Dissertations

Fall 12-2009

The Relationship Between Leadership Behaviors, Teacher Collaboration, and Student Achievement

Angela Nix McHenry
University of Southern Mississippi

Recommended Citation

The University of Southern Mississippi

THE RELATIONSHIP BETWEEN LEADERSHIP BEHAVIORS, TEACHER

COLLABORATION, AND STUDENT ACHIEVEMENT

by

Angela Nix McHenry

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Approved:

December 2009
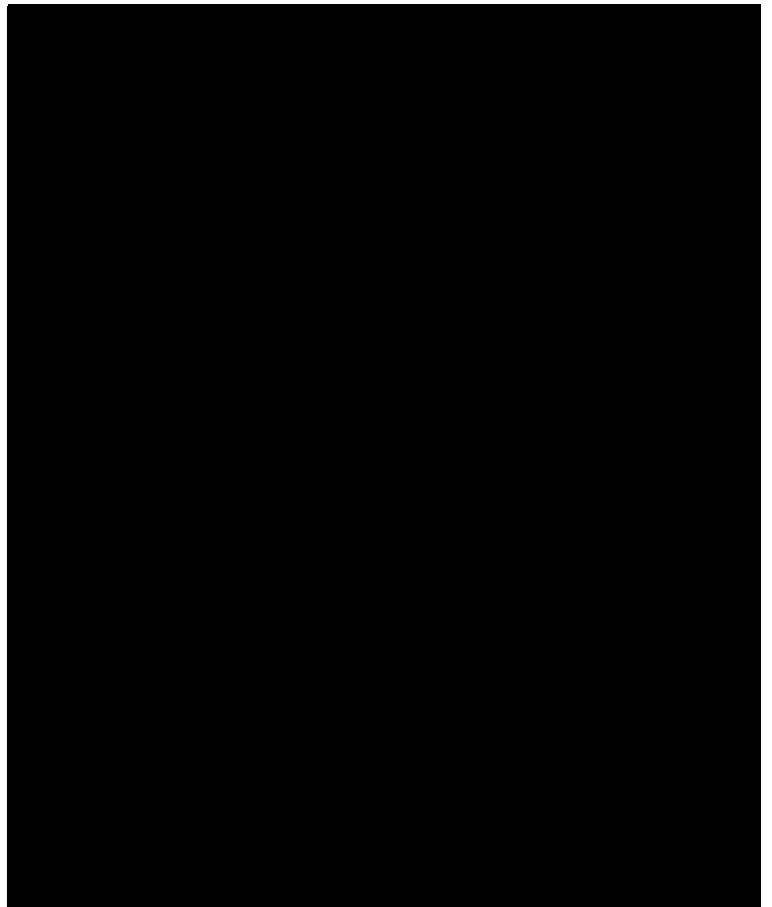
The University of Southern Mississippi

THE RELATIONSHIP BETWEEN LEADERSHIP BEHAVIORS, TEACHER

COLLABORATION, AND STUDENT ACHIEVEMENT

by

Angela Nix McHenry

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

December 2009

ABSTRACT

THE RELATIONSHIP BETWEEN LEADERSHIP BEHAVIORS, TEACHER

COLLABORATION, AND STUDENT ACHIEVEMENT

by Angela Nix McHenry

December 2009

Educational administrators face the unprecedented challenge of

increasing student achievement for all students. One response to this challenge

has been to increase and improve teacher collaboration. This study analyzed the

relationship between elementary principals' leadership behaviors, teacher

collaboration, and student achievement. The relationship between the variables

of teacher age, years of experience, and years working with the current principal

were also analyzed using multiple regression.

A random sample of 161 Mississippi elementary teachers in 15 schools

were surveyed, using the researcher-designed questionnaire, *Leadership for*

Collaboration. These responses measured the teachers' perception of their

elementary principals' leadership behaviors and the level of collaboration in their

schools. Multiple regression was used to analyzed the relationship between

these variables, and student achievement of fourth graders, as measured by the

Mississippi Curriculum Test2.

Results indicate that there is a significant relationship between leadership

behaviors and teacher collaboration. However, these same leadership behaviors

were not found to be predictors of student achievement. The variables of teacher age, years of experience, and years working with the current principal were not significantly related to the personal collaboration ratings of teachers.

This study has provided support to the existing literature regarding the influence of principal leadership to the development of a collaborative environment in schools. Additional research should focus on the relationship between teacher collaboration and student achievement.

ACKNOWLEDGEMENTS

The researcher would like to express sincere appreciation to the chair of her dissertation committee, Dr. Wanda Maulding, for her guidance, caring, patience, and support. She would also like to thank the other members of her committee, Dr. Gary Peters, and Dr. Mike Ward, for their helpful advice and feedback during this process. A special thanks is extended to Dr. J. T. Johnson for his understanding and constant availability.

In addition, special gratitude goes to the author's husband, Jeffery, for his unwavering love and support.

TABLE OF CONTENTS

LIST OF TABLES

Table

CHAPTER I

INTRODUCTION

Background

This quantitative study examines the relationship between leadership behaviors, teacher collaboration, and student achievement in Mississippi elementary public schools. This chapter provides a background for the study by providing research which places the current problem in context. Chapter 1 also identifies the problem addressed in the study and sets forth the purpose of the study. Research questions and corresponding hypotheses are given, followed by a list of specific terms used in the study. The chapter concludes with a description of the study's limitations and its significance to the larger body of research.

Educational reform has been underway to improve the quality of teaching and learning in public schools for more than two decades. In 1983, *A Nation at Risk* (National Commission on Excellence in Education) underscored the inadequate state of student learning in the United States and the need for improvement. Since then, governmental mandates have spurred an influx of reform initiatives. The No Child Left Behind (NCLB) Act, passed in 2002, has placed the accountability for student performance at the school level. Achievement standards have been established for every state, and all schools are responsible for educating all students according to these standards.

The goal of the NCLB Act is to have all students meet grade level proficiency standards by the year 2014. In 2007, however, only 22% of

Mississippi fourth graders were proficient in mathematics on the National Assessment of Educational Progress (NAEP). That same year 23% of Mississippi fourth graders scored proficient or above in reading on the same test. The mean (or average) scale score provides a measure of performance for a group of students. Scale scores on the Mississippi Curriculum Test can be compared from year to year within a given grade level and subject. Scale scores are not comparable across subjects and cannot be averaged across different grade levels. In 2007, the mean NAEP reading scale score for the fourth grade was 208 in Mississippi, while the national average was 220. There was a difference of 25 points in the scale score average between white and black fourth graders in reading that year and a difference of 27 points between the overall Mississippi scale score average and the scale score average for economically disadvantaged students (National Center for Educational Statistics, 2007).

In 2008, 49.5 % of fourth graders scored proficient or above in reading on the Mississippi Curriculum Test 2, and 55.2 % were proficient or above in mathematics on that assessment. There was a difference of 27 points in the percent of white fourth graders scoring proficient or above in reading as compared to the percentage of black fourth graders scoring proficient or above for that subject. In math, the difference was 26 points between black and white students for that same grade (Mississippi Department of Education, 2008) These statistics demonstrate the need for change and improvement in teaching and learning, since it seems clear that a large percentage of students are not learning to the extent that they should be.

Teacher quality has been shown to be one of the most important factors in determining student learning (Darling-Hammond & McLaughlin, 1999; Hord, 1999; Marzano, 2003). The research suggests that teacher quality is an important factor in closing the achievement gap between students from traditionally poor, nonwhite, urban backgrounds and their more advantaged peers. High-quality teachers have a substantial effect on student achievement, especially when assigned to work with disadvantaged students. Teacher quality more heavily influences differences in student performance than does race, class, or school of the student, and disadvantaged students benefit more from good teachers than do advantaged students (Heck, 2007). For these reasons, it seems desirable that efforts be made to improve teacher effectiveness.

