem with all group members and value the collective identity of the organization as a whole—have positive effects on teachers (Ross & Gray, 2006). As reported by Leithwood, Jantzi, and Steinbach (1999), principals who exhibit transformation leadership behaviors are likely to lead staff members that are more committed to

the organization, exert extra effort, and work together to accomplish organizational goals.

Furthermore, teachers with high expectations about their abilities produce higher levels of

student achievement (Ross & Cousins, 1993) while also positively affecting student motivation

(Roeser, Arbreton, & Anderman, 1993) and self-esteem (Borton, 1991). Indeed,

transformational leadership is linked to organizational learning, organizational effectiveness, and

organizational culture (Ross & Gray, 2006).

If we consider teacher leadership to be an extension of transformational leadership and a

characteristic in schools with principals whose behaviors reflect a transformational style, there

can be no doubt that teacher leadership has a profound effect on teachers' efficacy beliefs—at

both the individual and collective levels. Although conceptually distinct, collective and

individual teacher efficacy are related to one another (Goddard & Goddard, 2001). Whereas

teacher efficacy refers to the expectations about one's own teaching ability, collective teacher

efficacy refers to ''the perceptions of teachers in a school that the efforts of the faculty as a

whole will have a positive effect on students'' (Goddard, Hoy, & Hoy, 2000, p. 480). According

to Bandura (1997), "People working independently within a group structure do not function as

social isolates totally immune to the influence of those around them. . . . the resources,

impediments, and opportunities provided by a given system partly determine how efficacious

individuals can be" (p. 469). Thus, the power and collective efforts of the group can influence

the individual. Below, sources of collective efficacy are discussed.

Sources of Collective Efficacy

The relationship between teachers' individual sense of efficacy and collective efficacy is

further demonstrated by the sources of efficacy information. Bandura (1986) argued that the

sources of teachers' individual and collective efficacy beliefs are similar. As he states, "personal

and collective efficacy differ in the unit of agency, but in both forms efficacy beliefs have similar sources, serve similar functions, and operate through similar processes" (Bandura, 1997, p. 478). These sources of efficacy information are explained below:

Mastery experiences. The most powerful source of efficacy information comes from mastery experiences (Bandura, 1986). Successful teaching experiences build robust efficacy beliefs. As noted by Goddard, Hoy, and Woolfolk Hoy (2004), "The perception that a performance has been successful tends to raise efficacy beliefs, contributing to the expectation that performance will be proficient in the future" (p. 5). They go on to contend, "Past school successes build teachers' beliefs in the capability of the faculty, whereas failures tend to undermine a sense of collective efficacy" (p. 5).

Vicarious experiences. Another way of creating and strengthening efficacy beliefs is through vicarious experiences and social models (Bandura, 1986). By observing others who perform well on a certain tasks or in certain situations, the efficacy beliefs of the observer are influenced. As noted by Goddard et al. (2004), "collective efficacy may also be enhanced by observing successful organizations, especially those that attain similar goals in the face of familiar opportunities and constraints" (p. 5).

Social persuasion. Social persuasion is a third way that efficacy beliefs are affected. According to Bandura (1986), individuals can be persuaded verbally that they possess the necessary skills and capabilities to master a given activity or achieve a set goal. At the group level, Goddard et al. (2004) note that a robust sense of group capability, garnered through encouragement, specific performance feedback, or faculty discussions, can influence collective efficacy beliefs. Though not as strong or compelling as successful models or successful mastery experiences, social persuasion can encourage group members to overcome challenges through

innovative means while setting high goals (Goddard et al., 2004).

Affective states. In addition to the sources of efficacy beliefs mentioned above, people also rely on their somatic and emotional levels of arousal, such as stress, excitement, and anxiety, in the development of their efficacy beliefs. People with high levels of efficacy are likely to view their affective state as one that adds to their perception of self-capability (Bandura, 1986). Conversely, those who interpret stress and anxiety as a sign of poor performance or incompetence may believe they are unable to meet the demands of a task or certain situation. Goddard and his colleagues (2004) thought the same was true at the organizational level, "affective states may influence how organizations interpret and react to the myriad challenges they face" (p. 6).

The Power of Collective Efficacy

Understanding that the sources of efficacy information are similar at the individual and collective level, it is equally important to understand the power efficacy beliefs have on an organization and to establish a connection between teacher efficacy, student achievement, and teacher leadership. Just as teachers' individual self-efficacy can positively influence teaching and learning, so can collective efficacy beliefs. Several studies have replicated the relationship between individual teacher efficacy and student achievement at the collective level (Bandura, 1993; Goddard & Goddard, 2001; Goddard et al., 2000). This is because perceptions of collective efficacy are directly related to the ways in which groups work to achieve their goals. Collective efficacy is associated with group persistence, effort, shared thoughts, affective responses, and achievement (Goddard et al., 2004). As Goddard and his colleagues state, "Knowledge about collective efficacy beliefs is…critical to understanding the influence of school culture on teachers' professional work and, in turn, student achievement" (p. 8).

What's more, Derrington and Angelle (2013) established a strong relationship between collective efficacy and the extent of teacher leadership within a school. These findings were significant, especially in terms of this study. By connecting all three constructs, the importance of teacher leadership may be ascertained in a research-based, empirical way.

Summary: Connecting the Constructs

It is clear from the most significant prior research studies related to teacher leadership and collective efficacy that the constructs are deeply rooted in similar theories. Our understanding of human behavior and the means by which teacher leadership is developed and fostered within schools suggests that teachers' collective efficacy beliefs improve organizational capacity for leadership, thus allowing teachers to step up to take on leadership roles. These ideas were connected through the development of a conceptual framework that was used in this study. This framework could also be used to guide future research as we seek to know more about these important school variables. A better understanding of the outcomes and effects of teacher leadership and collective efficacy on student achievement holds the potential to expand our understanding of how to support teacher leadership in schools and promote organizational learning. Teaching can no longer be viewed as an isolated profession. As Katzenmeyer & Moller (2009) note,

> Within every school, there is a *sleeping giant* of teacher leadership that can be a catalyst for making changes to improve student learning…By helping teachers recognize that they are leaders, by offering opportunities to develop their leadership skills, and by creating school cultures that honor their leadership, we can awaken this sleeping giant of teacher leadership (p. 2-3).

As new laws call for elevated levels of student achievement and require our students to be

prepared for working and living in an age of unprecedented development and change, the opportunity to study teacher leadership, organizational capacity, and their influence on group outcomes is of utmost importance.

Research Design and Methodology

Educational researchers also frequently employ surveys to learn more about how specific variables, such as leadership belief systems, are applied in the real world.

Ross, 2006, p.985

Introduction

A review of the literature surrounding teacher leadership reveals an overwhelming number of studies promoting its potential benefits within an organization. Compared with traditional hierarchical form of leadership, leadership that is distributed throughout an organization not only reduces the likelihood of errors being made by a single entity, it also capitalizes on the strengths and abilities of all members, develops an appreciation of interdependence and collaboration, allows for its members to respond appropriately to work demands, and may improve members' work experiences (Leithwood & Mascall, 2008). This is an impressive list of potential benefits, and even more positive consequences are likely to be found in a literature base replete with enthusiasm and optimism for leadership that is shared collectively among an organization's members. Indeed, Sebring, Hallman, and Smylie (2003) state, "Our own and others' research convinced us that to achieve and sustain significant advances in instruction, leadership practice had to develop towards a model of distributed leadership" (p. 2). However, a significant lack of empirical evidence to support the aforementioned benefits reveals a gaping hole in the literature. In order to make sense of the findings from previous research, it was essential to give greater empirical attention to this issue—the general purpose of this study.

This study was proposed to add to the available knowledge about teacher leadership, specifically the relationship between teacher leadership, collective efficacy, and student achievement. Most studies pertaining to teacher leadership follow the qualitative research tradition; however, this study utilized survey data to conduct a quantitative analysis, thus helping to fill in the gaps in the related literature. This chapter presents the research design and methodology that were essential for answering the questions posed by this study. It includes an explanation and the rationale behind the design choices, identifies the participants, expands on the instrumentation, and describes the methods of data collection and analysis.

Research Design and Approach

The majority of studies surrounding the topic of teacher leadership have collected, analyzed, and interpreted data by observing what people do and say. While these qualitative case studies provided a foundation for understanding teacher leadership, a large-scale study conducted with a specific focus on student achievement has the potential to generate data that could be used to establish connections between teacher leadership and student outcomes. In their definition of qualitative research, Heppner and Heppner (2004) explained, "Qualitative researchers are interested in capturing the individual's point of view through multiple strategies such as interviewing and observation" (p. 139). In contrast, a quantitative approach allows the researcher to collect data from multiple sources and make generalizations to greater populations. Because the purpose of this study was to generate empirical data related to teacher leadership and collective efficacy, the quantitative research approach was deemed most appropriate.

In quantitative research, all aspects of the study are carefully designed before the data is collected: research questions are clearly defined, data is gathered using structured research instruments, and results are interpreted in an objective manner (Babbie, 2015). Furthermore,

quantitative research includes participants that are predetermined—large sample sizes are sought in order to achieve statistically valid findings with an acceptable degree of accuracy. Put simply, quantitative research is about numbers and is an approach in which findings may be generalized to better understand the variables being studied.

This descriptive, cross-sectional study focused on understanding whether or not the presence of teacher leadership and the collective efficacy of the teachers within a school building were related to student performance. By examining the relationships of these variables, this study explored teacher leadership from a different angle and at a new level of analysis, with the hopes of bringing to light the ways in which teacher leadership and collective efficacy influence entire organizations. From a quantitative, statistical perspective, there was potential for this study to be used to generalize the results more widely—a quality lacking in the current literature.

Research Questions

The research questions that guided this study are as follows:

1. What are teachers' perceptions of the degree of teacher leadership practiced in their schools, as measured by the Teacher Leadership Inventory (TLI)?

2. How efficacious are the staff members in the school, as measured by the Teacher Efficacy Belief Scale – Collective Form (TEBS–C)?

3. Is there a relationship between teachers' perceptions of the degree of teacher leadership and collective teacher efficacy?

4. What relationship exists between the degree of teacher leadership and the collective efficacy of elementary school teachers and the achievement levels of students as evidenced by performance on the Michigan Educational Assessment Program (MEAP)?

To answer these questions, explanatory and predictive correlational designs were employed. According to Creswell (2008), explanatory design is conducted when researchers seek to explore, "the extents to which two or more variables co-vary, that is, where changes in one variable are reflected in changes in the other" (p. 358). Furthermore, Johnson and Christensen (2004) state that examining the interrelationship of variables is fundamental to descriptive statistics. In this study, participants completed a survey with regards to teacher leadership and the collective efficacy of the faculty members in their school building. This data was then analyzed to determine if there was a relationship between the two constructs. In addition, predictive design was used to ascertain whether or not aggregate leadership and efficacy scores predicted performance on the MEAP. Survey research is a popular method in educational research as it affords researchers opportunities to describe and quantify trends and test research hypotheses (Creswell, 2014). In this way, this study and its design serve as a foundation for quantifying and measuring the effects of teacher leadership and collective efficacy.

Participant Selection and Participation

This study took place in western Michigan and used a convenience sample (Johnson & Christensen, 2004) of public elementary schools within the region where the researcher is employed. In an effort to generate interest in the study and promote participation, the study goals and details were presented to attendees at a meeting of elementary principals at one of the area's Intermediate School Districts (ISD) in the spring of 2015. In addition, the details of the study and information regarding participation were emailed to area principals in the minutes from the ISD meeting. Other area-wide elementary principals were invited to have their schools participate in the fall of the 2015-2016 school year. Email addresses and school information

were obtained from published emails on public elementary school websites in the area in which the study was conducted. Once schools were identified and district permission was received, principals were contacted via email and asked to voluntarily participate in the study. The researcher sought to survey teachers from at least twenty area schools. This sample size was chosen to help increase accuracy when seeking to determine the relationship of the study's variables.

As the unit-of-analysis focused on the school-level, teacher participants were not individually identified or coded. Rather, the data was aggregated to create *Teacher Leadership* and *Collective Efficacy* variables that were then compared to student performance on the MEAP. Some teacher-level demographic information was collected on the survey, such as gender, teaching experience, years at present school, degree attainment, and whether or not the respondents believed that they currently held a position of leadership. This information helped to provide context when analyzing study results and may be useful in future studies. However, the primary demographic data that was collected consisted of information at the school-level, such as the number of economically disadvantaged students, attendance rates, and information relating to student achievement outcomes. The details of the survey instrument and materials are outlined below.

Data Collection and Instrumentation

The purpose of this study was to investigate the relationship between teacher leadership, collective efficacy, and student achievement. The study was based on the administration of the Teacher Leadership Inventory, an instrument developed by Angelle and DeHart (2010), and the Teacher Efficacy Belief Scale – Collective form, created by Olivier (2001). Data from the survey was collected in one of two ways—electronically or by paper/pencil. Allowing for two

methods of data collection helped increase the survey response rate as principals were able to choose the method that worked best for their schools. For those choosing the electronic administration, *Survey Monkey®* was utilized. *Survey Monkey®* is an easy and accessible way to collect large amounts of data. The system is secure, controls for multiple submissions, protects anonymity, and offers an unlimited amount of space for responses. This method worked well for those schools using mobile computer labs at staff meetings, was convenient for principals, and was easy for teachers. However, surveys were also available in a paper/pencil format and the researcher was available to personally administer the surveys. This method, recommended by Fink (2006), also helped to increase the survey response rate. Below, the instruments, data collection techniques, and details regarding response rate are described further.

Teacher Leadership Inventory. The Teacher Leadership Inventory (TLI) is a 17-item measure that includes items relating to both formal and informal leadership activities, as well as principal involvement in developing teacher leaders. The items focus on the sharing of pedagogical or classroom management knowledge, the mutuality of leadership in a school between principals and teachers, the perceptions of teachers' leadership behaviors, and the degree to which principal selection has an impact on pathways to teacher leadership in a school (Angelle, 2010). Angelle and DeHart (2010) reported Cronbach alpha reliabilities of .85 for the entire instrument. Subscales of the instrument assess four factors of teacher leadership as proposed by Angelle and DeHart (2010): Sharing Expertise (SE), Sharing Leadership (SL), Supra-Practitioner (SP), and leadership via Principal Selection (PS). Faculty members completing the survey self-reported the frequency of behaviors related to these factors on a 4-point Likert scale (*Routinely*, *Sometimes*, *Seldom*, and *Never*). Permission to use the TLI was

granted via mail by the survey authors, Dr. Pamela Angelle and Dr. Corey Dehart, on March 12, 2015 (see Appendix D).

Teacher Efficacy Belief Scale – Collective Form. The TEBS–C is a one-dimensional 10-item measure that has been empirically validated using factor analysis and shown to be a reliable measure of the strength of teachers' collective efficacy beliefs (Cronbach alpha Reliability Coefficient = .93) (Olivier, 2001). The 4-point Likert scale for the TEBS-C requires respondents to make judgments about the collective strength of beliefs of faculty members at their schools, ranging from *Weak Beliefs* to *Very Strong Beliefs*. For example, the instrument items measure the strength of teachers' beliefs in their fellow faculty members to *produce high levels of learning with our students* or *carry out decisions and plans designed for school-wide improvement*. Permission to use the TEBS–C was granted via email on April 14, 2015 by Dr. Dianne Olivier, author of the instrument (see Appendix D).

Demographic data. Included in the final section of the survey, participants were asked to provide demographic information. This information, which included questions pertaining to years of experience, education level, and whether or not the respondents felt they held positions of leadership at their schools, assisted with the analyses of the results. An area for open-ended comments also offered additional insight in the discussion of the findings.

MEAP data collection. The MEAP tests were developed "to measure what Michigan educators believe all students should know and be able to achieve in five content areas: mathematics, reading, science, social studies, and writing" (State of Michigan, 2015). For the purposes of this study, the data used to measure student achievement from various schools came from the Fall 2013 testing cycle, which was the most recent MEAP data available. This information was collected from the state website and was represented by the percentages of

students meeting or exceeding the proficiency level established by the Michigan Department of Education on the reading and mathematics tests. Because the data collected came from a past assessment, only responses from teachers that were teaching in the school building during the Fall 2013 testing cycle were utilized. As students are assessed each year starting in grade three, the data was collected at several grade levels consistent with the elementary-level: grades 3 – 6. The data was analyzed by averaging proficiency percentages across grades to obtain subject achievement scores. Then, the single achievement score was calculated by averaging proficiency percentages across grades and subjects.

Response rate. When conducting survey research, it is essential to consider the instrument's response rate, or the degree of success in obtaining completed surveys from a sample (Lavrakas, 2008). Because it is extremely rare for any survey to achieve 100% cooperation from participants, examination of response rates allow researchers to establish a methodology that may help to boost a survey's success while also affording opportunities to amend or compensate should problems arise (Lavrakas, 2008). Perhaps even more important than the actual number of responders to a survey is whether or not the targeted sample is representative of the general population. Still, though researchers acknowledge the important role response rates play, especially in regards to validity of survey data, there has been a "great deal of overlap and inconsistency in both the definitions and formulas used to understand the concept" (Lavrakas, 2008, p. 759).

Response rate matters because researchers are interested in obtaining an accurate picture of their particular phenomenon of interest. To obtain this accurate picture, they seek to survey a representative sample. While random sampling is the best way to do this, for the purposes of this study, convenience sampling was used. Elementary teachers in western Michigan were the ones

who completed the survey in this study, and their responses addressed the first three research questions. However, because the data was aggregated to the school-level to answer the fourth research question, the target population was also elementary *schools* in western Michigan. Thus, results from the survey paint a broader picture about what is happening in the area in which the researcher resides. To assist in determining how well the demographic characteristics of the responding schools fit the characteristics of the general population, demographic data on each participating school, such as the number of economically disadvantaged students and attendance rates, were collected. This information is discussed in the analysis of the results.

While there may be inconsistencies in acceptable standards for survey response rates, it is clear that the methods used in the research process influence the degree of success in obtaining completed surveys. As noted by Manfreda, Bosnjak, Berzelak, Hass, and Vehovar (2008), the literature unanimously expects lower response rates from web surveys compared to other survey modes. Paper surveys tend to achieve higher response rates, and face-to-face administration offers even more advantages in this regard (Lavrakas, 2008). Accordingly, because the data were aggregated to the school-level for a portion of the analyses, the researcher suggested that surveys be completed at staff meetings to assist with response rates. The proposed methodology also offered multiple means for administration: 1) In-person, web-based administration through *Survey Monkey*® with the researcher present, 2) In-person, paper administration with the researcher present, 3) In-person, web-based administration through *Survey Monkey*® with clear instructions given to the principal, or 4) In-person, paper administration with clear instructions given to the principal. Though these methods varied slightly from one another, the primary purpose in offering the differing administration options was to help boost response rates by allowing the principals from participating schools to choose the method that worked best for

them. In addition, the researcher personally reached out to principals from all schools. This established a relationship and helped with obtaining study participants. Finally, a small incentive drawing for each completed survey assisted in boosting the response rate and helped to ensure the sample was representative of the population.

While there is no simple answer to the question of response rate acceptability, experts have given opinions as to what is considered an adequate response rate. For *mail* questionnaires, Babbie (1998) denotes 50% as an acceptable response rate. Babbie (1998) also reports that surveys conducted in-person have even higher response rates. Thus, for the purposes of this study, the researcher sought at least a 50% response rate for schools to be included in the final analysis. For the purposes of this study, the researcher sought to survey teachers from twenty area schools with a proposed response rate of at least 200 participants. In all, twenty-three schools were surveyed, surpassing the target goal of twenty. Out of a total of 622 teachers who were invited to participate in the study, 376 completed surveys. This represents an overall response rate of 60% and exceeds the researcher's proposed response rate of 200 participants. Individual school response rates have also been reported as part of the findings and can be viewed in Chapter Four.

