

EFFECTIVE TEACHER LEADERSHIP: A QUANTITATIVE STUDY OF THE
RELATIONSHIP BETWEEN SCHOOL STRUCTURES
AND EFFECTIVE TEACHER LEADERS

A Dissertation
presented to
the Faculty of the Graduate School
University of Missouri – Columbia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

By
Cathy Galland
Dr. Cynthia MacGregor, Dissertation Supervisor

May, 2008

© Copyright by Cathy Galland, 2008

All Rights Reserved

The undersigned, appointed by the Dean of the Graduate School, have examined the dissertation entitled

EFFECTIVE TEACHER LEADERSHIP: A QUANTITATIVE STUDY OF THE
RELATIONSHIP BETWEEN SCHOOL STRUCTURES
AND EFFECTIVE TEACHER LEADERS

Presented by Cathy Galland

A candidate for the degree of Doctor of Education

And hereby certify that in their opinion it is worthy of acceptance.

Dr. Cynthia MacGregor

Dr. Robert Watson

Dr. Pam Hedgpeth

Dr. Beth Hurst

Dr. Gerald Moseman

ACKNOWLEDGEMENTS

This work would not have been possible without the patience, help and support of a number of people; therefore, I would like to thank the following:

Dr. Cynthia MacGregor, my advisor, for all her advice, support, emails, phone calls and office visits. She kept me on track and motivated.

Dr. Pam Hedgpeth, for serving on my committee and supporting my efforts in so many other ways.

Dr. Robert Watson, Dr. Beth Hurst and Dr. Gerald Moseman for their time and effort in providing guidance and feedback by serving on my committee.

Everyone at the Department of Elementary and Secondary Education and the Regional Professional Development Centers for all their assistance with my data collection.

The members of my cohort for friendship, support and encouragement throughout the entire program.

My husband, Mark Galland, and all the members of my family for believing in me and supporting me for many years.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES.....	vi
ABSTRACT.....	vii
CHAPTER	
1. INTRODUCTION TO STUDY.....	1
Background	1
Conceptual Underpinnings of the Study.....	2
Distributed Leadership	3
Teacher Leadership	5
Structural Frame	7
Statement of the Problem.....	10
Research Questions.....	13
Limitations and Assumptions.....	14
Design Controls	15
Definition of Key Terms.....	15
Summary.....	17
2. REVIEW OF RELATED LITERATURE.....	19
Introduction.....	19
The Need for School Change	20
The Need for Distributed Leadership in Schools.....	24
Teacher Leaders as Change Agents	27
Barriers to Teacher Leadership	30

Structures to Support Teacher Leaders.....	33
Role Clarity	34
Physical Structure of the Building	37
Organizational Structure of the Building.....	40
Effective Teacher Leadership	44
Summary	45
3. RESEARCH DESIGN AND METHODOLOGY.....	47
Introduction	47
Research Questions.....	48
Design	49
Population and Sample.....	51
Population	51
Sample.....	51
Data Collection and Instrumentation	52
Data Analysis	60
Summary.....	62
4. PRESENTATION AND ANALYSIS OF DATA.....	64
Introduction	64
Study Design	65
Research Questions.....	67
Findings	68
Descriptive Findings	69
Inferential Findings	71

Summary of Findings	76
5. FINDINGS, CONCLUSIONS, RECOMMENDATIONS.....	79
Introduction	79
Overview of the Study	80
Research Questions.....	81
Summary of Findings	82
Discussion of Findings	85
Role Clarity	85
Physical Structure	88
Organizational Structure	90
Limitations of the Study.....	92
Implications for Practice.....	93
Recommendations for Future Research.....	95
REFERENCES.....	98
APPENDIX	
A. Permission Letter.....,	102
B. Informed Consent Form.....	103
C. School Structures and Teacher Leadership Questionnaire.....	105

LIST OF TABLES

Table 1 Structural Barriers to Teacher Leadership	53
Table 2 School Structure and Teacher Leadership Questionnaire Subscales and Components	56
Table 3 Correlation Coefficients for the Subscales and Components on the Test-Retest	59
Table 4 Additional Demographic Data	70
Table 5 Pearson Correlation for the Subscales and Components to Teacher Leader Effectiveness	72
Table 6 Forward Multiple Regression Analysis Results for Part C of Research Questions One, Two and Three.....	73
Table 7 Forward Multiple Regression Data for Research Question Number Four (Subscales)	75
Table 8 Forward Multiple Regression Data for Research Question Number Four (Components)	75
Table 9 Pearson Correlation for Components in Order of Significance	77

EFFECTIVE TEACHER LEADERSHIP: A QUANTITATIVE STUDY OF THE
RELATIONSHIP BETWEEN SCHOOL STRUCTURES
AND EFFECTIVE TEACHER LEADERS

Cathy Galland

Dr. Cynthia MacGregor, Dissertation Supervisor

ABSTRACT

The purpose of this quantitative study was to investigate the relationship between certain types of school structures and the effectiveness of teacher leaders. The study focused on teachers who lead from within their classrooms, as opposed to those who have left the classroom to take on different responsibilities. The types of school structures investigated were determined through an analysis of nine previously conducted qualitative studies. Through this analysis, specific structural components in three categories: (a) role clarity, (b) physical structures, and (c) organizational structures were identified.

The structural components identified through analysis of these qualitative studies were utilized to develop the SSTLQ (School Structures and Teacher Leadership Questionnaire). The questionnaire was completed by 158 teachers from various grade ranges who were enrolled in a professional development program for teacher leaders in a Midwestern state.

Data from the survey was analyzed using the Pearson correlation coefficient to determine the relationship between specific school structures and teacher leader effectiveness, as measured by the teacher leader's impact on instructional change and student achievement. A forward multiple regression analysis was also utilized to

determine the predictive value of each of the structural components measured by the SSTLQ.

Each of the structural components analyzed was found to have a statistically significant correlation to teacher leader effectiveness. The category of role clarity had the highest correlation and was found to be the most predictive of teacher leader effectiveness of the three categories included in the study. These findings have significance for school leaders as they develop and implement programs to support teacher leaders.

CHAPTER ONE

Introduction to the Study

Background

The standards and accountability movement, exemplified by the *No Child Left Behind* act has placed unprecedented demands on schools (Johnson & Donaldson, 2007). These demands require schools to make significant changes in the way they do business (Beauchum & Dentith, 2004; Elmore, 2000; Riordan, 2003), specifically in the area of school leadership.

The single, heroic leaders can no longer accomplish all that is necessary to meet the demands of school accountability. Andrews and Crowther (2002) postulated, “The past decade has seen major developments in the re-conceptualization of educational leadership for successful school reform” (p. 152). Riordan (2003) found these developments to be focused on a more distributed approach to leadership. “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). Distribution of leadership is necessary to bring about the type of reforms needed in public schools (Gronn, 2002; Sebring, Hallman, & Smylie, 2003).

This distribution of leadership in schools includes teachers as leaders. Birky, Shelton, and Headley (2006) explained, “With the addition of the No Child Left Behind Act of 2001, the emphasis on educational improvement at all grade levels provides further incentive for teachers to be involved in teacher leadership” (p. 88). Teacher leaders are currently an untapped resource for school improvement. Barth (2001)

postulated, “Most would agree that schools are full of an over abundance of underutilized talent” (p. 449).

Most schools, however, are not structured to accommodate effective teacher leadership. Silva, Gimbert, and Nolan (2000) found, “Teacher leadership roles will and should challenge the traditional structure of schools and school systems since teacher leadership requires dispersing responsibility” (p. 801). Too many schools attempt to utilize teacher leaders to bring about school reform without restructuring the school organization to support their new roles. Johnson and Donaldson (2007) explained, “On the whole, few schools have reorganized to make the most of the expertise teacher leaders offer. Usually, the new roles are simply appended to a flat, compartmentalized school structure in which classroom teachers continue to work alone” (p. 10). In order to determine how schools should be restructured to support teacher leadership, it is important to view public schools through a structural lens. It is also necessary to begin with a thorough understanding of teacher leadership in public schools.

Conceptual Underpinnings of the Study

Teacher leadership is not a new concept and many research studies have been conducted to investigate various elements of teacher leadership. This study is unique in that it is grounded in the conceptual framework of the structural frame for organizational analysis, as defined by Bolman and Deal (2003). Through this lens, distributed leadership as manifested in public PreK-12 schools through teacher leadership was analyzed. To determine which structural elements are most related to effective teacher leadership.

Distributed Leadership

Leadership has traditionally focused on what Yukl (2006) referred to as “a single, heroic leader” (p. 448), but in more recent years the idea of leadership being spread across several individuals has started to take hold. The distribution of leadership in schools is necessary to bring about the restructuring needed for reform to be successful. Distributed leadership has its roots in the notion of empowerment. Short and Greer (1997) described two basic types of empowerment: (1) power is a finite—for one person to gain power, someone else must give up a measure of power, and (2) power is infinite and should be spread over many to help accomplish the goals and mission of the organization. The infinite power theory, according to Short and Greer, leads to participative leadership. Yukl (2006) described participative leadership as “efforts by a leader to encourage and facilitate participation by others in making important decisions” (p. 81). Although participative leadership is a form of empowerment, its focus is on decision-making. With participative leadership, the other responsibilities of a leader are still left to the single leader. However, Yukl (2006) postulated, “An alternative perspective that is slowly gaining more adherents is to define leadership as a shared process of enhancing the capability of people to accomplish collective work effectively” (p. 449). This approach to leadership described by Yukl is more encompassing than participative leadership and involves distributing these responsibilities across the organization.

In 2002, Gronn argued it was time for practitioners of leadership to begin to adopt a more “expanded unit of analysis ...which encompasses patterns or varieties of distributed leadership” as an alternative to the more traditional study of focused leadership (p. 424).

That same year, Elmore (2002) attempted to demystify the notion of distributed leadership by pointing out that it is “not very complicated” (p. 14). The author further explained “In any organized system, people typically specialize, or develop particular competencies, that are related to their predispositions, interests, aptitudes, prior knowledge, skills, and specialized roles” (p. 14). A few years later, in 2005, Spillane postulated “Distributed leadership has garnered considerable attention in the United States and abroad” (p. 143). Spillane focused on the importance of leadership practice and the interactions of leaders in defining distributed leadership. He described this particular leadership practice as taking “form in the interactions between leaders and followers, rather than as a function of one or more leaders’ actions” (p. 146). Little (1995) focused her early work on distributed leadership within schools and explored the “contested ground” that developed when high schools tried to restructure the traditional subject departments and develop new teacher leader roles that did not align with the traditional role of the department head.

Distributed leadership appears to be a necessary component of school reform. Sebring et al. (2003) found, “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). The authors referenced research conducted by the Consortium on Chicago School Research:

In its study of the essential supports for improving student learning among 215 Chicago public elementary schools, the Consortium found that those schools that teachers rated highly on local leadership and governance were four to seven times more likely to improve student learning than those schools they rated as weak... A key point is that schools highly rated on local leadership had some (though not all) elements of distributed leadership. (p. 3)

Spillane (2005) also found distributed leadership to be an important element of instructional improvement, but argued “What matters for instructional improvement and student achievement is *not* that leadership is distributed, but *how* it is distributed” (p. 149). In schools, that distribution of leadership needs to include teachers.

Teacher Leadership

Teachers have always taken on leadership roles by chairing committees and heading up local organizations, and many of the descriptions of teacher leadership include those traditional forms of leadership. Silva, Gimbert and Nolan (2000) explained the development of teacher leadership by identifying three different “waves.” The first wave included these traditional teacher leadership roles, such as serving as department chairs. “A second wave of teacher leadership emerged that acknowledged the importance of teachers as instructional leaders and created positions that capitalized on teacher instructional knowledge” (p. 780). These positions included team leaders and staff and curriculum developers. As schools see the need to move away from surface level or first order changes towards more enduring, second order, changes a “third wave of teacher leadership” has begun to allow “teachers to meaningfully participate in our schools as organizations” (p. 780). This type of change emphasizes the importance of teachers leading from within the classroom and values collegiality and professionalism.

Smylie (1992) described teacher leaders in what Silva et al. would have described as the second wave of teacher leadership. Smylie, however, focused specifically on the working relationships developed between teacher leaders and other teachers as they “interact about instructional matters” (p. 86). The author went on to explain that these relationships are often difficult. “Teachers’ professional relationships are characterized

by work role independence and physical isolation that limit opportunities for collegial interaction” (p. 86). These conditions make it difficult for teachers to develop productive relationships with their colleagues.

While some researchers have identified waves, or stages of teacher leadership development, Lieberman and Miller (2005) focused on what they termed the fundamentalist view and the cosmopolitan view of the role of teachers. The fundamentalist view “supports standardization, accountability, and assessment” and views teaching as “technical and managed work that requires close supervision” (p. 152). In the cosmopolitan view “teachers assume roles as researchers, mentors, scholars, and developers; they expand the meaning of what it means to be a teacher. They are leaders and intellectuals who can make a difference in their schools and profession” (p. 153). Little (1995) also emphasized the importance of teacher leaders as intellectual professionals through their subject expertise.

Along with being experts in their field, teacher leaders are also adept at facilitating change. According to Mangin (2005), “Formal teacher leadership roles have become a standard component of education reform efforts designed to improve teaching and learning” (p. 1). Bowman (2004) explained that teachers aid the cause of reform through their influence over other teachers. “Successful teachers as leaders are adept at influencing constituencies over which they admittedly have no formal authority” (p. 187). This ability to influence other teachers is key to any reform movement. Silva et al. (2000) reported, “Recent calls for teacher leadership have appeared that suggest that teacher leadership is not only necessary for the profession but also critical to educational reform efforts as well” (p. 779).

In order for teacher leaders to influence their colleagues to bring about change, they require time to collaborate with their peers. Doyle (2000) found that collaboration among teachers was necessary for improvement, while Riordan (2003) pointed out that lead teachers should be expected to share their expertise through collaboration with colleagues. Collaboration, however, does not just happen. Schools must be structured in such a way as to support collaborative efforts.

Structural Frame

This study utilized what Leithwood and Duke (1998) identified as a “framework-dependent approach.” This approach allowed the researcher to focus on specific elements of teacher leadership. Bolman and Deal (2003) explained, “Frames are windows on the world of leadership and management. A good frame makes it easier to know what you are up against and what you can do about it” (p. 19). In order to more clearly identify impediments and supports for effective teacher leadership, the structural frame as identified by Bolman and Deal (2003) was used to narrow the focus of this study.

Bolman and Deal (2003) identified four frames for analyzing organizations and situations: (a) the structural frame, (b) the human resource frame, (c) the political frame, and (d) the symbolic frame. Each of these frames can be used to analyze teacher leadership. However, teacher leadership represents a significant change in the way schools operate and the structural frame allows the organization to focus on the most vital aspects of change. Bolman and Deal (2003) found, “For a given time and situation, one perspective may be more helpful than others. At a strategic crossroads, a rational process focused on gathering and analyzing information may be exactly what is needed” (p. 309). Although relationships, symbols and politics are all important components of a successful

change process, analysis of the organization through the structural frame seems to be vital for setting the stage for change. Lencioni (2002) explained, “A little structure goes a long way toward helping people take action that they might not otherwise be inclined to do” (p. 214).

Not only is structure helpful in bringing about the initial change, but it is also important to maintaining changes. Fullan and Miles (1992) found, “Reformers talk of the need for deeper, second-order changes in the structures and cultures of schools rather than superficial first-order changes” (p. 745). Additionally, an organization’s scarce resources should be used to their fullest potential, especially in times of change. Bolman and Deal (2003) postulated, “If structure is overlooked, an organization often misdirects energy and resources” (p. 67). This rational process is an important component of the structural frame. Yukl (2006) explained further, “Successful implementation of a major new strategy usually requires changes in the organization structure to make it consistent with the strategy” (p. 302). An organization’s structures can not be ignored if change is to be maintained. Preskill and Torres (1999) also emphasized the importance of structure. “The systems and structures of an organization mediate organization members’ ability to interact, collaborate, and communicate with each other” (p. 171). While the “human resource perspective emphasizes the importance of changing people,” the “structural perspective champions a pattern of well-thought-out roles and relationships” (Bolman & Deal, 2003, p. 45). Kotter (1994) described a successful change process as one that “goes through a series of phases that, in total, usually require a considerable length of time. Skipping steps creates only the illusion of speed and never produces a satisfying result” (p. 59). This need for attention to the steps requires attention to structure. Fullan and

Miles (1992) also emphasized the importance of structure during change, “Of course the failure to institutionalize an innovation and build it into the normal structures and practices of the organization underlies the disappearance of many reforms” (p. 748).

Dynamic leaders may leave the organization, and if the innovation is not institutionalized, it may not be maintained.

The elements of structure are vital to ensuring that change becomes institutionalized. Bolman and Deal (2003), identified six assumptions that undergird the structural frame:

1. Organizations exist to achieve established goals and objectives.
2. Organizations increase efficiency and enhance performance through specialization and a clear division of labor.
3. Appropriate forms of coordination and control ensure that diverse efforts of individuals and units mesh.
4. Organizations work best when rationality prevails over personal preferences and extraneous pressures.
5. Structures must be designed to fit an organizations’ circumstances (including its goals, technology, workforce, and environment).
6. Problems and performance gaps arise from structural deficiencies and can be remedied through analysis and restructuring. (p. 45)

Restructuring. During times of change, it is helpful for organizations to analyze their structures and restructure as necessary. Short and Greer (1997) defined restructuring in schools as “changing the basic organizational structure of the school”. They also gave examples, including creation of “ungraded primary units” and “schools-within-a-school

that collapse departments into larger academic structures” (p. 4). Bolman and Deal (2003) explained, “A given resolution of structural tensions may be right for a particular time and circumstance, but changes in the organization and its environment eventually require some form of structural adaptation” (p. 92).

Restructuring is necessary to allow for distributed teacher leadership. As Riordan (2003) found, “The realization that improving instruction requires shifts in the behavior of school leaders has spurred new theories of school leadership and attempts at restructuring organization” (p. 3). Structure is vital to the success of distributed leadership. Sebring et al. (2003) conducted a study of three schools which had implemented distributed leadership. The one school able to sustain distributed leadership had strong structural elements in place. “Of the three schools we analyzed, Bergman had the most structured and regimented intervention” (p. 47). Clearly, school structure needs to be addressed in order to provide support for third-wave type teacher leadership. If effectively implemented, this type of teacher leadership can facilitate necessary school reforms.