Teacher collaboration has been identified in the literature as a key element in the improvement of teaching and learning (Dufour, 2001, 2004; Hawley & Valli, 2000). Collaborative cultures yield improved teacher performance and higher teacher satisfaction (Barth, 1990; Barth, 2001; Deal & Peterson, 1999; Dufour & Eaker, 1998; Fullan & Hargreaves 1996; Hord, 2004; Marzano, 2003). Collaboration among teachers can also enhance teacher confidence and commitment (Rosenholtz, 1989). If schools are to increase their effectiveness and meet the needs of all learners, it is necessary for teachers to increase their capacity to work together in collaborative teams (Dufour, 2001, 2004).

Statement of the Problem

Although research (Fullan, 1991; Goddard & Heron, 2001; Little, 1990) has indicated that teacher collaboration improves instruction and therefore

increases student achievement, large-scale collaboration in schools is not being practiced (Barth, 2001; Darling-Hammond, 1998; Schlechty, 2002). Elementary principals should understand what can be done to change this situation, because the current lack of teacher collaboration in schools could have detrimental effects on student achievement (Fullan & Hargreaves, 1996; Goddard, Goddard, & Tschnnen-Moran, 2007).

Principals, as school leaders, are arguably in the best position to overcome obstacles to increased collaboration and embrace factors that facilitate it (Cotton, 2003). In fact, Blankstein (2007) found that leaders who support teacher collaboration could counteract all other barriers and influence norms of collaboration within the school. This position of influence makes it critical that principals become aware of behaviors which influence teacher collaboration and encourage collaborative relationships.

<center>Purpose of the Study</center>

To date, little research exists that describes the characteristics or discusses the predictors of teacher collaboration. Existing research shows that collaboration in schools is scarce and difficult to sustain (Goddard et al., 2007; Sawyer & Rimm-Kaufman, 2007).This study closely examined the relationship between principals' leadership behaviors, the existence of a collaborative school culture, and student achievement. It also provided information from which additional empirical research can be conducted in the future. This particular study focused on the elementary school. Since the elementary school structure differs from that of a middle school or high school, it was chosen to be studied

individually. Without the structure of subject area departments typical of middle and high schools, challenges to teacher collaboration may need to be addressed differently.

Research Questions

The following research questions guided this study:

1. Which leadership traits are related to high levels of student achievement?

2. Which leadership traits are related to high levels of general teacher collaboration?

3. Which leadership traits are related to higher levels of personal teacher collaboration?

4. Is teacher collaboration related to age, years of experience, and the number of years working with a principal?

Research Hypotheses

1. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the language and math mean scale scores of Mississippi fourth graders as measured by the MCT2.

2. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the general collaboration ratings ascribed to elementary teachers.

3. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a

statistically significant level (p < .05), of the personal collaboration ratings ascribed to elementary teachers.

4. There is a statistically significant relationship (p < .05), between the variables of age, years of experience, and years working with the current principal and the variable of personal collaboration ratings ascribed to elementary teachers.

Definition of Terms

Terms, when misunderstood, interfere with effective communication and impede an individual's ability to be receptive to new ideas and divergent perspectives. In an effort to diminish the potential for misinterpretations, definitions reflect this researcher's concurrence with the perspectives of specific researchers.

Administrator: An individual who works directly with faculty and students in a particular school, fulfilling the role and given the title of principal or assistant principal (Cotton, 2003)

Collaboration: A style for interaction between at least two co-equal parties voluntarily engaged in shared decision-making as they work toward a common goal (Friend & Cook, 1990).

Collegiality: Norms and values that define that faculty as a community of like-minded people bonded in common commitment (Sergiovanni, 1992).

Leadership behaviors: those behaviors by which a leader influences others to accomplish organizational goals (Northouse, 2004).

Mississippi Curriculum Test II (MCT2): The MCT2 consists of customized criterion-referenced reading/language arts and mathematics assessments administered to Mississippi students in grades 3 through 8 (Mississippi Department of Education, 2009).

School culture: The beliefs, values, rituals, and traditions shared by members of a school community (Deal & Peterson, 1999).

Limitations/Delimitations

1. While correlational studies can suggest a relationship between two variables, they cannot prove one variable causes a change in another variable. This study will attempt to determine whether a relationship exists between certain administrator behaviors, teacher collaboration, and student achievement in elementary schools. However, this relationship cannot lead to a determination that certain leadership behaviors cause increased teacher collaboration or changes in student achievement.

2. The findings of this study can be generalized only to those Mississippi elementary schools which are selected for and participate in the study.

Assumptions

Participants in this study have responded to the questionnaire in an open and honest manner.

Significance of the Study

Collaboration among teachers has been identified as a key component of various models that guide reform initiatives (Dufour & Eaker, 1998; Fullan, 2001;

Morse, 2000; Rosenholtz, 1989). In fact, Morse (2000) suggested that collaboration is an educational reform imperative: "Educators will recognize that they are not alone in searching for new modes of human exchange. The fact is, this quest for a new way of human exchange is endemic in the social order....Rejecting collaboration is not an option" (p. xi). A focus on the process of collaboration, however, has preempted emphasis on outcome indicators. Indeed, collaboration is often advocated, yet its effects are less frequently investigated. Through collaboration, teachers have the opportunity to reflect on their own practice and learn from others who are experts in the field, thereby improving their own instruction. District and school leaders aspiring to increase student achievement should know how to foster a collaborative environment in their schools. With conditions that impact teacher collaboration identified and prioritized, school leaders will be informed about how to plan for and facilitate teacher collaboration more effectively. Spillane, Halverson, and Diamond (2004) concluded that "...there is an expansive literature about what school structures, programs, and processes are necessary for instructional change, we know less about how these changes are undertaken or enacted by school leaders in their daily work" (p. 4).

This study is significant because it: 1) focused on the elementary setting; 2) expanded upon work done in previous studies (Goddard et al., 2007; Rosenholtz, 1989); 3) quantitatively examined the relationship between elementary principals' leadership traits, teacher collaboration, and student achievement; 4) provided research-based data from which prospective

elementary principals, district administrators, boards of education, and principal search committees can determine expectations for the performance of an elementary school principal in a collaborative school setting; and 5) provided direction to professional development programs for elementary principals. In summary, the greatest significance of this study was to identify baseline data in order to provide well-grounded recommendations for practical applications and future research.

Organization of the Study

Chapter I introduces a synopsis of research on teacher collaboration and student achievement, statement of the problem, significance of the study, definition of terms, and limitations and assumptions of the study.

Chapter II presents a review of the literature. It includes information from the following areas: leadership theory, professional learning communities, school culture, teacher collaboration, professional development, and change theory.

Chapter III examines the methodology. It reviews the research questions, the development of the instrument, selection of the sample, and the procedures for data collection.

A random sample of 22 public elementary schools from eight school districts was drawn from the population of 433 public elementary schools located in 149 school districts in the state of Mississippi that offer an elementary program. This sample represents 5% of the K-6 public elementary schools, 5% of the public school districts in Mississippi, and 15% of Mississippi's counties.

Chapter IV presents the research findings. Tables are used to illustrate the data.

Chapter V provides a discussion of the results that includes both the description and implications of the findings. Suggestions for further research are included.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter provides an overview of the research literature that serves as the framework for this study. The major bodies of literature that are reviewed are 1) professional learning communities, 2) teacher collaboration, 3) professional development, 4) school culture, 5) leadership, and 6) change theory. Prior to these topics, the theoretical framework behind teacher collaboration is described.

With high-stakes testing and accountability the focal point of today's educational landscape, school leaders are under pressure to meet success and document the achievement of all students. Heightened awareness of these expectations has led to increased public scrutiny of schools that don't meet the mark. Demands to develop students of all subgroups into equally high achieving individuals are intense, and current research has sharpened its focus on identifying practices that result in increased student achievement (Marzano, Waters, & McNulty, 2005).