Validity and reliability. The alpha coefficient for reliability on the TLI is .85 (Angelle & DeHart, 2010). Furthermore, the TLI is based on previous research and validation testing of earlier forms of the instrument (Angelle & DeHart, 2010). The TEBS-C is a measure of collective efficacy based on an alpha coefficient for reliability of .93 (Olivier, 2001). In the social sciences, acceptable estimates of reliability range from .70 to .80 (Nunnally & Bernstein, 1994). These findings suggest that the items on the TLI and TEBS–C have relatively high internal consistency, which made them appropriate for use in the study.

In addition to the instruments themselves, the researcher attended to issues of reliability by adhering to the established research procedures, providing consistent and clear instructions to participants, and imposing time constraints in which the surveys were completed.

Legal, ethical, and moral issues. Whenever primary research is being conducted, it is essential to take into consideration specific ethical concerns. Accordingly, the survey and research procedures were submitted to the Eastern Michigan University Human Subjects Review Committee (UHSRC) to ensure that participant rights would be protected and ethical research procedures followed. Notification of approval from the UHSRC is included in Appendix F. Upon approval, participants were invited to take part in the survey. Those interested in taking the survey were informed that participation was voluntary and that the data would be collected anonymously and reported anonymously. All participants were provided with an informed consent form, describing the purpose of the research, indicating that participation was voluntary, and informing them that there was no risk of harm. The consent form also advised participants that they could discontinue participation at any time during the study.

Finally, all data were stored in a secure location. Any computer housing the study's data was password protected and/or encrypted behind a firewall. Participants were unable to access the survey without first reading and indicating their consent.

Data Analysis

Data generated from the surveys included information regarding participants' individual perceptions of teacher leadership within their school building, their perceptions of the collective efficacy of staff members in their school, and basic demographic data of the participants. This information was entered into IBM®SPSS® Statistics, a software package used for statistical analysis. The initial data analyses focused on the frequencies of all categorical variables, such as

gender, teaching experience, years at present school, degree attainment, and whether or not the respondents believed they held a position of leadership. Explanations of these key findings provided context by which to explore the quantitative variables.

Next, teacher responses from the survey, aggregated to the school level, were compiled to obtain overall leadership and efficacy scores. Descriptive tables were generated for the scaled variables, and SPSS® was used to calculate means and standard deviations. Though there are several approaches that can be used to measure collective efficacy perceptions, such as aggregating measure of *individual* self-efficacy beliefs, according to Goddard, Hoy, and Woolfolk Hoy (2004), "The preponderance of evidence to date…suggests that aggregates of individual perceptions of *group* capability do indeed tap the perceived collective efficacy of organizations [emphasis added]" (p. 7). Thus, using a measurement tool that focused on group-referent perceptions of capability and aggregating those scores was an approach supported by research.

Finally, multiple regression analyses, using Pearson's r and assuming general linearity, was conducted to evaluate how well aggregate scores from the leadership and efficacy instruments predict student performance on the MEAP. The linearity assumption was tested with scatter plots. Alpha levels for the regression analysis were set at <.05, a conventional practice in survey research (Lavrakas, 2008). The purpose of the multiple regression analysis was to determine if there is a significant relationship between teacher leadership, collective efficacy, and student achievement.

Summary

This chapter described the methodology used in this quantitative study that sought to explore a possible relationship between teachers' perceptions of teacher leadership within their

buildings, their faculty's collective efficacy, and student achievement on the MEAP. The instruments were chosen based on their reliability. What's more, by utilizing instruments that have been tested and used in previous studies, validity was increased. The Teacher Leadership Inventory (Angelle & DeHart, 2010) was used to measure the extent of teacher leadership within a building. Teachers' perceptions of the collective efficacy of the staff members in their schools were measured with the Teacher Efficacy Belief Scale – Collective Form (Olivier, 2001). Then, results were analyzed using IBM®SPSS® Statistics software. The next chapter will present the results of these analyses, including explanations of all key findings.

Research Findings and Results

Data, evidence, and rational considerations shape knowledge.

Cresswell, 2014, p. 7

Overview of the Study

This chapter presents the results of this study on the relationship between teacher leadership, collective efficacy, and student achievement. The primary purpose of this research was to determine if teacher leadership and collective efficacy are related and whether or not they affect student achievement. In other words, does student achievement within a particular school increase as the levels of teacher leadership and collective efficacy increase? Is there a relationship between the degree of teacher leadership and collective efficacy?

The results discussed in this chapter begin with the descriptive statistics of the teachers who completed the survey and who were included in the final sample. Next, the results from the Teacher Leadership Inventory (TLI) developed by Angelle and DeHart (2010) and Teacher Efficacy Belief Scale – Collective Form (TEBS–C) created by Olivier (2001), are presented. This information is presented for the sample as a whole and is also aggregated for each participating school. Following the survey data, the reader will find descriptive statistics for the schools that participated in the study including Michigan Educational Assessment Program (MEAP) student achievement data. Finally, the results of the bivariate correlation and simple linear regression are presented.

Teacher Leadership, Collective Efficacy, and Student Achievement

The objective of this study was to assess the relationship between teacher leadership, collective efficacy, and student achievement in schools in western Michigan. The study was informed by the following research questions and null hypotheses:

1. What are teachers' perceptions of the degree of teacher leadership practiced in their school, as measured by the Teacher Leadership Inventory (TLI)?

2. How efficacious are the staff members in the school, as measured by the Teacher Efficacy Belief Scale – Collective Form (TEBS–C)?

3. Is there a relationship between teachers' perceptions of the degree of teacher leadership and collective teacher efficacy?

   Null Hypothesis: There will be no relationship between teachers' perceptions of the degree of teacher leadership practiced in their school and the collective efficacy of the staff.

4. What relationship exists between the degree of teacher leadership and the collective efficacy of elementary school teachers and the achievement levels of students as evidenced by performance on the Michigan Educational Assessment Program (MEAP)?

   Null Hypothesis: There will be no relationship between teachers' perceptions of the degree of teacher leadership practiced in their school and student performance on the MEAP.

   Null Hypothesis: There will be no relationship between the collective efficacy of elementary school teachers and student performance on the MEAP.

Survey and MEAP Data Collection

Two data sources were used in this study. A survey was used to gather participant responses regarding teacher leadership and collective efficacy, and MEAP data from the 2013-2014 school year was collected online from MI School Data, the State of Michigan's public portal for education data. Starting in November of 2015, recruiting emails were sent to area principals or superintendents containing a cover letter explaining the study (See Appendix B). In some cases, principals were contacted directly. In other instances, the superintendent was approached first per individual district guidelines. These superintendents helped the researcher establish connections with building principals. In all, twenty-three elementary principals from schools with varying staff sizes responded to this recruiting email indicating their consent to allow their teachers to be invited to participate in the survey.

Four of the principals requested in-person surveys to be conducted at a staff meeting. In these instances, the researcher spoke directly to the principals to schedule a date to survey the staff members. The surveys were administered and completed at the meetings, but an option was also given for the staff members to take the survey to complete at a later time. A small incentive drawing was used to encourage participation. If teachers chose to take the survey with them to complete at an alternate time, an envelope was left in a secure location in the school office in which they could submit their responses. These individuals were asked to have their responses submitted by the end of the week in which the survey took place, and the sealed responses were sent back to the researcher.

The principals from the remaining nineteen schools chose to have their teachers complete the online version of the survey. For these schools, a second email was sent to principals containing a brief study explanation for teachers and a link to the online version of the survey via

Survey Monkey®. The principals were asked to forward this email on to their teaching staff.

Because the researcher needed to keep the responses for each school separate from other schools,

an individual link was created for each online survey. Thus, it was easy to track when principals

forwarded the information and link to their teachers as the responses could be seen live from the

Survey Monkey® platform. As with the in-person surveys, an incentive drawing was also

offered in the online version. Online participants were given at least five days to respond to the

survey for entry into the prize raffle. One day before the raffle closed, a reminder email was sent

to principals to be forwarded on to staff members. Though the raffles closed after five days, the

surveys remained open at each school for three weeks. The online surveys were closed at the

end of the three-week time period.

The in-person and online surveys were identical, except for how the informed consent

letter was dispersed. The first page of the online version included the required consent page.

Participants simply had to click on the "I Agree" option to provide their consent to voluntarily

participate. This also indicated that they had received adequate information regarding the study

and its purposes. However, in order to maintain confidentiality for the in-person surveys, the

participants were given the required study information on a separate piece of paper. Those in

attendance signed this form indicating they had received the study information and also

indicating their understanding that they would be able to check whether or not they wanted to

participate in the study on the actual survey itself.

Both the in-person and online surveys consisted of three sections. The first section

included the Teacher Leadership Inventory (TLI) by Angelle and DeHart (2010) with directions

for completion. The second section consisted of the Teacher Efficacy Belief Scale – Collective

Form (TEBS–C) by Olivier (2001) with directions for completion. Finally, the third section

asked participants to provide some demographic information and allowed for open-ended

comments, as noted below (full survey can be found in Appendix B):

- *How many total years of experience in teaching do you have?*

- *How many years have you taught at your present school?*

- *Highest degree earned.*

- *What is your gender?*

- *Do you feel you hold a leadership position at your school? (Yes or No)*

- *If you answered yes to the above question, please explain.*

- *Additional comments.*

Response rate. For the purposes of this study, the researcher sought to survey

teachers from twenty area schools with a proposed response rate of at least 200

participants. In all, twenty-three schools were surveyed, surpassing the target goal of

twenty. Out of a total of 622 teachers who were invited to participate in the study, 376

completed surveys. This represents an overall response rate of 60% and exceeds the

researcher's proposed response rate of 200 participants. Table 2 on the next page shows

the frequency and percent of teachers who responded to the survey by school

(pseudonyms have been used for the schools represented in this study).

In order to determine if teacher leadership and collective efficacy have an impact on

student performance on the MEAP, the data was aggregated to the school-level, resulting

in Total Leadership and Collective Efficacy scores. Thus, to be sure that the data painted

an accurate picture of the perceptions of teachers in the school as a whole, a 50%

response rate was set. Out of the twenty-three schools surveyed, eighteen met the

researcher's proposed 50% response rate (See Table 3). Within the schools that hit the

50% target, the average response rate was 65%.

Table 2

Frequency and Percent of Teachers Responding to the Survey by School

School	Frequency	Percent
Ash Elementary	19	5.1
Aspen Elementary	25	6.6
Beech Elementary	15	4.0
Birch Elementary	12	3.2
Buckeye Elementary	12	3.2
Cedar Elementary	21	5.6
Cherry Elementary	8	2.1
Cottonwood Elementary	14	3.7
Cypress Elementary	30	8.0
Elm Elementary	18	4.8
Evergreen Elementary	19	5.1
Hawthorn Elementary	7	1.9
Hemlock Elementary	18	4.8
Linden Elementary	34	9.0
Magnolia Elementary	6	1.6
Maple Elementary	15	4.0
Oak Elementary	25	6.6
Poplar Elementary	10	2.7
Sequoia Elementary	12	3.2
Spruce Elementary	14	3.7
Sycamore Elementary	24	6.4
Walnut Elementary	7	1.9
Willow Elementary	11	2.9
Total	376	100.0

Table 3

Response Rate by School

School	Total Number of Teachers	Teachers who Completed Survey	Response Rate	Number of Surveys Usable for School-Level Analysis	Percent of Completed Surveys Usable for School-Level Analysis
Ash Elementary	33	19	58%	16	84%
Aspen Elementary	32	25	78%	17	68%
Beech Elementary	21	15	71%	13	87%
Birch Elementary	20	12	60%	6	50%
Buckeye Elementary	33	12	36%	0	0%
Cedar Elementary	23	21	91%	13	62%
Cherry Elementary	27	8	30%	0	0%
Cottonwood Elementary	25	14	56%	9	64%
Cypress Elementary	35	30	86%	27	90%
Elm Elementary	36	18	50%	17	94%
Evergreen Elementary	31	19	61%	15	79%
Hawthorn Elementary	14	7	50%	5	71%
Hemlock Elementary	35	18	51%	11	61%
Linden Elementary	40	34	85%	20	59%
Magnolia Elementary	19	6	32%	0	0%
Maple Elementary	27	15	56%	10	67%
Oak Elementary	27	25	93%	20	80%
Poplar Elementary	22	10	45%	0	0%
Sequoia Elementary	23	12	52%	11	92%
Spruce Elementary	33	14	42%	0	0%
Sycamore Elementary	31	24	77%	21	88%
Walnut Elementary	14	7	50%	3	43%
Willow Elementary	21	11	52%	9	82%

Teacher Sample Descriptive Statistics

Maintaining anonymity and confidentiality was a central focus of this study. However, because of the analyses the researcher sought to conduct, it was necessary to collect some demographic information from the respondents. Special care was taken to assure participants that the names of their districts, schools, principals, and teachers would not be revealed as a result of this study. That being said, twenty-five individuals chose not to answer all or a portion of the demographic questions on the survey. In these instances, the data was still used to answer the first three research questions. This data was not, however, usable for the school-level analysis comparing the survey results to MEAP data as there was no way of tracking whether or not those participants were teaching in the school during the Fall 2013 testing cycle.

The teachers who completed the survey were all elementary teachers consistent with kindergarten through sixth grades, yet they represented a wide range of educational levels and classroom experience. Table 4 depicts the sample's collective education, with 38.6% having achieved a Master's degree, 25.5% completing coursework beyond the Master's degree level, and two teachers having achieved Doctoral degrees.

Table 4
Highest Degree Earned

	Frequency	Percent
BA/BS	106	28.2
Masters	145	38.6
Masters +20	61	16.2
Masters +40	23	6.1
Specialist	12	3.2
Ph.D./Ed.D	2	.5
Other	5	1.3
No Response	22	5.9
Total	376	100.0

In addition to collecting information regarding the participants' education levels, the researcher also sought to gain perspective regarding the experience of the individuals sampled (Table 5). The histogram on the next page (See Figure 2) displays this information visually. As seen in the figure, the mean for the total years of teaching experience in the sample was 14.89 years.

Table 5
Years Teaching Experience

	Frequency	Percent
<= 5	63	16.8
6 - 10	55	14.6
11 - 16	72	19.1
17 - 21	65	17.3
22 - 26	58	15.4
27 - 32	29	7.7
33+	9	2.4
Total	351	93.4
Missing	25	6.6
Total	376	100.0

Finally, respondents indicated whether or not they felt they held a leadership position within their school. As seen in Table 6, 38% of those who took the survey perceived themselves to be leaders within their schools. Teachers who responded positively to holding a position of leadership were asked to comment on their answer. A table consisting of these teacher comments can be viewed in Appendix E and will be discussed in Chapter 5.

Table 6
Frequency of Participants Who Feel They Hold a Leadership Position

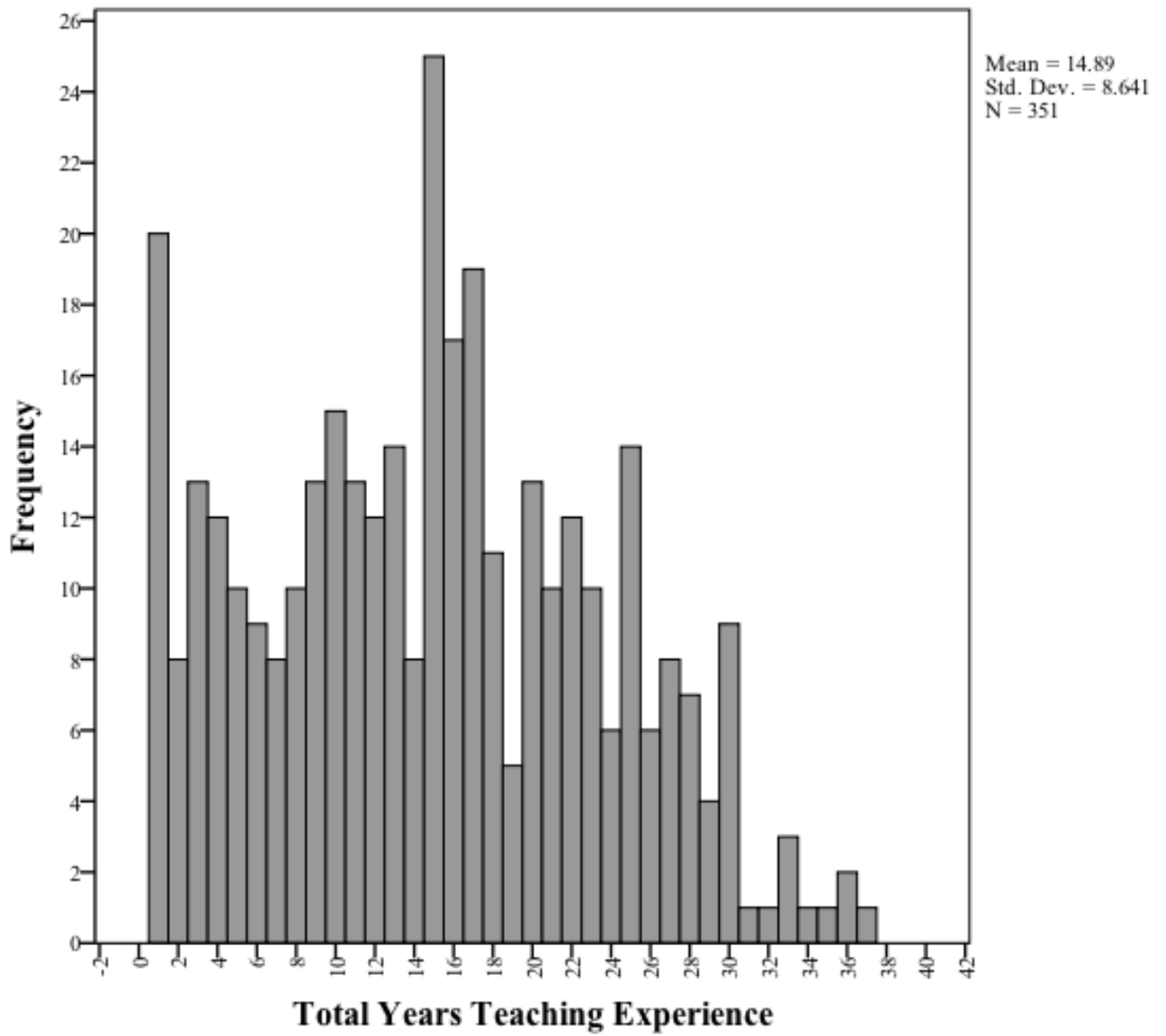|	Frequency	Percent
No	207	55.1
Yes	143	38.0
No Response	26	6.9
Total	376	100.0

Figure 2. Histogram depicting the total years of teaching experience of the sample.