Statement of the Problem

The implementation of distributed leadership in the form of teacher leadership can not be accomplished successfully without restructuring the school. Bolman and Deal (2003) identified four basic pressures that tend to lead to restructuring: (a) environment shifts, (b) technological changes, (c) organizational growth, and (d) leadership changes (p. 84). Although public schools may currently be experiencing all four of these conditions, the accountability associated with NCLB (No Child Left Behind) represents a major environmental shift for public education. Elmore (2000) explained, “Public schools

and school systems, as they are presently constituted, are simply not led in ways that enable them to respond to the increasing demands they face under standards-based reform” (p. 2). In order for school leaders to know the best approach to restructuring to support distributed leadership, they need an understanding of the school structures that are connected to effective teacher leadership.

According to Yukl (2006), leadership theory and research can be classified in three useful ways: (a) characteristics of leaders, (b) characteristics of followers, and (c) characteristics of the situation. “Most theories developed over the past half-century emphasize leader characteristics” (p. 12). This study, instead, focused on characteristics of the situation by utilizing the lens of the structural frame to analyze leadership effectiveness.

Additionally, the body of research on distributed leadership, as manifested in public schools through teacher leadership needs to be expanded. Yukl (2006) found “More research is needed to examine shared and distributed leadership in teams, networks, and hierarchies” (p. 450). Specifically in the area of teacher leadership, Silva et al. (2000) explained that teacher leadership is now moving into what the authors called a “third wave” which includes “opportunities for leadership to be a part of teachers’ day-to-day work. The first wave included traditional teacher leadership roles, such as serving as department chairs, while the second wave identified teachers as instructional leaders and took them out of the classrooms to serve as coaches and facilitators. The third wave of teacher leadership emphasizes the importance of teachers leading from within the classroom and values collegiality and professionalism. Although calls for teacher leadership abound in the reform literature, virtually no research has been conducted using

this third wave definition of teacher leadership” (p. 781). This emphasis on teacher leadership as an integral part of the day-to-day work of the teacher is part of this study’s working definition of teacher leadership. Although several case studies have been conducted since the Silva et al. 2000 publication, none have utilized the structural frame to analyze the school conditions that correlate to teacher leaders’ ability to implement this “third wave” type of leadership.

The researcher developed a questionnaire based on the findings of a review of nine different case studies published between 1997 and 2005 in various locations throughout the United States and Australia. These studies, although focused on a variety of elements of teacher leadership, revealed some consistent findings related to specific school structures that impede the work of teacher leaders. The findings of these studies were categorized around three basic elements of the structural frame: (a) role clarity, (b) physical structure, and (c) organizational structure and used to develop the SSTLQ (School Structures and Teacher Leadership Questionnaire). This questionnaire will give teacher leaders an opportunity for their voices’ to be heard. Birky et al. (2006) postulated:

Looking at teacher leadership presents another challenge for researchers in that the literature is often about the benefits of teacher leadership or about teacher leadership development through the perspective of an administrator, but little is written from the perspective of the teacher leaders themselves. (p. 90)

The purpose of this study was to investigate the relationship between certain types of school structure and effectiveness of teacher leaders. The findings of this study would add to the body of knowledge related to effective teacher leadership and could be important for guidance in school restructuring efforts.

Research Questions

The primary research questions for this study are as follows:

1. What is the relationship between role clarity and teacher-leader effectiveness?
 - a. What is the relationship between overall role clarity and teacher-leader effectiveness?
 - b. What is the relationship between clear role definitions, clear role understanding and clear role acceptance and teacher-leader effectiveness?
 - c. Which of the components of role clarity is most predictive of teacher-leader effectiveness?

2. What is the relationship between the physical structure of the school building and teacher-leader effectiveness?
 - a. What is the relationship between overall physical structure and teacher-leader effectiveness?
 - b. What is the relationship between the physical layout (proximity of classrooms, hallways, and space for teacher collaboration) and teacher-leader effectiveness?
 - c. Which of the components of physical structure is most predictive of teacher-leader effectiveness?

3. What is the relationship between the organizational structure (scheduling, team structures, and other policies) of the school building and teacher-leader effectiveness?
 - a. What is the relationship between the overall organizational structure of the school building and teacher-leader effectiveness?

- b. What is the relationship between scheduling, team structures and policies and teacher-leader effectiveness?
 - c. Which of the components of organizational structure is most predictive of teacher-leader effectiveness?
4. Of all the structural elements, which is most predictive of teacher-leader effectiveness?
- a. Is role clarity, physical structure or organizational structure most predictive of teacher-leader effectiveness?
 - b. Of all the components of the elements of structure listed above, which is most predictive of teacher-leader effectiveness?

Limitations and Assumptions

Several limitations should be considered when analyzing the findings of this study. First, the study utilized a new instrument developed by the researcher limiting the known reliability and validity of the study. The SSTLQ also collected the perceptions of teacher leaders and therefore included the assumption that survey participants were honest in their responses.

The findings are also limited by the size and nature of the sample group. Although this study included teacher leaders from various regions of the state, all teacher leaders were from the same Midwestern state and involved in the same professional development program. Additionally, the numbers were limited to those teacher leaders currently involved in the program, which limited the sample to 180 participants.

Design Controls

A questionnaire was selected to collect data for quantitative measure. Because the data the researcher wanted to collect needed to come directly from people—in this case teacher leaders—a questionnaire was the best method to collect the data (Fink, 2006). Regardless of the best fit, questionnaires do have certain disadvantages. “The first major disadvantage of questionnaires is that the response rate is often low” (Patten, 2001, p. 2). In order to control for this disadvantage, the researcher visited regularly scheduled meetings of the sample group and personally administered the surveys on site. Researcher bias and possible flaws in question design were controlled through an initial review, a pilot and an item analysis through a test-retest analysis (Fink, 2006; Patten, 2001).

Definition of Key Terms

The key terms and definitions, essential to an understanding of the study, are provided:

Teacher Leader

A teacher leader is a teacher who is committed to improving professional learning opportunities for self and others (Wright, 2005), and is willing to “go public” by modeling, sharing, and influencing others (Lieberman & Miller, 2005) as a part of his or her day-to-day work on behalf of children (Silva et al., 2000).

Teacher-Leader Effectiveness

According to Yukl (2006), “The most commonly used measure of leader effectiveness is the extent to which the leader’s organizational unit performs its task successfully and attains its goals” (p. 10). For teacher leaders this translates into the effect on classroom instruction and student achievement in the teacher leaders own classroom and the classrooms of their colleagues. For the purposes of this study, teacher-leader

effectiveness was measured utilizing teacher leader responses on a Likert scale to statements related to impact on classroom instruction and student achievement through the SSTLQ.

School Structures

A review of current literature and previously conducted case studies led the researcher to focus on three specific categories as representative of school structures: (a) role clarity, (b) physical structures, and (c) organizational structures. These categories formed the structure of the SSTLQ, including specific items for each category, related to the category definitions that follow.

Role Clarity

A review of current literature and previously conducted case studies led the researcher to focus on three specific areas to represent role clarity: (a) clear role definitions, (b) clear role understanding, and (c) clear role acceptance. These three subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

Physical Structures

A review of current literature and previously conducted case studies caused the researcher to focus on two specific areas to represent physical structures: (a) physical layout of hallways and proximity of classrooms, and (b) space for teacher collaboration. These two subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

Organizational Structures

A review of current literature and previously conducted case studies caused the researcher to focus on three specific areas to represent organizational structures: (a) scheduling, (b) team structures, and (c) other policies. These three subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

Summary

Public schools are facing increased accountability. This emphasis on accountability puts more responsibility than ever on school leaders. According to Crowther, Kaagan, Ferguson, and Hann (2002), “Educational leadership is at a crossroads... In the early years of a new century, leadership matters more than ever” (p. ix). School principals need to distribute those leadership responsibilities to teachers, whose roles must also change to meet the new challenges. 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 for distributed leadership, and more specifically teacher leadership to be effective, certain structural elements of schools demand attention. In order for an organization of any type to successfully implement change, structure must be attended to (Bolman & Deal, 2003; Fullan & Miles, 1992; Lencioni, 2002; Yukl, 2006).

The purpose of this study was to investigate the relationship between certain types of school structure and effective teacher leaders in order to contribute to the current body of research on teacher leadership. Current research included few quantitative studies,

none of which utilized the structural frame to examine structural facilitators and impediments to effective teacher leadership

This study began with an introduction, which provided an overview of the study. Chapter One also included an explanation of the conceptual underpinnings of the study, the research purpose and the design of the study. A review of current literature related to the study will follow in Chapter Two. Chapter Three will include a complete description of the sample population and research design, while Chapter Four includes a review of findings based on the data collected. Finally, Chapter Five will contain a discussion, conclusions and suggestions for further research.

CHAPTER TWO

Review of Related Literature

Introduction

Public schools are facing unprecedented demands, and the time has come to change the way we schools do business. According to Barth (2001), “Since *A Nation at Risk* in 1983, most national reform reports have recommended widespread teacher leadership” (p. 444). Two decades after the *A Nation at Risk* report, educational experts such as Crowther et al. (2002) were still calling for “educational leadership for the emerging postindustrial world” to “embrace the leadership capabilities of teachers” (p. xvii).

In order to successfully implement teacher leadership in schools, it is necessary to understand what supports are needed for this significant change in the organization’s leadership structure. The purpose of this study was to determine which structural elements support effective teacher leadership. In support of the study, this literature review provided background necessary to understand the issues related to teacher leadership and change in instruction, leading to school improvement. This chapter included a review of current literature related to: (a) the current need for school change, (b) the need for distributed leadership in schools, (c) teacher leaders as change agents, (d) barriers to teacher leadership, (e) structures to support teacher leadership, and (f) effective teacher leadership.

The Need for School Change

In their 1999 work, Preskill and Torres postulated, “The amount of organizational change occurring today is unprecedented” (p. xvii). Kotter (1994) also emphasized the amount of change occurring in organizations when he explained:

Over the last decade, I have watched more than 100 companies try to remake themselves into significantly better competitors... These efforts have gone under many banners: total quality management, reengineering, right sizing, restructuring, cultural change, and turnaround. But, in almost every case, the basic goal has been the same: to make fundamental changes in how business is conducted in order to help cope with a new, more challenging market environment. (p. 60)

Although these references focused on the corporate world, public schools are not immune to this wave of change. According to Burch (2007), “The practices and policies adopted by schools and governing agencies reflect the rules and structures in wider society” (p. 85). Almost a decade earlier, Ball (1998) explained, “In many respects educational institutions are now being expected to take on the qualities and characteristics of ‘fast capitalism’ and this involves not only changes in organizational practices and methods but also the adoption of new social relationships, values and ethical principles” (p. 124). Educational institutions also face similar problems as other organizations. Bolman and Deal (2003) pointed out one of the major issues for organizations is the knowledge “When managers and consultants fail [at solving problems], government frequently jumps in with legislation, policies, and regulations” (p. 9). This phenomenon has clearly been seen in education through the implementation of the *No Child Left Behind* legislation.

If schools are expected to behave like businesses, they may also need to begin to learn from businesses. The business world has been aware of the structures necessary to bring about change for over a decade. In his 1994 article, “Leading Change: Why Transformation Efforts Fail” Kotter discussed lessons learned from examining corporate change efforts over the previous decade. From that analysis, he identified eight errors made by corporations that were not successful with implementing change. Errors one

through five focused on creation, communication, and implementation of a vision, but in his discussion of error number five he also emphasized, “Sometimes the obstacle is the organizational structure” (p. 64). Yukl (2006) also found structure to be important for change. “Successful implementation of a major new strategy usually requires changes in the organization structure to make it consistent with the strategy” (p. 302).

While Kotter focused on the importance of a vision, Eraut (2004) argued that workplaces needed to be restructured in order to become places for learning to take place. Bolman and Deal (2003) agreed, “With stakes so high, organizational learning has emerged as a topic of increasing urgency” (p. 28); however, Morgan (1997) found “Where hierarchical and horizontal divisions are particularly strong, information and knowledge rarely flow in a free manner” (p. 88). Eraut (2004) recognized that most workplaces “are only rarely structured with learning in mind” (p. 247). He also identified four types of work activities that give rise to learning: (a) working in teams, (b) working alongside others, (c) tackling challenging tasks, and (d) working with clients (p. 266). This need for restructuring, Elmore (2000), is especially important in the leadership structure of schools, and he was not optimistic about success. He argued:

If schools, school systems, and their leaders respond to standards based reforms the way they have responded to other attempts at broad scale reform of public education over the past century, they will fail massively and visibly, with an attendant loss of public confidence and serious consequences for public education. (p. 2)

What then, do public schools need to do to successfully implement change?

Riordan (2003) explored the issue. “The realization that improving instruction requires shifts in the behavior of school leaders has spurred new theories of school leadership and attempts at restructuring school organization” (p. 3). Elmore (2000) also emphasized the

need for a change in school leadership structures, “Public schools and school systems, as they are presently constituted, are simply not led in ways that enable them to respond to the increasing demands they face under standards-based reform” (p. 2).

Changes in leadership structure also need to allow for more opportunities for adult learning. While Eraut (2004) pointed out that most workplaces are not structured for learning, one would assume that schools *would be* structured for learning; however, the learning structure generally only exists in the classroom. For schools to be structured to support *adult* learning, the four types of work activities that support learning identified by Eraut would need to be in place: (a) working in teams, (b) working alongside others, (c) tackling challenging tasks, and (d) working with clients (p. 266). While teachers generally are able to learn from working with their own students, they are rarely given the opportunity to tackle challenging tasks, and although many schools are beginning to incorporate more teacher teams, rarely do teachers spend significant time teaching alongside each other. Spillane (2005) emphasized the importance of collaboration to the extent that he argued leadership practice should be defined by “the interactions of two or more leaders” (p. 145). Birky et al. (2006) extended this idea by explaining, “Effective collaboration develops trust between teachers and administrators” (p. 94). Although collaboration is vital to adult learning, Barth (2001) argued that the act of leadership itself increases the potential for learning when he stated, “Teachers become more active learners in an environment where they are leaders” (p. 445). While Bowman (2004) postulated, “To create and sustain ... a developmental school culture, school leaders must teach not only students but also each other” (p. 188).

Schools cannot implement leadership changes and support adult learning without paying close attention to structure. Bolman and Deal (2003) explained, ‘Individual skills and confidence cannot guarantee success unless structure is also realigned to the new initiative’ (p. 373). In order to implement the lessons learned from the business world, schools need to reorganize and rethink the way they do business. Over a decade ago, Fullan and Miles (1992) recognized “The failure to institutionalize an innovation and build it into the normal structures and practices of the organization underlies the disappearance of many reforms” (p. 748), but schools continue to implement change without addressing the structural changes that must take place to make the changes successful.

In his paper “Building a New Structure for School Leadership,” Elmore (2000) found the restructuring problem for schools was closely linked to leadership structures:

The way out of this problem [the need for broad scale reform in education] is through the large scale improvement of instruction, something public education has been unable to do to date, but which is possible with dramatic changes in the way public schools define and practice leadership. (p. 2)

Beauchum and Dentith (2004) also identified the need for new leadership structures. “The pressure for accountability in student achievement has intensified as government scrutiny grows intense and ever-threatening” and “schools must negotiate daily life amid these complications, giving rise to the need for cogent new theories and models of leadership” (p. 276). These new models of leadership are necessary to share the burden of increased accountability. According to Webb, Neumann, and Jones (2004), “The push to improve student learning is too large a problem for any single leader to handle alone” (p. 254).

The Need for Distributed Leadership in Schools

What do schools need to do to implement these new models of leadership? Riordan (2003) explained what distributed leadership would look like in schools focused on improved instruction:

The theory of distributed leadership assumes that leadership is practiced both formally and informally in schools in a variety of ways and by a host of individuals at different levels, and portrays how leadership functions are actually carried out in schools focused on the improvement of teaching and learning. A distributed leadership model requires principals to be more involved in instruction and teachers to be more involved as leaders. (p. 4)

As Elmore (2000) pointed out, “The purpose of leadership is the improvement of instructional practice and performance, regardless of role” (p. 20). Gronn (2002) also discussed the need to rethink roles and their relationships. He postulated, “This duality of differentiation—integration inherent in a division of labor is the source of emerging new forms of role interdependence and coordination which have resulted in distributed patterns of leadership” (p. 428). Once this interdependence of roles becomes institutionalized, the various agents can reach a state of “conjoint agency” (p. 431). In this state, roles often overlap, or are complimentary. Spillane, Halverson, and Diamond (2004) focused on an analysis of leadership tasks, but also emphasized interdependence when they argued, “A distributed perspective presses us to consider the enactment of leadership tasks as potentially *stretched over* the practice of two or more leaders and followers” (p. 16).

However, as Sebring et al. (2003) found, school principals experience a great deal of difficulty developing and maintaining such distribution of leadership. The researchers described one principal who had implemented distributed leadership, but because of

increasing pressure and accountability for increased student achievement, “the principal became disillusioned and resorted to use of the ‘commanding’ approach” (p. 38).

The authors explained faculty stability and emotional intelligence competencies can help to make the distribution of roles more successful, while Short and Greer (1997) found the superintendent and school board must be willing to give school buildings autonomy in order to empower teachers and maintain morale. According to Beachum and Dentith (2004), this effort is worthwhile. They postulated, “When teachers and administrators take on new roles, emergent theories of leadership can be explored and new school structures can be envisioned” (p. 284). Their work focused on the notion of parallel leadership between principals and teachers, which also emphasized interdependence of efforts. “Parallel leadership is a process whereby teacher leaders and their principals engage in collective action to build capacity. It embodies mutual respect, shared purpose and allowance for individual expression” (p. 6).

Gronn (2002) also emphasized the numerical view of distributed leadership by differentiating between focused leadership, which “means that only one individual is attributed with the status of leader” as compared to distributed leadership which “means the aggregated leadership of an organization is dispersed among some, many, or maybe all of the members” (p. 429). One method of sharing leadership among many is the establishment of teams. Scribner, Sawyer, Watson, and Myers (2004) studied the effectiveness of teacher teams as a form of distributed leadership and found, “Many schools are using teacher teams to enhance their organizational effectiveness” (p. 31). Their research resulted in several recommendations for improving the effectiveness of teacher teams, especially those with a problem-solving purpose. These recommendations

included training and professional development for facilitators, team members and group members in strategies for team communication, and clear goals and task descriptions.