In the current era of accountability, the role of a school leader has become more focused on student outcomes than in past decades, and reform initiatives to enhance student achievement are widespread (Marzano et al., 2005). Among the most promising endeavors is the development of school faculties who work together to meet the diverse needs of their students. Cultivation of a collaborative culture, the creation of a professional learning community, and implementation of

meaningful teacher collaboration are techniques that can sustain a focus on student achievement.

There is a large body of research which points to teacher collaboration as an important means of improving professional learning among teachers (Blankstein, 2004; Cotton, 2003: Danielson, 2002; Deal & Peterson, 1999; Fullan, 2001; 2004; Glaser, 2004). Research also indicates that, although teacher collaboration is desirable, it is not occurring on any large scale (Fullan, 1995; Goddard et al., 2007; Little, 1987, 1990; Huberman, 1993; Zahorik, 1987). Barriers to teacher collaboration have been studied, and schools have been found which have overcome these barriers (Giles & Hargreaves, 2006; Johnson, 2003; Tollerfield, 2003; Wade, Welch, & Jensen, 1994). Overwhelmingly, the principal has been found to be the pivotal person to shape and support teacher collaboration (Cotton, 2003; Deal & Peterson, 1999; Fullan, 2004). If we know teacher collaboration is effective and we know that some schools have made it work, why is it not being done on a large scale?

This investigation examined research from a variety of related fields. Scholarly literature was consulted in the areas of leadership, professional learning communities, school culture, teacher collaboration, professional development, and change theory. To understand the factors affecting teacher collaboration, research was reviewed related to what teachers need to learn and how adults learn best. It was necessary to find information about the effectiveness of professional development within a collaborative learning community and how this type of learning supports student achievement.

Research was consulted about how school culture affects teacher collaboration, as well as how to change culture and support those making changes. It was also important to understand what school reform is demanding of teachers and principals and how school principals might lead their schools to high achievement levels through support of teacher collaboration.

Theoretical Framework

History of Leadership

Leadership has been defined in as many ways as there are researchers and authors publishing works regarding leadership. Northouse (2004) defined *leadership* as a process whereby an individual influences a group of individuals to achieve a common goal. Burns (1978) defined *leadership* as leaders inducing followers to act for certain goals that represent the values and the motivation— the wants and the needs, the aspirations and expectations—of both leaders and followers. King (2002) simply stated that instructional leadership is anything that leaders do to improve teaching and learning in their schools and districts.

Leadership models have been created in order to help people understand and evaluate leadership in a variety of different settings. Researchers, such as Bass (1985), Burns (1978), and Katz (1955), have provided insights on different approaches to practice. One of the first leadership approaches was the Trait Approach. This approach was defined by a person's characteristics or traits. A list of the most influencing leadership traits was created, and if anyone possessed the same traits, he or she would be considered a potential leader. Northouse (2004) noted that this approach evolved through the 20th century, and

it currently spotlights how important leadership traits are to effective school leadership.

Katz (1955) developed the skills approach to leadership. In the skills model, Katz stated that leadership skills are divided into three categories: technical, human, and conceptual. Katz believed, depending upon a leader's skill set, that a leader would be more successful in certain leadership positions. For example, leaders who had high human skill abilities would be able to work better with people and be able to get others to work together. Katz believed these leaders would be most successful in a middle management position in which managing subordinates is part of the job description. Katz also stated that there were very few leaders who were high in all categories; however, leaders should strive to excel in each category if possible.

The goal-path theory of leadership focused on enhancing employee performance and satisfaction through employee motivation. Early research by House (1971) noted the goal–path theory concerning employee motivation. Employee motivation research was used as the basis for this theory. The Path-Goal Theory of Leadership was developed to describe the way that leaders encourage and support their followers in achieving the goals that have been set by making the path that they should take clear and easy. In particular, leaders (a) clarify the path so subordinates know which way to go, (b) remove roadblocks that are stopping them going there, and (c) increase the rewards along the route.

House (1971) stated leaders could take a strong or limited approach in these. In clarifying the path, they may be directive or give vague hints. In

removing roadblocks, they may scour the path or help the follower move the bigger blocks. In increasing rewards, they may give occasional encouragement or pave the way for followers. This variation in approach depended upon the situation, including the follower's capability and motivation, as well as the difficulty of the job and other contextual factors.

Other leadership theories include Burns' (1978) two types of leadership: transactional and transformational. Burns described transactional leadership as the relationship between the leader and his or her subordinates. Transactional leadership can be identified through a variety of actions, such as teachers giving students grades for their completed work, politicians winning votes because of campaign promises, and supervisors giving promotions to subordinates for achieving or surpassing a goal. These actions are low level and focus on the basic needs of the subordinates, such as food, water, and shelter. In contrast, transformational leaders promote relationships among and between leaders and followers that elevate motivation and morality among all respondents. The author used Mahatma Ghandi as an example of a transformational leader. Ghandi was passionate about his beliefs and acquired a following of believers who absorbed his beliefs. Ghandi taught his followers through his actions and words, which inspired them to believe in themselves. Burns noted that transformational leaders grow just as much or more from the experience as the followers do.

Bass (1985) expanded Burns' work on transformational and transactional leadership to include situational experiences and focus more on the needs of followers rather than the leaders. Bass suggested that transformational leaders

could be both negative and positive. Bass also stated that transformational and transactional leadership should be on the same continuum instead of separate as in Burns's research.

Depree (1989) contended that leadership is an art, something to be learned over time. Leadership liberated followers to do what was required of them in the most effective and humane way. In order to influence followers the ability to build healthy relationships within the organization is a fundamental requirement. According to DePree (1989), the followers were the heart and spirit of an organization and without them there is no need for followers. However, DePree (1989) asserted that individual consistency and coherence did not mean that all individuals acted in the same manner in all leadership positions. Barth (1990) concurred with DePree, stating that leadership arises from the interaction between a person and a context. It is different every time; seldom does it fit a particular model.

Situational leadership, developed by Hersey and Blanchard (1993), was based primarily on the relationship between the maturity of the follower, leader task behavior, and the relationship behavior of the leader. Using task behavior, the leader exemplifies one-way communication by defining what each follower is to do, when and where, and how the task is to be performed. The use of relationship behavior necessitates the leader to engage in two-way communication by providing socio-economic support and facilitating behaviors. Two key leadership behaviors are identified in situational leadership: task behavior and relationship behavior.

A broader perspective of leadership, as suggested by Senge (1990), required a paradigm shift to occur in order for organizations to perpetuate themselves. Senge (1990) contended new leaders should serve as designers, stewards, and teachers. Designing is a process that forces the leader to reflect on collective ideas of governance, values, purpose, and vision. The designer serves as the architect of a learning environment that makes perpetual growth possible, while the steward conveys the purpose through flexibility. Leaders, as teachers, assist others to become more insightful and empowered (Senge, 1990).

Bolman and Deal (2003) developed an organizational model of leadership. This model was based on four unique frames of leadership. The structural frame emphasized efficiency and structure with its leaders valuing clear decisions and holding constituents accountable for results. The human resource frame focused on the interaction between individuals' and organizations' needs with leaders valuing relationships and leadership through empowerment. The political frame emphasized conflict among various groups competing for resources. Finally, the symbolic frame of leadership depicted organizations as cultures with leaders who value rituals, ceremonies, stories, and myths. Bolman and Deal (2003) stated that the effective leader should possess skills to examine organizations and decisions from each of the four frames by integrating the frames into a flexible leadership style.

Mumford, Zaccaro, Harding, Jacobs, and Fleishman (2000) conducted a study to ascertain specific behaviors and personal characteristics employees

expect and desire from leaders. Mumford et al. (2000) and conference attendees collected data that identified behavior and knowledge as key leadership expectations. This research focused on the behaviors observed as leaders interacted with their followers. This study emphasized the leaders' behavior and knowledge influenced the behavior of others within the organization.