Teacher Leadership Inventory Descriptive Statistics

The Teacher Leadership Inventory (TLI) created by Angelle and DeHart (2010), was the instrument used to measure teacher leadership on the survey. This instrument used a 4-point Likert scale with the following descriptors: 4 = Routinely; 3 = Sometimes; 2 = Seldom; and 1 = Never. The construction and testing of the instrument resulted in a four-factor model of teacher leadership (Angelle & DeHart, 2010). The four factors identified by the authors include: *Sharing Expertise*, *Sharing Leadership*, *Supra-Practitioner*, and *Leadership via Principal Selection*. Figure 3 shows the breakdown of the instrument into its subscales.
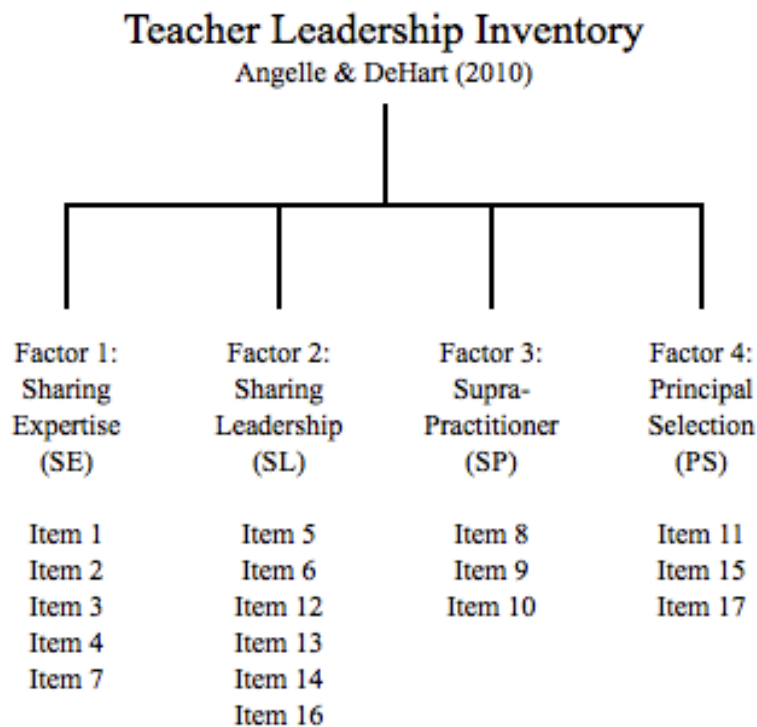

Figure 3. Teacher Leadership Inventory subscales (Angelle & DeHart, 2010).

The results in Table 7 display the means and standard deviations for the seventeen survey questions and represent the responses for all 376 participants. Five items reported a rating of 3.5 or higher. The highest rating (3.76) was: *Teachers discuss ways to improve student learning*. The next three highest items addressed how teachers share ideas and offer one another assistance with teaching new topics or student behavior. Finally, Item 12: *The principal responds to the concerns and ideas of teachers*, was also ranked above 3.5, indicating that principals hear the concerns and ideas of teachers and respond accordingly.

The items that ranked below 3.0 all seemed to relate to the educational system and the lack of opportunities given to teachers to influence the school as a whole. Item 13: *Teachers plan the content of professional learning activities at my school*, for example, ranked among the lowest of all of the items. This disparity to the highest responses might indicate that, though teachers have a wide variety of skills, expertise, and, indeed, potential, teachers are not "tapped into" as often as they could be to better influence the system. This will be discussed further in Chapter 5. Interestingly, the item, *Administrators object when teachers take on leadership responsibilities*, was ranked lowest at 1.53. However, this means that administrators *do not* object to teachers stepping up in leadership roles. The findings from these items, in particular, will be examined further as they tend to contradict each other.

Finally, the mean of all combined teacher leadership items on the survey ($M = 3.15$, $SD = .29$) shows that, overall, teachers sometimes perceive themselves to be leaders, but not routinely. The internal consistency for the seventeen items on the TLI, Cronbach's alpha = .727, demonstrates acceptable reliability of the teacher leadership scale. Cronbach's alphas for the four sub-scales (Sharing Expertise, Sharing Leadership, Supra-Practitioner, and Principal Selection) were .61, .76, .82, and .50, respectively. Though the alpha for the fourth factor was

low, and also negatively correlated to the other factors, the authors acknowledge the potential for model and scale improvement, especially since they do not recommend reverse coding for the items in the Principal Selection factor—items 11, 15, and 17—as this would distort the intended meaning of the survey items (Angelle & DeHart, 2010).

Table 7

Teacher Leadership Inventory Descriptive Statistics for All Schools

Item	N = 376	
	Mean	SD
Item 1: Teachers ask one another for assistance when we have a problem with student behavior in the classroom.	3.62	.53
Item 2: Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skills.	3.72	.52
Item 3: Teachers here share new ideas for teaching with other teachers such as through grade level/department meetings, school wide meetings, professional development, etc.	3.70	.50
Item 4: Teachers discuss ways to improve student learning.	3.76	.45
Item 5: Teachers are involved in making decisions about activities such as professional development, cross curricular projects, etc.	2.99	.71
Item 6: Teachers are actively involved in improving the school as a whole.	3.37	.69
Item 7: Teachers stay current on education research in our grade level/subject area/department.	3.36	.62
Item 8: Teachers willingly stay after school to work on school improvement activities.	3.17	.70
Item 9: Teachers willingly stay after school to help other teachers who need assistance.	3.42	.64
Item 10: Teachers willingly stay after school to work with administrators, if administrators need assistance.	3.15	.70
Item 11: Administrators object when teachers take on leadership responsibilities.	1.53	.70
Item 12: The principal responds to the concerns and ideas of teachers.	3.64	.55
Item 13: Teachers plan the content of professional learning activities at my school.	2.74	.75
Item 14: Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.	2.99	.71
Item 15: The principal consults the same small group of teachers for input on decisions.	2.83	.85
Item 16: Time is provided for teachers to collaborate about matters relevant to teaching and learning.	3.06	.84
Item 17: Most teachers in leadership positions only serve because they have been principal appointed.	2.56	.74

Teacher Efficacy Belief Scale – Collective Form Descriptive Statistics

Created by Olivier (2001), the Teacher Efficacy Belief Scale – Collective Form (TEBS–C) was the instrument used on the survey to measure the collective efficacy of the staff members at the various schools. This instrument also used a 4-point Likert scale with the following anchors: 4 = Very Strong Beliefs; 3 = Strong Beliefs; 2 = Somewhat Strong Beliefs; 1 = Weak Beliefs. The ten questions on this portion of the survey addressed the teachers' perceptions of the strengths of their faculty's beliefs and capabilities. Table 8 on the next page depicts the highest and lowest responses on this portion of the survey.

Only one item was rated above a 3.5. Item 6: *The strength of our faculty's collective beliefs in our capabilities to maintain a school environment in which students feel good about themselves*, had a mean of 3.53. The second and fourth items, though not rated as high, both addressed areas over which teachers have direct control—teachers' abilities to produce high levels of learning ($M = 3.35$) and to maintain effective communication with parents ($M = 3.24$).

Interestingly, the items that were ranked lowest were Item 7: *The strength of our faculty's collective beliefs in our capabilities to provide input in making important school decisions*, and Item 8: *The strength of our faculty's collective beliefs in our capabilities to effectively communicate with the school administration*. Rated at 2.90 and 2.85, respectively, these findings echo those from the TLI. This might suggest that some of the largest hurdles for teachers involve having their opinions and expertise taken into account by the individuals who *are* able to make the decisions that affect schools and, ultimately, students.

The mean of all combined collective efficacy items on the survey was 3.14 with a standard deviation equal to .53. Finally, the internal consistency for the ten items for the TEBS–

C, Cronbach's alpha = .91, was very close to the author's alpha coefficient of .93 (Olivier, 2001), thus demonstrating the reliability of the scale.

Table 8

Teacher Efficacy Belief Scale – Collective Form Descriptive Statistics

Item	N = 376	
	Mean	SD
Item 1: The strength of our faculty's collective beliefs in our capabilities to carry out decisions and plans designed for school-wide improvement.	3.05	.68
Item 2: The strength of our faculty's collective beliefs in our capabilities to produce high levels of learning with our students.	3.35	.66
Item 3: The strength of our faculty's collective beliefs in our capabilities to create ways to improve the school environment.	3.17	.72
Item 4: The strength of our faculty's collective beliefs in our capabilities to maintain effective communication with parents and the larger community.	3.24	.70
Item 5: The strength of our faculty's collective beliefs in our capabilities to support each other in addressing new policies, rules, and regulations.	3.10	.73
Item 6: The strength of our faculty's collective beliefs in our capabilities to maintain a school environment in which students feel good about themselves.	3.53	.60
Item 7: The strength of our faculty's collective beliefs in our capabilities to provide input in making important school decisions.	2.90	.80
Item 8: The strength of our faculty's collective beliefs in our capabilities to effectively communicate with the school administration.	2.85	.80
Item 9: The strength of our faculty's collective beliefs in our capabilities to work with disadvantaged and troublesome students.	3.15	.73
Item 10: The strength of our faculty's collective beliefs in our capabilities to manage student misbehavior.	3.06	.74

Descriptive Statistics by School

Analysis of all individual responses to the survey ($N = 376$) reveals important information about the entire sample. However, the main purpose of this study was to analyze the results at the organizational level. Table 9 shows the overall leadership and efficacy scores by school.

Table 9
Total Leadership and Collective Efficacy Scores Aggregated to School Level

School	SE	SL	SP	PS	Mean LS	Mean CES
					N = 376	
Ash Elementary	3.44	2.86	2.95	2.74	3.03	2.32
Aspen Elementary	3.70	3.02	3.41	2.08	3.12	3.24
Beech Elementary	3.41	2.59	3.09	2.42	2.89	2.50
Birch Elementary	3.63	3.22	3.25	2.61	3.24	2.97
Cedar Elementary	3.18	2.94	2.67	2.24	2.84	2.89
Cottonwood Elementary	3.57	3.17	3.19	2.38	3.15	3.16
Cypress Elementary	3.68	3.32	3.26	2.37	3.25	3.50
Elm Elementary	3.77	3.33	3.61	2.24	3.32	3.25
Evergreen Elementary	3.53	3.00	3.18	2.33	3.07	3.15
Hawthorn Elementary	3.66	3.24	2.95	2.14	3.12	3.44
Hemlock Elementary	3.70	3.19	3.50	2.24	3.23	3.21
Linden Elementary	3.62	3.12	3.43	2.07	3.14	3.19
Maple Elementary	3.71	3.58	3.33	2.16	3.32	3.37
Oak Elementary	3.78	2.98	3.41	2.49	3.20	3.18
Sequoia Elementary	3.78	3.31	3.17	2.14	3.22	3.18
Sycamore Elementary	3.72	3.34	3.35	2.19	3.25	3.26
Walnut Elementary	3.51	2.64	3.19	2.14	2.91	3.01
Willow Elementary	3.73	2.83	3.06	2.36	3.05	3.05

Note. SE = Sharing Expertise; SL = Sharing Leadership; SP = Supra-Practitioner; PS = Principal selection; LS = Leadership Score; CES = Collective Efficacy Score.

The first two research questions addressed teachers' perceptions of the degree of teacher leadership and the collective efficacy of the staff in the school buildings. The highest overall rating on the TLI was 3.32 at Elm Elementary, while the lowest rating was 2.84 at Cedar Elementary. A total of nine schools met or exceeded the combined mean ($M = 3.15$) of the entire instrument. In regards to collective efficacy, the highest overall rating was 3.5 at Cypress Elementary and the lowest was 2.32 at Ash Elementary. Twelve of the eighteen schools exceeded the combined mean of the TEBS–C ($M = 3.15$).

Demographic information was collected for each of the schools to assist in interpreting the results (See Table 10). Two schools (Ash and Walnut) had high percentages of their student populations that were economically disadvantaged at 77.90% and 91.03%, respectively. The average percentage of economically disadvantaged students for all of the schools was 32.17%. A total of eight schools had percentages of economically disadvantaged students above this average. The overall mean years of service was equal to 16 years, while the overall years teachers had been in their present school was 10 years.

The education levels of the teachers are also represented for each school. These findings can be compared to the overall education levels presented earlier in the chapter for the entire sample. For example, for those teachers responding from Ash Elementary, 53% had earned their Bachelor's degrees, 32% held Master's degrees, 10% had either their Education Specialist or Doctoral degrees, and 5% did not respond to the question. Compared to the percentages from the entire sample (BA/BS = 28.2%; MA = 38.6%; MA+20 = 16.2%; MA+40 = 6.1%; Ed.S. = 3.2%; Ph.D./Ed.D = .5%; Other = 1.3%; and No Response = 5.9%), it can be seen that Ash Elementary had more teachers with Bachelor's degrees.

Table 10

School Demographic Information

School	Mean YOS	Mean YAPS	BA/BS	MA	MA +20	MA +40	Ed.S	Ed.D/ Ph.D	Other	NR	ED	CA
Ash Elementary	10	8	53%	32%	0%	0%	5%	5%	0%	5%	77.90%	17.9%
Aspen Elementary	15	9	32%	32%	32%	4%	0%	0%	0%	0%	39.84%	9.2%
Beech Elementary	17	10	13%	33%	13%	27%	0%	0%	7%	7%	48.63%	14.2%
Birch Elementary	21	11	8%	58%	25%	0%	0%	0%	8%	0%	18.41%	10.8%
Cedar Elementary	16	11	24%	19%	33%	14%	0%	0%	0%	10%	25.18%	9.5%
Cottonwood Elementary	18	12	43%	21%	14%	7%	7%	0%	0%	7%	12.53%	15.4%
Cypress Elementary	18	11	33%	33%	20%	3%	3%	3%	0%	3%	11.95%	11.5%
Elm Elementary	12	7	22%	56%	11%	11%	0%	0%	0%	0%	32.53%	13.9%
Evergreen Elementary	19	13	16%	53%	11%	11%	5%	0%	0%	5%	14.29%	13.9%
Hawthorn Elementary	15	8	43%	43%	0%	0%	14%	0%	0%	0%	8.91%	14.3%
Hemlock Elementary	15	10	6%	33%	28%	0%	0%	0%	0%	33%	20.63%	8.3%
Linden Elementary	10	8	50%	38%	3%	0%	0%	0%	3%	6%	41.75%	15.5%
Maple Elementary	13	8	47%	53%	0%	0%	0%	0%	0%	0%	36.84%	11.1%
Oak Elementary	15	10	20%	52%	28%	0%	0%	0%	0%	0%	21.35%	8.3%
Sequoia Elementary	18	15	17%	33%	25%	25%	0%	0%	0%	0%	35.90%	12.7%
Sycamore Elementary	15	10	21%	33%	25%	8%	13%	0%	0%	0%	27.54%	11.6%
Walnut Elementary	18	5	29%	0%	0	29%	0%	0%	0%	43%	91.03%	41.6%
Willow Elementary	15	9	27%	45%	18%	9%	0%	0%	0%	0%	13.82%	8.3%

Note. YOS = Years of Service; YAPS = Years at Present School; NR = No Response; ED = Economically Disadvantaged; CA = Chronically Absent.

Finally, the researcher sought to collect information regarding teachers' perceptions as to whether or not they held a position of leadership within their school. Table 11 shows the percent of responding teachers in each school who felt they held a position of leadership. As can be seen in the table, five schools had 50% or more of their teachers answering "Yes" to this item. The lowest score was from Hemlock Elementary, with only 11% of teachers indicating that they believed they held positions of leadership.

Table 11

Percent of Teachers who Believe They Hold a Leadership Position

School	Percent
Ash Elementary	37%
Aspen Elementary	36%
Beech Elementary	40%
Birch Elementary	33%
Cedar Elementary	38%
Cottonwood Elementary	36%
Cypress Elementary	50%
Elm Elementary	50%
Evergreen Elementary	16%
Hawthorn Elementary	57%
Hemlock Elementary	11%
Linden Elementary	24%
Maple Elementary	67%
Oak Elementary	48%
Sequoia Elementary	50%
Sycamore Elementary	42%
Walnut Elementary	43%
Willow Elementary	45%

Correlation Between Teachers' Perceptions of Teacher Leadership and Collective Efficacy

A two-tailed Pearson bivariate correlation was conducted using SPSS® software to determine if there was a relationship between teacher leadership and collective efficacy. The scatterplot depicted in Figure 4 visually illustrates these two variables.
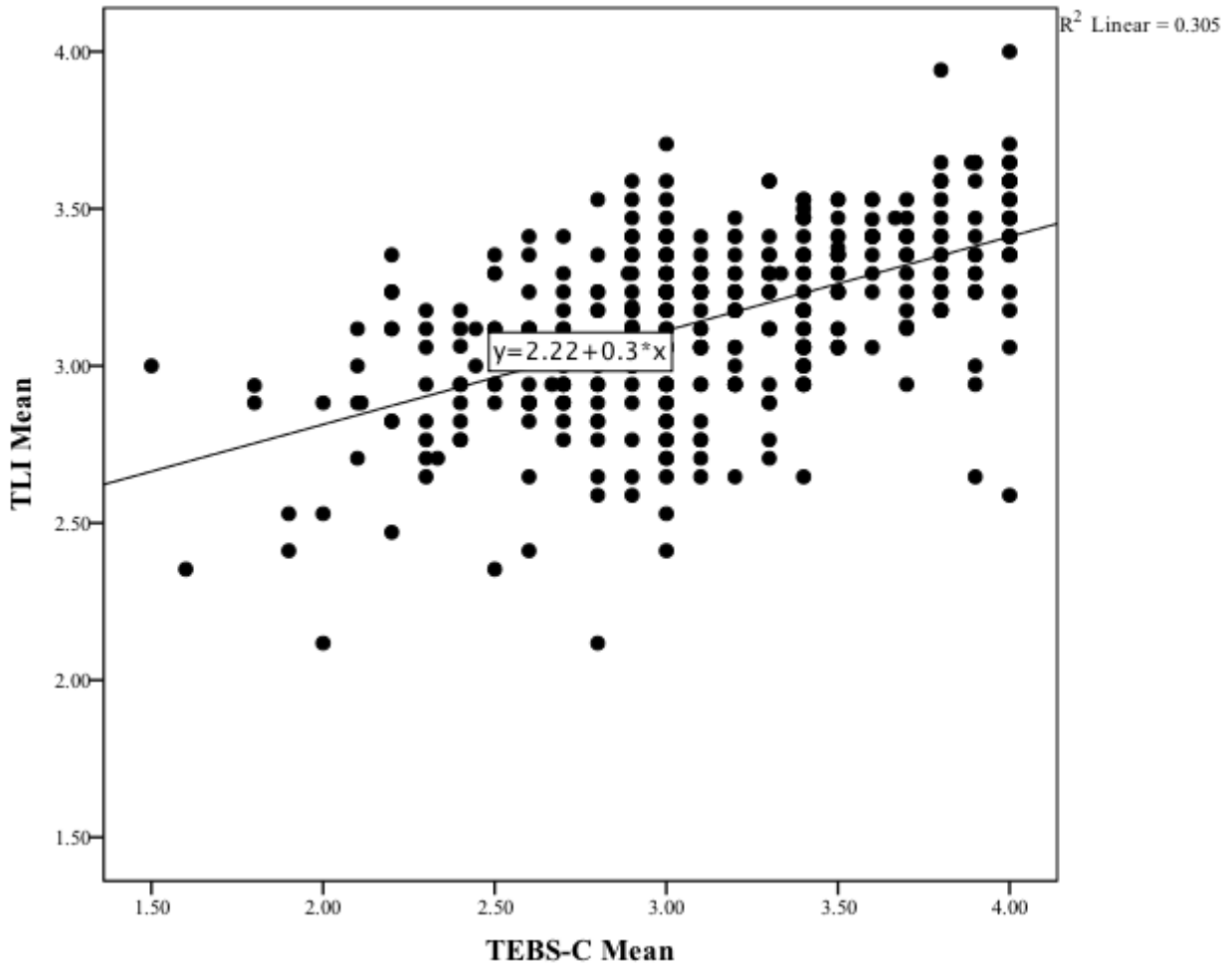

Figure 4. Scatterplot showing the relationship between mean TEBS–C and TLI scores.

The Pearson correlation test revealed a moderate positive correlation ($r = +.55$, $N = 376$, $p < .01$ two tailed) between the scores on the TEBS–C and TLI, as seen in Table 12 on the next page.

Table 12

Correlation between Collective Efficacy and Teacher Leadership

		TLI Mean	TEBS–C Mean
TLI Mean	Pearson Correlation	1	.552[**]
	Sig. (2-tailed)		.000
	N	376	376
TEBS–C Mean	Pearson Correlation	.552[**]	1
	Sig. (2-tailed)	.000	
	N	376	376

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

Correlations from the sub-scales of the TLI with collective efficacy resulted in the following:

Sharing Expertise and collective efficacy $r = +.50$, $p < .01$; Sharing Leadership and collective

efficacy $r = +.54$, $p < .01$; Supra-Practitioner and collective efficacy $r = +.48$, $p < .01$; and

Principal Selection and collective efficacy $r = -.27$, $p < .01$. A positive correlation was found

between each of the factors on the TLI and collective efficacy with the exception of Principal

Selection. This finding will be discussed further in Chapter 5.