Spillane's (2005) focus was the importance of leadership practice within distributed leadership, which is "viewed as a product of the interactions of school leaders, followers, and their situation" (p. 144) and "the primary characteristic of interactions among leaders" (p. 146) is interdependency. Elmore (2000) also stressed the importance of these interactions. He explained that instructional improvement cannot be attained by old leadership models that focus on control. Instead, leadership needs to focus on shared expertise. He found, "it is this problem of the distribution of knowledge required for large scale improvement that creates the imperative for the development of models of distributed leadership" (p. 14). In order to more clearly understand these leadership practices, Spillane et al. (2004) argued, "leaders' thinking and behaviour and their situation need to be considered *together* in an integrated framework" (p. 8) and that researchers need to focus on the *how* and the *why* of such leadership practices.

Regardless of the definition or description, distributed leadership seems to have many benefits for schools. Mangin (2005) found the benefits of distributed leadership are "multiplicative and not just the additive benefit of having more people to do the same job" (23). Spillane (2005) also emphasized the "multiplicative rather than additive model" because the "interactions among two or more leaders in carrying out a particular task may amount to more than the sum of those leaders' practice" (p. 16). Elmore (2000) described these multiple benefits, "Distributed leadership, then, means multiple sources of guidance and direction, following the contours of expertise in an organization" (p. 15). Sebring et al. (2003) also emphasized the advantaged of multiple leaders. They claimed,

“A central element of the distributed perspective is that leadership goes beyond the skills and knowledge of a single individual, and in practice it is executed through multiple leaders” (p. 5). In order to reap these benefits, schools need to begin to involve teachers in leadership through these distributed models.

Teacher Leaders as Change Agents

School principals can no longer handle the extensive responsibilities related to managing the building and being an instructional leader. In their book *Reframing the Path to School Leadership*, Bolman and Deal (2002) pointed out, “When leaders try to do everything themselves, they leave everyone else frustrated and disempowered. The school bogs down because nothing gets done unless the boss does it or approves it” (p. 66). Principals need the help of teacher leaders. Beachum and Dentith (2004) shared similar advice for principals:

School leaders have to build more collaborative and democratic arrangements with teachers and others to achieve the enormous ambitions of schooling and respond to students’ diverse needs. This research indicates that theories and models of teacher leadership could significantly contribute to the renewal processes in today’s schools. (p. 277)

To address this need, Andrews and Crowther (2002) called for a system of “parallel leadership” which they defined as “a process whereby teacher leaders and their principals engage in collective action to build capacity” (p. 155).

Not only is the workload too overwhelming for principals, but there is also the need to involve those who are actually responsible for implementing the changes. Yukl (2006) pointed out, “It is especially important to get the commitment of people directly responsible for implementing the change, the people in key positions who will make it happen” (p. 303). Dee, Henkin, and Duemer (2002) explained how this theory relates to

teachers. “The case for empowerment is argued frequently, on the assertion that people who work closely with students are in the best position to make responsive decisions” (p. 258). Teacher leaders need to be empowered in order to spread their influence.

Lieberman and Miller (2004) postulated, “Teacher leaders are in a unique position to make change happen. They are close to the ground and have the knowledge and ability to control the conditions for teaching and learning in schools and classrooms” (p. 12).

Mangin (2005) agreed “The notion of teachers as leaders builds on the belief that, in addition to being the gatekeepers of instructional change, teachers have a situated perspective on teaching that may make them the logical leaders of changed practice” (p. 1). Birky et al. (2006) argued it was the responsibility of the principal to facilitate teacher leadership, “The ability of a principal to encourage and motivate leadership capacities in the building is critical for educational reform and collaboration” (p. 87).

Previous research has shown that teacher leaders can be successful change agents. Webb et al. (2004) found “Teachers who take leadership roles in their schools are successful agents and conduits in promoting cultural change” (p. 283), while Lieberman and Miller (2004) postulated, “Teachers in leadership positions, whether formal or informal, can be important change agents in meeting the new demands that schools face” (p. 12). Teacher leaders, themselves believe in their ability to facilitate change. Silva et al. (2000) utilized across case analysis to develop five assertions from the experiences of the three teacher leaders in their study. They assert, teacher leaders: navigate the structures of schools, nurture relationships, encourage professional growth, help others with change, and challenge the status quo by raising children’s voices (p. 793). Whitaker’s (1997) study also included teacher leaders who believed they could facilitate

change. One second-year teacher leader stated, “I had strong expectations that I could make a difference. As a classroom teacher I knew I wanted to see things changed, and I wanted to have a stronger impact on what we do” (p. 6). While Suranna and Moss (2000) found, “Most of the participants also believed that by parlaying experience, wisdom, and collegiality outside the classroom, the teacher leader’s impact on the professional development of others and themselves can be far reaching” (p. 9). Birky et al. (2006) also found the teacher leaders in their studies, “expressed personal satisfaction in seeing progress and changes taking place at school. They indicated they cared about their school and were making a positive impact on their students, school, and district—they felt they were making a difference” (p. 93). Reeves (2006) explained why teachers are so effective and leading change among their colleagues:

Changes in behavior do not follow the creation of a personal belief system; they precede it. Behavior does not stem from a rational consideration of evidence, but from an emotional attachment to a trusted colleague. Most workers do not feel this kind of attachment to a trusted colleague. (p. 33)

Not only has research shown that teachers *can* be successful change agents, many education researchers point out that teachers *must* be included in school reform if it is to be successful. Birky et al. (2006) stated, “Because the overall goal of educational reform is to increase student achievement, and because teacher leaders are seen as instrumental in making that happen, the topic of educational reform is seldom addressed in depth without discussing teacher leadership” (p. 88). Crowther et al. (2002) concluded teacher leadership was “inseparable from successful school reform” (p. xix), while Silva et al. (2000) identified teacher leadership as “critical to educational reform efforts” (p. 779). Finally, Webb et al. (2004) postulated, “Teachers provide valuable insight into knotty problems of school reform—knowledge that has all too often gone untapped. Precluding

teachers from leadership roles, ... serves only to deny them roles they practice anyway” (p. 261). Although the importance of teacher leadership seems clear, there are many barriers to overcome.

Barriers to Teacher Leadership

Leadership beyond the classroom, especially related to instructional improvement, is not a traditional role for teachers. Teachers willing to step into this new role will encounter many barriers, some due to already established relationships with their colleagues. Bowman (2004) reported, “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). Smylie (1992) studied teachers’ interactions with teacher leaders in matters related to instructional improvement and found “these new teacher leadership roles may conflict with two important professional beliefs—equality of status and independence” (p. 93). Barth (2001) also found, “A kind of taboo among teachers in many schools, then, makes it difficult to accept or display leadership. Teachers who lead—who behave like administrators—violate the taboos of their school and may be dealt with severely by their peers” (p. 446).

Many teachers are also reluctant to lead because they feel they are just too busy. “Responsibility upon responsibility has been added to each teacher’s working day: responding to parents, overseeing after-school activities, attending professional development activities, and, of course, maintaining standards” (Barth, 2001, p. 445). Zinn (1997) explained that this struggle of balancing too many responsibilities can extend to more personal issues. All of the teacher leaders in the study noted “the difficult balance they must maintain between their commitments to work and their responsibilities to

family” (p. 12). Suranna and Moss (2000) had similar findings. “Teachers are under tremendous strain and very often have little time to devote to this practice. One participant commented, ‘Getting ready to begin a family, I’m not in a position to devote weekends to attend or present at workshops’” (p. 10).

Another barrier to teacher leadership is often the building principal. In 2004, Wright published the results of a case study on the relationship between teacher leaders and their principal in a suburban high school. In this particular study, the principal was very supportive of the teacher leaders in her building. The author found, “Principal leadership works in unison with teacher leadership. The principal supports the actions of her teachers working together and provides them opportunities to explore areas that they are interested in” (p. 88). Barth (2001), however, postulated, “It is disheartening that many teachers experience their school administrator, and especially their principal, as an obstacle to their leadership aspirations” (p. 447). In a 2006 article, Birky et al. discussed findings from two different studies that utilized interviews and surveys to determine how high school administrators could best support teacher leadership in their schools. The authors found, “Participants in both studies revealed similar sentiments toward their leadership involvement and indicated that administrators can either encourage or discourage teacher leadership” (p. 93). Mangin (2005) reported similar findings. “Teacher leaders reported that the level of support they received from administrators directly impacted their ability to access classrooms and implement the teacher leadership position as intended” (p. 15). Principals, then, can either be a support or a hindrance in the implementation of teacher leader programs (Suranna & Moss, 2000).

Considering all the potential barriers to teacher leadership identified by various studies over the last decade, it is difficult to see why teachers would be willing to step into these roles and attempt to overcome the many barriers. In order to facilitate teacher leadership, school leaders need to ensure the necessary structures are in place to support such leadership. According to Danielson (2006):

Most schools are not organized to promote the development of teacher leadership: the school day, the school week, and the school year are all organized around a view of teaching that regards contact time with students as the entirety of the job. (p. 131)

Whether attempting to implement distributed leadership in general, or teacher leadership specifically, public schools are simply not structured in ways to facilitate or support such leadership (Johnson & Donaldson, 2007; Riordan, 2003; Silva et al., 2000).

When considering the importance of school structures to support teacher leadership, it is also important to note that barriers and supports have a symbiotic relationship. A principal can either be a barrier or a support. The same is true for relationships with other teachers. Zinn (1997) found “factors serving as sources of support at one time or in one setting could be barriers at other times or in other settings” (p. 7). This parallel structure of barriers and supports seems to be a natural element of school structures. As Sinden, Hoy and Sweetland (2004) argued, “Structure can either hinder or enable the effective operation of schools” (p. 463).

Structures to Support Teacher Leaders

As explained earlier in this chapter, schools are not traditionally structured in such a way as to support the empowerment of teachers and to allow for the development of teacher leaders. Dee et al. (2002) summed up the situation quite well:

Evidence abounds that work environments of schools may not be particularly empowering; especially where teachers' work roles are routine and repetitive, where teachers are isolated from peers, and where pressures of time and understaffing leave minimal time for doing anything new or different. (p. 258)

Therefore, schools need to restructure if teacher leadership is to be effective. Each of the six assumptions of the structural frame, as identified by Bolman and Deal (2003) and as outlined in chapter one are relevant to this process. The sixth assumption stated, "Problems and performance gaps arise from structural deficiencies and can be remedied through analysis and restructuring" (p. 45).

Many of the struggles that teacher leaders are currently facing could be eliminated, or at least mitigated, with support through appropriate structures. Johnson and Donaldson (2007) found "to reap the full benefits of teacher leadership, school administrators need to provide formal support structures and build leadership roles into the structure of the school" (p. 9). Webb et al. (2004) explored teacher leadership within the context of three different leadership models: transactional, critical, and transformational, but concluded:

A central tendency to all three leadership domains is the focus on providing the organization with structures that support a deliberative work environment. These structures include superintendents, principals, and administrators who believe all teachers are leaders or have the potential for leadership. (p. 262)

Elmore (2000) emphasized that supporting structures were even more important to the success of teacher leadership than the actual selection of the teachers who will lead when he argued, "Improvement at scale is largely a *property of organizations*, not of the pre-existing traits of the individuals who work in them" (p. 25). One of the most important structures to support teacher leadership is establishing a clear role definition for the teacher leader.

Role Clarity

The need for role clarity is supported by the second assumption of the structural frame, as identified by Bolman and Deal (2003), which stated, “Organizations increase efficiency and enhance performance through specialization and a clear division of labor” (p. 45). As early as 1995, Little recognized that role clarity was a barrier to effective teacher leadership. She examined the roles of teacher leaders in two high schools engaged in restructuring. The focus of her study was on the tradition of subject specialism in high schools, but her findings about teacher leadership in these two high schools greatly impacted future research on teacher leadership. One of her major findings related to role clarity. “The heuristic of contested ground becomes a means for illuminating dilemmas for role ambiguity and conflict that mark the evolution of teacher leadership” (p. 48).

Role Definitions. Often teacher leaders step into this difficult new role without clear definitions of their responsibilities. Additionally, these new roles are often established without consideration to structures of the workplace related to time, schedules, and self-contained classrooms, making interactions with other teachers physically difficult (Smylie, 1992). This lack of structure provides an additional roadblock for the success of teacher leaders. As Bolman and Deal (2003) found, “Clear, well-understood roles and relationships and adequate coordination are key to how well an organization performs” (p. 44). Zinn (1997) also found, “Poorly defined or overly broad roles limit the potential for success” (p. 11). Smylie (1992) explained why it is so important for teacher leader roles to be clearly defined. “These roles redefine the relative status, responsibilities, and interdependence of teachers who may have worked together for some time under different role definitions and collegial expectations” (p. 93). Clarification of roles can

lead to a new collegiality, as described by Barth (2006). “Once the exchange of craft knowledge becomes institutionally sanctioned, educators no longer feel pretentious or in violation of a taboo by sharing their insights. A new taboo-*against withholding what we know*-replaces the old” (p. 12).

Role Acceptance. Other teachers in the building may come to resent teachers who attempt to act as leaders. Zinn (1997) found other teachers often resented the flexible schedules that were created to allow certain teachers to become leaders. The researcher also found “tense relationships with peers sometimes makes them think about relinquishing certain leadership roles” (p. 9). Role clarification could help to eliminate some of this resentment, and therefore help to retain teacher leaders. Role clarity is also a vital structural element that must be addressed when introducing a change, such as teacher leadership. Bolman and Deal (2003) pointed out, “Change efforts must anticipate structural issues and work to realign roles and relationships” (p. 376).

Lack of a clear description of what it means to be a teacher leader can cause a great deal of role confusion for some teachers. In 1997, Whitaker conducted a case study of four teacher leaders on a management team. The team was formed by the principal of a K-5 elementary school in a large, metropolitan district in the Rocky Mountain region. The management team consisted of the principal and several teachers and their responsibilities included “discipline, expanding the technology program, managing the extended day program, staff development, grant writing, and serving as liaison to the community” (p. 2). These teacher leaders served half of the day as classroom teachers and half of the day in their role on the management team. This structure resembles the type of teacher leadership defined by Silva et al. (2000) as “second wave” teacher

leadership and seemed to add to the role ambiguity. One participant explained, “Roles need to be more clearly defined. There are a lot of inconsistencies in what each says. If we knew who did what, it would be better. One half-day teaching and one half-day administering is a problem” (p. 4).

The focus of Whitaker’s (1997) study was on the teacher’s perceptions about their new roles, the strengths and weaknesses of the management team model, and the principal’s leadership within the model. He made several important findings related to role ambiguity and its effects on the teacher leaders. Although “school staff members perceived the idea of using teacher-leaders on a management team as positive,” data also showed that “Roles needed to be more clearly defined for teacher-leaders and the principal” (p. 9). This is representative of what happens when new strategies are implemented without having appropriate structures in place to support implementation. Another structure that can affect the success of school change is the physical structure of the building.

Role Understanding. Many teachers are not even familiar with the term teacher leader. Suranna and Moss (2000) interviewed 12 elementary teachers to determine their familiarity with teacher leadership. The purpose of their study was to define and describe teacher leadership, according to the perceptions of elementary teachers. Their interviews identified many definitions of teacher leaders, which were organized into four categories: (a) professional development, (b) great teaching, (c) taking a stand, and (d) circumstances that hinder or facilitate teacher leadership, but of greatest concern was “approximately half of the participants in this study were unfamiliar with the term teacher leadership. Among those who were not, some were hesitant to express their perceptions because they

were not cognizant of a ‘textbook definition’” (p. 7). Other studies have been conducted to try to define teacher leadership. Andrews and Crowther (2002) conducted a five-year analysis of schools in Australia that had success with reform efforts. “Three concepts – teacher leadership, teacher-principal relationships and the role of the principal in nurturing teacher leadership” (p. 153) provided the focus for their research. During the first phase of their study, the researchers developed a Teachers as Leaders Framework, which includes an extensive description of what teacher leaders do. Crowther et al. (2002), in a further discussion of this research, emphasized the Teachers as Leaders framework grew out of a need for a “new, dynamic, defensible conception of teacher leadership” (p. 5). The fact there is no clear definition or understanding of what it means to be a teacher leader is one important reason why clarity in role descriptions is so vital. Role clarity, however, can not eliminate all the structural barriers to effective teacher leadership.

Physical Structure of the Building

The need for space and building configurations that support teacher leaders in their collaboration efforts can be categorized under assumption number five of the structural frame, 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). The physical structure of a building can affect a teacher leader’s ability to communicate and collaborate with colleagues. Bolman and Deal (2003) found, “If the efforts of individuals or groups are too autonomous, people often feel isolated and unsupported. School teachers feel lonely and without support as a result of working in self-contained classrooms, rarely seeing other adults” (p. 71). Eraut (2004) found the

structuring of work to be important to “the opportunities for meeting, observing, and working alongside people who had more or different expertise, and for forming relationships that might provide feedback, support or advice” (p. 270). This need for schools to design spaces for communication and collaboration was also recognized by Silva et al. (2000) who found most schools are not committed to providing space for important conversations. “This is a barrier that is often present in schools that are not truly learning organizations. Teachers can only become leaders within schools when the school culture is clearly committed to providing support for the learning of all its members” (p. 802).

Physical Layout. Additional issues of physical structures also can impede teacher leadership. In 1997, Zinn studied nine teacher leaders in three elementary schools with a focus on supports and barriers for teacher leaders within the educational context, outside the educational context and within the teacher leaders themselves. The researcher utilized interviews and focus groups to collect data about the various supports and barriers identified by these nine teacher leaders. In one of these cases, the researcher found “the physical layout of the school” a barrier to success and because of physical problems, the teacher leader expressed difficulties “getting around the five buildings” that comprised her elementary school (p. 11). Sinden et al. (2004) had similar findings related to school size. “Smallness and accessibility lend themselves to informal two-way communications” and “smaller structures with informal conversations led to a greater sharing of decision-making” in these environments, principals were more likely to leave classroom decision-making to the teachers (p. 469).