More recent research suggests traditional, autocratic, and hierarchical modes of leadership are being replaced by newer models. These models are based on teamwork and community, and they strive to involve others in decision-making. These models are based strongly in ethical and caring behavior that attempts to enhance the personal growth of the individual person (Spears, 1998).

Jim Collins (2001) was the author of a book that has become quite influential in the world of business and adopted by educational circles (Marzano et al., 2005). This work, *Good to Great,* discussed five levels of leaders with the fifth level being the one who was able to lead a company to outperform industry standards. That leader was also able to sustain the success over a period of years. The level five leader was described as having the following characteristics: surrounding themselves with quality people, confronting the brutal facts and acting upon them, creating a culture of discipline within the organization, developing and relying on high standards, and maintaining a focus on the things that matter (Collins, 2001).

A large body of literature exists related to the many leadership models and styles of leadership and their impact on education (Cotton, 2003; Sergiovanni, 1992). Recently, in response to the overwhelming number of leadership studies,

Marzano et al. (2005) used a meta-analysis approach to review 30 years of research. The meta-analysis included 70 studies that described leadership effects on student achievement. This work discusses six different leadership styles: servant; dictatorial; autocratic; situational; transformational; and transactional. These researchers concluded that there is a significant relationship between leadership and student achievement. Twenty-one leadership responsibilities were identified through this meta-analysis as having an effect on student achievement. The authors also noted that this effect on student achievement could be positive or negative. They recommended that leaders take into account their school climates and characteristics while implementing a change in order to see a positive result instead of a negative result.

Research has shown that a more collaborative leadership style has been one response to increased accountability demands on the principal (Cotton, 2003; Gruenert, 2005). Gruenert (2005) concludes that the more collaborative the culture of a school, the higher the student achievement in that school. Cotton (2003) reiterated their finding that when principals share leadership and decision-making authority, staff and students all benefit. Leadership has been shown to be one of the foundations for successful schools and has an effect on student achievement through various characteristics and actions (Glickman, 2002; Marzano et al., 2005).

Instructional Leadership

In the 1980s, research began to emerge in the area of instructional leadership. Instructional leadership is a term that describes a broad set of

principal roles and responsibilities designed to address the workplace needs of successful teachers and to foster improved achievement among students (DiPaola & Tschannen-Moran, 2003) While there are many definitions of instructional leadership, there seems to be agreement as to the goal of instructional leaders---student achievement.

Hallinger, Murphy, Weil, Mesa, and Mitman (1983) suggested that a principal's instructional leadership role could be divided into three dimensions: defining the school's mission, managing the instructional program, and promoting a positive school-learning climate. The three dimensions contained 11 job functions. The 11 job functions included framing school goals, communicating school goals, supervising and evaluating instruction, coordinating curriculum, monitoring student progress, protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers, developing and enforcing academic standards, and providing incentives for learning. These functions provide leaders with the standards for being effective instructional leaders in their organizations.

Hallinger and Murphy (1985) noted that principals have an indirect effect on school effectiveness. Although the principal was seen as the primary instructional leader within the school setting, their research found few outcomes which identified organizational and personal factors that impact instructional leadership. Additionally, there was no instrument to measure these factors. Because of the lack of research for instructional leadership before 1980, instructional leadership did not have a clear definition and could not be promoted

adequately and properly within a school district. Hallinger and Murphy (1985) conducted a study of 10 elementary principals in one school district to identify organizational and personal factors that impact instructional leadership and create an instrument to measure those factors. They collected two types of data: data from a principal instructional management behavior questionnaire and supplemental data from principal observations, teacher evaluations, school goal documents, and other school-related artifacts. The questionnaire ratings reflected frequency, not quality, in which principals were seen conducting the activity. Research findings suggested the principals received high ratings in all 11 functions. However, high ratings differed among the 11 job functions. For example, one principal may have received high ratings in six job functions, and another principal received high ratings in the other five job functions. The high ratings were not consistent for each principal across all job functions. The difference was visible to the researchers due to the high standard deviations among the 11 job functions. The results showed that, in general, principals were more actively involved in managing curriculum and instruction than the literature suggests. Also, results showed that principals did not generally view the students as a key audience and few made regular efforts to maintain a close relationship with students. This conclusion was apparent in several job functions including communicating goals, monitoring student progress, and maintaining high visibility.

Hallinger and Heck (1996) reviewed empirical studies exploring the principal's contribution to school effectiveness from 1980 to 1995. During this

review, they found evidence that supports the claim that principals do have an effect on school effectiveness and student achievement. This effect, they found, was small and indirect. They stated that principals use several paths in order to affect student achievement. These paths include school goals, school structure and social networks, people, and organizational culture. Specifically, the principal's role in shaping the school's direction through vision, mission, and goals was seen as a primary avenue of influence.

More recently, Hallinger (2003) concluded that 15 years of research have provided findings concerning qualities of instructional leadership behavior, effects of the school context on instructional leadership, effects of school leadership on the organization, and school outcomes. Conclusions from the 125 empirical studies reviewed by Hallinger include the following: (a) principals affect student achievement indirectlythrough their actions, (b) principals set school goals/purposes as their most influential act, and (c) principals align school outcomes with school structures and missions.

Other researchers have found relationships among instructional leadership behaviors and successful schools. Sheppard (1996) conducted a study of teacher perceptions of instructional leadership and school level characteristics using elementary and high school teachers. Findings indicated statistically significant positive relationships between instructional leadership behaviors of school principals and the following school level characteristics: teacher commitment, professional involvement, and innovations. These positive relationships existed at both the elementary and high school levels. Sheppard's

study reinforces the validity of instructional leadership and suggests that particular leadership behaviors contribute to school effectiveness.

O'Donnell and White (2005) studied relationships between principals' instructional leadership behaviors and student achievement. The PIMRS (Principal's Instructional Management Rating Scale) questionnaire developed by Hallinger (1984) was utilized in their study of 325 middle school educators, 75 principals, and 250 eighth-grade English and mathematics teachers. The Pennsylvania System School assessment achievement data for eighth-grade reading and mathematics were used as the measure of student achievement. O'Donnell and White (2005) found that higher teacher perceptions of principal instructional leadership behaviors correlate with higher student achievement in reading and mathematics. A positive significant relationship was found with the teacher perceptions in all three leadership dimensions on the PIMRS. *Promoting the school learning climate* was the variable that had the strongest relationship to both reading and mathematics assessment scores. Other results indicated that *promoting the school learning climate* was a significant predictor of mathematics and reading scores based on the teacher ratings on the survey instrument.

Blase and Blase (2002) examined leadership behaviors that have direct effects on teachers and classroom instruction. Over 800 elementary, middle, and high school teachers from across America participated in the study. The results found two themes from the data: talking with teachers to promote reflection and promoting professional growth. Effective instructional leaders talk with teachers to promote reflection by making suggestions, giving feedback, modeling, using

inquiry, soliciting advice and opinions, and praising their teachers. Emphasizing the study of teaching and learning; supporting collaboration among educators; developing coaching relationships among educators; applying the principles of adult learning, growth, and development to staff development; and implementing action research to inform instructional decision making are all highly rated items from teachers concerning their professional growth. The authors suggested these behaviors make the administrator more approachable and less intimidating, thus creating a more effective school culture of behaviors that are expected and routine.