A two-tailed Pearson bivariate correlation was also conducted using the overall

leadership and efficacy scores, as seen in Table 13. This test also revealed a strong positive

correlation ($r = +.64$, $N = 18$, p $< .01$ two tailed) between the scores on the TEBS–C and TLI.

Table 13

Correlation between Collective Efficacy and Teacher Leadership Aggregated to School-Level

		Overall Teacher Leadership Score	Overall Collective Efficacy Score
Overall Teacher Leadership Score	Pearson Correlation	1	.635[**]
	Sig. (2-tailed)		.005
	N	18	18
Overall Collective Efficacy Score	Pearson Correlation	.635[**]	1
	Sig. (2-tailed)	.005	
	N	18	18

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

Teacher Leadership, Collective Efficacy, and Student Achievement Regression Analysis

The final research question sought to determine whether or not the degree of teacher leadership present in a building and/or the collective efficacy of the staff members had an effect on student performance on the MEAP. For the purposes of this analysis, only those teachers who had worked in the school building during the 2013-2014 school year were used. Table 14 shows the leadership, efficacy, and student achievement scores for the various schools. A school's total achievement was calculated by averaging scores across grades and subject areas.

Table 14

School Teacher Leadership, Collective Efficacy, and Student Achievement Data

School	Mean LS	Mean CES	Math	Reading	Total Achievement
Ash Elementary	3.03	2.31	36.83%	57.07%	46.95%
Aspen Elementary	3.11	3.30	61.25%	85.95%	73.60%
Beech Elementary	2.87	2.46	51.40%	82.36%	66.89%
Birch Elementary	3.25	3.22	60.17%	80.03%	70.10%
Cedar Elementary	2.87	2.84	56.73%	83.60%	70.16%
Cottonwood Elementary	3.11	3.09	58.93%	83.53%	71.23%
Cypress Elementary	3.23	3.47	49.43%	81.83%	65.63%
Elm Elementary	3.30	3.21	49.70%	80.37%	65.03%
Evergreen Elementary	3.05	3.11	53.33%	77.50%	65.42%
Hawthorn Elementary	3.11	3.42	57.93%	79.90%	68.92%
Hemlock Elementary	3.21	3.25	65.30%	81.70%	73.50%
Linden Elementary	3.17	3.15	62.67%	82.87%	72.77%
Maple Elementary	3.32	3.37	39.93%	73.87%	56.90%
Oak Elementary	3.19	3.14	66.45%	87.00%	76.73%
Sequoia Elementary	3.22	3.18	59.50%	77.30%	68.40%
Sycamore Elementary	3.26	3.27	58.75%	82.63%	70.69%
Walnut Elementary	3.18	3.37	20.07%	41.00%	30.53%
Willow Elementary	3.00	2.94	65.53%	85.67%	75.60%

Note. LS = Leadership Score; CES = Collective Efficacy Score

The overall teacher leadership and collective efficacy scores vary slightly from the scores

presented for the schools earlier in the chapter due to the fact that some teachers were not

included in the analysis as they did not work in the building during the 2013-2014 school year.

A simple linear regression was run with total student achievement as the dependent variable and

teacher leadership and collective efficacy as the predictor variables. Table 15 describes the

linear relationship between teacher leadership and student achievement.

Table 15
Predictors of Student Achievement – Teacher Leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.071[a]	.005	-.057	11.61868%

a. Predictors: (Constant), Overall Teacher Leadership Score

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.964	1	10.964	.081	.779[b]
	Residual	2159.901	16	134.994		
	Total	2170.865	17			

a. Dependent Variable: Total Achievement
b. Predictors: (Constant), Overall Teacher Leadership Score

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	85.119	66.940		1.272	.222
	Overall Teacher Leadership Score	-6.075	21.316	-.071	-.285	.779

a. Dependent Variable: Total Achievement

The correlation between the overall teacher leadership score and total achievement was -.071.

Approximately .5% of the variance of total student achievement was accounted for by its linear

relationship with school scores from the TLI. Thus, accuracy in predicting students'

performance on the MEAP by using this variable was poor. Overall, the relationship was not

significant ($F_{1,16}$ = .081, p = .779) because the *p*-value is outside the threshold of *p* < .05. The

overall model of teacher leadership scores predicting student achievement is highly likely

(77.9%) to happen by chance—teacher leadership as measured by the TLI is unrelated to the

student achievement scores on the MEAP.

A simple linear regression was also conducted with total student achievement as the

dependent variable and collective efficacy as the predictor variable (See Table 16).

Table 16
Predictors of Student Achievement – Collective Efficacy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.090[a]	.008	-.054	11.60131%

a. Predictors: (Constant), Overall Collective Efficacy Score

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.419	1	17.419	.129	.724[b]
	Residual	2153.447	16	134.590		
	Total	2170.865	17			

a. Dependent Variable: Total Achievement
b. Predictors: (Constant), Overall Collective Efficacy Score

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	55.887	28.404		1.968	.067
	Overall Collective Efficacy Score	3.263	9.071	.090	.360	.724

a. Dependent Variable: Total Achievement

For this model, the correlation between collective efficacy and student achievement was $+.09$. Approximately 0.8% of the variation in student achievement was explained by collective efficacy. However, the model is, again, not significant ($F_{1,16} = .129$, $p = .724$) and is likely due to chance. Thus, collective efficacy as measured by the TEBS–C is also unrelated to the student achievement scores on the MEAP.

This chapter presented the results from the Teacher Leadership Inventory, Teacher Efficacy Belief Scale – Collective Form, and student achievement data from the Michigan Educational Assessment Program. The following chapter will present the results of this study including implications for policy, practice, and future research.

CHAPTER FIVE

Discussion

Research consists in seeing what everyone else has seen,

but thinking what no one else has thought.

Szent-Gyorgyi

Since the inception of formal education in America, teachers have had relative autonomy over their classrooms, including, but not limited to, teaching methods, classroom management, and curriculum. It wasn't until the end of the last century that words such as *collaboration*, *collegiality*, and *community* became associated with the teaching profession. The reform movement that has swept our nation's schools during the past few decades has ushered in a myriad of initiatives and structures in which classroom teachers have taken a more pivotal and central role in problem-solving and seeking the best solutions for their students and their schools (Firestone & Bader, 1992; Lambert, 1998). From professional learning communities and shared leadership to participatory management and learning organizations, it is no longer acceptable for the principal to be the lone instructional leader or authoritarian of the school. Similarly, it is no longer acceptable for teachers to close their doors and isolate themselves within the four walls of their classrooms. In this new era of education, leadership roles focusing on teachers and providing teachers with substantial opportunities to influence educational decision-making and change have begun to emerge (Danielson, 2006). What's more, all of this happens without even leaving the classroom. Teachers facilitate the creation of professional development activities, serve on school-based leadership and instructional support teams, act as mentors for new teachers, and participate in action research (Danielson, 2006, Fullan & Hargreaves, 1996; Katzenmeyer & Moller, 2001). This change in school leadership to a more inclusive,

collaborative environment is beginning to break down the barriers that impede student learning and is helping to promote the overall professionalism and efficacy of the teaching profession. Instead of falling into the "I am just a teacher" syndrome (Helterbran, 2010), encouraging the role of *teacher as leader* promotes individual and collective teacher efficacy, as well as school improvement and increased academic achievement. This study sought to examine these variables in an effort to promote teacher leadership and to ascertain the impact that teacher leadership and collective efficacy may have on student learning.

This chapter begins with an overview of the purpose of the study, including the specific research questions the study sought to answer. Next, the study's findings are presented and discussed. The third section of this chapter examines the limitations on the study. Finally, implications for school leaders and related topics for future research are included.

Purpose and Significance of the Study

The purpose of this study was to investigate the existence of a relationship between teachers' perceptions of the extent of teacher leadership practiced in their schools, their perceptions of the collective efficacy of the staff members, and student achievement. The study sought to determine whether high levels of teacher leadership and collective efficacy were predictors of, or related to, increased student achievement. Several researchers have documented the connection between teacher leadership and improvements in student achievement (Lambert, 1998; Leithwood, Patten, & Jantzi, 2010; Leiberman & Miller, 2005; Murphy, 2005; Spillane, 2006). Research surrounding collective efficacy (Bandura, 1993; Goddard & Goddard, 2001; Goddard et al., 2000) also reveals a positive link between student academic outcomes and teachers' efficacy beliefs. That being said, the majority of research studies surrounding teacher leadership still examine the phenomenon from a teacher perspective with findings and

conclusions that are more relevant to the teachers assuming the leadership roles. Furthermore, though research surrounding collective efficacy is gaining momentum, the related body of research is still relatively small. However, if new research can reveal empirical evidence linking teacher leadership and collective efficacy to student achievement data on a broad basis, it may be possible to identify which schools are in need of assistance and which schools might serve as models for others to follow.

This study compared results from participating teachers' responses to both the Teacher Leadership Inventory (TLI) (Angelle & DeHart, 2010), the Teacher Efficacy Belief Scale – Collective Form (TEBS–C) (Olivier, 2001), and student achievement data from the Michigan Educational Assessment Program (MEAP) using regression and correlational methods. A survey of both measures, including questions regarding teacher demographics, was given to a sample of practicing elementary public school teachers in western Michigan.

This study was completed to answer the following research questions:

1. What are teachers' perceptions of the degree of teacher leadership practiced in their schools, as measured by the Teacher Leadership Inventory (TLI)?

2. How efficacious are the staff members in the school, as measured by the Teacher Efficacy Belief Scale – Collective Form (TEBS–C)?

3. Is there a relationship between teachers' perceptions of the degree of teacher leadership and collective teacher efficacy?

4. What relationship exists between the degree of teacher leadership and the collective efficacy of elementary school teachers and the achievement levels of students as evidenced by performance on the Michigan Educational Assessment Program (MEAP)?

This study was proposed to add to the rather limited research that exists by studying the phenomenon of teacher leadership and collective efficacy from the school-level of analysis—a characteristic often missing in the related literature. The results and key findings are discussed below.

Key Findings

The first two research questions that guided this study sought to quantify teachers' perceptions of the degree of teacher leadership practiced in their schools and the collective efficacy of the staff members. The highest overall rating on the TLI was 3.32, while the lowest rating was 2.84. Of the eighteen schools that met the targeted response rate, a total of nine schools met or exceeded the combined mean ($M = 3.15$) of the entire instrument. Thus, in those nine schools, the overall perception of the teachers was that they were "Sometimes" involved with leadership activities. In regards to collective efficacy, the highest overall rating was 3.5 and the lowest was 2.32. Twelve of the eighteen schools exceeded the combined mean of the TEBS–C ($M = 3.15$). Thus, teachers in those twelve schools indicated they had "Strong Beliefs" regarding the efficacy of the members of their staff.

When it comes to taking on leadership roles and responsibilities, the results of this study indicate that teachers feel most comfortable in sharing their own expertise with other teachers in their school building. Findings from the participants' responses on the TLI and TEBS–C illustrate this point. Of the items on the TLI, those pertaining to discussing ways to improve student learning, offering assistance to other teachers related to the craft and art of teaching, and sharing new ideas for teaching were among the highest rated. The item, *Teachers discuss ways to improve student learning*, was rated the highest (3.76). The next three highest items (Items 2, 3, and 1, respectively) addressed how teachers share ideas and offer one another assistance with

teaching new topics or student behavior. Finally, Item 12: *The principal responds to the concerns and ideas of teachers*, was also ranked above 3.5.

Besides Item 12, each of these items falls under the *Sharing Expertise* subscale. Through their daily work, it is clear that teachers become masters in their content areas, with their specific grade levels, in classroom management, and in addressing student behavior (Stronge, 2007). Thus, it is in these areas that they feel most compelled and comfortable to share their knowledge. This is evident across the nation as teachers are increasingly sharing their ideas through grade-level team meetings, at school-improvement meetings, and, simply, through daily interactions with their colleagues. The increase of teachers using the Internet and social media to share, seek ideas, and ask questions of other educators is also evidence of the fact that teachers feel most comfortable in sharing their own expertise. Advances in technology have assisted in breaking down the barriers that have, for so long, kept those in the teaching profession isolated from one another (Ferriter, 2010). A simple search online reveals a plethora of teachers who write blog posts, who share unique and innovative lessons, and who are willing to open the doors to their classrooms by providing a platform for others to view their work. All of this evidence shows the true professionalism of teachers—they want to *learn* how to better their craft and, more importantly (and increasingly), they want to *share* their skills and expertise (Danielson, 2007; Stronge, 2007).

That being said, the results from the TLI also indicate the need to bridge the gap between teachers' work in their classrooms and with their colleagues and their abilities to influence important decisions. Ranked among the lowest of the items on the Teacher Leadership Inventory were questions relating to the degree in which teachers are involved in making decisions and planning professional development. The disparity here is quite revealing. Though it is clear that

there is a wealth of expertise and knowledge amongst the body of teaching professionals, tapping

into this knowledge and including teachers in arenas that are usually reserved for those in

administration remains an area in which the education profession must improve (Zehr, 2001).

The results from this study specifically show that—though competent, knowledgeable, and

capable—teachers perceive that their knowledge is not being utilized to its fullest extent.

Learning to bridge this gap and involve teachers in planning professional development,

developing curriculum, starting new school initiatives, and making school decisions is essential,

especially since it is *teachers* who work directly with students each and every day.

Findings from the Teacher Efficacy Belief Scale – Collective Form, echo the findings

from the TLI in many ways, and it is easy to see how the two constructs are related. The items

that were rated the highest on the TEBS–C involved teachers' abilities to maintain a school

environment in which students feel good about themselves (Item 6, $M = 3.53$), to produce high

levels of learning (Item 2, $M = 3.35$), and to maintain effective communication with parents

(Item 4, $M = 3.24$). These items are all similar in the fact that they involve the aspects of school

over which teachers have direct control, and, even more so, are directly related to teachers'

abilities and expertise.

Responses on the TEBS–C also indicate that more work must be done to help teachers

communicate effectively with administrators and to ensure that they are involved in important

decision-making. The survey items relating to these issues have some of the largest implications

when it comes to school improvement, but were ranked among the lowest by the survey

respondents. It is essential for teachers to be invested in or empowered to make decisions related

to teaching and school improvement. However, far too often, school decisions are made with no

or limited teacher input resulting in school environments where many teachers do not feel

engaged or listened to when it comes to decisions that affect their classrooms. These decisions might include curriculum choices, changes to school policy, new school initiatives, or professional development. And, though the number of opportunities for teachers to engage in these decisions has grown with the push for more collaborative and inclusive school systems, work must be done to ensure teachers and leaders are working together to make informed decisions. Incorporation of teacher input is an integral and crucial component for creating school cultures in which teachers feel respected and useful (Laine, Behrstock-Sherratt, & Lasagna, 2011).

The third research question, "Is there a relationship between teachers' perceptions of the degree of teacher leadership and collective teacher efficacy?," intended to determine if there was an association between collective efficacy and teacher leadership. Findings from this study indicate a moderate, positive, and statistically significant relationship between teachers' perceptions of the extent of teacher leadership practiced in their school building and the collective efficacy of the staff ($r = +.55$, $N = 376$, p $< .01$ two tailed). Based on this correlation, the null hypothesis is rejected and we can accept the alternative hypothesis that there is a relationship between teacher leadership and collective efficacy. This finding was also significant when teachers' scores on the TLI and the TEBS–C were aggregated to the school-level: there was a strong, positive correlation ($r = +.64$, $N = 18$, p $< .01$ two tailed) between collective efficacy and teacher leadership. Thus, school buildings in which the staff members believe that they can "organize and execute the courses of action required to have a positive effect on students" (Goddard & Goddard, 2001, p. 809) relates to higher levels of teachers who willingly undertake added roles, responsibilities, or other actions (Danielson, 2007) in an effort to enhance the practice of fellow teachers (Silva et al., 2000) and influence others. This finding is important

because it shows how teachers' beliefs in their abilities are directly related to their behaviors and actions. When teachers believe in their collective capabilities to organize and successfully carry out work tasks that affect the school as a whole, more staff members engage in leadership activities, such as offering one another assistance, sharing new ideas, discussing student learning, planning professional development, and more.

Correlations from the sub-scales of the TLI with collective efficacy resulted in the following: Sharing Expertise and collective efficacy $r = +.50$, $p < .01$; Sharing Leadership and collective efficacy $r = +.54$, $p < .01$; Supra-Practitioner and collective efficacy $r = +.48$, $p < .01$; and Principal Selection and collective efficacy $r = -.27$, $p < .01$. A positive correlation was found between each of the factors on the TLI and collective efficacy with the exception of Principal Selection. These findings reiterate what Derrington and Angelle found in their 2013 study. As the authors state, "Serving as a 'chosen one' does not promote a shared teacher belief in a collective capability for leadership or encourage staff belief in the school's mission and goals" (p. 6). Though we can acknowledge that many of the pathways to teacher leadership are because of principal selection, this finding is significant as it illustrates that the more organic and natural forms of teacher leadership as described by Moller et al. (2001), Danielson (2007), and Silva et al. (2000)—such as leading by example, collaborating, and sharing experiences with their colleagues—are more valued by the members of the school. From this study's findings, it is evident that the "fluid and emergent" (Muijs & Harris, 2007, p. 113) forms of teacher leadership are more highly regarded than leadership that is prescribed and mechanistic. Considering that one of the barriers to teacher leadership involves teacher leaders being accepted by their colleagues and valued for their knowledge and expertise (Katzenmeyer & Moller, 2009),

further attention and support should be given to the grassroots movement that is happening in classrooms around the nation as teachers work to collaborate and better their craft.

The final research question, "What relationship exists between the degree of teacher leadership and the collective efficacy of elementary school teachers and the achievement levels of students as evidenced by performance on the Michigan Educational Assessment Program (MEAP)?," sought to determine if teacher leadership and collective efficacy have an impact on student performance. Findings from the study showed that correlation between the overall teacher leadership score from the participating schools and the schools' total achievement was -.071. Only .5% of the variance of total student achievement was accounted for by its linear relationship with school scores from the TLI. Thus, accuracy in predicting students' performance on the MEAP by using this variable was poor. Overall, the relationship was not significant ($F_{1,16}$ = .081, p = .779). Findings from the study also showed that only 0.8% of the variation in student achievement can be explained by collective efficacy. This model was also not significant ($F_{1,16}$ = .129, p = .724) and is likely due to chance. Collective efficacy as measured by the TEBS–C is also unrelated to the student achievement scores on the MEAP. From these findings, the null hypotheses are retained—there is no relationship between teacher leadership, collective efficacy, and student performance on the MEAP.

There are several possible reasons for the lack of findings in this study that support a meaningful relationship between teacher leadership and student achievement and collective efficacy and student achievement. One very simple explanation is that no such relationship actually exists. However, as other researchers have documented connections between teacher leadership and student achievement (Lambert, 1998; Leithwood, Patten, & Jantzi, 2010; Leiberman & Miller, 2005; Murphy, 2005; Smylie, 2010; Spillane, 2006) and collective efficacy

and student achievement (Goddard et al., 2000), it is possible that other reasons are embedded in the limitations of this study as well as in the challenges of assessing the constructs. These limitations are discussed below.