Access to classrooms. Mangin (2005) also drew conclusions about the importance of physical layout. She conducted a comparative case study of 12 teacher leaders from five school districts. These teacher leaders had been released from teaching responsibilities to assist colleagues full time. This removal from the classroom puts these teacher leaders in Silva et al.'s (2000) second wave category of teacher leadership. Each of the 12 teacher leaders was working to bring about instructional improvement in math. The purpose of this study was to examine how the teacher leaders “negotiate access to classrooms and encourage instructional change in light of teacher resistance” (p. 1). The author found the issue of access to be vital to success. “If teacher leaders cannot gain access to teachers, they may be unable to promote the kind of shared instructional focus described by distributed leadership theorists as necessary to support instructional change” (p. 8). The teacher leaders in this study were denied access to their colleagues in the most fundamental of ways—they were denied access to the classroom, to the extent that “all 12 of the teacher leaders participating in this study reported having doors slammed in their faces, both literally and figuratively” (p. 8). Although this may have been related to issues of trust and relationships, the physical barrier of the locked door made accessibility physically difficult. This represents an important element of physical building structures. Most schools are designed with individual classrooms with doors that close and lock. To date, little, if any, research has been done around the effect that building layouts can have on effective teacher leadership.

Space for collaboration. Silva et al. (2000) utilized a descriptive case study methodology to study teacher leaders in one school district in the northeastern United States. The researchers focused on the experiences of these teacher leaders in order to

identify barriers and facilitators. The teachers in their study were identified as third wave teacher leaders, according to their explanation of three different waves in the development of teacher leaders in education. One of the teachers in the study talked about the need for space to collaborate. “We teach American History in 11th grade Social Studies and American Literature in 11th grade English and never the twain shall meet. How absurd. But in order to get English teachers and Social Studies teachers to talk together you have to create time and space” (p. 789).

Organizational Structure of the Building

The need for a restructuring of the organizational aspects of schools in order to support teacher leadership aligned with assumptions three and four of the structural frame, as identified by Bolman and Deal (2003). They are as follows: (3) “Appropriate forms of coordination and control ensure that diverse efforts of individuals and units mesh,” and (4) “Organizations work best when rationality prevails over personal preferences and extraneous pressures” (p. 45).

Policies. School policies dictate the organization and hierarchy of roles and responsibilities within a school. The hierarchical structure of most schools does not lend itself to development of teacher leaders. Morgan (1997) explained:

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)

This shift in the traditional role of a teacher represented by teacher leadership requires a parallel shift in the structures of schools. Fullan and Miles identified this need as early as

1992. “Reformers talk of the need for deeper, second-order changes in the structures and cultures of schools rather than superficial first-order changes” (p. 745). They explained second-order changes as those that are built “into the normal structures and practices of the organization” (p. 748). Schools can be organized, however, to facilitate teacher leadership. Sinden et al. (2004) found, “The interviews of teachers and principals from six schools that had been identified as having enabling structures supported the contention that bureaucratic structures can enhance the attitudes and efforts of the teaching staff” (p. 473).

Scheduling. Besides the policies that govern the leadership structure in a school, other organizational factors also affect teacher leaders. Time constraints seem to be one of the most challenging factors. Doyle (2000) conducted a qualitative case study to examine the use of teacher leaders to support the implementation of a standards-based mathematics curriculum. She conducted observations and interviews with two elementary teacher leaders in a school district in Washington. The purpose of the study was “to understand how a district employed their teacher leaders to support fellow teachers in curriculum change” (p. 4). The study emphasized the use of eight fundamental principles for effective professional development and the link between teacher leadership and professional development. One of the four major findings of this study was “The issue of time constraints combined with the teachers’ typical dislike of being away from the classroom for the district’s leader meetings” (p. 35). Teachers in the study expressed a need for more time to deal with all the additional responsibilities, along with more time to collaborate with their colleagues. Suranna and Moss (2000) also found, “Lack of time

was identified by the majority of the participants as a major hindrance to teacher leadership” (p. 13).

While lack of time can be a serious impediment, time allowance is seen as an important support for teacher leaders. Beachum and Dentith (2004) explored definitions of teacher leadership, as supplied by teachers who are leaders in their schools. Their study was conducted in five schools, “reputed to recognize the value of *teachers as leaders*” (p. 278) within one school district. A total of 25 teachers participated in this qualitative study. Interviews led to the identification of three central themes related to support for teacher leaders: specific types of school structures and organizational patterns; processes and identities practiced and shared among the teachers in the study; and a deliberate use of outside resources. The first of these themes is most pertinent to this study. Within the context of this first theme, the authors found that in these schools known to support teacher leadership, “teachers spent time in an organized and sustained fashion to plan curriculum together, talk generally about their teaching, relate student successes, and work on problems or new initiatives in the school” (p. 280). Zinn (1997) also found that teacher leaders who said they felt supported, described, among other things how their administrators “created flexibility in their work days to allow for leadership responsibilities” (p. 7). “Participants agree time looms as the greatest barrier to teacher leadership” (p. 9).

Team structures. Another organizational structure that is important to successful teacher leadership is a system of teams in which teachers can collaborate. Schools have not traditionally been designed to support collaboration. As Elmore (2000) pointed out, “The existing institutional structure of public education does one thing very well: It

creates a normative environment that values idiosyncratic, isolated, and individualistic learning at the expense of collective learning” (p. 20). Beachum and Dentith (2004) described school structures which supported the teacher leaders in their study. One important structure was “Strong teacher teaming according to grade levels or subject matter, and consistent teacher committee work on issues and events relevant to everyday teaching and learning” (p. 279). Andrews and Crowther (2002) described the successful collaboration that occurred in one of the nine Australian schools in their study. “Through professional conversations, teachers are able to make explicit their personal (and now shared) practices. Professional knowledge has been created personally and, more importantly, has been explored and discussed in a social context with other professionals” (p. 7). Teacher leaders experience frustration when school structures do not support collaboration. Silva et al. (2000) described the experiences of one of the teacher leaders in their study:

Clearly, the structures of the school blocked the teachers’ ability to work together. Eventually, Laura was able to join a team of teachers that attempted to negotiate the structures of schools by readjusting existing resources. However, as they collaborated new problems developed. (p. 789)

In 2003, Riordan found policies to support collaboration a strong component in successful schools. Her research through the Merck Institute for Science Education centered on four school districts in New Jersey and Pennsylvania. The report described the development of teacher leadership within these four partner districts and an analysis of the strategies used. One important strategy was the design of the Leader Teacher Institute to provide professional development for teacher leaders. Providing time for teacher collaboration was also identified as an important strategy utilized by those schools with successful teacher leaders. All of the structural elements described in this

section: role clarity, physical structures, and organizational structures, must be addressed with appropriate restructuring efforts if teacher leaders are to reach their full potential.

Effective Teacher Leadership

How can teacher leaders know if they are effective? How can teacher-leader effectiveness be measured? When measuring effectiveness, goals and purposes are generally utilized. Teacher-leader effectiveness then, should be linked to the reasons for teacher leadership. A review of the literature on evaluation supports this approach. In his book *Utilization Focused Evaluation: The New Century Text*, Patton (1997) explained utilization-focused evaluation and argued, “The *focus* in utilization-focused evaluation is on *intended use by intended users*” (p. 20). He also explained that implementation evaluation, one of the many types of utilization-focused evaluations allows the organization to “know the extent to which a program attains intended outcomes” (p. 197). So, not only should an evaluation of effectiveness include a focus on intended outcomes, but according to Yukl (2006), those outcomes for leaders should be all about change. “...leading change is the essence of leadership – everything else is secondary” (p. 284). To fully examine what makes a teacher leader effective, researchers should examine the intended outcomes for schools which adopt a model of teacher leadership, and those outcomes should represent a change in the organization.

Schools adopt models of teacher leadership for many reasons, but paramount among those is to help with school reform efforts (Beachum & Dentith, 2004; Crowther et al., 2002; Lieberman & Miller, 2004; Silva et al., 2000; Webb et al., 2004). In today’s climate of increased accountability, these reform efforts are generally focused on improved student achievement, and teacher leadership seems to be an effective means to

that end (Mangin, 2005). Silva et al. (2000) postulated, “Recent calls for teacher leadership have appeared that suggest that teacher leadership is not only necessary for the profession but also critical to educational reform efforts as well” (p. 779).

One reason teacher leadership is seen as an effective method of improving student achievement is because teacher leadership has proven effective at bringing about changes in instruction (Elmore, 2000; Mangin, 2005). According to Yukl (2006), “The most commonly used measure of leader effectiveness is the extent to which the leader’s organizational unit performs its task successfully and attains its goals” (p. 10). Elmore (2000) was more specific when he argued, “The purpose of leadership is the improvement of instructional practice and performance, regardless of role” (p. 20). For teacher leaders this translates into the effect on classroom instruction and student achievement in the teacher leaders own classroom and the classrooms of their colleagues. This focus on changes in instruction and improved student achievement aligned with the first assumption of Bolman and Deal’s (2003) assumptions of the structural frame, which stated, “Organizations exist to achieve established goals and objectives” (p. 45).

Summary

Definitions and basic theories need to be understood before embarking on any new study of teacher leadership. A clear, established definition of teacher leadership has not previously been developed, but a working definition for the purpose of this study identified teacher leaders as those who are willing to step out of their classrooms and lead others in improving classroom instruction. There are many obstacles that these teacher leaders will need to overcome, including traditional attitudes, poorly defined roles, and

limited support structures. However, teacher leaders are vital to the success of initiatives to change and improve instruction for students in public schools.

For schools to be successful, those in the field of educational administration need to find ways to create structures that support teacher leaders. As Webb et al. (2004) found “Schools in the new millennium however, require teachers to assume an integral role in school reform” (p. 254). It is up to the current leaders to establish structures to support the development of these new teacher leaders.

Chapter Two included a review of current literature related to this quantitative study. Chapter Three will include a complete description of the sample population and research design, while Chapter Four will include a review of findings based on the data collected. Finally, Chapter Five will contain a discussion, conclusions and suggestions for further research.

CHAPTER THREE

Research Design and Methodology

Introduction

Leadership beyond the classroom, especially related to instructional improvement, is not a traditional role for teachers. Teachers willing to accept this new role will encounter many difficulties. According to Bowman (2004), “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). Teachers can, however, be successful change agents if they are given the necessary support. “It appears that teachers who take leadership roles in their schools are successful agents” (Beachum & Dentith, 2004, p. 283). However, there are many variables that may determine the effectiveness of a teacher leader. Beachum and Dentith (2004) found “three central themes explained the presence of and support of teachers as leaders” the first of these themes was “specific types of school structures and organizational patterns” (p. 279). Other studies include a variety of findings that include issues related to school organization, politics and relationships. In order to make sense of the wide variety of findings and provide a focus for further research, this study utilized the structural frame. Bolman and Deal (2003) advised “Frames are windows on the world of leadership and management. A good frame makes it easier to know what you are up against and what you can do about it” (p. 19).

This study was proposed to add to the available knowledge about teacher leadership, specifically the relationship between effective teacher leaders and the structure of the schools in which they lead. Additionally, the study allowed for the

findings from previous case studies of teacher leaders to be expanded. Most studies in the area of teacher leadership have been qualitative; however, this study utilized survey data to conduct a quantitative analysis. This chapter will include the research questions that guided this investigation, a description of the design of the study and the survey instrument, a discussion of the data collection procedures, and a description of the data analysis process.

Research Questions

Within the context of this study, four relationship questions (Heppner & Heppner, 2004) were investigated:

1. What is the relationship between role clarity and teacher-leader effectiveness?
 - a. What is the relationship between overall role clarity and teacher-leader effectiveness?
 - b. What is the relationship between clear role definitions, clear role understanding and clear role acceptance and teacher-leader effectiveness?
 - c. Which of the components of role clarity is most predictive of teacher-leader effectiveness?
2. What is the relationship between the physical structure of the school building and teacher-leader effectiveness?
 - a. What is the relationship between overall physical structure and teacher-leader effectiveness?
 - b. What is the relationship between the physical layout (proximity of classrooms, hallways, and space for teacher collaboration) and teacher-leader effectiveness?

- c. Which of the components of physical structure is most predictive of teacher-leader effectiveness?
3. What is the relationship between the organizational structure (scheduling, team structures, and other policies) of the school building and teacher-leader effectiveness?
- a. What is the relationship between the overall organizational structure of the school building and teacher-leader effectiveness?
 - b. What is the relationship between scheduling, team structures and policies and teacher-leader effectiveness?
 - c. Which of the components of organizational structure is most predictive of teacher-leader effectiveness?
4. Of all the structural elements, which is most predictive of teacher-leader effectiveness?
- d. Is role clarity, physical structure or organizational structure most predictive of teacher-leader effectiveness?
 - e. Of all the components of the elements of structure listed above, which is most predictive of teacher-leader effectiveness?

Design

Much of the previous research on successful teacher leadership has utilized case studies through a qualitative research approach. A review of nine different case studies published between 1997 and 2005 in various locations throughout the United States and Australia revealed some consistent findings related to specific school structures that impede the work of teacher leaders. Bolman and Deal (2003) identified the two basic

elements of structural design as: (a) “how to allocate work,” and (b) how to coordinate roles and units once responsibilities have been parceled out” (p. 49). Findings from the qualitative case studies were examined to identify those that were related to either of these two elements of structural design.

While these qualitative studies have provided some conclusions about the conditions that contribute to successful teacher leadership, a survey conducted on a larger scale with a specific focus on structure would generate quantitative data to further identify structural elements that facilitate or impede teacher leadership. One of the fundamental differences between the use of qualitative and quantitative research methods is the purpose of the study. 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), whereas a quantitative approach allows the researcher to collect data from multiple sources that could be meaningful to a broad range of practitioners within the field. Since the purpose of this study was to expand on findings from the previous qualitative case studies, the quantitative approach was determined to be most appropriate. The purpose of a study should be closely related to the epistemological view of the researcher. Merriam (1998) advised, “Choosing a study design requires understanding the philosophical foundations underlying the type of research” (p. 1). Quantitative research generally follows a positivism form of study where reality is considered to be observable and measurable. On the other hand, qualitative research is more likely to be interpretative and multiple realities can exist (Merriam, 1998, p. 4). Examining teacher leadership from a different theoretical perspective and utilizing a

different research method and frame from the previous studies will add to the available body of research on the topic.

Population and Sample

Population

Previous case studies had focused on teachers who had been designated as teacher leaders. In order to expand on those studies, a similar population was necessary. Teachers who had been accepted into a professional development program designed to “provide an intellectually stimulating and nurturing environment for both personal and professional growth” (program brochure, 2007-2008) were selected as the population. Permission was requested (see Appendix A) from the directors of this professional development program to survey teachers who had participated in the statewide program. This allowed for the population to include teacher leaders from all nine geographic regions of the state.

Sample

All of the 180 teachers who were currently participating in the professional development program were invited to be a part of the study. These teachers had been selected to participate in the program based on characteristics of teacher leaders. Applicants to the program must have three years of teaching experience, demonstrated classroom effectiveness and strong interest in professional growth. Participants were selected through an application process which gave priority to teachers from districts involved in school reform. The objectives of the program were: (a) develop a professional vocabulary, (b) demonstrate a deeper sense of efficacy for student learning in the classroom, (c) demonstrate a deeper sense of efficacy for teacher leadership, and (d) use new understandings to shape instructional practice and reflect on the impact on students.

The strata for this sample was represented by the different regions within the state, and all current participants in the program from each stratum were selected. Including all participants reduced the potential for sampling errors (Fink, 2006) along with potential sampling biases, therefore increasing the generalizability of the results (Heppner & Heppner, 2004).

Data Collection and Instrumentation

The purpose of this study was to investigate the relationship between school structure and teacher leadership. The types of school structure investigated were determined by the findings from previously conducted case studies. The SSTLQ (School Structure and Teacher Leadership Questionnaire) was created by the author to collect the necessary data (see Appendix B). During development of the survey instrument, close attention was paid to the alignment of the survey, the research questions and the theoretical perspectives of this study. Grix (2004) emphasized the importance of this approach.

One common mistake in students' projects is a lack of connection between the theoretical section, the purpose of which is to shed light on the empirical reality, and the actual research undertaken, with the result that both sections could, in fact, stand on their own. (p. 102)

To focus the investigation, previous case studies were analyzed to identify specific areas of school structure. These nine qualitative studies ranged in scope from Doyle's (2000) case study of two elementary math teachers to Andrews and Crowther's (2002) five-year analysis of teacher leaders in nine different schools in Australia. Each of these studies were described in chapter two. Findings from these studies were charted (see Table 1) in order to "construct categories or themes that capture some recurring

Table 1

Structural Barriers to Teacher Leadership

Structural Barrier	Author	Publication
Role clarity	Little (role ambiguity, role conflict)	1995
	Whitaker (role conflict, role ambiguity)	1997
	Zinn (role conflict, role ambiguity)	1997
	Doyle (role tension)	2000
	Silva, Gimbert & Nolan (role support)	2000
	Suranna & Moss (role ambiguity, support)	2000
	Riordan (role ambiguity, role support)	2003
	Mangin (role ambiguity)	2005
Physical Structures	Zinn (building layouts)	1997
	Mangin (closed doors, limited access)	1997
	Silva, Gimbert & Nolan (space)	2000
Organizational Structures	Little (time, policies)	1995
	Zinn (time, policies)	1997
	Doyle (time)	2000
	Suranna & Moss (time, policies)	2000
	Silva, Gimbert & Nolan (policies)	2000
	Riordan (policies for collaboration)	2003
	Beachum & Dentith (time & policies for collaboration)	2004

pattern that cuts across ‘the preponderance’ (Taylor & Bogdan, 1984, p. 139) of the data” (Merriam, 1998, p. 179). This category construction approach, although generally used in qualitative data analysis, allowed for compilation of the findings from the previously published qualitative studies. From this compilation, three categories of structures were identified: (a) role clarity, including definitions, understanding and acceptance; (b) physical structures, including physical layout and space for collaboration; and (c) organizational structures, including scheduling, team structures, and other policies.