Effective leaders are critical if students are to attain high levels of achievement in school (Bottoms & O'Neill, 2001). Many educational researchers have acknowledged or alluded to the importance of the principal's role in this regard. Researchers have found that the role of the school principal or headmaster had evolved significantly since the 1970s, transitioning from a largely authoritarian figure to one who is expected to successfully prioritize and balance the responsibilities of manager and instructional leader and who pursues a community approach to school governance. According to Verona and Young (2001), "The problem that currently exists within the cries for holding principals accountable for raising the test scores of their students is that there are limited empirical data on how leadership styles of principals affect students" (p. 4). Based on previous literature, the assumption has been that principals and headmasters made an important difference in school performance, effectiveness, and student achievement. There is a lack of understanding of the theoretical

and practical impact on such outcomes in this regard. The literature is replete with studies on effective headship, mostly in the form of descriptive examinations that fail to explore the relationship between leadership and school performance (Harris, 2004). The following literature builds upon the framework of leadership theory by examining current literature which examines concepts related to leadership, teacher collaboration, and student achievement.

<div align="center">Professional Learning Communities</div>

Peter Senge first used the term "learning organization" in his 1990 book, *The Fifth Discipline.* Though Senge was writing for the business community, soon thereafter the term made its way into the education literature (Senge, 1990). Sergiovanni translated one of Senge's five principals, "team learning," to an educational context. This idea was that a school should have a kind of connectedness among members that resembles what is found in a family, a neighborhood, or some other closely knit group (Sergiovanni, 1992).

In addition to individual teacher learning, community learning is necessary to bring about large-scale improvement in schools (Cotton, 2003; Danielson, 2002; Dufour, Eaker, & Dufour, 2005; Fullan, 2004). In a collaborative learning community, teachers work together extensively. They are able to alleviate doubts about their abilities by seeking each other out as intellectual and professional resources and engaging in collaborative interactions (Deal & Peterson, 1999). Dufour and Eaker (1998) emphasized the need for school personnel to increase their capacity to work together in a professional learning community if schools were to increase their effectiveness and meet the needs of all learners. They

contended that, in order to create a professional learning community, the focus needed to be on student learning, staff collaboration, and accountability for results. The vehicle for improvement, growth, and renewal is collective inquiry within the structure of collaborative teams. To build the capacity for organizational growth, as opposed to individual growth, the task of professional learning should be collaborative (Dufour & Eaker, 1998).

Fullan (2004) contended that the creation of professional learning communities within individual schools had been largely dependent upon the leadership of the principal, but sustaining the collegial structure had not been a focus and often ended with the tenure of that leader. He advocated for a tri-level solution, involving the school, district, and state in building capacity for the development and continuation of professional learning communities. Fullan discussed four implications of his tri-level solution. First, educators should focus on changing the cultures within the system to provide increased opportunities to learn in context. This allows for shared learning, further changing the culture. Second, he recognized the need for systems thinking in action; this assists in changing the context and promotes sustainability. Perhaps more urgent, Fullan (2004) emphasized the importance of school staff learning from each other on an ongoing basis. Schools can learn from one another, as can districts and even states. Finally, he cautioned against waiting for the "system" to change. Each entity constitutes a system and should tie its own professional learning to the larger system.

Dufour (2004) discussed three "big ideas" behind the concept of professional learning communities:

1. <u>Ensuring that students learn</u>. A shift from a focus on teaching to a focus on learning separates learning communities from traditional schools.

2. <u>A culture of collaboration</u>. This type of collaboration is a process in which teachers work together in a systemized manner to analyze and improve their classroom instruction.

3. <u>Judging effectiveness on the basis of results</u>. This requires that teachers work together to analyze data and use data to set improvement goals. (pp.8-10).

DuFour (2001, 2004) also emphasized the need for school personnel to increase their capacity to work together in a professional learning community if schools were to increase their effectiveness and meet the needs of all learners. He contended that, in order to create a professional learning community, the focus needed to be on student learning, staff collaboration, and accountability for results. The vehicle for improvement, growth, and renewal is collective inquiry within the structure of collaborative teams. To build the capacity for organizational growth, as opposed to individual growth, the task of professional learning should be collaborative (Dufour, 2004).

Wood and Anderson (2003) conducted several case studies in order to identify the characteristics of schools which function as professional learning communities. Four main issues emerged from this study. First, newer teachers

were found to be generally more open toward the idea of professional learning communities than more established teachers. It was also found that time is a precious resource that can make the difference in how well professional learning communities are implemented. Third, a range of relationships are important in sustaining professional learning communities, according to the interviewees in this study. Finally, it is important for staff members to be comfortable with other professionals observing and critiquing their lessons. There should be a culture of openness within the school.

Schmoker (2005) asserted that the creation of professional learning communities is the definitive answer to school improvement because school improvement depends upon teacher improvement. The old culture of isolation, he asserts, should be replaced by one in which teams of teachers design lessons, monitor student progress, and evaluate student learning.

The work of learning communities requires leadership skills and a depth of knowledge about what practices translate into results for student achievement (Marzano, 2003). Fullan (2001) describes the responsibility of a building leader to generate "greater capacity in the organization in order to get better results" (p. 65). In a professional learning community, an administrator is like a cultivator, always working to ensure that elements are right for continuous learning. Leadership fosters growth in a learning community. Since teachers learn from a variety of sources, the leader's responsibility is to provide constant learning opportunities in many forms so that learning becomes routine (Zepeda, 2004.) Since all types of learning have value, teachers should have frequent

opportunities to engage in learning that is formal, informal, self-initiated, and planned by others. With the guidance of a leader, inquiry, generative problem-solving, dialogue, and reflection can be implemented and will assist in the transition to a learning community (Zepeda, 2004).

Unlike the roles in traditional structures, however, the administrator is not the sole leader. As the "leader of leaders" the ultimate goal is to tap into the potential of all staff members and disperse leadership widely (Dufour et al., 2005). Leadership solely by the principal is not enough because it takes more than one individual to accomplish the development of a professional learning community.

While shared leadership, shared decision-making, and collective inquiry are critical to learning communities, there is little chance for success without an effective leader to guide the process (Dufour & Eaker, 1998). Leaders make a difference because they often determine what is discussed and how it is presented. Administrators and other school leaders have the ability to guide opportunities for learning and, equally as important, dialogue within those opportunities. Leaders have the power to engage the community, foster a collaborative culture, and assert that the full potential of the staff and students can be achieved.

In recognizing the pivotal role of a principal, Dufour and Eaker (1998) offered five characteristics of principals who are able to lead the transformation to professional learning communities in their schools. These principals engage the school community in the creation of a shared vision in that can guide them. They

then make efforts to empower others to participate in decision-making processes by asking questions and seeking others' ideas. By providing staff with continuous training and putting structures in place that will lead to good decisions, the principal can ensure sustained change. Similarly, school leaders should guide the creation of measurable goals and constantly review progress made toward those goals. Lastly, principals should model behavior and communication that is consistent with the school's vision and values (Dufour & Eaker, 1998).

The type of collaboration that characterizes professional learning communities is a systematic process in which teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. In order to understand how principals engage in supporting the collaboration necessary for a successful learning community, this study inquired about the strategies that principals have found to be successful in supporting teacher collaboration.

Teacher Collaboration

Upon acknowledging the difficult task of creating a professional learning community, it becomes necessary to investigate its various aspects that, over time, can be implemented singularly while working toward the ultimate vision of a community of learners. Shared decision-making, creation of a vision and mission, and formulation of professional development opportunities are all hallmarks of a professional learning community, but teacher collaboration is the dominant feature (Cotton, 2003; Dufour, 2004). While the creation of a professional learning community takes time, the process has to begin somewhere, and a shift from isolation to collaboration is the most appropriate starting point (Eaker,

Dufour, & Dufour, 2002). "Traditional structures of teachers in isolation from other adults hinder the sustenance of professional learning communities where community perspectives are valued over an individual perspective" (Snow-Gerono, 2005, p. 242). Conditions can be put into place to promote teacher collaboration without drastic changes and, as collaboration becomes more common, a collaborative culture can develop.