Discussion

In the following section, several possible limitations existing in the design and implementation of this study are discussed. While none of the limitations seriously weaken the results of this research, these factors must be taken into account when studying the results and making recommendations that affect current practice and future research:

- In this study, teachers self-reported their perceptions regarding the degree to which teacher leadership and collective efficacy were present in their school buildings. As such, the unique experiences that each individual educator has had with these constructs most surely had an effect on their perceptions. Because of their own experiences, teachers completing the survey may have been biased in favor of or against their colleagues, principal, or school system. Furthermore, participation in the study was not required. Thus, the educators that responded represent only a group of individuals who were willing to take part in the research.

- The topic of teacher leadership and collective efficacy also poses a limitation on the research. By nature of the topic, teachers who responded to the researcher and the principal's request to complete the survey may be more prone to teacher leadership behaviors. Therefore, it is quite possible that the responding teachers' perceptions of the leadership and collective efficacy levels in their schools were higher than they are in actual practice. A future study in which the perceptions of administrators, and possibly

even students, were taken into account in regards to teacher leadership levels could

potentially provide a more accurate reflection of teacher leadership levels.

- Teacher leadership is a very elusive concept, and many researches have acknowledged

  this fact (Harris, 2003; Smylie et al., 2002; Wigginton, 1992; York-Barr & Duke, 2004).

  While the literature points to teacher leadership as a mechanism for school reform, the

  definitions are fleeting and vary with the focus of the leadership initiatives or strategies

  undertaken. The questions on the survey used as part of this study represent only the one

  interpretation of teacher leadership. Thus, the questions may lean toward only one

  specific model or definition.

- The nature of the implementation of the survey instrument used in this study acts as a

  limitation. In this study, principals had the option to either send a link to an online

  version of the survey or to have the researcher present and give the survey in-person in a

  paper/pencil format. Nineteen principals chose to use the online version of the survey.

  While detailed explanations and directions were given to the principals guiding the

  distribution of the online survey link to their staff members, there was no guarantee of the

  consistency in the administration of the survey other than the instrument itself.

- The nature of the Michigan Education Assessment Program (MEAP) scores as the

  dependent variable might be considered as another limitation of the study. As discussed

  in Chapter Three, though scores from the MEAP did not represent the most recent set of

  available student achievement data, because of the potential problems associated with the

  newest set of available student data through implementation of Michigan's first online

  standardized test, the Michigan Student Test of Educational Progress (M-STEP), MEAP

  data were deemed the better choice to use in this research study. However, utilizing past

student data posed difficulties in seeking to find a relationship between teacher

leadership, collective efficacy, and student achievement. First, it was nearly impossible

to associate *all* teacher responses on the survey with the student achievement data.

Because of teacher turnover and movement within schools and districts, not every teacher

was present in the school building during the testing cycle. Indeed, some schools had so

much teacher turnover that very few teacher survey responses could be used when

analyzing student data. Furthermore, though much effort was made to ensure

respondents anonymity on the survey, quite often, the survey items regarding teachers'

years at their present school and years of experience were skipped. Thus, though their

responses to the survey could be used to analyze the relationship between teacher

leadership and collective efficacy, they could not be used in the analysis of student

achievement because there was no way of knowing if the teachers taught in the building

during the testing cycle from which the data were pulled. Future research that utilizes

student scores measured during the school year in which the survey takes place would

most certainly assist in seeking to establish a connection between teacher leadership,

collective efficacy, and student achievement.

- Because research revolves around the study of human behavior, it is essential to consider

how it can be influenced by culture and demographics (Creswell, 2014). The schools in

the study varied in terms of their demographic make-up, achievement, and size.

Moreover, the schools in the study represented varying urban, suburban, and rural

locations. The percentage of economically disadvantaged children in the schools ranged

from 8.91% to 91.03%, and the percentage of students chronically absent ranged from

8.3% to 41.6%. The education levels and experience of teachers also differed from

school to school. While these differences help boost the ability of the study to be generalized, the study's sample was still limited only to schools in western Michigan. This could inhibit the degree to which the sample used in this study can be said to represent the results that would be obtained from the entire population. For these findings to be used to support new policies and practices, future research that includes an even more heterogeneous sample of schools should be completed. A study focusing on teacher leadership from all levels, not merely elementary, would also help to alleviate any concerns regarding the generalizibility of the findings.

- The survey elicited teachers to comment when they felt they held a position of leadership (See Appendix E). These comments are very useful as they help to target the specific responsibilities and functions of teacher leaders. What is missing, and, indeed, what could have been even more revealing, is why some teachers do *not* feel they hold positions of leadership. If we accept the fact that teachers become masters in their grade level, content areas, or other areas of interest, it could be inferred that *all* teachers are leaders to some degree. Analyzing teachers' comments as to why they do not feel they hold leadership positions would help to pinpoint what school leaders can do to promote leadership from all levels and from all individuals in the organization.

Implications for School Leaders

Across the board, researchers assert that teacher leadership can have, or at least has great potential to have, a significant, positive effect on school reform (Lambert, 1998; Leithwood, Patten, & Jantzi, 2010; Leiberman & Miller, 2005; Murphy, 2005; Spillane, 2006). Educational leadership, as it pertains to individual schools, has become an enormous task—one that is, not

surprisingly, too vast and difficult to be fulfilled by one individual. Elmore (2000), describes this complexity well:

> Reading the literature on the principalship can be overwhelming, because it suggests that principals should embody all the traits and skills that remedy all the defects of the schools in which they work. They should be in close touch with their communities, inside and outside the school; they should, above all, be masters of human relations, attending to all the conflicts and disagreements that might arise among students, among teachers, and among anyone else who chooses to create a conflict in the school; they should be both respectful of the authority of district administrators and crafty at deflecting administrative intrusions that disrupt the autonomy of teachers; they should keep an orderly school; and so on. Somewhere on the list one usually finds a reference to instruction (p. 14).

Effective school leaders understand these complexities and recognize the importance of collective agency, or control, over the organizational conditions and decisions that can affect student learning and school improvement. However, the delicate balance between leading within a school hierarchy that naturally lends itself to a top-down approach and the more collaborative, shared leadership approach isn't necessarily an easy balance to master. Not only is the principalship one of the most complex positions in American public schools, it is often the most contradictory (Rousmaniere, 2013). School principals have always taken the role of "middle-man" when communicating the desires of administration to the teachers within their buildings. On top of that, good principals also act as conduits for teachers' voices to be heard by the upper echelons. Most have roots in the classroom and, as such, they are the protectors of teacher autonomy. What's more, even though the principalship has become increasingly disconnected from the classroom, principals are still responsible for student learning. Effective principals

navigate this paradoxical role to the best of their abilities, with many poised to balance their responsibilities to both promote large-scaled initiatives and to address the day-to-day running of the school.

Leading in the 21st Century, however, will require much more than one single individual acting as the link between the large bureaucratic system and the daily experiences of teachers and students (Riordan, 2003). It is clear that teachers should also take a pivotal role in shaping the educational practices of schools—one that extends beyond the four walls of their classrooms. Teachers can do a lot to help support principals' work. What's more, many teachers *desire* opportunities to extend their reach beyond their classrooms (Danielson, 2007). The following implications based on the results of this study are offered to help cultivate teacher leadership and promote further understanding of the concept among school leadership:

1. As noted by Danielson (2006), "Teacher leaders see themselves first as teachers; although they are not interested in becoming administrators, they are looking to extend their influence" (p. 15). This point is essential to understand. Administrators need to recognize teacher leaders and their desires to make a greater impact on the school as a whole. However, it must also be recognized that teacher leaders are *not* administrators. Their work is still deeply rooted in the classroom and the students with whom they work. It is teachers' knowledge and expertise in what they know from their daily interactions with children that is essential to take into consideration when making school changes.

2. Encouraging widespread teacher leadership is extremely important. Though some novice teachers may be more focused on learning their curriculum, fine-tuning classroom management skills, and learning how their school functions, and

though some veteran teachers may still be more comfortable allowing others to step up into leadership roles, when principals encourage leadership from *all* ranks, there is greater potential for staff members to get "on board." This also acknowledges that each individual teacher is a leader or expert in his or her own right. As espoused in some of the teacher comments from this study (See Appendix E), in many cases, teachers feel that they are all leaders to some degree. As one participant stated, *"I view most of our staff to be in leadership positions based on their expertise in various areas and commitment to various district committees."* Echoed by another respondent, *"Everyone at our school has the opportunity for leadership positions and each take[s] a role of leadership in different activities. There are many leadership roles offered from school improvement to lead teacher to district committees to [the] union to school committees."* And, finally, *"I feel that every teacher holds a leadership position in some way or another at this school."* These comments are important for school leaders to consider. We know that one of the pathways to teacher leadership is through principal selection. What's more, most principals have key staff members to whom they go for various teacher-led activities or responsibilities. What would happen, however, if even more teachers were enlisted to take on leadership roles or responsibilities? What would happen if principals made concerted efforts to recognize and involve each staff member in areas that push them into potential leadership positions? Would the results from a study like this change and, instead of only 38% of responding teachers indicating that they felt like they held a leadership role, would *more* teachers respond positively? Isn't

this what we desire with our students…the chance for *all* students to be actively

involved in learning and held to high expectations? Shouldn't we apply this same

principle with our teaching staff, as well?

3. Fellow colleagues receive organic forms of teacher leadership better than

    principal-appointed teacher leaders (Moller et al., 2001). There is something to

    be said about a school culture in which all teachers feel empowered by their

    administrator to lead in some way. Often times, all it takes is a little

    encouragement or a small opportunity for a teacher to recognize his or her

    potential to lead. However, even more can be said about schools where teachers

    naturally band together to support one another and their work. Just as principals

    should consider spreading out opportunities for leadership amongst all staff

    members in some way, they should also recognize and encourage teachers who

    naturally evolve as leaders in their own right. By building school cultures in

    which staff members are empowered and encouraged to take risks, by being open

    and flexible to changes in scheduling and creative methods that allow for

    collaboration, and, most importantly, by recognizing that each teacher is an expert

    (or is on his or her way to becoming one), principals will create an atmosphere

    conducive to problem-solving, teamwork, and leadership from staff members.

4. According to Borko (2004), teacher professional development is essential for

    improving schools. Yet, despite this fact, questions abound as to what constitutes

    high-quality professional development. Indeed, as Borko (2004) states, "Despite

    recognition of its importance, the professional development currently available to

    teachers is woefully inadequate" (p. 3). Though the literature shows that

professional development can lead to improvements in teachers' instructional practices and student learning, the educational community still has much to learn about how teachers learn (Desimone, Porter, Garet, Yoon, & Birman, 2002). Adler's (2000) understanding of teacher learning gives us a hint as to what professional development should entail. To Adler, teacher learning "is usefully understood as a process of increasing participation in the practice of teaching, and through this participation, a process of becoming knowledgeable in and about teaching" (Adler, 2000, p. 37). As such, teachers should be directly included in designing and implementing professional development. However, far too often, teachers find themselves in professional development classes or in-services that have little meaning regarding their own professional goals or areas of interest. When teachers do not participate in professional learning that is relevant or important to them, many get frustrated because their needs are not met. While some may try to seek out their own professional development opportunities (and, increasingly, many teachers are), this can take a great deal of commitment and a lot of time. It is also hard for teachers to sustain over the long haul. Just as we differentiate and espouse the importance of choice for student learning, isn't it important that we do the same for teachers? A one-size-fits-all approach to professional development won't provide the needed learning that teachers seek. Rather, school leaders and administrators should *involve* teachers in designing professional development. If teachers feel they need more content knowledge related to their subject-area, they should be able to tap into resources (including other master teachers!) to learn more. If teachers are seeking strategies to help

them tailor their teaching to meet the needs of students in special education or English-language learners, they should be provided opportunities to explore those areas. Leading is about learning (Lambert, 1998). Involving teachers in the professional development process is a great way to encourage teacher leadership and collective efficacy. Not only does it send a message that recognizes teachers as professionals, it also has the potential to significantly affect teachers and, in turn, student learning (Borko, 2004).

5. The power of the individual is transitive. The power of a *group* is transformative. To be sure, individual teachers who step up into leadership positions will have a positive impact on students and teachers alike. Yet, when teacher leadership is thought of not just as an individual construct, but also as one relating to the group, the potential to reach a true tipping point is revealed. This study illustrated a clear, positive correlation between the collective efficacy of a staff and teacher leadership. Schools in which teachers believe in the abilities of their colleagues to organize and execute work tasks effectively show higher levels of teacher leadership. Similarly, schools in which many teachers share teacher leadership responsibilities have higher levels of collective efficacy. This finding points to the vital importance of the group in affecting needed change. Though individuals may be willing to step up into leadership roles and may, indeed, have an impact on school culture, improvement, and student learning, the power of the group is much greater. In this regard, it is essential for school leaders to build group capacity for leadership and learning.

Embedded in the bureaucratic structures of schools is the stark reality that teaching is a "flat" profession (Danielson, 2007). Historically, there have been limited pathways for teachers wishing to extend their influence. Along with changes in society, culture, and our knowledge of the teaching profession, changing conceptions of school leadership have begun to transform leadership practice. Increasingly, principals and other district administrators are recognizing the need for teachers to be included in school decisions. Teachers are also beginning to find their voice and acknowledge their leadership propensities. To continue building this momentum, more attention needs to be given to teacher leadership and collective efficacy. The following section provides summary recommendations regarding areas of future study.

Recommendations for Future Research

There has never been a better time to take advantage of teachers who want to be teacher leaders, to empower those who have leadership skills to take on leadership roles and responsibilities beyond the classroom, and, even, to help build leadership skills in teachers who may not be considered, or who may not consider themselves, to be leaders. The time is also ripe for building organizational capacity within our nation's schools and for realizing the importance and value of group efforts. The results of this study support these endeavors. Yet, questions regarding teacher leadership, group capacity, collective efficacy, and opportunities for future research also arise as a result of this study. One area for future research that would add perspective to this study would be a qualitative study involving the participants in this study's sample. Talking specifically and in more depth with the individuals who responded that they felt they held a position of leadership might help better target the pathways to leadership. What's more, a future study that included interviews with those individuals who did *not* consider themselves to be leaders would also help to shed light on what school leaders can do to foster

teacher leadership in their schools. Though the results of this study support the reciprocal relationship between teacher leadership and collective efficacy, a thirty-three-question survey is not able to capture the exact thoughts and feelings of teachers. Additional interviews and observations of teachers would add more depth to the results of this study that cannot be achieved using quantitative methods.

Another study that would address one of the limitations of the current study would consist of using student achievement data that were collected the same year in which the survey was given. A yearlong study in which teacher leadership, collective efficacy, and student achievement data were collected periodically throughout the year might show trends and help to establish a better association between the constructs.

Considering other longitudinal studies would also add depth to the present research and collective knowledge surrounding teacher leadership and collective efficacy. Possible research ideas include having staff members from various schools participate in leadership training. Specific research questions that would inform the study would address whether or not leadership training for teachers has an impact on the extent of teacher leadership in the school building, collective efficacy, and student achievement.

Though this study highlights the importance of teacher leadership, it cannot be denied that principals play a huge role in promoting collective teacher efficacy and teacher leadership. Future studies examining the ways in which school principals foster widespread teacher leadership would help build capacity to put teacher leadership into action. What's more, this study's finding that administrators seldom object when teachers take on leadership roles yet teachers still feel as though they are not included in decision-making or planning the content of professional development is another area worthy of further exploration.

Finally, more studies should be aimed at looking at the phenomenon of teacher leadership through the organizational lens. In order to make organizational changes, an emphasis must be placed on research that takes the school as a whole—*all* teachers, *all* students—into account. If more reliable connections between teacher leadership, collective efficacy, and student achievement were established, the educational community would most certainly stand behind the push to include teachers in leadership decisions and roles.

Final Thoughts

Included in the March 6, 2002 edition of *Education Week* was a poignant story entitled, *The Blueberry Story: The teacher gives the businessman a lesson*. It has since been reprinted hundreds of times in newspapers and periodicals across the country. It has been shared widely among educators. Written by Jamie Vollmer, a leading businessman and entrepreneur, the story included his reflections on a speech he had given to a group of teachers. Originally representing the view that educators needed to look to the business world to learn how to produce a high quality "product," after his speech, Mr. Vollmer found himself at a crossroads. When asked about the premium ingredients on which his highly successful ice cream company was built, he told the crowd that the company used nothing but the best. Yet, when pressed further, he found himself challenged to see why school is *not* like a business:

> "Mr. Vollmer," she [the teacher] said, leaning forward with a wicked eyebrow raised to the sky, "when you are standing on your receiving dock and you see an inferior shipment of blueberries arrive, what do you do?" In the silence of that room, I could hear the trap snap…I was dead meat, but I wasn't going to lie. "I send them back." She jumped to her feet. "That's right!" she barked, "and we can never send back our blueberries. We take them big, small, rich, poor, gifted, exceptional, abused, frightened, confident, homeless,

rude, and brilliant. We take them with ADHD, junior rheumatoid arthritis, and English as

their second language. We take them all! Every one! And that, Mr. Vollmer, is why it's

not a business. It's school!"[1]

Since this story was originally printed, schools across the country have found themselves in the

midst of a myriad of challenges and changes: ever-changing fiscal supports, high-stakes testing,

advances in school law and policy, heightened standards, increases in student diversity, problems

with school security, economic recession, shifts in community values and youth culture, among

many, many more. Yet, through these challenges and changes, teacher leaders are stepping up to

take the reins. As Alisa Simeral, school turnaround specialist and author, states,

> "Let's be honest. In this time of unprecedented demands, teacher morale is at an all-time
>
> low. Maintaining a passion for our craft is becoming harder to do, and the need to invest,
>
> influence, and inspire is crucial. Teacher leaders have the capacity to get others excited
>
> about teaching again. They have the capacity to spark passion and shape school culture
>
> in significant ways" (Simeral, 2016, para. 7).

Though schools and educational leaders continue to face unparalleled demands, the concept of

teacher leadership is a source of hope for the future of the teaching profession. By collaborating

and working together, teacher leaders, their principals, and their colleagues have the capacity to

create an environment where teachers can thrive and grow professionally to make sure each

"blueberry"—whether plump, shiny, bruised, squished, or unripe—is prepared with the

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[1] From "The Blueberry Story: The teacher gives the businessman a lesson," by J. Vollmer, 2002, *Education Week, 21*(25), p. 42. Copyright 2002 by James Vollmer. Reprinted with permission.

knowledge, skills, and values to succeed in our fast-paced, global, knowledge-driven society.

Now, more than ever, it is *teachers* who must lead the way.

References

Adler, J. (2000). Social practice theory and mathematics teacher education: A conversation between theory and practice. *Nordic Mathematics Education Journal, 8*(3), 31–53.

Agsuga-Gage, A., Simonsen, B., & Briere, D. E. (2012). Effective teaching practices that promote a positive classroom environment. *Beyond Behavior, 22*(1), 1–11.

Andrews, D., & Crowther, F. (2002). Parallel leadership: A clue to the contents of the "black box" of school reform. *International Journal of Educational Management, 16*(4), 152–159. doi:10.1108/09513540210432128

Angelle, P. S. & Beaumont, J. S. (2007). School structure and the identity of teacher leaders: Perspectives of principals and teachers. Journal of School Leadership, 17(6), 771–799.

Angelle, P. S., & DeHart, C. (2010). *A four factor model of teacher leadership: Construction and testing of the Teacher Leadership Inventory.* Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

Annenberg Institute for School Reform. (n.d.) Educational leadership. Retrieved December 6, 2003 (http:/ /www.annenberginstitute.org/work/leadership_framework.html#practice); Electronic Management and Information Services (EMIS)—Stark County Schools (n.d.) [Data file]. Canton, OH as cited in Khourey-Bowers, C., Dinko, R. L., & Hart, R. G. (2005). Influence of a shared leadership model in creating a school culture of inquiry and collegiality. *Journal of Research in Science Teaching, 42*(1), 3–24.

Avolio, B., Walumbwa, F., & Weber, T. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60(1), 421–449.