The SSTLQ also included a set of 13 questions designed to determine the level of effectiveness of the teacher leader. As explained by Yukl (2006), “The most commonly used measure of leader effectiveness is the extent to which the leader’s organizational unit performs its task successfully and attains its goals” (p. 10). The goals of most schools include improved student achievement. Additionally, Barth (2001) postulated:

Most would agree that who the teacher is and what the teacher does within the classroom have a greater influence upon students’ accomplishment than any other school factor. There is considerable evidence, also, that what the teacher does inside the classroom is directly related to what the teacher does outside the classroom. (p. 445)

This reach beyond their own classroom is also paramount to the teacher leader’s effectiveness and vital to the success of any school reform movement, since Reeves (2006) found, “The majority of employees [according to a Gallup poll] take their cues from a trusted colleague rather than from the boss” (p. 34). Elmore (2000) also argued this was an important aspect of teacher leadership. “Leaders should be doing, and should be seen to be doing, that which they expect of require others to do” (p. 21). Therefore, data collected for the section of the survey measuring teacher-leader effectiveness included teacher leader’s perceptions about the degree to which the teacher leader has

impacted: (a) instruction and student achievement in his or her own classroom, (b) instruction and student achievement in other classrooms in the building, and (c) instruction and student achievement in other buildings in the district.

The last section of the survey collected demographic information about the teacher leaders who participated in the survey, including: (a) grade levels in the teacher leader's building, (b) number of years of teaching experience, (c) number of years in current building and district, (d) size of participant's building, (e) gender, and (f) age. This information provided a profile of the teacher leaders who participated in the study.

In order to fully address the research questions, the survey included items aligned to the three categories identified from the previously conducted studies. According to Cox and Cox (2008), this cross-referencing helped to establish content validity for the instrument. Data collected for the category of role clarity included teacher leader's perceptions about the degree to which: (a) the teacher leader's role is clearly defined, (b) other teachers and administrators understand the teacher leader's role, and (c) other teachers and administrators accept the teacher leader's role. Components within each subscale were also utilized for further analysis (see Table 2).

Data collected for the physical structure of the building included information about the general layout of the building and teacher leader's perceptions about the degree to which: (a) the physical structure of the building supports communication among teachers, (b) the physical structure of the building supports teacher collaboration, and (c) the building provides space for teachers to collaborate.

Data collected about the organizational structure of the building included teacher leader's perceptions about the degree to which: (a) the daily schedule supports teacher

collaboration, (b) the weekly schedule supports teacher collaboration, (c) teachers in the building work in teams, (d) building policies support teacher collaboration, and (e) building policies support the role of the teacher leader.

Table 2

School Structure and Teacher Leadership Questionnaire Subscales and Components

Subscale	Components	Items
Role clarity	Role Definitions	1 - 5
	Role Understanding	6 - 8, 11, 12, 15 & 16
	Role Acceptance	9, 10, 13, 14, 17 & 18
Physical Structures	Physical Layout	20 - 26
	Space for Collaboration	27 - 30
Organizational Structures	Scheduling	32 - 36
	Team Structures	37 - 41
	Policies	42 - 47
Teacher-Leader Effectiveness	Impact on Instruction	49 - 54
	Impact on Student Achievement	55 - 60

The survey also included an open-ended question following each section, asking teacher leaders to identify additional characteristics of role clarity, physical structure, and organizational structure that either facilitate or impede his or her effectiveness as a teacher leader. Additionally, an open-ended item for the category of teacher-leader effectiveness asked for other results of effective teacher leadership that the participant

saw in his or her building. These open-ended items were designed to solicit comments for further explanation of the survey responses and to provide guidance for further research.

In each of these four subscales, a five-point Likert-type scale ranging from strongly disagree to strongly agree, as recommended by Patten (2001), was used to determine agreement with a series of statements. In order to guard against possible bias in the survey responses, the questions were kept “concrete and close to the respondents experience” (Fink, 2006, p. 11). The survey questions are closely aligned to the data generated by the previously conducted case studies, providing a measure of content validity.

Item reliability was enhanced by the use of reverse coding on specific items within the subscales. Of the 60 items on the survey (excluding demographic items), 26 utilized reverse coding within the five-point Likert scale. This reverse coding required respondents to read each item carefully, and helped to reduce what Patten (2001) described as the “halo effect” (p. 38), where respondents who feel favorably about a topic will simply mark “strongly agree” for each item.

After the survey was developed, a group of five professionals who train teacher leaders were asked to review the instrument for language that reflected any personal bias and other possible issues. The reviewers were also asked to determine if all relevant topics had been included as a way to “bolster validity” (Fink, 2006, p. 40). As a result of the review, the following questions were added: (a) a question to determine if the teacher leader had a formal or informal role, (b) a demographic question related to years in teaching, and (c) a demographic question about the grade level taught. A pilot was also conducted to bolster the “reliability and validity” of the instrument (Fink, 2006, p. 32).

During the pilot, four teacher leaders from four different Midwestern school districts completed the survey and also included comments about the items. The purpose of this pilot was to clarify the questions and identify potential bias in word selection.

Next, a field test was conducted to establish reliability, using a test-retest approach (Heppner & Heppner, 2004). A sample group of 22 teacher leaders from the same school district completed the survey on two separate occasions, with a period of approximately two weeks between occasions. The consistency of the scores between the two administrations of the survey provided a measure of reliability. The Cronbach-alpha was calculated for items in each component within a subscale and on each subscale to provide internal consistency reliability analysis (Fink, 2006). The results of this analysis indicated that all components and subscales had a correlation of .813 or higher.

Test-Retest reliability was also conducted for each of the components within a subscale and for each subscale utilizing the two separate administrations of the field test. This was accomplished by conducted a bivariate correlation using SPSS 15.0. The Pearson correlation coefficient for each of the subscales was greater than .5, indicating a large effect (Field, 2005, p. 111). Additionally, all of the component correlations for the test-retest were above .5, with the exception of the team structure component of the organizational structure subscale (see Table 3).

The completed survey instrument and its use in the study followed the guidelines outlined by the University of Missouri-Columbia's Institutional Review Board (IRB). The IRB examined the instrument and all processes and procedures of the study. Participants in the study were voluntary and not coerced in any way to participate. Additionally, the participants did not benefit by participating, or suffer consequences for

not participating. Participants were fully informed of the process through the informed consent form (see Appendix C), and their identities were protected throughout the study.

The author traveled to a regularly scheduled meeting in each region to personally administer the survey. This method was recommended by Fink (2006) to increase the survey response rate.

Table 3

Correlation Coefficients for the Subscales and Components on the Test-Retest

Subscale	Components	Coefficients
Role clarity		.847
	Role Definitions	.722
	Role Understanding	.864
	Role Acceptance	.769
Physical Structures		.850
	Physical Layout	.826
	Space for Collaboration	.797
Organizational Structures		.945
	Scheduling	.833
	Team Structures	.481
	Policies	.932
Teacher-Leader Effectiveness		.863
	Impact on Instruction	.730
	Impact on Student Achievement	.857

Data Analysis

Data generated from the surveys included basic demographic data about the teachers in the leadership program, information regarding individual perceptions of their effectiveness as a teacher leader, and information about school structures. The school structure data fit into one of three subscales: (1) role clarity, (2) physical structure, and (3) organizational structure. The data collected from the survey was entered into a SPSS 15.0 program and analyzed using different statistical methods for each research question. The data collected for each of the four research questions required the use of inferential statistics. A forward multiple regression analysis of the data allowed for examination of the correlation between effective teacher leaders and various types of school structures. The types of school structures included in the survey were identified through the analysis of previously conducted qualitative studies, following the advice of Field (2005) who recommended, “predictors [in a regression analysis] should be selected based on past research” (p. 159). Specific items on the questionnaire were identified for each component and subscale (see Table 2, page 54).

The first research question concerning the relationship between role clarity and teacher-leader effectiveness was broken into three sub-questions for data analysis purposes. For sub-question a, concerning the relationship between overall role clarity and teacher-leader effectiveness, a Pearson correlation coefficient was calculated for subscale totals for role clarity and the subscale totals for teacher-leader effectiveness. The Pearson correlation coefficient was also used for sub-question b, which addressed the relationship between clear role definitions, clear role understanding and clear role acceptance and teacher-leader effectiveness. In this case, totals for each of three components were

correlated to the subscale total for teacher-leader effectiveness. The third sub-question focused on which of these components is most predictive of teacher-leader effectiveness, and therefore required the use of a forward multiple regression analysis.

The next research question concerning the relationship between the physical structure of the school building and teacher-leader effectiveness was also divided into three sub-questions for clarity. The first sub-question, examining the relationship between overall physical structure and teacher-leader effectiveness utilized a Pearson correlation to determine the relationship between the two subscales through analysis of the subscale totals. The second sub-question was concerned with the relationship between the physical layout of classrooms and hallways, space for teacher collaboration and teacher-leader effectiveness. Totals for each of the two components were correlated to the subscale component for teacher-leader effectiveness using the Pearson correlation. A forward multiple regression analysis was used to analyze data for the third sub-question—which of the components of physical structure was most predictive of teacher-leader effectiveness.

The third research question focused on the relationship between the organizational structure of the school building and teacher-leader effectiveness. This was broken down into three sub-questions for data analysis. Sub-question one sought to determine the relationship between the subscale of organizational structure and that of teacher-leader effectiveness. The Pearson correlation coefficient was used for the totals for each of these subscales. The second sub-question also used the Pearson, but totals for each of the components: (a) scheduling, (b) team structures, and (c) policies were utilized to correlate with the totals for the teacher-leader effectiveness subscale totals. The third sub-question

required the use of a forward multiple regression analysis, as it was focused on determining which of the components of organizational structure is most predictive of teacher-leader effectiveness.

The final research question was concerned with determining which of the structural elements was most predictive of teacher-leader effectiveness. This question was divided into two sub-questions. The first sub-question was concerned with determining which of the subscales (role clarity, physical structure, or organizational structure) was most predictive of teacher-leader effectiveness and utilized a forward multiple regression analysis. The second sub-question focused on the components of each of the subscales to attempt to determine which component was most predictive of teacher-leader effectiveness. This sub-question also required the use of forward multiple regression analysis.

Summary

This study was proposed to add to the available knowledge about teacher leadership, specifically in the relationship between effective teacher leaders and the structure of the schools in which they lead. The research questions for the study were developed by analyzing findings of nine previously conducted qualitative case studies. These findings were also used to develop the survey instrument for the quantitative study.

The survey was administered to a population of teacher leaders enrolled in a specific professional development program, and included teacher leaders from all geographic regions of one Midwestern state. Forward multiple regression analysis was used to determine possible relationships within the data.

Chapter Three of this study included the research design and methodology. Chapter Four will include a review of findings based on the data collected. Finally, Chapter Five will contain a discussion, conclusions and suggestions for further research.

CHAPTER FOUR

Presentation and Analysis of Data

Introduction

Schools today are facing unprecedented accountability, which demands large-scale reform. According to Elmore (2000), reform efforts must include, "...large scale improvement of instruction, something public education has been unable to do to date, but which is possible with dramatic changes in the way public schools define and practice leadership" (p. 2). This change in leadership is necessary because of the increased demands on school leaders and the increased need for improvement in instruction. Barth (2001) summarized, "If ever there was a time when the principal could ride in alone on a white horse, like John Wayne or Joan of Arc, and save a troubled school, those days are certainly over" (p. 445). Instead, the accountability faced by today's schools demands leadership from those who are closest to the instructional changes that need to occur.

In order to accomplish the necessary reform to meet the demands for improved achievement, teachers need to become part of the leadership structure of schools. Teachers represent an untapped source of leadership. According to the Institute for Educational Leadership (2001), "The infinite potential the nation's teachers possess for sharing their hard-earned knowledge and wisdom with players in education's decision-making circles—or even for becoming part of these circles—remains largely unexploited" (p. 1).

Because teacher leadership represents a major shift in the way schools are lead, schools need to be restructured to support teacher leaders. Traditional school structures were not designed to support teacher leadership. According to the Institute for

Educational Leadership (2001):

As long as school leadership remains mostly top-down and hierarchical, there is little chance that teachers will ever be more than fringe players—available as a resource when called upon, but seldom directly and continuously involved in decisions of substance. (p. 9)

In spite of the lack of structural support, the role of a teacher leader has grown over the last 10 to 20 years.

Teacher leadership has evolved over the years through what Silva et al. (2000) described as three different “waves” of teacher leadership. The first wave included traditional teacher leadership roles such as department chairs and mentors. The second wave took teacher leaders out of the classroom and gave them titles such as instructional coach. The third wave of teacher leadership, the one this study has focused on, is teacher leadership from within the classroom. This allows high quality teachers to continue to teach, but to influence the practices of their colleagues as well. According to Silva et al. (2000), “the third wave of teacher leadership grew out of a need to move away from a focus on first-order change to engage in second-order changes that would ‘reculture’ our schools” (p. 780).

In order to restructure effectively, administrators need to know what structures support teacher leadership. Qualitative studies conducted over the last 10 years have yielded some findings related to school structures, and this quantitative study will allow those findings to be more generalized.

Study Design

The purpose of this study was to analyze the relationship between effective teacher leaders and the structure of the schools in which they lead. The study allowed for the findings from previous case studies of teacher leaders to be expanded. Most studies in the

area of teacher leadership have been qualitative; however, this study utilized survey data to conduct a quantitative analysis.

The SSTLQ (School Structures and Teacher Leadership Questionnaire) was developed by the researcher and used to collect the quantitative data for this study. The survey was developed by categorizing findings from previously conducted qualitative studies which pertained to elements of school structure. These elements were divided into three major categories: (a) role clarity, (b) physical structure, and (c) organizational structure. The questionnaire also addressed the elements of effective teacher leadership and basic demographic data of the participants.

The participants in this study were enrolled in a state-wide professional development program for teacher leaders in one Midwestern state. The teachers had been selected to participate in the program based on characteristics of teacher leaders. Applicants to the program were required to have three years of teaching experience, demonstrated classroom effectiveness and strong interest in professional growth. Participants in the program had been selected through an application process which gave priority to teachers from districts involved in school reform. Teachers from eight of the nine regions of this Midwestern state were surveyed. One region did not have enough applicants to form a group for the 2007-2008 school year when the data was collected. Of the 180 teachers enrolled in the program, 162 completed the questionnaires. Three of these questionnaires were discarded because the demographic responses indicated the teacher did not fit the definition of teacher leader utilized for this study, as they were not currently classroom teachers.

Data from the survey was analyzed using the Pearson correlation coefficient and a forward multiple regression analysis. Each of the four research questions was divided into sub-questions for data analysis. Sub-questions one and two of questions one, two and three sought to determine the relationship between various school structures and teacher-leader effectiveness, and the Pearson correlation coefficient was used for the totals for each of these subscales. The third sub-question for each of the first three and both sub-questions for the fourth research question required the use of a forward multiple regression analysis, as these questions were focused on determining which of the components of organizational structure is most predictive of teacher-leader effectiveness.

Research Questions

Within the context of this study, four relationship questions (Heppner & Heppner, 2004) were investigated:

1. What is the relationship between role clarity and teacher-leader effectiveness?
 - a. What is the relationship between overall role clarity and teacher-leader effectiveness?
 - b. What is the relationship between clear role definitions, clear role understanding and clear role acceptance and teacher-leader effectiveness?
 - c. Which of the components of role clarity is most predictive of teacher-leader effectiveness?
2. What is the relationship between the physical structure of the school building and teacher-leader effectiveness?
 - a. What is the relationship between overall physical structure and teacher leader effectiveness?

- b. What is the relationship between the physical layout (proximity of classrooms, hallways, and space for teacher collaboration) and teacher-leader effectiveness?
 - c. Which of the components of physical structure is most predictive of teacher-leader effectiveness?
3. What is the relationship between the organizational structure (scheduling, team structures, and other policies) of the school building and teacher-leader effectiveness?
- a. What is the relationship between the overall organizational structure of the school building and teacher-leader effectiveness?
 - b. What is the relationship between scheduling, team structures and policies and teacher-leader effectiveness?
 - c. Which of the components of organizational structure is most predictive of teacher-leader effectiveness?
4. Of all the structural elements, which is most predictive of teacher-leader effectiveness?
- a. Is role clarity, physical structure or organizational structure most predictive of teacher-leader effectiveness?
 - b. Of all the components of the elements of structure listed above, which is most predictive of teacher-leader effectiveness?

Findings

Findings for this study include descriptive results, which include demographics, and responses to open-ended item number 62. Findings related to the specific research

questions are inferential and involve the use of correlation analysis for the relationship questions and forward multiple regression analysis for the predictive questions.

Descriptive Findings

Demographics. The demographic data collected on the SSSLQ included information about grade levels in building, grade level taught, years in teaching, years in the current building and district, size of school, gender, age and level of education for the 158 of the 159 respondents. One respondent did not complete the demographic section of the questionnaire. The grade levels in the buildings in which the respondents taught ranged from Pre-K-K to 10-12. The distribution across grade levels for buildings was fairly even, with 28 of 158 in high schools, 34 in middle schools, 61 in upper elementary buildings and 24 in primary buildings. There were also three respondents in K-8 buildings and 10 respondents in K-12 buildings. The grade levels taught by the respondents were also distributed across the K-12 range with some respondents teaching multiple grade levels. Grade levels taught included 28 at the high school level, 48 at the middle school level, 42 at upper elementary and 40 at primary. Three questionnaires were eliminated from the findings because of a “NA” response to item 64, “What grade level do you teach?”. The “NA” response indicated the respondent was not currently a classroom teacher and did not meet the definition of teacher leadership utilized in this study.

Additional demographics included size of building, gender and degree. The building sizes were small (fewer than 250 students), medium (250 – 500 students), and large (more than 500 students). Of the 158 respondents to this question, 60 reported teaching in large buildings, 59 in medium sized buildings, and 39 in small buildings.

Respondents included 10 males and 148 females. Of the 134 respondents who completed the degree level item on the demographics section of the questionnaire, six had completed a B.A. or B.S. degree only, 42 had completed additional hours beyond the initial degree, 83 had completed a Master’s degree, and three had completed a specialist degree.

The remainder of the demographic findings, years in teaching, years taught in the building and district, and age of the respondents are presented in Table 4. These data were more readily analyzed using the calculation of mean, median and mode as identified by the SPSS 15.0 software program utilized in this study.