Teachers commonly carry out their work autonomously, without assistance or input from colleagues. Lortie (1975) acknowledged the practice of teachers spending the majority of their school days isolated from other adults. Beyond trading general classroom tips and stories about students and parents, teachers rarely interact for the purpose of improving their work or analyzing their instruction. Even over twenty years ago, Lortie presented this isolation as detrimental to teachers in many ways. Not only does isolation limit access to new ideas, but it fails to recognize success as others are denied access to best practices. Emotionally, working alone leads to greater stress. Without access to one another, some teachers are allowed to be incompetent and resistant to change. Isolation is restrictive and can be defensive.

Collaboration is a complicated construct to define. It is often referred to interchangeably with concepts like cooperation and collegiality; however, it is distinctly different (Kruse, 1999). Cooperation between teachers occurs when they provide each other with basic assistance in the form of lesson planning or material sharing. Collegial relationships are characterized by mutual learning as teachers discuss classroom practice and student performance. Collaborative

relationships extend beyond both cooperative and collegial relationships because collaborative environments are grounded in shared values that guide interactions as teachers work as a team to make mutual decisions that can positively impact everyone in that environment (Kruse, 1999).

Collaboration exists along a continuum, from an absence of collaboration, where teachers practice in complete isolation, to an atmosphere that is permeated by teacher improving themselves and their peers through continuous sharing and reflection. Collaboration can also present itself in various forms. Fullan and Hargreaves (1996) identified four types of collaboration that may exist in schools. Balkanized schools have various groups which work to address perspectives and goals important to the people in those groups. These schools have pockets of collaboration that are not aligned with one another, thus resulting in competing groups. A second type of collaboration is comfortable collaboration, which is synonymous to Kruse's (1999) definition of cooperation. Teachers in schools which are comfortably collaborative are congenial, but not necessarily collegial. They give advice to one another, share materials, and trade tricks; however, they are not bound by the same vision and goals. Contrived collaboration stems from formal procedures, usually mandated from a top-down approach for the purpose of getting teachers to work together. While contrived collaboration may be a necessary step on the journey toward the ultimate goal of a collaborative culture, it alone is not a positive form of collaboration as teachers are ultimately responsible for initiating and sustaining an atmosphere of sharing (Fullan & Hargreaves, 1996). A collaborative culture could be described as a

supportive atmosphere developed over time and based on a culture bound by a common vision that seeks to foster and facilitate improvement of teachers' skills and techniques through continuous inquiry, sharing, reflection, and cooperation (Schmoker, 1999). Collaboration is an intentional process that results in all teachers within a school working interdependently toward the common goal of meeting the needs of all students in order to increase student achievement.

Collaboration is the opposite of isolation. Common elements of teacher collaboration include open communication, professional development, collective inquiry, and discussion of solutions for daily problems (Erickson & Christman, 1996). Its characteristics also include talking about student learning, observing one another in action, sharing knowledge, and actively helping one another become more skilled in the delivery of instruction. Teachers who collaborate may collectively question their teaching practices, examine new ideas, and engage in generating potential responses to challenges (Little, 1990). Just as people get better at what they do by continuing to explore and refine skills, they are more effective in groups than through isolated exploration of these skills (Supovitz, 2002). Collaboration facilitates the learning of teachers and, in turn, students.

Researchers have found value in the work of a learning community (Cotton, 2003; Danielson, 2002; Dufour, 2004). Despite this fact, the reality is that many schools still rely on traditional practices the literature has found to be ineffective (Gideon, 2002; Mitchell, 1999). A number of writers have provided information about how schools improve (Fullan, 2004; Lezotte, 1997; Marzano, 2003). These descriptions have remained fairly consistent. One characteristic of

successful schools is that teachers work collaboratively. This allows them to develop stronger instructional strategies, which in turn enhance student achievement. This collaboration also causes a stronger professional community among teachers, enabling them to support each other in further learning (Strahan, 2003). The literature is rich with examples of schools in which teachers have democratically, either formally or informally, decided on their professional development needs and pursued them together. They benefited by the social interaction and mutual discussion revolving around their new learning.

Bray (2002) studied the process of establishing collaborative inquiry groups at a small rural public school. He found that the establishment of these groups changed the culture and climate of the school. The relationships between teachers improved as a result of working in collaborative groups as a result of their interaction. Teachers themselves became excited about learning and the improvement of their teaching.

Collaboration seems important to any type of school reform. Friend and Cook (1990) suggested that one can predict the level of success of a school reform movement, based on the degree of implementation of the conditions necessary for teacher collaboration. They looked specifically at three reform issues: professionalism, empowerment, and restructure schools. These closely related reforms can best be implemented in schools where the conditions exist which facilitate teacher collaboration. They suggested that these conditions include (a) a mutual goal, (b) parity among participants, (c) shared participation,

(d) shared accountability, (e) shared resources, and (f) a willingness to volunteer (Friend & Cook, 1990).

Strahan (2003) examined data from case studies of three schools that had made remarkable gains in achievement among low-income and minority students. These elementary schools were part of the North Carolina Lighthouse project in which researchers examined archival data and conducted site visits to identify some of the reasons why these schools were successful. Teachers in this study described the importance of the time they spent conversing in grade-level meetings, site-based staff development sessions, mentoring discussions, and informal get-togethers. This dialogue focused on available student data, guided by assessment systems and informal observations. This continuous dialogue helped to cultivate collective efficacy at each school and provided a renewable source of energy for participants.

Manouchehri (2001) studied professional collaboration between middle school math teachers. Teachers in this study were asked to team up and collaborate on a school-wide project. After examining interactions among teachers, Manouchehri found patterns of collaboration. First, they shared their daily experiences with their peers by either discussing or observing classroom lessons. This collaboration was characterized by providing emotional support and encouragement for each other's work. As a result of the daily sharing of practice, teachers began to reflect on their own practice, as compared to that of his/her peer. Finally, teachers discussed improvements in their teaching, geared toward improving student success.

Collaboration regarding curriculum is important to school improvement (Dufour, 2004; Lopez, 2002; Marzano, 2003). Dufour (2004) described powerful discussions in a Virginia school that had grade-level teams. Together, the teachers looked at achievement data to help them focus on the curriculum. Then, they developed common formative assessments. In their routine conversations, teachers discussed goals, strategies, materials, and other concerns. By meeting regularly to discuss curriculum, and focusing on student data, the teachers identified strengths and weaknesses. Thus, using collaboration was a means to improve teaching and learning within this school.

In a case study by Lopez (2002), teachers found ways to improve their practice through daily discussions of classroom work. Teachers found that because of this collaboration, they were able to institute new teaching practices. They experienced improvement at teachers and reported a more productive learning environment for their students.

The presence or absence of collaboration within a school was found to be the strongest predictor of job satisfaction by researchers Beaudoin and Taylor (2004). Teachers said that being a team member, collaborating, and sharing as the top three most helpful aspects of their staff relationships. This study listed the following advantages to collaboration. Collaboration:

1. Reenergizes

2. Fosters an open mind and creativity

3. Generates a greater number of ideas when faced with a problem

4. Fuels enthusiasm and fun

5. Provides rewarding experiences of shared success

6. Increases performance. (p. 19)

Upon reviewing the literature, researchers Goddard et al. (2007) reported a lack of research investigating the extent to which teachers' collaborative school improvement practices are related to student achievement. Most existing research, they found, was poorly designed and they felt did not provide evidence of cause and effect relationships. To investigate the issue, Goddard and colleagues conducted a study in a large urban school district in the Midwest. First, the researchers surveyed 452 teachers in 47 elementary schools to determine the extent to which they worked collectively to influence decisions related to school improvement, curriculum and instruction, and professional development. To determine the relationship between teacher collaboration and student achievement, the researchers used reading and math achievement scores for 2,536 fourth-graders, controlling for school context and student characteristics such as prior achievement. They found a positive relationship between teacher collaboration and differences among schools in mathematics and reading achievement.