Babbie, E.R. (1998). *The Practice of Social Research.* 10th ed. Belmont, CA: Cengage Learning

Babbie, E.R. (2012). *The Practice of Social Research*. 14th ed. Belmont, CA: Cengage Learning

Balyer, A. (2012). Transformational leadership behaviors of school principals: A qualitative research based on teachers' perceptions. *International Online Journal of Educational Sciences, 4*(3), 581–591.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, N. J.: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory.* Englewood Cliffs, N. J.: Prentice Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 29*(2), 117–148.

Bandura, A. (1995). *Self-efficacy in changing society*. Cambridge, UK: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*(3), 75–78.

Barth, R. S. (2001). Teacher leader. *Phi Delta Kappan*, *82*(6), 443–449.

Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership. Thousand Oaks, CA: Sage Publications.

Bass, B. & Riggio, R. (2006) *Transformational Leadership*, 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates.

Beachum, F., & Dentith, A.M. (2004). Teacher leaders creating cultures of school renewal and transformation. The Educational Forum, 68(3), 276–286.

Bergman, H., Hurson, K., & Russ-Eft, D. (1999). *Everyone a Leader: A grassroots model for the new workplace*. New York: Wiley.

Berliner, D. C. & Biddle, B. J., (1995). The manufactured crisis: Myths, fraud, and the attack on America's public schools. Reading, Massachusetts: Addison-Wesley.

Blase, J. & Kirby, P.C. (2000). Bringing out the best in teachers: What effective principals do (2nd ed.). Thousand Oaks, California: Corwin Press.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher, 33*(8), 3–15.

Bolman, L. G., & Deal, T. E. (2003). Reframing organizations: Artistry, choice, and leadership. San Francisco, CA: Jossey-Bass.

Borton, W. (1991). Empowering teachers and students in a restructuring school: A teacher efficacy interaction model and the effect on reading outcomes. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Bowman, R. F. (2004). Teachers as leaders. *The Clearing House*, *77*(5), 187–189.

Burns, J.M. (1978). Leadership. New York: Harper and Row.

Camburn, E., Rowan, B., & Taylor, J. E. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models. *Educational Evaluation and Policy Analysis*, 25(4), 347–373.

Carnegie Forum on Education and the Economy. Task Force on Teaching as a Profession. (1986). A nation prepared: teachers for the 21st century: The report of the Task Force on Teaching as a Profession. Washington, D.C.: The Forum.

Childs-Bowen, D., Moller, G., & Scrivner, J. (2000). Principals: Leaders of leaders. NASSP Bulletin, 85, 27-34. http://dx.doi.org/10.1177/019263650008461606

Conger, J. A., & Pearce, C. L. (2003). All those years ago: The historical underpinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds.), Shared Leadership (pp. 1–18).

Thousand Oaks, CA: Sage.

Copland, M. A. (2001). The myth of the superprincipal. *Phi Delta Kappan, 82*(7), 528.

Copland, M. A. (2003). Leadership of inquiry: building and sustaining capacity for school
improvement. *Educational Evaluation and Policy Analysis, 25*(4), 375–395.

Creswell, J. (2008). *Educational research: Planning, conducting, and evaluating quantitative
and qualitative research*. New Jersey: Pearson: Merrill Prentice Hall.

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed-methods approaches*.
Thousand Oaks, CA: Sage.

Crowther, F., Kaagen, S. S., Ferguson, M., & Hann, L. (2002). Developing teacher leaders: How
teacher leadership enhances school success. Thousand Oaks, CA: Corwin Press.

Crowther, F., Ferguson, M., & Hann, L. (2009). *Developing teacher leaders: How teacher
leadership enhances school success 2nd ed.* Thousand Oaks, California: Corwin Pres.

Danielson, C. (2007). The many faces of leadership. *Educational Leadership, 65*(1), 14–19.

Danielson, C. (2006). *Teacher leadership that strengthens professional practice*. Alexandria,
VA: Association for Supervision and Curriculum Development.

de Villiers, E., & Pretorius, S.G. (2011). Democracy in schools: Are educators ready for teacher
leadership? *South African Journal of Education, 31*(4), 574–589.

Derrington, M., & Angelle, P.S. (2013). Teacher leadership and collective efficacy: Connections
and links. *International Journal of Teacher Leadership, 4*(1), 1–13.

Desimone, L.M., Porter, A.C., Garet, M.S., Yoon, K.S., & Birman, B.F. (2002). Effects of
professional development on teachers' instruction: Results from a three-year longitudinal
study. *Educational Evaluation and Policy Analysis, 24*, 81–112.

DiRanna, K., & Loucks-Horsley, S. (2001). *Designing programs for teacher leaders: The case of the California Science Implementation Network*. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. (ERIC Document Reproduction Service No. ED465590).

Donaldson, S.I., & Grant-Vallone, E.J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology (17)*2, 245–260.

Dufour, R. (2004). What is a professional learning community? *Educational Leadership, 61*(8), 6–11.

Editorial Projects in Education Research Center. (2004, August 3). Issues A-Z: A Nation at Risk. *Education Week.* Retrieved from http://www.edweek.org/ew/issues/a-nation-at-risk/

Elmore, R.F. (2000). *Building a new structure for school leadership*. Washington, DC: The Albert Shanker Institute.

Ferriter, W. (2010). Digitally speaking: Using social media to reach your community. *Educational Leadership, 68*(4), 87–88.

Fink, A. (2006). *How to conduct surveys: A step-by-step guide* (3rd ed.). Thousand Oaks, CA: Sage.

Firestone, W. A., & Bader, B.D. (1992) *Redesigning teaching: professionalism or bureaucracy?* Albany, N.Y.: SUNY Press.

Firestone, W. A., & Martinez, M. C. (2007). Districts, teacher leaders, and distributed leadership: Changing instructional practice. *Leadership & Policy in Schools, 6*(1), 3-35. doi: 10.1080/15700760601091234

Frost, D., & Harris, A. (2003). Teacher Leadership: towards a research agenda. *Cambrigde Journal of Education, 33*, 479–498. doi: 10.1080/0305764032000122078

Fullan, M.G. (1994). Teacher leadership: A failure to conceptualize. In D.R. Walling (Ed.), *Teachers as Leaders* (pp. 241–253). Bloomington, IN: Phi Delta Kappa Educational Foundation.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco: Jossey-Bass.

Fullan, M. & Hargreaves, A. (1996). What's Worth Fighting for in Your School…New York: Teachers' College Press.

Glatthorn, A.A., & Joyner, R.L. (2005). *Writing the winning thesis or dissertation: A step-by-step guide*. Thousand Oaks, CA: Corwin Press.

Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education 17*(7), 807–818.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37*(2), 479–507.

Goddard, R. G., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researchers*, 33, 2–13.

Goldberg, M. & Harvey, J. (1983). A nation at risk: The report of the national commission on excellence in education. *Phi Delta Kappan, 65*(1), 14–18.

Good, C. J. (2010). A nation at risk. *American Educational History Journal, 37*(1), 367-386.

Gronn, P. (2000). Distributed properties: a new architecture for leadership. *Educational Management Administration & Leadership, 28*, pp. 317–338.

Guthrie, J.W. & Springer, M.G. (2004). A nation at risk revisited: Did "wrong" reasoning result in "right" results? At what cost? *Peabody Journal of Education, 79*(1), 7–35.

Hargreaves, A. (1997). Cultures of teaching and educational change. In M. Fullan (Ed.), The challenge of school change. Illinois: Skylight Training and Publishing.

Hargreave, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.

Hargreaves, A., & Fink, D. (2003). The seven principles of sustainable leadership: Educational leadership. San Francisco, CA: Jossey-Bass.

Harris, A. (2003). Teacher leadership as distributed leadership: Heresy, fantasy or possibility? *School Leadership & Management 23*(3), 313–324.

Harris, A. (2005). Teacher leadership: More than just a feel-good factor? *Leadership and Policy in Schools, 4*, 201–219.

Harris, A., & Muijs, D. (2003). Teacher leadership and school improvement. *Education Review, 16*(2), 39–42.

Harris, A. & Muijs, D. (2005). *Improving schools through teacher leadership*. Berkshire, UK: Open University Press, as cited in Firestone, W. A., & Martinez, M. C. (2007). Districts, teacher leaders, and distributed leadership: Changing instructional practice. *Leadership & Policy in Schools, 6*(1), 3-35. Doi:10.1080/15700760601091234

Harrison, C., & Killion, J. (2007). Ten roles for teacher leaders. *Educational Leadership, 65*(1), 74–77.

Heifetz, R. A., & Linsky, M. (2004). When leadership spells danger. *Educational Leadership, 61*(7), 33–37.

Heller, M. F., & Firestone, W. A. (1995). Who's in charge here? Sources of leadership for

      change in eight schools. *Elementary School Journal, 96*(1), 65.

Helterbran, V. R. (2010). Teacher leadership: Overcoming 'I am just a teacher' syndrome.

      Education, 131(2), 363–371.

Henson, R. K. (2001). *Teacher self-efficacy: Substantive implications and measurement*

      dilemmas. Paper presented at the Annual Meeting of the Educational Research Exchange,

      College Station, TX.

Heppner, P. P., & Heppner, M. J. (2004). Writing and publishing your thesis, dissertation

      & research: A guide for students in the helping professions. Belmont, CA:

      Brooks/Cole Thomson.

Jackson, T., Burrus, J., Bassett, K., Roberts, R.D. (2010). *Teacher leadership: An assessment*

      framework for and emerging area of professional practice. New Jersey: ETS

      (Educational Testing Service).

Jerald, C. D. (2007). *Believing and achieving (Issue Brief).* Washington, DC: Center for

      Comprehensive School Reform and Improvement.

Johnson, B., & Christensen, L. (2004). *Educational Research: Quantitative, qualitative, and*

      mixed approaches (2nd ed.). Boston: Pearson.

Johnson, S.M., & Donaldson, M. L. (2007). Overcoming the obstacles to leadership. Educational

      Leadership, 65(1), 8–13.

Katzenmeyer, M., and Moller, G. (2001). Awakening the sleeping giant: helping teachers

      develop as leaders. Thousand Oaks: Corwin Press.

Katzenmeyer, M. & Moller, G. (2009). Awakening the sleeping giant: Helping teachers develop

      as leaders(3rd ed.). Thousand Oaks, CA: Corwin Press.

Laine, S., Behrstock-Sherratt, E., Lasagna, M. (2011). *Improving teacher quality: A guide for education eeaders*, San Francisco, CA: Jossey-Bass.

Lambert, L. (1998). Building leadership capacity in schools. Alexandria, VA: Association for Supervision and Curriculum Development.

Lambert, L. (2003). Leadership capacity for lasting school improvement. Alexandria, VA: Associateion for Supervision and Curriculum Development.

Lambert, L. (2005). What does leadership capacity really mean? *National Staff Development Council*, 26(2), 38–40.

Lavrakas, P.J. (2008). *Encyclopedia of survey research methods*. Thousand Oaks, CA: SAGE Publications.

Leithwood, K. (1992). The move toward transformational leadership. *Educational Leadership*, 49(5), 8–12.

Leithwood, K., & Duke, D.L. (1998). Mapping the conceptual terrain of leadership: A critical point of departure for cross-cultural..,*Peabody Journal of Education (0161956X), 73*(2), 31.

Leithwood, K., & Duke, D. L. (1999). A century's quest to understand school leadership. In K. S. Louis & J. Murphy (Eds.), Handbook of research on educational administration (2nd Ed., pp. 45–72). San Francisco: Jossey-Bass.

Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. Journal of Educational Administration, 38(2), 112–129.

Leithwood, K. A., Jantzi, D., & Steinbach, R. (1999). Changing leadership for changing times. Buckingham, UK: Open University Press.

Leithwood, K., & Mascall, B. (2008). Collective leadership effects on student achievement.

    Educational Administration Quarterly, 44(4), 529-561. Retrieved from

    http://ezproxy.emich.edu/login?url=http://search.proquest.com/docview/61976933?accou

    ntid=10650.

Leithwood K., & Riehl C (2003). What We Know About Successful School Leadership.

    Philadelphia, PA: Laboratory for Student Success, Temple University.

Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership

    influences student learning. Educational Administration Quarterly, 46, 671–706.

    doi:10.1177/0013161X10377347

Lieberman, A., & Miller, L. (2004). Teacher leadership. San Francisco: Jossey-Bass.

Lieberman, A. & Miller, L. (2005). Teachers as leaders. The Educational Forum, 69,

    151–159.

Manfreda, K. L., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus

    other survey modes: A meta-analysis comparing response rates. *International Journal of*

    Market Research, 50(1), 79. Retrieved from

    http://ezproxy.emich.edu/login?url=http://search.proquest.com/docview/214808455?acco

    untid=10650.

Mangin, M.M. (2005). Distributed leadership and the culture of schools: Teacher leaders'

    strategies for gaining access to classrooms. New Jersey: Rutgers University Publication

    Series No. 2.

Margolis, J. (2008). When teachers face teachers: Listening to the resource "right down the hall."

    Teaching Education, 19(4), 293–310.

Marzano, R.J., Waters, T., & McNulty, B.A. (2005). *School leadership that works.* Alexandria, VA: Association for Supervision and Curriculum Development.

Meadows, L. (2007). Looking back: A nation at risk and national standards. *Science Teacher, 74*(8), 10–12.

Meredith, E.M. (2007). Leadership strategies for teachers (2nd ed.). Thousand Oaks, CA: Corwin Press.

Moir, E. (2009). Accelerating teacher effectiveness: Lessons learned from two decades of new teacher induction. *Phi Delta Kappan, 91*(2), 14–21.

Moller, G., Childs-Bowen, D., & Scrivner, J. (2001). *Teachers of the year speak out: Tapping into teacher leadership.* Greensboro, NC: SouthEastern Regional Vision for Education.

Morgan, G. (1997). Images of organization, (2nd ed.). Thousand Oaks, CA: Sage Publications.

Muhammad, A. Q., & Hamid, K. N. (2012). Impact of effective teachers on students' academic achievements. *Journal of Educational Research (1027-9776), 15*(1), 30–38.

Muijs, D., & Harris, A. (2007). Teacher leadership in (in)action. *Educational Management Administration & Leadership, 35*(1), 111–134. doi:10.1177/1741143207071387

Murphy, J.F. (2005). Connecting Teacher Leadership and School Improvement. Thousand Oaks, CA: Corwin Press.

National Commission on Excellence in Education (NCEE). (1983). A nation at risk: The imperative for educational reform. An open letter to the American people. A report to the Nation and the Secretary of Education. Department of Education, Washington, DC.

Nunnally, J.C., & Bernstein, I.H. (1994) Psychometric Theory (3rd ed.). McGraw-Hill: New York.

Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. Educational

Administration Quarterly, 31, 224–243.

Olivier, D. F. (2001). *Teacher personal and school culture characteristics in effective schools: Toward a model of a professional learning community* (Ph.D.). Available from ProQuest Dissertations & Theses Global. (275848775).

Pearce, C.L., & Conger, J.A., (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage Publications.

Pellicer, L. O., & Anderson, L. W. (1995). A handbook for teacher leaders. Thousand Oaks, CA: Corwin Press.

Pounder, J. S. (2006). Transformational classroom leadership: The fourth wave of teacher leadership? *Educational Management Administration & Leadership, 34*(4), 533–545. doi:10.1177/1741143206068216

Riordan, K. (2003). Teacher leadership as a strategy for instructional improvement: The case of the Merck Institute for Science Education. CPRE Research Report Series.

Roeser, R., Arbreton, A., & Anderman, E. (1993). Teacher characteristics and their effects on student motivation across the school year. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Ross, M. (2006). Surveys and survey results, in F. English (Ed.), Encyclopedia of educational leadership and administration. (pp. 985–987). Thousand Oaks, CA: Sage.

Ross, J. A., & Cousins, J. B. (1993). Enhancing secondary school students' acquisition of correlational reasoning skills. Research in Science & Technological Education, 11(3), 191–206.

Ross, J. A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School*

Effectiveness and School Improvement, 17(2), 179–199.

Rousmaniere, K. (2013). The principal: The most misunderstood person in all of education. (2013, November 8). Retrieved from http://www.theatlantic.com/education/archive/2013/11/the-principal-the-most-misunderstood-person-in-all-of-education/281223/

Rutherford, C. (2006). Teacher leadership and organizational structure. *Journal of Educational Change, 7*(1), 59-76. Doi:10.1007/s10833-006-0013-4

Schuermann, P. (2005). *Share leadership and student achievement: A review of literature.* Charleston, WV: Appalachian Educational Laboratory at Edvantia. Retrieved from http://files.eric.ed.gov/fulltext/ED489145.pdf.

Sebring, P. B., Hallman, S., & Smylie, M. (2003). *When distributed leadership is called back.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois.

Senge, P.M. (1990). *The fifth discipline: The art and practice of the learning organization.* Sydney, Australia: Random House.

Shaughnessy, M. F. (2004). An interview with Anita Woolfolk: The educational psychology of teacher efficacy. *Educational Psychology Review, 16*(2), 153–175.

Silins, H. & Mulford, B. (2004). Schools as learning organizations – effects on teacher leadership and student outcomes. *School Effectiveness and School Improvement, 15*(3-4), 443–466.

Silva, D. Y., Gimbert, B., & Nolan, J. (2000). Sliding the doors: Locking and unlocking possibilities for teacher leadership. Teachers College Record , 102, 779–804.

Simeral, A. (2016, January 6). Invest, Influence, Inspire: Teacher Leadership in Action.

Retrieved from http://inservice.ascd.org/invest-influence-inspire-teacher-leadership-in-

action/

Smith, P. (2011). Transactional and transformational leadership in schools in challenging

circumstances: A policy paradox. *Management in Education, 25*(2), 58–61.

Smylie, M.A. (1992). Teacher participation in school decision making: Assessing willingness to

participate. Educational Evaluation and Policy Analysis, 14(1), 53–67.

Smylie, M.A. (1994). Redesigning teachers' work: Connections to the classroom. In L. Darling-

Hammond, Re*v*iew in research in education, Vol. 20 (pp. 129–177). Washington:

American Educational Research Association.

Smylie, M. (1995). New perspectives on teacher leadership. The Elementary School Journal,

96(1).

Smylie, M.A. (1997). Research on teacher leadership: Assessing the state of the art. In

Biddle, B.Thomas, G.Goodson, I., (Eds.) *International handbook of teachers and*

teaching, (521–591) Dordreht, the Netherlands: Kluwer.

Smylie, M. A., Conley, S. and Marks, H. M. (2002). Exploring new approaches to teacher

leadership for school improvement. *Yearbook of the National Society for the Study of*

Education, 101(1), 162–188. Doi: 10.1111/j.1744-7984.2002.tb00008.x

Spillane, J.P., (2005). Distributed leadership. *The Educational Forum, 69*(2), 143-150.

Spillane, J. (2006). Distributed leadership. San Francisco, CA: Jossey-Bass.

Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice:

A distributed perspective. Educational Researcher, 30(3), 23–28.

Stronge, J.H. (2007). *Qualities of Effective Teachers, 2nd Edition*. Alexandria, VA: Association

for Supervision and Curriculum Development.

State of Michigan, (2015). *Find out what is the purpose of the MEAP?* Retrieved from

http://www.michigan.gov/som/0,4669,7-192-41009-2252--,00.html.

Tschannen-Moran, M., & Gareis, C. R. (2004). Principals' sense of efficacy: Assessing a

promising construct. *Journal of Educational Administration*, *42*(5), 573–585.

doi:10.1108/09578230410554070

Tschannen-Moran, M., & Woolfolk Hoy, A. (2002). The influence of resources and support on

teacher's efficacy beliefs. Paper Presented At Thec Annual Meeting of The American

Educational Research Association, New Orleans, http://www.coe.ohio-

tate.edu/ahoy/aera%202002%20megan.pdf.