Table 4

Additional Demographic Data

	N	Mean	Median	Mode
Years taught	158	12.35	10.00	4.00
Years in district	158	9.18	8.00	2.00
Years in building	158	7.91	6.00	2.00
Age	155	39.27	38.00	27.00

Open-ended questions. Open-ended question number 64 asked, “Are you compensated for your responsibilities as a teacher leader? If so, how? (stipend, extra time, extended contract, etc.)” Of the 159 respondents, 80 responded to item 64, including 58 negative responses. Of the 22 positive responses, nine indicated they received a stipend, four mentioned they could count the hours for career ladder, two replied they received a salary increase, and one respondent had an extended contract. Other response were more vague, including four that indicated they were “sometimes”

compensated without identifying how, while three respondents indicated the district paid for their substitute to attend the meetings and they considered the professional development received through the program a form of compensation. Responses to the other open-ended questions were widely varied and were used to provide additional insight into the inferential findings. These will be discussed in chapter five.

Inferential Findings

The four research questions identified earlier in this chapter were focused on the relationship between certain school structures and teacher leader effectiveness. Additionally, the questions sought to identify school structures predictive of teacher leader effectiveness. To address these questions, data was collected with the SSTLQ and the data was entered into SPSS 15.0 for analysis. The Pearson correlation coefficient was calculated for the relationship questions (see Table 5). A forward multiple regression analysis was calculated for the questions related to predictive value (see Table 6).

Role clarity. The first research question sought to identify a relationship between role clarity and teacher leader effectiveness. The overall correlation with teacher leader effectiveness for the subscale of role clarity was .394. The correlation between teacher leader effectiveness and the role definitions component was .250, the correlation between teacher leader effectiveness and role understanding was .391, while the correlation between teacher leader effectiveness and role acceptance was .290.

Each of the components was identified as independent variables for the dependent variable of teacher leader effectiveness to calculate a forward multiple regression analysis to determine which of the components of role clarity was most predictive of teacher leader effectiveness. Of the three components of role clarity, role understanding was

identified as the most predictive of teacher leader effectiveness with an R of .389 and an R square of .152, indicating role understanding predicted 15.2% of the variance of teacher leader effectiveness.

Table 5

Pearson Correlation for the Subscales and Components to Teacher Leader Effectiveness

Subscales	Components	Teacher Leader Effectiveness
Subscale: Role Clarity		.394**
	Component: Role Definitions	.250**
	Component: Role Understanding	.391**
	Component: Role Acceptance	.290**
Subscale: Physical Structures		.204**
	Component: Physical Layout	.153**
	Component: Space for Collaboration	.224**
Subscale: Organizational Structures		.305**
	Component: Scheduling	.170**
	Component: Team Structures	.296**
	Component: Policies	.279**

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

Table 6

Forward Multiple Regression Analysis Results for Part C of Research Questions One, Two and Three

Component	<i>R</i>	<i>R</i> Square	Adjusted <i>R</i> Square	Std. Error
Role Understanding	.389	.152	.146	5.60
Space for Collaboration	.209	.044	.037	6.16
Team Structures	.300	.090	.084	5.96

Note. The dependent variable is teacher leader effectiveness.

Physical structures. The second research question focused on the relationship between physical structures of the school and teacher leader effectiveness. The overall correlation with teacher leader effectiveness for the subscale of physical structures was .204. The correlation between teacher leader effectiveness and the physical layout component was .153, and the correlation between space for collaboration and teacher leader effectiveness was .224.

Both components of physical structure were identified as independent variables for the dependent variable of teacher leader effectiveness in a forward multiple regression analysis to determine which of the components was most predictive of teacher leader effectiveness. Space for collaboration was identified as the most predictive of teacher leader effectiveness with an *R* of .209 and an *R* square of .044, indicating space for collaboration predicted 4.4% of the variance of teacher leader effectiveness.

Organizational structures. The third research question sought to identify a relationship between organizational structures and teacher leader effectiveness. The overall correlation with teacher leader effectiveness for the subscale of organizational structures was .305. The correlation between teacher leader effectiveness and the

scheduling component was .170, the correlation between teacher leader effectiveness and team structures was .296, and the correlation between teacher leader effectiveness and policies was .279.

Each component was identified as an independent variable for the dependent variable of teacher leader effectiveness in a forward multiple regression analysis to determine which of the components of organizational structure was most predictive of teacher leader effectiveness. Of the three components, team structures was the most predictive of teacher leader effectiveness with an R of .300 and an R square of .090, indicating team structures predicted 9% of the variance of teacher leader effectiveness.

Overall results. The final research question was focused on identification of which of all the subscales and components was most predictive of teacher leader effectiveness. Each of the subscales: (a) role clarity, (b) physical structure, and (c) organizational structure was identified as an independent variable for the dependent variable of teacher leader effectiveness in a forward multiple regression analysis to determine which of the subscales was most predictive of teacher leader effectiveness. Of the three sub scales, role clarity was found to be most predictive with an R of .385 and an R square of .148, indicating role clarity predicted 14.8% of the variance of teacher leader effectiveness. When organizational structure was added to the model, the two together accounted for 18.7% of the variance of teacher leader effectiveness (see Table 7).

Table 7

Forward Multiple Regression Data for Research Question Number Four (Subscales)

Subscale Model	<i>R</i>	<i>R</i> Square	Adjusted <i>R</i> Square	Std. Error
^a Role Clarity	.385	.148	.141	5.61
^b Organizational Structure	.432	.187	.175	5.50

Note. The dependent variable is teacher leader effectiveness.

^a Predictors: (Constant), Role Clarity.

^b Predictors: (Constant), Role Clarity, Organizational Structures

The eight components of the three subscales were entered as independent variables for the dependent variable, teacher leader effectiveness (see Table 8). Of these, role understanding was the most predictive with an *R* of .375 and an *R* square of .141, indicating role understanding predicted 14.1% of the variance of teacher leader effectiveness. The addition of team structure to the model created an *R* square of .193 and the addition of space for collaboration an *R* square of .228, indicating that these three components together account for 22.8% of the variance of teacher leader effectiveness.

Table 8

Forward Multiple Regression Data for Research Question Number Four (Components)

Component	<i>R</i>	<i>R</i> Square	Adjusted <i>R</i> Square	Std. Error
^a Role understanding	.375	.141	.134	5.63
^b Team structure	.439	.193	.181	5.50
^c Space for collaboration	.478	.228	.210	5.40

Note. The dependent variable is teacher leader effectiveness.

Note. The dependent variable is teacher leader effectiveness.

^a Predictors: (Constant), Role Understanding.

^b Predictors: (Constant), Role Understanding, Team Structures.

^c Predictors: (Constant), Role Understanding, Team Structures, Space for Collaboration.

Summary of Findings

Descriptive Findings

The participants in this study consisted of 159 teacher leaders from schools of various sizes and from eight geographic regions of one Midwestern state. The teachers were all participants in a professional development program designed to enhance the knowledge and skills of teacher leaders. These participants completed the SSTLQ to provide data about their perceptions of various school structures and their effectiveness as teacher leaders.

Inferential Findings

The data collected with the SSTLQ identified significant relationships between various school structures and teacher leader effectiveness. The school structures included in the questionnaire were components of three different subscales—role clarity, physical structures, and organizational structures. Components for these three subscales included: (a) role understanding, (b) role definition, (c) role acceptance, (d) physical layout, (e) space for collaboration, (f) team structures, (g) scheduling, and (h) policies. Of these eight components, role understanding was found to be the most significant, with a correlation of .391 with teacher leader effectiveness. All eight components are ordered according to significance in Table 8.

A forward multiple regression analysis was also conducted for subscales and components to determine which was most predictive of teacher leader effectiveness. When components within each subscale were analyzed, one component for each subscale was identified as most predictive of teacher leader effectiveness. For the Role clarity subscale, role understanding was the component most predictive; within the physical

structures subscale, space for collaboration was most predictive; and, for the Organizational structures subscale, the component identified as most predictive of teacher leader effectiveness was team structures. A forward multiple regression (forward) was also conducted to determine which of the subscales was most predictive of teacher leader effectiveness and this test identified the subscale of Role Clarity. Finally, each of the eight components of the combined three subscales was included in a regression analysis and it was determined of the eight, role understanding was the most predictive of teacher leader effectiveness.

Table 9

Pearson Correlation for Components in Order of Significance

Components	Subscale	Teacher Leader Effectiveness
Component: Role Understanding	Role Clarity	.391**
Component: Team Structures	Organizational Structure	.296**
Component: Role Acceptance	Role Clarity	.290**
Component: Policies	Organizational Structure	.279**
Component: Role Definitions	Role Clarity	.250**
Component: Space for Collaboration	Physical Structure	.224**
Component: Scheduling	Organizational Structure	.170**
Component: Physical Layout	Physical Structure	.153**

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

The findings of this study verified the findings of previously conducted case studies, indicating that all of the components had a statistically significant correlation with teacher leader effectiveness. It seems clear, however, that of the three subscale

structural elements included in this study, role clarity had the most significant relationship ($R = .385$) with teacher leader effectiveness.

Chapter Four of this study included a review of both descriptive and inferential findings for the four research questions and sub-questions. These findings were based on the data collected with the SSTLQ from 159 teacher leaders enrolled in a professional development program in a Midwestern state. Chapter Five will contain a discussion of this data, limitations of the study, implications for practice, and suggestions for further research.

CHAPTER FIVE

Findings, Conclusions, and Recommendations

Introduction

The current demands of school accountability can not be met without large-scale reform and those reform efforts must include a restructuring of school leadership. Elmore (2000) explained, “School leaders are being asked to assume responsibilities they are largely unequipped to assume, and the risks and consequences of failure are high for everyone, but especially for children” (p. 2). Findings from the Institute for Educational Leadership (2001) supported this theory, “As it is presently constituted, educational leadership needs all the help it can get” (p. 9). School leaders must begin to distribute leadership in order to attain the necessary gains in student achievement.

This distribution of leadership would include classroom teachers in leadership roles in the school. Danielson (2007) postulated, “Teacher leadership is an idea whose time has come. The unprecedented demands being placed on schools today require leadership at every level” (p. 19). This leadership from within the classroom, however, can not be accomplished effectively within current school structures. Johnson and Donaldson (2007) agreed. The authors interviewed 20 teacher leaders in a variety of settings and found, “The schools in which they worked remained largely unchanged, with an egg-crate structure that reinforced classroom boundaries” (p. 9).

Schools need to be restructured to support teacher leaders. It is vital that schools identify the structures that support teacher leadership in order to make the correct changes. Sinden et al. (2004) explained:

All organizations have structure and schools are no exception...The key to success is to avoid the dysfunctions of structure while embracing its positive forces. In

particular the task is not to try to eliminate structure but rather to change the *kind* of hierarchy. (p. 464)

A number of qualitative studies have been conducted in recent years around the topic of teacher leadership. While none of these studies focused specifically on school structures, many of the studies included findings that indicated specific structures which either supported teacher leaders or created barriers to effective teacher leadership. This study expanded on the findings of nine qualitative studies in order to collect quantitative data about the relationship between school structures and effective teacher leadership.

Overview of the Study

The purpose of this study was to investigate the relationship between certain types of school structure and effectiveness of teacher leaders. The findings of this study would add to the body of knowledge related to effective teacher leadership and could be important for guidance in school restructuring efforts.

Participants in this study were teachers from all nine regions of a mid-western state who were involved in a professional development program for teacher leaders. All of the 180 teachers currently participating in the program were asked to participate. These teachers had been selected to participate in the program based on characteristics of teacher leaders. Applicants to the program must have three years of teaching experience, demonstrated classroom effectiveness and strong interest in professional growth. Participants were selected for the program through an application process which gave priority to teachers from districts involved in school reform.

The SSTLQ (School Structures and Teacher Leadership Questionnaire) was developed by the researcher and used to collect the quantitative data for this study. The survey was developed by categorizing findings from nine previously conducted

qualitative studies (Beachum & Dentith, 2004; Doyle, 2000; Little, 1995; Mangin, 2005; Riordan, 2003; Silva et al., 2000; Suranna & Moss, 2000; Whitaker, 1997; Zinn, 1997).

These elements were divided into three major categories: (a) role clarity, (b) physical structure, and (c) organizational structure. The questionnaire also addressed the elements of effective teacher leadership and basic demographic data of the participants.

Research Questions

Within the context of this study, four relationship questions (Heppner & Heppner, 2004) were investigated:

1. What is the relationship between role clarity and teacher-leader effectiveness?
 - a. What is the relationship between overall role clarity and teacher-leader effectiveness?
 - b. What is the relationship between clear role definitions, clear role understanding and clear role acceptance and teacher-leader effectiveness?
 - c. Which of the components of role clarity is most predictive of teacher-leader effectiveness?
2. What is the relationship between the physical structure of the school building and teacher-leader effectiveness?
 - a. What is the relationship between overall physical structure and teacher leader effectiveness?
 - b. What is the relationship between the physical layout (proximity of classrooms, hallways, and space for teacher collaboration) and teacher-leader effectiveness?

- c. Which of the components of physical structure is most predictive of teacher-leader effectiveness?
3. What is the relationship between the organizational structure (scheduling, team structures, and other policies) of the school building and teacher-leader effectiveness?
 - a. What is the relationship between the overall organizational structure of the school building and teacher-leader effectiveness?
 - b. What is the relationship between scheduling, team structures and policies and teacher-leader effectiveness?
 - c. Which of the components of organizational structure is most predictive of teacher-leader effectiveness?
4. Of all the structural elements, which is most predictive of teacher-leader effectiveness?
 - a. Is role clarity, physical structure or organizational structure most predictive of teacher-leader effectiveness?
 - b. Of all the components of the elements of structure listed above, which is most predictive of teacher-leader effectiveness?

Summary of the Findings

Demographics

The demographic data collected on the SSTLQ included information about 158 of the 159 respondents, with one respondent not completing the demographic section of the questionnaire. The grade levels in the buildings in which the respondents taught ranged from Pre-K-K to 10-12 and were of various sizes. The grade levels taught by the

respondents were also distributed across the K-12 range with some respondents teaching multiple grade levels. Respondents included 10 males and 148 females, most of which had completed hours beyond their initial degree or had complete a Master's degree. Most of the participants were 35 years of age or older, had been teaching 10 years or more and had been in their current building seven years or more.

Relationships

The data collected with the SSSLQ identified significant relationships between various school structures and teacher leader effectiveness through data analysis for each research question. Correlations and forward multiple regression analysis were conducted, using SPSS 15.0. A brief summary of those findings is included in this section.

Role clarity. The first research question sought to identify a relationship between role clarity and teacher leader effectiveness. The overall correlation with teacher leader effectiveness for the subscale was .394. The correlation between teacher leader effectiveness and the role definitions component was .250, the correlation between teacher leader effectiveness and role understanding was .391, while the correlation between teacher leader effectiveness and role acceptance was .290. Additionally, each of the components were identified as independent variables for the dependent variable of teacher leader effectiveness in order to calculate a forward multiple regression analysis to determine which was most predictive of teacher leader effectiveness. Of the three components of role clarity, role understanding was identified as the most predictive of teacher leader effectiveness with an *R* of .389.

Physical structures. The second research question focused on the relationship between physical structures of the school and teacher leader effectiveness. The overall

correlation with teacher leader effectiveness for the subscale was .204. The correlation between teacher leader effectiveness and the physical layout component was .153, and the correlation between space for collaboration and teacher leader effectiveness was .224. Both components were also identified as independent variables for the dependent variable of teacher leader effectiveness in a forward multiple regression analysis to determine which was most predictive of teacher leader effectiveness. Space for collaboration was identified as the most predictive of teacher leader effectiveness with an R of .209.

Organizational structures. The third research question sought to identify a relationship between organizational structures and teacher leader effectiveness. The overall correlation with teacher leader effectiveness for the subscale was .305. The correlation between teacher leader effectiveness and the scheduling component was .170, the correlation between teacher leader effectiveness and team structures was .296, and the correlation between teacher leader effectiveness and policies was .279. The three components were also identified as independent variables for the dependent variable of teacher leader effectiveness in a forward multiple regression analysis. Of the three components, team structures was identified as the most predictive of teacher leader effectiveness with an R of .300.

Overall results. The final research question was focused on identification of which of all the subscales and components was most predictive of teacher leader effectiveness. Each of the subscales: (a) role clarity, (b) physical structure, and (c) organizational structure was identified as an independent variable for the dependent variable of teacher leader effectiveness to calculate a forward multiple regression analysis. Of the three subscales, role clarity was found to be most predictive of teacher leader effectiveness with an

R of .385. When organizational structure was added to the model, the two together accounted for 18.7% of the variance of teacher leader effectiveness. The eight components of the three subscales were also entered as independent variables for the dependent variable, teacher leader effectiveness. Of these eight, role understanding was the most predictive with an R of .375 and an R square of .141, indicating role understanding predicted 14.1% of the variance of teacher leader effectiveness. The addition of team structure to the model created an R square of .193 and the addition of space for collaboration an R square of .228, indicating that these three components together accounted for 22.8% of the variance of teacher leader effectiveness.

Discussion of Findings

The relationships between the various subscales and components of school structure and teacher leader effectiveness are discussed in this section. The section is organized around the three categories of school structure identified through an analysis of previous research and included in the SSTLQ. Discussion of these categories: (a) role clarity, (b) physical structure, and (c) organizational structure, will also include discussion of the data associated with each of the components within the category.

Role Clarity

Role clarity refers to the extent to which a teacher leader's role is made clear to the teacher leader, other teachers and administration. A review of current literature and previously conducted case studies led the researcher to focus on three specific area of role clarity: (a) clear role definitions, (b) clear role understanding, and (c) clear role acceptance. These three subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

Findings related to role clarity and its components were significant. The overall correlation with teacher leader effectiveness for the subscale of role clarity produced a medium effect and was the highest of the three subscales. The components of Role clarity included: (a) role definition, (b) role understanding, and (c) role acceptance. The correlation for role definition was small, as was the correlation between teacher leader effectiveness and role acceptance. The correlation for role understanding, however, produced a medium effect and was the highest correlation among all of the eight components. Regression analysis also identified role clarity as having the highest predictive value among the three subscales, accounting for nearly 15% of the variance for teacher leader effectiveness. Additionally, regression analysis identified role understanding, a component of role clarity, as having the highest predictive value of all eight components.