The research suggests that teacher collaboration is a complex set of behaviors that is necessary for school improvement. Improving teacher quality is the work of every teacher and administrator. This process is made more effective and efficient through collaboration. Understanding the factors that affect this process is essential.

Professional Development

Improving teacher quality is the goal of professional development. The traditional types of professional development are not adequate for meeting current accountability standards (Guskey, 2003; Hord, 1999; Huffman, 2003; Phillips, 2003). Professional development is important in assisting leaders to help school staff understand and embrace the vision. Hawley and Valli (2000) discussed learner-centered professional development, proposing nine principles relevant to the establishment of a collegial culture in support of school improvement.

1. The content of professional development should focus on what students are to learn and how to address the problems students have in learning the material.

2. Professional development should be based on an analysis of the difference between the stated goals and standards for learning and the level of student performance.

3. Professional development should engage teachers in the active identification of what they need to learn and the development of those learning opportunities.

4. Professional development should be mostly school-based and job-imbedded.

5. Professional development should be organized around collegial problem solving while meeting individual needs.

6. Professional development should be a continuous process, including follow-up and support as needed for further learning.

7. Professional development should include evaluation from a variety of sources for student learning resulting from the implementation of the strategies developed and learned through the professional development process.

8. Professional development should assist teachers to develop a theoretical understanding of the knowledge and skills to be learned.

9. Professional development should be an integral part of a comprehensive change process within the school.

This multifaceted approach to professional development becomes integrated with the structure, culture, and reward system of the workplace (Hawley & Valli, 2000).

The traditional path to improvement for teachers has been professional development workshops and in-service programs. Until recently, it had been presumed that attending workshops would supply teacher with the knowledge and skills to make necessary changes in their classrooms. Certainly it is wise to look to experts for teacher learning. However, certain conditions can make professional development workshops either valuable or extremely worthless (Fullan & Hargreaves, 1996; Guskey, 2003).

A great deal of professional development is required and developed by administrators alone. It often ignores the needs of individual teachers. If workshops and in-service programs do not consider the varying needs of staff

members, fail to motivate them, and do not allow them input or practice, learning may be minimal (Fullan & Hargreaves, 1996).

Learning from workshops may be increased with the professional development model researched by Joyce and Showers (2002). They found teacher learning was successful when a component of collaboration was included. Joyce and Showers (2002) suggested that the theory behind the learning should be made clear, and that authentic demonstration of that theory be given to teachers. Teachers should then have opportunities to practice new learning and get feedback from peers. Finally, coaching is used for follow-up, to ensure confidence in the new learning. This model, which combines the use of traditional workshops with teacher collaboration, is most often more effective that a workshop alone (Fullan & Hargreaves, 1996; Joyce & Showers, 2002; Rey, 1999).

School Culture

Organizational culture is the totality of beliefs, assumptions, values, and traditions that characterize the essence of every organization (Schein, 1985). Cultural components evolve over time and develop through both random and calculated associations among the people, practices, priorities, policies, and politics of the organization. Once created, the cultural norms of an organization become powerful determinants of the way things are done. In fact, Deal and Kennedy (1982) define culture as an understanding about "the way we do things around here" (p. 14).

During the period from the mid-70's to the mid-90's , researchers have determined that schools cultures vary considerably (Peterson & Breitzke, 1994). In the seminal work, *Schoolteacher,* Lortie (1975) identified three orientations: (a) conservatism-continuation of long traditions, (b) individualism-based on the isolation of teachers, and (c) presentism –focus on immediate issues. Rosenholtz (1989) placed schools on a continuum from highly cohesive, "forward moving" schools on one end to "stuck" schools on the other end, in which teacher isolation and estrangement are the norm. Glickman (1993) specified three types of schooling: (a) conventional-isolated environment and autonomy of individual teachers, (b) congenial-social environment and autonomy of individual teachers, and (c) collegial-professional environment and collective autonomy of teams.

Hargreaves (1994) further delineated collegial cultures into three variations: (a) balkanized-teacher working in sub-groups that are insulated, exclusive, segregated from other groups and positioned for power struggles, (b) contrived collegiality-teachers working together in an administratively regulated, compulsory, implementation-orientated manner where outcomes are predictable, and (c) collaborative-teachers working together in a spontaneous, voluntary, development-oriented manner where outcomes are predictable. There are metaphors of schools as communities (Glickman, 1993; Sergiovanni, 1992) where parents, teachers, and administrators work as teams, and of schools as learning organizations (Senge, 1990) where stakeholders look upon problem solving as an opportunity for collective thinking and bonding, depict collaborative relationships.

A collaborative culture can be broadly defined as a workplace environment in which networks of people, exchanging ideas, are central to teachers' daily work (Fullan & Hargreaves, 1996). More specifically, it describes an environment in which "the underlying norms, values, beliefs, and assumptions reinforce and support high levels of collegiality, team work, and dialogue about problems of practice" (Peterson & Brietzke, 1994, p. 3). Fullan (1991) cited the importance of interactive professionalism in assessing the effectiveness of all the facets and tasks which comprise a school's culture. He said that teachers and others should be working together in small groups. Senge (1990) and Hargreaves (1995) termed this "organizational learning" and "shared learning," respectively.

Enhanced learning outcomes are the premise upon which collaborative school cultures are based. It is believed that student achievement will improve as stakeholders have more input into policy decisions, faculty members are regarded as colleagues of administrators, and teachers foster collegial alliances among themselves (Fullan & Hargreaves, 1996; Glickman, 1993; Rosenholtz, 1991).

To facilitate change in an elementary school where teaching in isolation is the norm, a principal would need to facilitate a change in school culture (Deal & Peterson, 1999; Rosenholtz, 1989). Lambert (1998) recommended that principals improve the capacity of teachers to lead their own educational growth and collaborate with each other by changing the codependent relationship between principals and teachers. He suggested that principals should ask teachers for their thoughts on issues, help analyze issues and make decisions, and

renegotiate responsibilities of teachers and principals. Mentioned throughout the National Association of Elementary School Principals (NAESP) standards are expectations that the elementary principal would attend to adult learning and performance, and to create a culture of continuous learning for adults (NAESP, 2001).

Deal and Peterson (1999) suggested that a culture is what supports effectiveness and productivity in a school. They found that successful teachers valued and used the social resources at school to help them improve instruction. These teachers engaged in discussions with their peers on professional issues. They shared ideas, knowledge, and techniques and worked together to problem-solve classroom or teaching issues.

Murphy and Beck (1995) argued that a select group of executives can no longer control and manipulate the school. Since employee involvement is crucial for success, school boards, superintendents and administrators should adapt to involve all stakeholders. Yukl (2002) agreed, stating that management is no longer expected to have all the answers. Yukl (2002) further asserted that problem-solving is shifted to the level where there is the most expertise related to the problem with decision-making involving those individuals most affected by the decision.

Strong effective leadership is critical in instituting and nurturing a school's culture. School leaders set a tone for the school and have the power to create or destroy a positive culture (Edmonson, Fisher, Brown, Irby, & Lunenburg, 2002). They are role models for the type of culture they attempt to cultivate. Deal and

Peterson (1998) suggest how entwined a leader is in the development of a school's culture. Leader's words and actions communicate the school's core values in both small and large ways. They typically lead recognitions, celebrate traditions, communicate stories to the public, and portray the school's most fundamental messages (Deal & Peterson, 1999).

Conley and Bacharach (1990) found two elements critical for collaboration: (a) levels of teachers' participative decision-making and (b) the quality of the principal-teacher relationship. Their research affirmed the need for professional cooperation between principals and teachers because the lack of participation deprives teachers of the ability to make decisions, thus leading to dissatisfaction and work alienation. Shafritz and Ott (1996) identified authority, responsibility, discipline, unity of command and direction, and *espirit de corps* as necessary elements that lend themselves to the importance of the relationship between leader and constituents.