Tschannen-Moran, M., Wooklfolk Hoy, A., & Hoy, W.K. (1998). Teacher efficacy: Its meaning

and measure. *Review of Educational Research, 68,* 202–248.

Teacher Leadership Exploratory Consortium. (2011). *Teacher Leader Model Standards.*

Retrieved February 9, 2014 from http://www.teacherleaderstandards.org/

The White House, United States Government. (2013). Race to the top. Retrieved January 25,

2014 from http://www.whitehouse.gov/issues/education/k-12/race-to-the-top

Wahlstrom, K., & Louis, K. S. (2008). How teachers perceive principal leadership. *Educational

Administration Quarterly, 44*(4), 498–445.

Wasley, P.A. (1991). Teachers as leaders. The rhetoric reform and the realities of practice. New

York: Teacher College Press.

Wasley, P.A. (1992). Working together: Teacher leadership and collaboration. In C. Livingston (Ed.), *Teacher leaders: Evolving roles* (pp. 21–55). Washington, DC: National Education Association.

Waters, J.T., Marzano, R.J., & McNulty, B. (2004). Leadership that sparks learning. *Educational Leadership, 61*(7), 48–51.

Wigginton, E. (1992). A vision of teacher leadership. In C. Livingston (Ed.), Teachers as leaders: Evolving roles (pp. 167–173). Washington, DC: National Education Association.

Woolfolk, A.E., & Hoy, W.K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82,* 81-91.

Wright, T.E. (2005). *Examining teachers' perceptions of teacher and principal leadership as they relate to school improvement in a suburban high school.* Unpublished doctoral dissertation, University of Missouri, Columbia.

York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, *74*(3), 255–316.

Zehr M. A. (2001). Teacher leadership should be strengthened, report says. *Education Week*, 20(32), 5.

Appendix A

The Teacher Leadership Exploratory Consortium's

Teacher Leader Model Standards

The Standards: Domain 1:
Fostering a Collaborative Culture to Support Educator Development and Student Learning

The teacher leader is well versed in adult learning theory and uses that knowledge to create a community of collective responsibility within his or her school. In promoting this collaborative culture among fellow teachers, administrators, and other school leaders, the teacher leader ensures improvement in educator instruction and, consequently, student learning.

Functions

The teacher leader:

a) Utilizes group processes to help colleagues1 work collaboratively to solve problems, make decisions, manage conflict, and promote meaningful change;

b) Models effective skills in listening, presenting ideas, leading discussions, clarifying, mediating, and identifying the needs of self and others in order to advance shared goals and professional learning;

c) Employs facilitation skills to create trust among colleagues, develop collective wisdom, build ownership and action that supports student learning;

d) Strives to create an inclusive culture where diverse perspectives are welcomed in addressing challenges; and

e) Uses knowledge and understanding of different backgrounds, ethnicities, cultures, and languages to promote effective interactions among colleagues.

The Standards: Domain 2:
Accessing and Using Research to Improve Practice and Student Learning

The teacher leader keeps abreast of the latest research about teaching effectiveness and student learning, and implements best practices where appropriate. He or she models the use of systematic inquiry as a critical component of teachers' ongoing learning and development.

Functions

The teacher leader:

a) Assists colleagues in accessing and using research in order to select appropriate strategies to improve student learning;

b) Facilitates the analysis of student learning data, collaborative interpretation of results, and application of findings to improve teaching and learning;

c) Supports colleagues in collaborating with the higher education institutions and other organizations engaged in researching critical educational issues; and

d) Teaches and supports colleagues to collect, analyze, and communicate data from their classrooms to improve teaching and learning.

The Standards: Domain 3:
Promoting Professional Learning for Continuous Improvement

The teacher leader understands that the processes of teaching and learning are constantly evolving. The teacher leader designs and facilitates job-embedded professional development opportunities that are aligned with school improvement goals.

Functions

The teacher leader:

a) Collaborates with colleagues and school administrators to plan professional learning that is team-based, job-embedded, sustained over time, aligned with content standards, and linked to school/district improvement goals;

b) Uses information about adult learning to respond to the diverse learning needs of colleagues by identifying, promoting, and facilitating varied and differentiated professional learning;

c) Facilitates professional learning among colleagues;

d) Identifies and uses appropriate technologies to promote collaborative and differentiated professional learning;

e) Works with colleagues to collect, analyze, and disseminate data related to the quality of professional learning and its effect on teaching and student learning;

f) Advocates for sufficient preparation, time, and support for colleagues to work in teams to engage in job-embedded professional learning;

g) Provides constructive feedback to colleagues to strengthen teaching practice and improve student learning; and

h) Uses information about emerging education, economic, and social trends in planning and facilitating professional learning.

The Standards: Domain 4:
Facilitating Improvements in Instruction and Student Learning

The teacher leader possesses a deep understanding of teaching and learning, and models an attitude of continuous learning and reflective practice for colleagues. The teacher leader works collaboratively with fellow teachers to constantly improve instructional practices.

Functions

The teacher leader:

a) Facilitates the collection, analysis, and use of classroom- and school-based data to identify opportunities to improve curriculum, instruction, assessment, school organization, and school culture;

b) Engages in reflective dialog with colleagues based on observation of instruction, student work, and assessment data and helps make connections to research-based effective practices;

c) Supports colleagues' individual and collective reflection and professional growth by serving in roles such as mentor, coach, and content facilitator;

d) Serves as a team leader to harness the skills, expertise, and knowledge of colleagues to address curricular expectations and student learning needs;

e) Uses knowledge of existing and emerging technologies to guide colleagues in helping students skillfully and appropriately navigate the universe of knowledge available on the Internet, use social media to promote collaborative learning, and connect with people and resources around the globe; and

f) Promotes instructional strategies that address issues of diversity and equity in the classroom and ensures that individual student learning needs remain the central focus of instruction.

The Standards: Domain 5:
Promoting the Use of Assessments and Data for School and District Improvement

The teacher leader is knowledgeable about the design of assessments, both formative and summative. He or she works with colleagues to analyze data and interpret results to inform goals and to improve student learning.

Functions

The teacher leader:

a) Increases the capacity of colleagues to identify and use multiple assessment tools aligned to state and local standards;

b) Collaborates with colleagues in the design, implementation, scoring, and interpretation of student data to improve educational practice and student learning;

c) Creates a climate of trust and critical reflection in order to engage colleagues in challenging conversations about student learning data that lead to solutions to identified issues; and

d) Works with colleagues to use assessment and data findings to promote changes in instructional practices or organizational structures to improve student learning.

The Standards: Domain 6:
Improving Outreach and Collaboration with Families and Community

The teacher leader understands the impact that families, cultures, and communities have on student learning. As a result, the teacher leader seeks to promote a sense of partnership among these different groups toward the common goal of excellent education.

Functions

The teacher leader:

a) Uses knowledge and understanding of the different backgrounds, ethnicities, cultures, and languages in the school community to promote effective interactions among colleagues, families, and the larger community;

b) Models and teaches effective communication and collaboration skills with families and other stakeholders focused on attaining equitable achievement for students of all backgrounds and circumstances;

c) Facilitates colleagues' self-examination of their own understandings of community culture and diversity and how they can develop culturally responsive strategies to enrich the educational experiences of students and achieve high levels of learning for all students;

d) Develops a shared understanding among colleagues of the diverse educational needs of families and the community; and

e) Collaborates with families, communities, and colleagues to develop comprehensive strategies to address the diverse educational needs of families and the community.

The Standards: Domain 7:
Advocating for Student Learning and the Profession

The teacher leader understands the landscape of education policy and can identify key players at the local, state, and national levels. The teacher leader advocates for the teaching profession and for policies that benefit student learning.

Functions

The teacher leader:

a) Shares information with colleagues within and/or beyond the district regarding how local, state, and national trends and policies can impact classroom practices and expectations for student learning;

b) Works with colleagues to identify and use research to advocate for teaching and learning processes that meet the needs of all students;

c) Collaborates with colleagues to select appropriate opportunities to advocate for the rights and/or needs of students, to secure additional resources within the building or district that support student learning, and to communicate effectively with targeted audiences such as parents and community members;

d) Advocates for access to professional resources, including financial support and human and other material resources, that allow colleagues to spend significant time learning about effective practices and developing a professional learning community focused on school improvement goals; and

e) Represents and advocates for the profession in contexts outside of the classroom.

Appendix B

Survey Instrument

Teacher Leadership & Collective Efficacy Survey

Directions: This survey requests you to respond to various items with your opinions or judgments regarding teacher leadership and collective efficacy within your school building. The survey is divided into three sections. It is important that each section is completed to perform a thorough analysis of the survey results.

Your responses will be completely anonymous. No one who completes this survey will be identified. Thank you for your cooperation.

I wish to participate in this study.

☐ Yes

☐ No

Section 1: Teacher Leadership Inventory

Teachers often take on leadership responsibilities in schools. Sometimes teachers are appointed to fulfill these responsibilities by the principal. Other times, teachers naturally take on leadership responsibilities because of their interest or expertise. Understanding teacher leadership, whether appointed or natural, is important to understanding how schools function effectively. The items which follow ask your opinions about various aspects of teacher leadership. There are no wrong answers, so feel free to respond to each statement candidly.

For each statement below, indicate how often this occurs in your school. Mark only one response per item.

Item #	Never	Seldom	Sometimes	Routinely
Item 1: Teachers ask one another for assistance when we have a problem with student behavior in the classroom.	☐	☐	☐	☐
Item 2: Other teachers willingly offer me assistance if I have questions about how to teach a new topic or skills.	☐	☐	☐	☐
Item 3: Teachers here share new ideas for teaching with other teachers such as through grade level/department meetings, school wide meetings, professional development, etc.	☐	☐	☐	☐

Continued...

Item #	Never	Seldom	Sometimes	Routinely
Item 4: Teachers discuss ways to improve student learning.	☐	☐	☐	☐
Item 5: Teachers are involved in making decisions about activities such as professional development, cross curricular projects, etc.	☐	☐	☐	☐
Item 6: Teachers are actively involved in improving the school as a whole.	☐	☐	☐	☐
Item 7: Teachers stay current on education research in our grade level/ subject area/department.	☐	☐	☐	☐
Item 8: Teachers willingly stay after school to work on school improvement activities.	☐	☐	☐	☐
Item 9: Teachers willingly stay after school to help other teachers who need assistance.	☐	☐	☐	☐
Item 10: Teachers willingly stay after school to work with administrators, if administrators need assistance.	☐	☐	☐	☐
Item 11: Administrators object when teachers take on leadership responsibilities.	☐	☐	☐	☐
Item 12: The principal responds to the concerns and ideas of teachers.	☐	☐	☐	☐

Item #	Never	Seldom	Sometimes	Routinely
Item 13: Teachers plan the content of professional learning activities at my school.	☐	☐	☐	☐
Item 14: Teachers have opportunities to influence important decisions even if they do not hold an official leadership position.	☐	☐	☐	☐
Item 15: The principal consults the same small group of teachers for input on decisions.	☐	☐	☐	☐
Item 16: Time is provided for teachers to collaborate about matters relevant to teaching and learning.	☐	☐	☐	☐
Item 17: Most teachers in leadership positions only serve because they have been principal appointed.	☐	☐	☐	☐

Please go on to Section 2

Section 2: Teacher Efficacy Belief Scale–Collective Form

This portion of the survey requests that you make judgments about the *collective strength of beliefs of faculty members at your school* in their capabilities to organize and successfully carry out work tasks. Assess the strengths of faculty beliefs, consider the faculty's collective abilities within the context of your *current* school. Consider job roles and responsibilities, available resources and support, current policies, help from colleagues, and so on. Considering the faculty in your school as a whole, for each item, use the scale provided. Check the appropriate box provided that reflects your view. Mark only one response per item.

STRENGTH OF FACULTY COLLECTIVE BELIEFS SCALE:

> 1 = *Weak Beliefs* in our capabilities (WB)
> 2 = *Somewhat Strong Beliefs* in our capabilities (SSB)
> 3 = *Strong Beliefs* in our capabilities (SB)
> 4 = *Very Strong Beliefs* in our capabilities (VSB)

The strength of our faculty's *collective beliefs* in our capabilities to...	WB	SSB	SB	VSB
1. ...carry out decisions and plans designed for school-wide improvement.	☐	☐	☐	☐
2. ...produce high levels of learning with our students.	☐	☐	☐	☐
3. ...create ways to improve the school environment.	☐	☐	☐	☐
4. ...maintain effective communication with parents and the larger community.	☐	☐	☐	☐
5. ...support each other in addressing new policies, rules, and regulations.	☐	☐	☐	☐
6. ...maintain a school environment in which students feel good about themselves.	☐	☐	☐	☐
7. ...provide input in making important school decisions.	☐	☐	☐	☐
8. ...effectively communicate with the school administration.	☐	☐	☐	☐
9. ...work with disadvantaged and troublesome students.	☐	☐	☐	☐
10. ...manage student misbehavior.	☐	☐	☐	☐

Continued...

Section 3: Demographic Information

How many total years of experience in teaching do you have?

How many years have you taught at your present school?

Highest degree earned.

☐ BA/BS　　☐ Masters　　☐ Masters + 20　　☐ Masters + 40

☐ Specialist　　☐ PhD/EdD　　☐ Other

Gender

☐ Female　　☐ Male

Do you feel you hold a leadership position at your school?

☐ Yes　　☐ No

If *yes*, please explain:

Additional comments:

Appendix C

Informed Consent

Informed Consent Letter for Principals

To: K-6 Grade Public School Principals

Researcher: Julie L. Clark
                              Gifted & Talented Coordinator/Teacher
                              Jenison Public Schools, Jenison, MI
                              Eastern Michigan University Doctoral Student

Dissertation Title: The Self-Perception of Leadership Efficacy of Teachers and its Effects on
                              Student Achievement

I am a doctoral student at Eastern Michigan University. To complete my degree program, I have chosen to conduct a study that I believe has significant relevance in education today. As we continue learning more about what leading and teaching in the 21st Century entails, it is apparent that leadership from all levels of an organization, including teachers, is of utmost importance. While many studies have analyzed the qualities and characteristics of teacher leaders, few have established a direct connection between the practice of teacher leadership and student performance. As Harris (2005) states, "We do not know the ways in which teachers positively influence instructional and organizational development; the existing studies are not fine grained or detailed enough" (p. 214). In order to help cultivate teacher leadership, we need to measure its collective effect on schools as a whole, for the implementation of distributed leadership in the form of teacher leadership cannot be accomplished successfully without focusing on the relationship between teacher leadership and student learning.

In addition to teacher leadership, this study will also examine teachers' collective efficacy, or "the perception[s] of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Goddard & Goddard, 2001, p. 809). Thus, the primary purpose of this study is to attempt to provide greater clarity on the influence of teacher leadership and collective efficacy on student performance.

Rather than study the phenomenon of teacher leadership from the individual-level, I am seeking to study this important construct at the school-level. As such, I am writing you to see if you would be interested in having your school participate in this important work. Here are more details about the study and survey:

- The survey is anonymous. At no time will your school's name or your teachers' names be associated with the responses to the questionnaire. All information will be secure at all times.

- There are no foreseeable risks to your teachers or school by completing this survey, as all results will be kept completely confidential. Participants may not personally benefit from participating in this study other than the satisfaction they might derive from knowing they are contributing to the greater understanding on how teacher leadership and collective efficacy impact student achievement.

- Participation in this study is voluntary. Once surveys are returned to me, your participation will have been completed. You may choose not to have your school participate, and individual teachers may also opt-out or withdraw without negative consequences.

- There are two options for administration of the survey. You may choose to have your staff members complete the survey in paper/pencil format or electronically via *Survey Monkey.*

- Results will be presented in aggregate form only. No names or individually identifying information will be revealed. Results may be presented at research meetings and conferences, in scientific publications, and as part of a doctoral thesis being conducted by the researcher.

This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee for use. If you have questions about the approval process, please contact the USHRC at human.subjects@emich.edu or call 734-486-0042.

If you have any questions concerning your participation now or in the future, you may contact me, the researcher—Julie L. Clark, at jallerd1@emich.edu or 616.291.3171 or you may contact my dissertation chair, Dr. Ronald Williamson at rwilliams1@emich.edu.

Sincerely,

Julie L. Clark

Consent to Participate:

I have read or had read to me all of the above information about this research study, including the research procedures.

By signing, you agree to allow your school participate in either the paper or electronic version of the survey (*Survey Monkey)*. By agreeing, you are indicating that you are a building principal, understand the consent form, and agree to have your school participate in the research study.

Printed Name: _____

                               (*First*)   (*Last*)

Signature: _____ Date: _____

Research Study Information Letter for Teachers

Researcher:	Julie L. Clark
	Gifted & Talented Coordinator/Teacher
	Jenison Public Schools, Jenison, MI
	Eastern Michigan University Doctoral Student

Dissertation Title: The Self-Perception of Leadership Efficacy of Teachers and its Effects on Student Achievement

_____

I am a doctoral student at Eastern Michigan University. To complete my degree program, I have chosen to conduct a study that I believe has significant relevance in education today. As we continue learning more about what leading and teaching in the 21st Century entails, it is apparent that leadership from all levels of an organization, including teachers, is of utmost importance.

In addition to teacher leadership, this study will also examine teachers' collective efficacy, or "the perception[s] of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Goddard & Goddard, 2001, p. 809). Thus, the primary purpose of this study is to attempt to provide greater clarity on the influence of teacher leadership and collective efficacy on student performance. Here are more details about the study/survey:

> **Procedures:** This survey is divided into three sections, consists of 33 questions, and will take approximately 10 minutes to complete. It is important that each section is completed to perform a thorough analysis of the survey results.

> **Confidentiality and Data Storage:** The survey is anonymous. At no time will your name be associated with your responses to the survey. All information will be kept secure at all times.

> **Potential Risks/Benefits:** There are no foreseeable risks to you by completing this survey as all results will be kept completely confidential. Participants may not personally benefit from this survey other than the satisfaction they might derive from knowing they are contributing to the greater understanding on how teacher leadership and collective efficacy impact student achievement.

> **Participation:** Participation in this study is voluntary. Once the survey is finished, your participation will have been completed. You may choose opt-out prior to starting the survey or withdraw from the study at any time without negative consequences.

> **Results and Means of Public Dissemination:** Results will be presented in aggregate form only. No names or individually identifying information will be revealed. Results will be shared in the final dissertation project and may be presented at research meetings and conferences, or in scientific publications.

Questions about the Research: This research protocol and informed consent document have been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee (UHSRC) for use. If you have questions about the approval process, please contact the UHSRC at human.subjects@emich.edu or call 734-486-0042.

If you have any questions concerning your participation now or in the future, you may contact me, the researcher—Julie L. Clark, at jallerd1@emich.edu OR julieclark@jpsonline.org OR 616.291.3171. You may also contact my dissertation chair, Dr. Ronald Williamson, at rwilliams1@emich.edu.

I have read or had read to me all of the above information about this research study, including the research procedures. I understand that I will be able to opt-out of participating prior to starting the survey without negative consequences and may withdraw at any time.

Printed Name: _____

                                            (First)   *(Last)*

Signature: _____ Date: _____

Appendix D

Permissions to Use Survey Instruments

Teacher Leadership Inventory Permission

Permission Request

March 1, 2015

Dr. Pamela S. Angelle
Department of Educational Leadership and Policy Studies
The University of Tennessee
323 Bailey Education Complex
Knoxville, TN 37996-3430

Dear Dr. Angelle:

I am a doctoral student from Eastern Michigan University writing my dissertation tentatively titled *The Self Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement* under the direction of my dissertation committee chaired by Dr. Ronald Williamson.
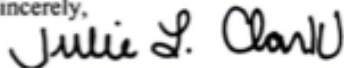
I would like to seek your permission to reproduce and use the survey instrument you developed with Dr. Corey DeHart, the *Teacher Leadership Inventory*, in my research study. I would use and print your survey under the following conditions:

- I will use this survey only for my research study and will not sell or use it with any compensated or curriculum development activities.