While role clarity is not the only structural element exhibiting a relationship with teacher leader effectiveness, it clearly is important. These results buttress the findings of qualitative case studies which also identified issues related to role clarity as either barriers or supports for teacher leadership. Eight of the nine studies (Doyle, 2000; Little, 1995; Mangin, 2005; Riordan, 2003; Silva et al., 2000; Suranna & Moss, 2000; Whitaker, 1997; Zinn, 1997) had findings related to role clarity. Other literature exhibited similar findings. For example, Johnson and Donaldson (2007) found, “Most teacher leaders we interviewed were left to define their own roles, which proved to be more of a burden than an opportunity” (p.12). One of the most traditional teacher leader roles for classroom teachers is that of department head. In her 1995 study, Little lamented the lack of any sort of clear definition for the role. Participants in this 2008 study apparently still feel the

frustration. Comments in response to an open-ended question about role clarity on the SSTLQ included, “I have the title of department head, but there is no formal description of duties, we become a person to blame if any thing is wrong with the department but are given no authority to make changes.” The findings of Whitaker (1997) indicate understanding of newer teacher leader roles isn’t any clearer. “Findings suggest that ambiguity and organizational constraints surround the new roles for teacher leaders” (p. 1).

Although much of the literature on school change talks about the importance of changes to instruction and the need to involve classroom teachers in the process, “the change literature has not specifically described the role of classroom teachers in facilitating change in their colleagues” (Silva et al., 2000, p. 797). Roles must be defined clearly so teacher leaders can become effective contributors to school reform efforts from within their classrooms. Riordan (2003) found the principal to be vital in this process. His study focused on a specific partnership program which developed “Leader Teachers”. The partnership worked with the teachers, but failed to involve principals. “As a consequence, the role of the Leader Teachers was somewhat vague. These teachers were taking on new responsibilities and felt pressure to fulfill an ambiguous role” (p. 25). Responses to the open-ended question concerning role clarity on the SSTLQ support these findings. “My role as a teacher leader has never been addressed with myself or the others in my building. I don’t think that my principal is aware of what a teacher leader is” and “The administration shows their feelings of being threatened by knowledge and the gains that I make in my professional development. They do not use my experiences for the advantage of the students and/or district.”

Principals could begin to address this ambiguity by collaborating with teacher leaders to develop a clear role definition and record it in a district document. Of the 159 respondents for the SSTLQ, 78 (49%) marked “disagree” or “strongly disagree” for the statement, “My role as a teacher leader is described in some type of school document.” In Mangin’s 2005 study, the principal’s involvement in defining the role of one of the math coordinators proved beneficial for the teacher leader. “In this case, the principal has set clear expectations about the teacher leader’s role, including the expectation that other teachers will interact with the teacher leader. As a result, the teacher leader indicates his job is easier” (p. 17). Developing, recording, and communicating a clear role description for teacher leaders can go a long way towards enhancing their effectiveness.

Analysis of the quantitative findings of this study indicate the importance of role clarity in supporting effective teacher leadership. Of the structural elements included in this study, role clarity had the most significant relationship with teacher leader effectiveness. Qualitative case studies conducted over the previous twelve years also identified the barriers that occur when teacher leader’s roles are not clearly defined, and the support that clear role expectations can provide.

Physical Structures

Physical structures can include many elements of the school building; however, a review of current literature and previously conducted case studies caused the researcher to focus on two specific areas of represent physical structure for this study: (a) physical layout of hallways and proximity of classrooms, and (b) space for teacher collaboration. These two subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

The second research question focused on the relationship between these physical structures of the school and teacher leader effectiveness. The subscale of physical structures was found to have the lowest correlation of the three subscales with teacher leader effectiveness, although the relationship is of small statistical significance. The correlation between teacher leader effectiveness and the physical layout component exhibited the lowest correlation of all eight components, and the correlation between space for collaboration and teacher leader effectiveness also exhibited a small effect. Both of the components of physical structure were included in a forward multiple regression analysis to determine which of the components was most predictive of teacher leader effectiveness. Space for collaboration was identified as the most predictive of the two components, indicating space for collaboration predicts a little more than 4% of the variance of teacher leader effectiveness.

These quantitative findings were aligned with the findings of the qualitative studies. Of the nine qualitative studies used to develop the SSTLQ, only three (Mangin, 1997; Silva et al., 2000; Zinn, 1997) found elements of physical structure to be either barriers or support to effective teacher leadership. This structural element seemed to be of the least importance in the qualitative findings since so few of the studies included findings related to physical structure. Although the results on the Likert scale items did not exhibit a strong correlation to effective teacher leadership, the responses on the open-ended question did indicate that some teacher leaders found the layout of their building frustrating. There were 67 responses for question number 31 “What other characteristics of the physical structure of your building (layout of grade levels or department, etc) facilitate or impede your effectiveness as a teacher leader?” Of those 67 responses, 22

included negative comments about the layout of the building, such as; “Very spread out; little time to have conversations with other teachers,” and “My classroom is in a trailer behind the regular buildings, so I only see and talk to the other teachers on break or at lunch.” Perhaps the reason teachers did not respond in a manner on the Likert scale that emphasized these barriers is that they don’t see the physical layout of the building as something that could be any different. One respondent commented, “Our school seems poorly designed, but I can’t think of a more effective plan with 7 per grade level and 7 grades.”

The quantitative findings of this study indicated physical structure was the least important structural element when considering restructuring schools to support teacher leaders. This is good news for schools since changes to the physical layout of a building would be cost prohibitive for most districts. Three of the nine qualitative studies found elements of physical structure to be barriers or support to teacher leadership, and this study found space for collaboration to have a slightly higher correlation with teacher leader effectiveness than physical layout.

Organizational Structures

There are many organizational structures within a school, but a review of current literature and previously conducted case studies caused the researcher to identify three specific elements of organizational structure to focus this study. These include: (a) scheduling, (b) team structures, and (c) other policies. These three subcategories were measured utilizing teacher leader responses on a Likert scale to statements on the SSTLQ.

The qualitative findings for organizational structure indicated some significance. The overall correlation with teacher leader effectiveness for the subscale of organizational structures was of a medium effect size. The correlation between teacher leader effectiveness and each of the components of organizational structure exhibited a small effect size, although the correlation between teacher leader effectiveness and team structures was the second highest correlation among all eight components. Each of the components was also used to calculate a forward multiple regression analysis to determine which was most predictive of teacher leader effectiveness. Of the three components, team structures was the most predictive of teacher leader effectiveness, indicating team structures predicts 9% of the variance of teacher leader effectiveness.

Open-ended question number 48 asked, “What other characteristics of the organizational structure of your building either facilitate or impede your effectiveness as a teacher leader?” Of the 159 participants, 48 responded to this question, but only 19 made positive comments about their collaboration experiences. Positive team structures mentioned in these comments included: (a) weekly PLC (Professional Learning Communities) meetings, (b) monthly faculty meetings, (c) interdisciplinary team meetings, (d) vertical team meetings, and (e) common planning times. Most of the negative comments related to team structure included frustrations about lack of time for collaboration. There were also a few comments that indicated just having teams and time to meet was not enough to ensure effectiveness. For example, “Collaboration mandated, but often taken for other PD,” and “Team meetings are not regularly scheduled or checked on.”

These findings support the findings of the qualitative studies. Of the nine studies, seven (Beachum & Dentith, 2004; Doyle, 2000; Little, 1995; Riordan, 2003; Silva et al., 2000; Suranna & Moss, 2000; Zinn, 1997) included findings related to organizational structures. The quantitative data indicated that team structures had the closest relationship with teacher leader effectiveness among the components of organizational structure. This finding is consistent with the literature and quantitative studies. Beachum and Dentith (2004) found in schools with effective teacher leaders, “Strong teacher teaming according to grade levels or subject matter, and consistent teacher committee work on issues and events relevant to everyday teaching and learning were present” (p. 279). For teachers to be able to lead from within their classrooms, they need to have frequent, scheduled contact with their colleagues. Ackerman and Mackenzie (2006) explained, “The rub for all teacher leaders? Their strength comes from the classroom, yet unless they venture out of it, connecting and relating to other adults in the school, they do not fulfill the power implicit in their teaching role” (p. 66).

The findings of this study, along with the qualitative findings of previous studies indicated organizational structure, especially team structures was connected to effective teacher leadership. Team structures had the second highest correlation to effective teacher leadership of the eight components analyzed. For teachers to be effective leaders, they must have opportunities to collaborate with other teachers.

Although some of the structural components analyzed in this study had a higher correlation to effective teacher leadership than others, each of the subscales and components exhibited a significant relationship. These relationships were also supported

by the findings of nine different qualitative case studies. Figure 1 exemplifies a model of structural elements necessary to support effective teacher leadership.

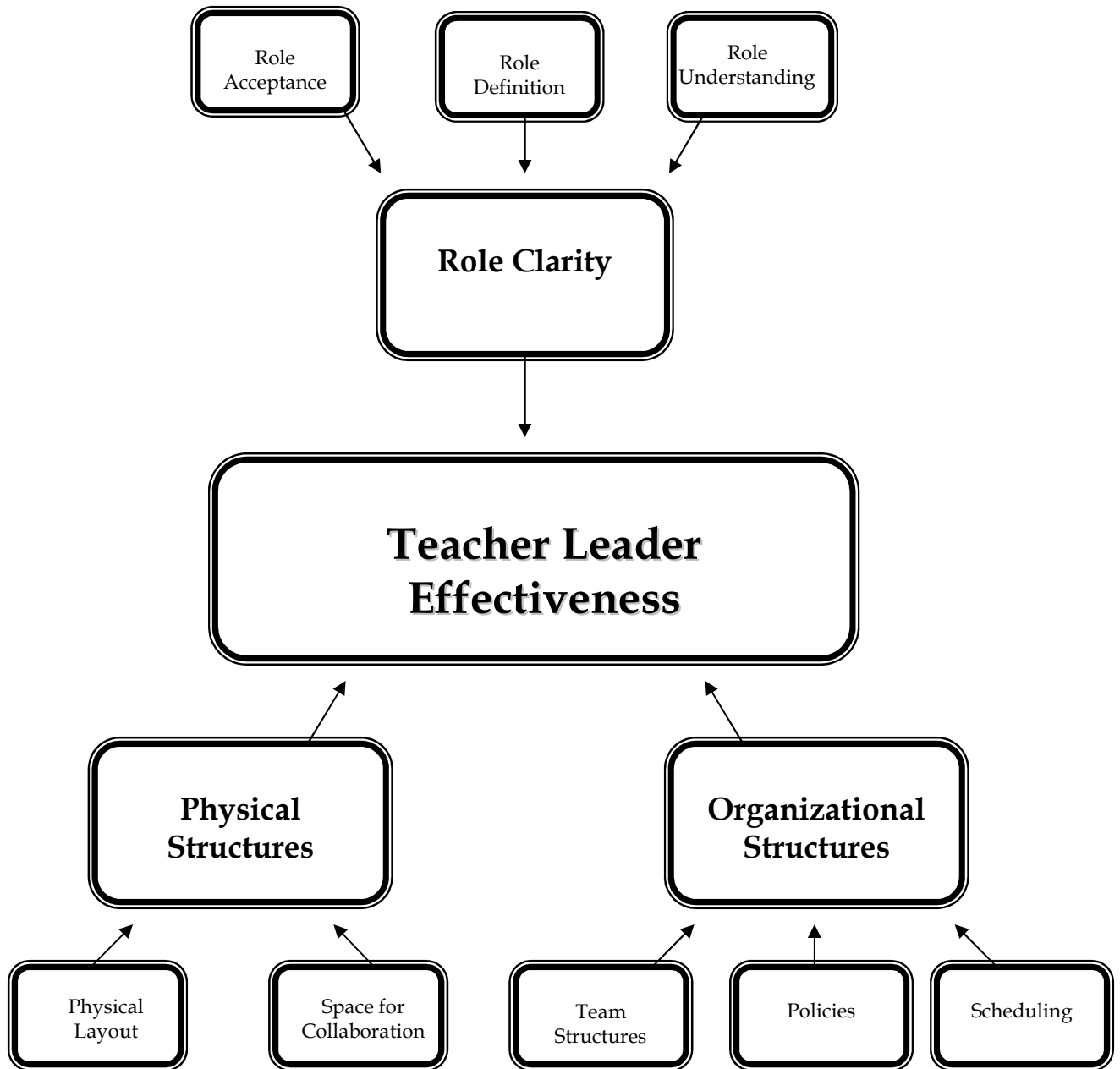


Figure 1. Model of structural subscales and components necessary to support teacher leader effectiveness.

Limitations of the Study

Although the researcher received guidance and supervision from an experienced researcher throughout all steps of the research, there were certain limitations to this study. First, the study utilized a new instrument developed by the researcher limiting the known reliability and validity of the study. The SSTLQ also collected the perceptions of teacher leaders and therefore included the assumption that survey participants were honest in their responses. The findings are also limited by the size and nature of the sample group. Although this study included teacher leaders from various regions of the state, all teacher leaders were from the same Midwestern state and involved in the same professional development program. Additionally, the numbers were limited to those teacher leaders currently involved in the program, which limited the sample to 180 participants.

Steps were taken, however, to reduce the impact of these limitations. To reduce errors related to the questionnaire, the SSTLQ was reviewed by experts, piloted and field-tested. A test-retest process was used for the field test to ensure the reliability of the items. A definition of teacher leadership was also provided to participants (see Appendix C) to minimize interpretation errors and increase the probability of a valid response. The questionnaire also included reverse-ordered items to help ensure reliability of responses.

Implications for Practice

Schools are facing unprecedented accountability causing a serious need for reform. Elmore (2000) wrote about the need for large-scale distribution of knowledge in order to bring about the type of reform needed. He explained, “It is this problem of the distribution of knowledge required for large scale improvement that creates the imperative for the development of models of distributed leadership” (p. 14). These new

models of distributed leadership need to include teachers as leaders. In order for these teacher leaders to be successful, however, schools need to consider restructuring. Simply creating new responsibilities for teachers within current structures will not be effective. Johnson and Donaldson (2007) found, “On the whole, few schools have reorganized to make the most of the expertise teacher leaders offer. Usually, the new roles are simply appended to a flat, compartmentalized school structure in which classroom teachers continue to work alone” (p. 10).

While the idea of restructuring may seem overwhelming to schools, even small changes could have an impact. This study identified role clarity as the structure that had the highest predictive value for teacher leader effectiveness. Schools could potentially increase the effectiveness of their teacher leaders by clearly defining their roles and clearly communicating those roles to everyone in the school. A clear role definition that is recorded in a school document and articulated to other teachers can help those teacher leaders who are hesitant to “over-step” their bounds. As Bowman (2004) pointed out, “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). These teacher leaders need the support of clearly defined roles to ease this transition. Teacher leaders also need their roles defined to provide them with guidance. As Bolman and Deal (2003) explained, “If employees are unclear about what they are supposed to be doing, they often shape their role around personal preferences instead of organizational goals, frequently leading to problems” (p. 70).

Team structures also seem to be important for enhancing teacher leader effectiveness. Andrews and Crowther (2002) described the advantages of the collaboration that occurred in one of the schools in their study. “Through professional conversations, teachers are able to make explicit their personal (and now shared) practices” (p. 7). It seems clear that teachers can not be effective leaders if they do not have the opportunity to collaborate with their peers. Team structures provide the opportunity for this collaboration, but many of the respondents on the open-ended question expressed frustration that their teams did not meet often enough. School administrators can ensure teachers have daily collaboration opportunities by scheduling common planning times for teachers of the same grade level or subject area. Schools can also provide weekly collaboration opportunities for larger groups by scheduling “late-starts” or “early-outs.”

Team structures, along with clearly defined roles for teacher leaders could enhance the effectiveness of those teachers attempting to lead from within their classrooms. Clearly defining and articulating roles for teacher leaders is a fairly simple step that could make a big difference in the effectiveness of teacher leaders. Similarly, schools should develop teams and find a way to schedule time for those teams to meet.

Recommendations for Future Research

The combined findings of previously conducted qualitative studies and this quantitative study allow for generalizations about school structures and effective teacher leadership. Teachers who take on these new roles need clear definitions of their responsibilities and those definitions need to be clearly articulated to everyone in the

school building. Once the roles are clearly defined and understood by all, teachers leaders need appropriate team structures to allow them a venue to share their expertise.

Although this study was designed around the findings of previously conducted qualitative studies, the number of published studies focused on teacher leadership is limited, and many studies included teacher leaders who were in roles that took them out of the classroom. More research is needed around the type of teacher leadership described by Silva et al. (2000) as “third-wave,” or teachers leading from within their classroom. The authors explained that these third wave teacher leaders “collaborate with other teachers, discuss common problems, share approaches to various learning situations, explore ways to overcome structural constraints of limited time, space, resources and restrictive policies” (p. 781). More research is needed around how these teachers work together to problem solve and improve school structures to support their own collaboration.

This study was unique in that it utilized the structural frame to analyze teacher leadership, but was limited to specific types of school structures. Bolman and Deal (2002) suggested that leaders need to analyze their organizations from multiple perspectives. “We have repeatedly found that administrators and executives are more successful when they can look at things from more than one angle. The best leaders use multiple frames or lenses, each offering a different perspective on common challenges” (p. 3). Much of the research on teacher leadership has focused on relationships and school culture, rather than structures. But both are vital, as Silva et al. (2000) pointed out, “We must change the culture and structure of schools so that they value developing teachers over developing efficient and effective structure” (p. 800).

Findings of this study indicated that role clarity has a significant relationship to teacher leader effectiveness, but the findings are limited to the extent they only included 159 participants from one state. Replicating this study in a larger setting which included more participants or more than one study would be of value. Additional research is also needed with a specific focus on role definitions. The literature includes many references to the lack of role definition, and the vagueness of those definitions that are in use. Riordan (2003), along with several other researchers emphasized that teacher leader's roles are often ambiguous. The field of education needs additional research on how best to model and define these new roles for teachers because teacher leaders clearly need to be supported to be effective.

These third-wave teacher leaders are vital to the success of school reform efforts. This call for teachers to take on new roles and responsibilities must be accompanied by new structures to support this change. Schools are not currently structured to support teachers leading from within their classrooms. Now, though, is the time to make such changes to the structures of schools. According to Barth (2001), "In the next 10 years, 2.2 million new teachers will be needed to staff American's schools. Approximately two-thirds of the entire teaching profession will be replaced...The coming decade brings with it a profound opportunity to *re-create* the teaching profession" (p. 449). Schools can begin this recreation process now. Clearly defining and articulating the roles that these new teacher leaders will fill can be the first step towards the restructuring necessary to support effective teacher leaders.

References

- Ackerman, R., & Mackenzie, S.V. (2006). Uncovering teacher leadership. *Educational Leadership*, 63(8), 66-70.
- Andrews, D., & Crowther, F. (2002). Parallel leadership: A clue to the contents of the “blackbox” of school reform. *The International Journal of Educational Management*, 16(4/5), 152-160.
- Ball, J. (1998). Big policies/small world: An introduction to international perspectives in education policy. *Comparative Education*, 34(2), 119-130.
- Barth, R. S. (2001). Teacher leader. *Phi Delta Kappan*, 82(6), 443-449.
- Barth, R. S. (2006). Improving relationships within the schoolhouse. *Educational Leadership*, 63(6), 8-13.
- Beachum, F., & Dentith, A.M. (2004). Teacher leaders creating cultures of school renewal and transformation. *The Educational Forum*, 68(3), 276-286.
- Birky, V.D., Shelton, M., & Headley, S. (2006). An administrator’s challenge: Encouraging teachers to be leaders. *NASSP Bulletin*, (90)2, 87-101.
- Bolman, L. G., & Deal, T. E. (2002). *Reframing the path to school leadership: A guide for teachers and principals*. Thousand Oaks, CA: Corwin Press.
- Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice, and leadership*. San Francisco, CA: Jossey-Bass.
- Bowman, R.F. (2004). Teachers as leaders. *Clearing House*, 77(5), 187-189.
- Burch, P. (2007). Educational policy and practice from the perspective of institutional theory: Crafting a wider lens. *Educational Researcher*, 36(2), 84-95.
- Cox, J., & Cox, K.B. (2008). *Your opinion, please: How to build the best questionnaires in the field of education*. Thousand Oaks, CA: Corwin Press.
- Crowther, F., Kaagan, S., Ferguson, M., & Hann, L. (2002). *Developing teacher leaders: How teacher leadership enhances school success*. Thousand Oaks, CA: Corwin Press.
- Danielson, C. (2006). *Teacher leadership that strengthens professional practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Danielson, C. (2007). The many faces of leadership. *Educational Leadership*, 65(1), 14-19.

- Dee, R.D., Henkin, A.B., & Duemer, L. (2002). Structural antecedents and psychological correlates of teacher empowerment. *Journal of Educational Administration*, 41(3), 257-277.
- Doyle, M. (2000, April). Making meaning of teacher leadership in the implementation of a standards based mathematics curriculum. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Eraut, M. (2004). Informal learning in the workplace. *Studies in continuing education*, 26(2), 247-273.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. New York: Albert Shanker Institute.
- Field, A. (2005). *Discovering statistics using SPSS*. Thousand Oaks, CA: Sage.
- Fink, A. (2006). *How to conduct surveys: A step-by-step guide* (3rd ed.). Thousand Oaks, CA: Sage.
- Fullan, M. G., & Miles, M. B. (1992). Getting reform right: What works and what Doesn't. *Phi Delta Kappan*, 73(10), 745-752.
- Grix, J. (2004). *The foundations of research*. New York: Palgrave Macmillan.
- Gronn, P. (2002). Distributed leadership as a unit of analysis. *The Leadership Quarterly*, 13, 423-451.
- 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.
- Institute for Educational Leadership. (2001). *Leadership for student learning: Redefining the teacher as leader*. Washington, D.C.: A Report of the Task Force on Teacher Leadership.
- Johnson, S.M., & Donaldson, M. L. (2007). Overcoming the obstacles to leadership. *Educational Leadership*, 65(1), 8-13.
- Kotter, J. (1994). Leading change: Why transformation efforts fail. *Harvard Business Review*, 73(2), 59-67.
- Lencioni, P. (2002). *The five dysfunctions of a team*. San Francisco: Jossey-Bass.

- Leithwood, K., & Duke, D.L. (1998). Mapping the conceptual terrain of leadership: A critical point of departure for cross-cultural studies. *Peabody Journal of Education*, 73(2), 31-50.
- Lieberman, A., & Miller, L. (2004). *Teacher leadership*. San Francisco: Jossey-Bass.
- Lieberman, A., & Miller, L. (2005). Teachers as leaders. *The Educational Forum*, 69(2), 151-162.
- Little, J. W. (1995). Contested ground: The basis of teacher leadership in two restructuring high schools. *The Elementary School Journal*, 96(1), 47-63.
- 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.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Morgan, G. (1997). *Images of organization*, (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Patten, M. L. (2001). *Questionnaire research: A practical guide* (2nd ed.). Los Angeles: Pycszak Publishing.
- Patton, M.Q. (1997). *Utilization focused evaluation: The new century text* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Preskill, H., & Torres, R. T. (1999). *Evaluative inquiry for learning in organizations*. Thousand Oaks, CA: Sage Publications.
- Reeves, D. B. (2006). Of hubs, brides and networks. *Educational Leadership*, 63(8), 32-37.
- Riordan, K. (2003). Teacher leadership as a strategy for instructional improvement: The case of the merck institute for science education. CPRE Research Report Series.
- Scribner, J.P., Sawyer, R.K., Watson, S.T., & Myers, V.L. (2004). *Teacher teams and distributed leadership: A study of group discourse and collaboration*. Columbia, MO: University of Missouri.
- 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.

- Short, P.M., & Greer, J.T. (1997). *Leadership in empowered schools: Themes from innovative efforts*. Upper Saddle River, NJ: Prentice Hall, Inc.
- Silva, D.Y., Gimbert, R., & Nolan, J. (2000). Sliding the doors: Locking and unlocking possibilities for teacher leadership. *Teachers College Record*, 102(4), 779-804.
- Sinden, J.E., Hoy, W.K., & Sweetland, S.R. (2004). An analysis of enabling school structure: Theoretical, empirical, and research considerations. *Journal of Educational Administration*, 42(4), 462-478.
- Smylie, M.A. (1992). Teachers' reports of their interactions with teacher leaders concerning classroom instruction. *The Elementary School Journal*, 93(1), 85-98.
- Spillane, J.P. (2005). Distributed leadership. *The Educational Forum*, 69, 143-150.
- Spillane, J.P., Halverson, R. & Diamond, J.B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36(1), 3-34.
- Suranna, K. J., & Moss, D. M. (2000, April). Perceptions of teacher leadership: A case study of inservice elementary school teachers. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Webb, P. T., Neumann, M., & Jones, L. C. (2004). Politics, school improvement, and social justice: A triadic model of teacher leadership. *The Educational Forum*, 68(3), 254-262.
- Whitaker, K.S. (1997). Developing teacher leadership and the management team concept: A case study. *The Teacher Educator*, 33, 1-6.
- 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.
- Yukl, G. (2006). *Leadership in organizations* (6th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Zinn, L. F. (1997, March). Supports and barriers to teacher leadership: Reports of teacher leaders. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Appendix A

Dear [names of program directors]:

I am a doctoral student in the University of Missouri-Columbia program in Educational Leadership and Policy Analysis and am preparing to conduct research for my study, titled "School Structures and Effective Teacher Leadership." This study is being conducted to complete my dissertation. As part of the research study, I would like to survey teachers involved in professional development programs designed to foster teacher leadership throughout the state of [name of state]. This questionnaire should take approximately 15 minutes to complete. These data will then be analyzed to see if a relationship exists between specific school structures and effective teacher leaders. If so, the findings could serve to assist teachers and principals in changing structural components in their buildings to improve the effectiveness of teacher leaders.

I am writing to seek your permission to conduct the surveys with teachers involved in [state department of education] sponsored professional development training programs. I would appreciate your support with this project because limited research is available regarding the structural conditions that contribute to, or impede, the effectiveness of teacher leaders. Confidentiality of the teachers and the specific programs will be protected throughout the study. No teacher or region will be identified in reporting results. Participation is completely voluntary. Participants may withdraw at any time without penalty. Individual responses to the survey are completely confidential and anonymous. Only aggregate data will be reported in the study results.

If you grant your permission for participation, I will contact the [regional center] directors to schedule administration of the survey and make all necessary arrangement with as little inconvenience as possible.

If you have any questions about this research project, please feel free to contact me. You may also contact my Faculty Advisor, Dr. Cindy MacGregor, at (417) 836-6046, or CMacgregor@MissouriState.edu.

Thank you in advance for your assistance with this project.

Sincerely,

Cathy Galland
Republic R-III School District
417-732-3605 (work)
417-823-8982 (home)
cg59a@mizzou.edu

Keep for your records.

Please return to researcher.

I, _____ agree to allow teachers in the state sponsored professional development program to participate in the study of school structures and teacher leadership conducted by Cathy Galland. I understand that:

- Their answers will be used for dissertation research.
- Their participation is voluntary.
- They may stop participation at any point without penalty.
- They need not answer all of the questions.
- Their answers and identity will be kept confidential.

I have read the material above, and any questions I asked have been answered to my satisfaction. I agree to allow participation of teachers in this activity, realizing that they may withdraw without prejudice at any time.

Signed: _____

Date: _____

Appendix B

Informed Consent Form for School Structure and Teacher Leadership Questionnaire

Thank you for considering participation in the study of the relationship between school structures and teacher leadership. This study is being conducted to complete a doctorate in Educational Leadership and Policy Analysis through the University of Missouri-Columbia.

I am requesting your participation in my study as a member of the [name of professional development program]. This program has been selected as the focus of this research because of the involvement of teacher leaders in this statewide program. Your participation will provide valuable assistance as I examine the relationship between school structures and teacher leadership. Permission to ask for your participation was granted by [program directors] at the [state department of education].

Data collection will consist of administration of the School Structures and Teacher Leadership Questionnaire (SSTLQ). The SSTLQ should take approximately fifteen minutes to complete.

Before you make a final decision about participation, please read the following about how your input will be used and how your rights as a participant will be protected:

- There are no foreseeable risks associated with the study.
- You should feel no greater degree of discomfort than is normally experienced in expressing personal views about your work.
- Your participation is completely voluntary. You may withdraw at any time without penalty.
- Your individual responses to the questionnaire will remain confidential.
- Only aggregate data from the SSTLQ will be shared and reported in the study results.
- At your request, I will provide you results from this study.
- Data will be stored in a locked cabinet for a period of three years after completion of my dissertation. Only the researcher will have access to the data.

The project is being supervised by Dr. Cynthia MacGregor, Doctoral Supervisor, Educational Administration, Missouri State University. If you need further answers regarding research participant's rights, please contact University of Missouri Institutional Review Board at (573) 882-9585.

If you have any questions about this study, please contact me via e-mail at cg59a@mizzou.edu or by phone at (417) 732-3605. Dr. Cindy MacGregor, at (417) 836-6046, or CMacgregor@MissouriState.edu. Thank you in advance for your assistance with this project.

Sincerely,

Cathy Galland
Doctoral Candidate
University of Missouri – Missouri State University Cohort
Curriculum Director
Republic R-III Schools

I, _____ agree to participate in the study of effective leadership practices of teaching professors conducted by Cathy Galland. I understand that:

- My answers will be used for dissertation research.
- My participation is voluntary.
- I may stop participation at any point without penalty.
- I need not answer all of the questions.
- My answers and identity will be kept confidential.

I have read the material above, and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

Signed: _____ Date: _____

Appendix C

School Structure and Teacher Leadership Questionnaire Cover Sheet

You have been selected to complete this survey because you are enrolled in a professional development program designed to foster teacher leadership. This data is being collected for a research project in partial fulfillment of the requirements for a doctorate degree through University of Missouri, Columbia. This research project is focused on analyzing the characteristics of teacher leaders and structural elements within their schools. Your time and honesty on this survey will be very much appreciated.

For the purposes of this questionnaire, you should use the following definition for teacher leader:

Teacher Leader - A teacher leader is a teacher who is committed to improving professional learning opportunities for self and others and is willing to “go public” by modeling, sharing and influencing others as a part of his or her day-to-day work on behalf of children.

School Structure and Teacher Leadership Questionnaire

Please rate your agreement with the following statements by marking an X in the appropriate box:

Role Clarity	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My role as a teacher leader is formal and includes a title.					
2. My role as a teacher leader is informal and does not include a title.					
3. My role as a teacher leader is clearly defined.					
4. My role as a teacher leader is vague and not well defined.					
5. My role as a teacher leader is described in some type of school document.					
6. My role as a teacher leader has been explained to me.					
7. Other teachers in my building clearly understand my role as a teacher leader.					
8. Other teachers in my building have only a vague idea of my role as a teacher leader.					
9. Other teachers in my building are accepting of my role as a teacher leader.					
10. Other teachers in my building resent my role as a teacher leader.					
11. My principal clearly understands my role as a teacher leader.					
12. My principal has only a vague understanding of my role as a teacher leader.					
13. My principal supports my role as a teacher leader.					
14. My principal resents my role as a teacher leader.					
15. Other administrators in the district clearly understand my role as a teacher leader.					
16. Other administrators in the district have only a vague understanding of my role as a teacher leader.					
17. Other administrators in the district support my role as a teacher leader.					
18. Other administrators in the district resent my role as a teacher leader.					
19. What other characteristics of role clarity either facilitate or impede your effectiveness as a teacher leader?					

Physical Structure of the Building (classrooms, hallways, etc.)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
20. The physical layout of my building facilitates teacher collaboration.					
21. The physical layout of my building contributes to teacher isolation.					
22. The physical layout of my building facilitates frequent, informal conversations with other teachers.					
23. The physical layout of my building does not allow for frequent, informal conversations with other teachers.					
24. My building has mostly self-contained classrooms with four walls and a door.					
25. There are few open areas in my building.					
26. My building has open classrooms with few walls or doors.					
27. My building has many open spaces for informal gatherings.					
28. My building has few or no spaces for informal gatherings.					
29. My building has spaces designated for teacher collaboration.					
30. My building does not have room for teachers to meet and collaborate.					
31. What other characteristics of the physical structure of your building (layout of grade levels or departments, etc.) facilitate or impede your effectiveness as a teacher leader?					

Organizational Structure of the Building (schedules, teams, policies, etc.)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
32. The daily schedule in my building allows time for teacher collaboration.					
33. The daily schedule in my building does not include time for teacher collaboration.					
34. The weekly schedule in my building allows time for teacher collaboration.					
35. The weekly schedule in my building does not include time for teacher collaboration.					
36. Sufficient time is included in the schedule for teacher collaboration.					
37. Teachers in my building are organized into formal teams.					
38. Teachers in my building are on more than one formal team.					
39. Teachers in my building are on formal teams with teachers in other buildings.					
40. Teachers in my building have organized themselves into informal teams.					
41. There is no team structure in my building.					
42. Building policies support teacher collaboration.					
43. Building policies inhibit teacher collaboration.					
44. Building policies support my role as a teacher leader.					
45. Building policies inhibit my role as a teacher leader.					
46. Building policies support teacher teams.					
47. Building policies inhibit the work of teacher teams.					
48. What other characteristics of the organizational structure of your building either facilitate or impede your effectiveness as a teacher leader?					

Effectiveness of Teacher Leader	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
49. My role as a teacher leader has significantly improved instruction in my own classroom.					
50. My role as a teacher leader has had no impact on instruction in my classroom.					
51. My role as a teacher leader has significantly improved instruction in other classrooms in my building.					
52. My role as a teacher leader has had no impact on instruction in other classrooms in my building.					
53. My role as a teacher leader has significantly improved instruction in other buildings in the district.					
54. My role as a teacher leader has had no impact on instruction in other buildings in the district.					
55. Student achievement in my classroom has improved as a result of my role as a teacher leader.					
56. Student achievement in my classroom has not been affected by my role as a teacher leader.					
57. Student achievement in other classrooms in my building has improved as a result of my role as a teacher leader.					
58. Student achievement in other classrooms in my building has not been affected by my role as a teacher leader.					
59. Student achievement in other buildings in the district has improved as a result of my role as a teacher leader.					
60. Student achievement in other buildings in the district has not been affected by my role as a teacher leader.					
61. What other results of effective teacher leadership do you see in your building?					

62. Are you compensated for your responsibilities as a teacher leader? If so, how? (stipend, extra time, extended contract, etc.)

Please answer the following questions about yourself and your teaching experience:

63. What grade levels are in your building? Circle all that apply.

K 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th

64. What grade level do you teach? Circle all that apply.

K 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th NA

65. How many years have you been teaching? _____

66. How many years have you been teaching in your current district? _____

67. How many years have you been teaching in your current building? _____

68. Please check the size of your building, as indicate by the number of students:

_____ small (fewer than 250 students)

_____ medium (250 – 500 students)

_____ large (more than 500 students)

69. Are you male ___ or female _____?

70. What is your age? _____

71. What level is your last completed degree?

_____ B.S.

_____ Masters + additional hours

_____ B.S. + additional hours

_____ Specialist

_____ Doctorate

VITA

Cathy Galland was born Cathy Chism on February 15, 1962 in Moberly, Missouri. She spent her childhood in the Moberly area and attended Moberly and Renick Public Schools. After graduating from Moberly High School, she received the following degrees: B.A. in English from Simpson College in Indianola, Iowa (1991); M.S. in Education from Central Methodist College in Fayette, Missouri (1999); Ed.D. in Educational Leadership and Policy Analysis from the University of Missouri-Columbia (2008).

Cathy taught English at Higbee R-VIII High School in Higbee, Missouri for eight years and became involved in the Missouri Assessment Program (MAP) as a teacher representative. She then went on to become a MAP Regional Facilitator at the Heart of Missouri Regional Professional Development Center in Columbia, Missouri for two years and then at the Southwest Missouri Regional Professional Development Center in Springfield for four more years.

In 2005, Cathy became the Curriculum Director for Republic R-II School District, Republic, Missouri. She is very active in curriculum and staff development and serves as president of the Southwest Area Curriculum Directors Association and is on the board of directors of the Missouri Staff Development Council.