- I will include the copyright statement on all copies of the instrument.

- I will send my research study and any subsequent reports, articles, or papers that make use of the survey data promptly to your attention.

If these are acceptable terms and conditions, please indicate so through either email correspondence, a written letter, or by signing and dating one copy of this letter and returning it to me either through postal mail, fax, or email:

Julie L. Clark
6573 Bradenwood Drive
Hudsonville, MI 49426
jallerd1@emich.edu
julieclark@jpsonline.org
Phone: 616.291.3171
Fax: 616.457.1906

Sincerely,

Julie L. Clark

Julie L. Clark
Doctoral Candidate

Expected date of completion: Spring 2016

Julie Clark <jallerd1@emich.edu>   📎 Mar 1 ☆   ↩   ▾
to pangelle, bcc: Julie ▾

Dear Dr. Angelle:

I am a doctoral student from Eastern Michigan University writing my dissertation tentatively titled *The Self Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement* under the direction of my dissertation committee chaired by Dr. Ronald Williamson.

I would like to seek your permission to reproduce and use the survey instrument you developed with Dr. Corey DeHart, the *Teacher Leadership Inventory*, in my research study. I would use and print your survey under the following conditions:

- I will use this survey only for my research study and will not sell or use it with any compensated or curriculum development activities.

- I will include the copyright statement on all copies of the instrument.

- I will send my research study and any subsequent reports, articles, or papers that make use of the survey data promptly to your attention.

If these are acceptable terms and conditions, please indicate so through either email correspondence, a written letter, or by signing one copy of the attached letter and returning it to me either through postal mail, fax, or email:

Julie L. Clark
6573 Bradenwood Drive
Hudsonville, MI 49426
jallerd1@emich.edu
julieclark@jpsonline.org
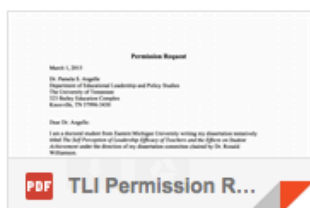Phone: 616.291.3171
Fax: 616.457.1906

Thank you, in advance, for your consideration. I look forward to hearing from you.

Sincerely,

Julie L. Clark
Doctoral Candidate

Expected date of completion: Spring 2016

• • •

📄 PDF   TLI Permission R...

Angelle, Pamela Ann <pangelle@utk.edu>   Mar 5 ☆ ↩ ▾

to me ▾

I am in touch with my co-author to ensure permission from him and will get back to you soon.

From: Julie Clark [mailto:jallerd1@emich.edu]
Sent: Sunday, March 01, 2015 12:28 PM
To: Angelle, Pamela Ann
Subject: Teacher Leadership Inventory Permission Request

···

Julie Clark <jallerd1@emich.edu>   Mar 8 ☆ ↩ ▾

to Pamela ▾

Thank you very much!

···

Angelle, Pamela Ann <pangelle@utk.edu>   📎 Mar 12 ☆ ↩ ▾

to Corey, me ▾

Julie
Attached please find a permission letter for you to use the TLI. I am afraid the scan did not translate very clearly.
Therefore, I am sending a hard copy via postal mail, for your files.
I have also attached a copy of the instrument. Also attached is the AERA paper that explains the testing of the
instrument and finally, a rationale for why we did not reverse code the principal selection factor….a factor that is
negatively correlated to the other factors.
Please let me know if there is anything else you need.
Best,
Pam Angelle

Pamela S. Angelle, Ph.D.
Associate Professor and Graduate Program Coordinator
Educational Administration Program
Department of Educational Leadership and Policy Studies
College of Education, Health, and Human Sciences
The University of Tennessee
323 Bailey Education Complex
Knoxville, TN 37996
(865) 974-4139 (office)
(865) 974-6146 (fax)

4 Attachments

PDF Teacher Leaders…

PDF Reverse Coding …

PDF TLI permission..J…

PDF AERA.10.Measuri…
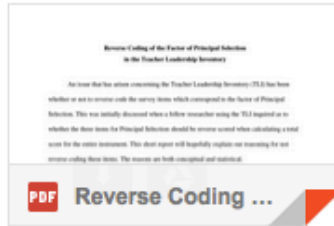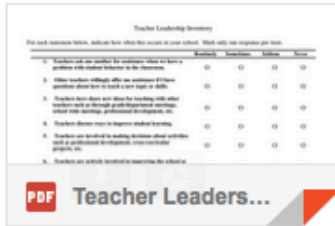
Julie Clark <jallerd1@emich.edu>   Mar 14 ☆

to Pamela, Corey ▾

Good morning, Dr. Angelle and Dr. Dehart:

Thank you for your permission to use the TLI and for the additional information on the testing of the instrument and reverse coding. I look forward to conducting my study and will be sure to forward my findings on to you both.

Kind regards,
Julie Clark

...

COLLEGE of EDUCATION, HEALTH, & HUMAN SCIENCES

Educational Leadership and Policy Studies
1122 Volunteer Boulevard
325 Jane and David Bailey Education Complex
Knoxville, TN 37996-3430
Phone: 865-974-2214
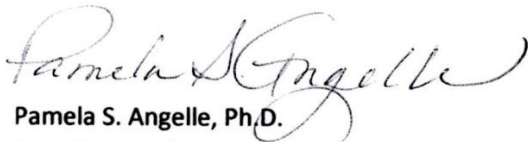865-974-6146
http://elps.utk.edu

Julie L. Clark
6573 Bradenwood Drive
Hudsonville, MI 49426

Dear Ms. Clark,

I hereby grant you permission to use the Teacher Leadership Inventory for dissertation research. This permission allows for online or hard copy dissemination of the instrument. This permission is granted with the terms set forth in your request; that is,

- For research purposes only, barring any monetary profiting from the instrument.
- To include copyright on all copies.
- To forward your research and links to subsequent manuscripts generated from the study.

Best wishes for your research and I look forward to seeing the results.

Pamela S. Angelle, Ph.D.
Associate Professor and Graduate Program Coordinator
Educational Administration Program
Department of Educational Leadership and Policy Studies
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Teacher Efficacy Belief Scale – Collective Form Permission

Teacher Efficacy Belief Scale - Collective Form Instrument Question 📁 Inbox x

Julie Clark <jallerd1@emich.edu>   Apr 10
to dolivier

Dear Dr. Olivier -

I am a doctoral student from Eastern Michigan University preparing to write my dissertation tentatively titled *The Self Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement* under the direction of my dissertation committee chaired by Dr. Ronald Williamson.

I am interested in the possibility of using the *Teacher Efficacy Belief Scale - Collective Form (TEBS-C)* survey instrument for my study. I have obtained a copy of the questionnaire. However, prior to making my instrumentation decisions, I was looking to see if you might be able to provide some details regarding the validity and reliability of the instrument and how it was developed. I hope to obtain this information in order to better inform my decisions for my methodology.

Any information that you might have, or resources to which I might be directed, would be greatly appreciated.

Thanks, in advance, for your assistance.

Kind regards,

Julie L. Clark

Dianne L Olivier <dlo7569@louisiana.edu>   Apr 14
to me

Julie,

I wanted to acknowledge receiving your email. I will be happy to provide permission and I will send you info regarding the validation of the survey a bit later. I am under a very tight timeline for completion of a project and I will be traveling out of state this week. I'll get back to you as soon as I can, within the week.

Dianne Olivier

_____
Dianne F. Olivier, Ph. D.
Associate Professor & Interim Department Head
Joan D. & Alexander S. Haig/BORSF Professor in Education
Educational Foundations and Leadership
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Appendix E

Teacher Comments from Survey

Comments from Teachers who Indicated they Held Leadership Positions

Team Liaison
I have been asked by my administrator to attend some trainings and to share my learning with my team. I have been our PLC facilitator for a few years.
Grade-level liaison
I am a special education teacher and I am the go to person about behavior sometimes.
I feel I am a leader within my grade level professional learning community.
I have asked and been asked to take on leadership roles many times. I have also stepped in as principal, on occasion. I have a strong desire to become a 'leader' in my building, outside of my classroom, and my principal helps foster these opportunities.
I am a literacy coach and routinely answer curriculum questions and coach teachers with literacy expectations.
While it is nothing official, I do see myself and I believe others see me as a leader in early elementary education. My years of experience both in general and special education have provided me with expertise I am always willing to share with others.
I feel as if I am a leader in instructional strategies. Teachers have been brought into my room to observe engagement techniques and technology strategies. I do not hold formal leadership position, but I feel comfortable in my areas of expertise leading and advising teachers
I volunteer ideas, support multiple staff members, support various committees, relay important information to staff about district-impacting activities and decisions
School Improvement Team member
Director of Elementary Media Services
As the school psychologist, it is part of my role to support students and staff through data review, staffing, SIT, etc.
Involved in many important decisions, others look to me for leadership, given tasks by administration, work with other teachers to improve
Some teachers ask for my tech assistance.
Student Council leader
District grade level leader, math committee, School Improvement Team
Yes, I am one of two Lead teachers for the building.
I am the chairperson for the School Improvement Writing Committee.
Lead Teacher
Most teachers hold some type of a leadership role because each teacher sits on a school improvement team at the very least.

I am the reading specialist in our building and also chair the reading school improvement team.
I serve as the academic coach in our building and sit on the leadership team.
We all have a committee that we work with monthly to talk about how to make the school better.
Behavior coach
All of the teachers are respected for whatever they have to say.
I run the Healthy Kids Club on Monday and Wednesday mornings. The students learn about nutrition, eat a healthy snack and play a fun activity.
I am a reading specialist and am currently working as a Title I teacher where I work with students who struggle with reading and math. I am on the leadership team in the building as well.
Member of the school MTSS team comprised of principal, special Ed teachers, title one teachers, reading consultant, speech and language pathologist, school psychologist and behavior specialist.
I am department chair.
I feel that I have input in the committees.
I am a grade level team leader for the district. I plan and lead monthly meetings for all teachers at my level in the district. I also perform PD trainings in behalf of the district.
I am on the Building Leadership Team.
I am the leader of our Building Leadership Team.
I have been on several committees and have taken a leadership role on some of these committees.
We all have strengths within our grade teams!
MTSS coordinator/Member of Building Leadership Team/Chair of Behavior committee
On School Improvement Team Participate in many extracurricular activities
I feel that every teacher holds a leadership position in some way or another at this school.
I feel listened to, by staff and admin.
The only music teacher, only choir director, I like leadership roles.
School Improvement
Camp Director/Safety Coordinator
I am a grade level leader as well as sitting on multiple curriculum committees.
Only P.E. teacher in the building.
My class starts the day with the pledge for the whole school. I am on a SS district committee. New to the building so not as much as my previous school
I am on SET committee, and other committees, I am a person that helps the principal when she needs it.

Only in so that I sit on a committee to help the school (School Improvement Team).

Our principal empowers us all do be active in the decisions made for our school and kids.

I lead a number of PD sessions for our district and learning labs.

I'm on the school's SET (School Excellence Team).

I feel like my principal and other teachers listen to my thoughts and ideas.

I am a technology pilot and am also helping to implement our new math curriculum.

AdvancEd chairperson/Several district committees

I came here as a classroom learning lab facilitator and former reading specialist, however I'm not sure how other teachers perceive me because I'm new to this building.

I am a part of the Literacy Coaches network, the technology pilot, and am a lab classroom facilitator.

School Improvement; designated facilitator for collaborative learning

I am on a Technology Pilot team.

Lead Teacher

As an "aged" teacher, I think the younger teachers look to me for advise both in the classroom and out of the classroom.

SIP Committee Chair

I am the head for many committees in our school and district as well as a facilitator in learning labs.

I serve as co-lead teacher as well as have had leadership roles with school improvement and other activities.

My role is as a teacher consultant in a specific area of educations. Part of my job as consultant is to serve as a teacher leader in PD, interventions, and guidance.

Help with behavior issues and school improvement plans

I am the district literacy coach. I handle district professional development under Title II

Committee work and student teachers.

Lead Teacher within our building

Lead teacher for grade level, committee work etc

Head of the affective committee for school improvement.

Grade Level Team/Experience

Through school improvement & lead teacher.

We all hold a leadership role in our school improvement groups.

School improvement

I feel every teacher has a voice.

Chairperson of School Improvement

I am able to share & learn from others easily & openly.

Self-appointed. I run a student after school club--Green Team. Have requested to be head teacher-No Response.

Buddies/Special Ed.-Math intervention & resource room students.

Early childhood

I have worked on district curriculum committees and have helped teach new curriculum to many teachers.

Multiple committees (for content areas)/Team Leader for 2 grade levels/Attend classes and conferences when asked/Co-director of camp/Safety Coordinator

I am asked to take the role of the principal often times when he is not in the building.

I am looked to for curriculum development & as a mentor. I feel that my experience is valued.

By being an example to other staff members who are new to the building.

I have a strong knowledge of the way things are done at all levels. I am in contact with all teachers & feel they come to me often with concerns.

I take on a lot of extra responsibilities.

Team Leader

Team leader, attending meetings for coordinating school functions & addressing issues, both at the building & district level.

There is power in master teachers leading!

I teach in a new position and program in the district so I'm able to share new feedback with other staff members.

I feel as though I am looked upon as a leader in the area of technology.

I've been a mentor teacher and have served on curriculum committees.

For many years, I was part of the MiBLISi team, I have led "Positive Morale" initiatives, among others, and I am currently leading our School Families.

I am often in charge of after school functions and organize student and staff challenges periodically. I am asked by other teachers for advice/help/ideas with various teacher challenges.

School Improvement Team Leader

I believe I do in the sense that I feel people look to me to help with certain things. I also believe I am sometimes a leader in trying new ideas in curriculum and products.

I am in charge of all scheduling issues for the school and am often consulted for input on school wise decisions.

I have been asked to lead/teach professional development opportunities throughout our district. I also sit on our School Improvement Team. I believe I am an enthusiastic individual and willing to try new things to move our school forward in a positive direction.
Committee work, etc
I believe I am respected and heard on issues. I believe my administration also respect and hear my thoughts and beliefs. Additionally, I serve on a number of school committees.
I am the elementary PE liaison.
Have had a leadership role in the committees I have been involved in.
Leadership Team and with Technology
Support Role in the building - part of the MTSS and Leadership team
Mentor Coach for WMU intern teachers/Leadership Co. member/Student Council Advisor
I'm on the School Improvement Committee, as part of that team, we are making decisions for our school's staff meetings and professional development days often.
ELA Design Team/Cognitive Coach/Mentor for New Teacher/Facilitator for Classroom Learning Labs
I have several leadership positions. Some because of my job title and others because I want to make a difference in the school.
I am a grade level co-chair for my department. I also feel that our principal trusts and asks for my opinion/help when it applies to our department or if she feels I demonstrate expertise on a subject.
I feel like I hold the position of grade level representative for my grade because I have more years on my team than the other teachers.
Within our grade level team we share the leadership role in all types of situations.
I feel that I am a leader within my grade level.
Social committee, union rep
School improvement
Since this is my first year in a new role, I haven't taken on a specific leadership role, but I feel like my experience and input are valued.
Administration
Member of the SIT team at my school.
SIT Team, CST Team, Internship with principal, Tech Committee
I am a school psychologist and tend to communicate between staff and administrators on a frequent basis.
I am the chairperson the writing committee and the young author's team as well as am on several other committees.

I am often approached with questions concerning language arts curriculum, behavior, and environment. I serve on committees and take leadership roles when necessary. For the most part, the staff works collaboratively and most have opportunities to share their expertise, and take leadership positions when necessary.

I'm not afraid to take the lead in efforts to make improvements for our school, students, & staff.

I am a reading specialist for a young 5s through 4th grade building.

I lead our school's math team, and I serve on the district math committee. I have also led professional development in math.

I am the chairperson for our writing committee and Young Author's Day committee. I am also on the behavioral team and Child Study team.

I co-chair English Learner teacher development after-school EL tutoring. I co-chair the school talent show. I lead my classroom of students every day. I help lead my team of teachers.

I mentor new teachers.

Team leader

Peers come to me including administration for answers to questions they have about my area of expertise.

I am the only one who teachers my grade level subject, so I am the leader of that subject and responsible for my students learning and collaboration of what needs to be accomplished.

I am the team leader for my grade and lead professional development days for other teachers at my grade level.

Head of service club

I am a team leader and help organize and facilitate discussions and planning within our team.

MTTS coordinator

When the principal is out of the building I am the one in charge.

Lead Teacher for our after school program. Union representative for the building.

Additional Comments from Study Participants

Our principal makes us feel valued. She does this. The general administration does not make us feel valued.
I don't want to say what my job title is, as there is only one. I feel as a whole our staff is supportive of change and willing to work the extra mile. There are a few people that are only willing to do things in a minimum.
I value our staff and leadership. It is with great joy that I serve as an educator!
I view most of our staff to be in leadership positions based on their expertise in various areas and commitment to various district committees.
I have had 5 Principals over the course of 26 years and our current Principal is the most collaborative. It is appreciated.
I have been an assistant principal for 3 years!
Love our staff & school.
I do take an active role in our school, but many of my responses were based on my thoughts of other staff members as well. I could not honestly say that our staff has strong beliefs because there may be one or two that do not.
Everyone at our school has the opportunity for leadership positions and each take a role of leadership in different activities. There are many leadership roles offered from school improvement to lead teacher to district committees to union to school committees.
As people "age" in the building, it is my feeling that there importance/voice becomes more limited. Time, money and leadership is put in the hands of the younger teachers and "older" teachers are not given the respect of experience like had been in the past. I am NOT saying this because I am an "old" teacher, but because I have been in this building my entire career, have watched it happen over and over. It saddens me because "new" doesn't always mean better, but rather different…
I think that it is very difficult to summarize the feelings/beliefs of an entire staff. Obviously different administrators factor into attitudes etc. as well.

Appendix F

Human Subjects Approval Letter

RESEARCH @ EMU

UHSRC Determination: **EXEMPT**

DATE: **October 22, 2015**

TO: **Julie Clark, Ed.S.**
           Department of Leadership and Couseling
           Eastern Michigan University

Re: **UHSRC: # 814167-1**
           Category: Exempt category 2
           Approval Date: October 22, 2015

Title: **The Self-Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement**

Your research project, entitled **The Self-Perception of Leadership Efficacy of Teachers and the Effects on Student Achievement,** has been determined **Exempt** in accordance with federal regulation 45 CFR 46.102. UHSRC policy states that you, as the Principal Investigator, are responsible for protecting the rights and welfare of your research subjects and conducting your research as described in your protocol.

Renewals: Exempt protocols do not need to be renewed. When the project is completed, please submit the **Human Subjects Study Completion Form** (access through IRBNet on the UHSRC website).

Modifications: You may make minor changes (e.g., study staff changes, sample size changes, contact information changes, etc.) without submitting for review. However, if you plan to make changes that alter study design or any study instruments, you must submit a **Human Subjects Approval Request Form** and obtain approval prior to implementation. The form is available through IRBNet on the UHSRC website.

Problems: All major deviations from the reviewed protocol, unanticipated problems, adverse events, subject complaints, or other problems that may increase the risk to human subjects **or** change the category of review must be reported to the UHSRC via an **Event Report** form, available through IRBNet on the UHSRC website

Follow-up: If your Exempt project is not completed and closed after **three years**, the UHSRC office will contact you regarding the status of the project.

Please use the UHSRC number listed above on any forms submitted that relate to this project, or on any correspondence with the UHSRC office.

Good luck in your research. If we can be of further assistance, please contact us at 734-487-3090 or via e-mail at human.subjects@emich.edu. Thank you for your cooperation.

Sincerely,

Beth Kubitskey
Chair
COE Human Subjects Review Committee

Generated on IRBNet