Leadership

Effective leadership is somewhat an elusive concept which has evolved from several leadership, social and cognitive systems, theories and models (Bass & Avolio,1993; Yukl, 2002). Understanding major leadership theories influenced where leadership is today and why leaders continue to be flexible in a changing environment. In educational settings, several leadership theories have been explored as effective which are instructional, transformational and shared leadership (Hallinger, 2003; Marzano et al., 2005). Transformational leadership

behaviors are thought to help organizations perform during change and stressful situations (Bass, Avolio, Jung, & Berson, 2003).

Marzano et al., (2005) explored the role effective leadership in a school plays in whether a school is effective or ineffective in increasing student achievement. These authors conducted a meta-analysis to explore the relationship between student achievement and leadership. They reviewed literature over the last 35 years which showed a quantitative relationship between leadership skills and academic achievement. With the increasing changes in the principal leadership responsibilities and the pressure to increase student achievement, selecting and developing principals with the right set of leadership skills is important.

Waters and Cameron (2006) furthered the research by Marzano et al. (2005) and presented a framework of balanced leadership components based on the 21 responsibilities of principal leadership. These leadership responsibilities or skills which relate to the performance of academic achievement of students will need to be validated and measured against leadership performance standards. Understanding leadership behaviors in the selection of a school principal might help to improve overall student testing and accountability in a school.

Lashway (2003) has defined the school principal as a leader of multiple roles which include improving academic performance, collaboration with teachers, parents and community and analyzing data and improving student overall educational proficiency levels. The role of the school leader has changed over the years with performance standards based more on traditional leadership

roles found in organizations. The performance standards now expected from school leaders include: creating and defining a vision; fostering goals and high expectations from staff; developing the employees' professional skills and providing resources and support; creating a school culture which fosters student learning and growth; and building collaborative relationships with stakeholders (Lashway, 2003).

It is the principal's leadership behavior that invites or impedes the development of a collaborative culture within the school. Collegial interactions do not develop without purposeful attention and they cannot be maintained without commitment to continuous renewal (Garmston & Wellman, 1995). Even though investment in this commitment should be shared among all staff members, it is the principal's responsibility to facilitate and empower teachers with the knowledge that allows interdependence to develop (Rosenholtz, 1991). Teachers can only effectively participate in school-based decision making if the principal is able to relinquish some control and cultivate the expertise and experience of teachers (Barth, 1988). Fullan (1991) pointed out that the most important job for the principal is to change the culture of the school.

Collaborative school cultures require new organizational forms and different images of leadership that digress from the traditional bureaucratic and hierarchical modes. These images provide the basis for the leadership behaviors which depict principals in collaborative cultures.

Change Process

Since improvement is necessary in schools, change is an ongoing process. The principal has the primary responsibility for the initiation of change. Changes that support collaboration require the principal to create an environment that prohibits isolation (Elmore, 2000). This type of environment requires that teachers in a school have common goals, value continuous learning, and a sense of responsibility for the learning of colleagues (Darling-Hammond & McLaughlin, 1999; Elmore, 2000; Hord, 2004; Rosenholtz, 1989).

A recent wave of studies on restructuring and change is the importance of the principal within the school. Leadership, some argue, is the ability to make needed changes. According to Houlihan (1988) the principal's leadership is critical. Studies conducted in 1979 by the states of Michigan, New York, Maryland, Pennsylvania, Delaware, and California all concluded that "as the principal goes, so goes the school" (Houlihan, 1988, p. 46).

The principal's leadership is vital to the improvement of schools. Hall, Rutherford, Hord, and Huling (1984) contended that principal's leadership style varies when change is implemented. Their research characterized these change facilitator styles as responder, manager, and initiator. Responder principals accentuate the opportunity for subordinates to take the lead. These principals also strive to maintain a smooth operating school by focusing on traditional administrative tasks. A related characteristic is the tendency to make decisions based upon immediate circumstances rather than long range instructional or school goals.

Manager principals, however, demonstrate both responsive behaviors and initiating actions. Manager principals perform without fanfare to provide basic support to assist teachers and to defend teachers from what are perceived as excessive demands, while initiator principals have clear, decisive long-range policies and goals that transcend but include implementation of current innovations. Initiator principals possess strong beliefs related to what is best for students and expect teacher to work intensely to attain this vision. While initiator principals respect district goals, priority is placed on the individual school's student needs (Hall et al, 1984).

Many factors should be considered by the principal who wants to implement any systemic change. Personal needs, the work environment, and the social and political atmosphere within the school are a few of these factors (Sergiovanni, 2001). All aspects of the school are important to change, since it is a system in which each facet affects others (Senge, 1990; Sergiovanni, 2001).

Teachers who are expected to change their habits and engage in collaboration are making a personal change. For principals to support this effort, it is helpful to understand stages of acceptance teachers that teacher typically go through. They will need to understand and support the thoughts and feelings of teachers as they attempt to make changes in the way they go about their work. The concerns-based adoption model detailed by Horsley and Loucks-Horsley (1998) explained the process of individual change and how a teacher typically thinks about the change during the process.

0   Awareness   -   I am not concerned about it.

1. Informational   I would like to know more about it.

2. Personal   How will using it affect me?

3. Management   I seem to be spending all my time preparing

    materials.

4. Consequence   How is my use affecting my students?

5. Collaboration   I am concerned about relating what I am doing

    with what other teachers are doing.

6. Refocusing   I have some ideas about something that would

    work even better. (p. 20)

The more that principals understand what they typical response to the process of change is for teachers, the more supportive they can be in facilitating the change.

According to Sergiovanni (2001), change in a school is made more difficult because of repeated patterns. On the school-wide level, teachers may understand and approve of the concept of teachers collaboration, but actual execution of the necessary behaviors may not occur at the individual level. These changes require the principal to set specific goals for implementation, target the needed materials, set up the schedule, and put needed supports in place.

Principals who have been most successful in effecting school-wide change have been those who stay very involved with teachers. They express clear expectations, and encourage input and involvement from teachers (Cotton, 2003; Fullan, 2001; Sergiovanni, 2001). Meaningful change requires individual and school-wide involvement. A principal alone cannot make change happen, but his or her supportive actions are necessary for a successful change (Dufour &

Eaker, 1998; Fullan, 2001; Schlechty, 2002; Sergiovanni, 2001). By overseeing the process of change, the school principal supports the development of teacher collaboration. The principal should clear the path to change and perform the function of a change facilitator.

Fullan (1992) addressed the issue of leadership for change by discussing the idea of collegial cultures in schools. Change involves learning to do something new and interaction is the primary basis for social learning. New meanings, new skills, and new beliefs are dependent on whether teachers are working as isolated individuals or exchanging ideas, support, and positive feelings about their work (Fullan, 1992). Each school has a life and personality of its own fed by everyday interactions and interactions. The quality of working relationships among teachers is strongly related to the successful implementation of change.

<div align="center">Summary</div>

As documented in this literature review, collaboration has the potential for increased teacher self-efficiacy and reflection, improved achievement by students, and the development of community within schools. As schools are given the responsibility for developing their own staff development programs, teacher collaboration becomes the perfect vehicle for this implementation. However to be effective, schools should go beyond what Hargreaves (1994) identifies as "contrived collegiality" to one of collaboration. A factor necessary for building collaboration is administrative support for the collaborative process (Dufour, 2004). The principal's role in creating and maintaining a collaborative

environment results from a variety of historical, cultural and organizational factors. This dissertation study will examine these factors in detail, as well as how these factors ultimately relate to student achievement.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this quantitative study was to determine the relationship

between leadership behaviors of elementary school principals and teacher

collaboration in their schools. The relationship between teacher collaboration and

student achievement was also examined. This chapter defines the (a)

independent and dependent variables, (b) hypotheses, (c) research design, (d)

planned data collection methods, and (e) planned data analysis methods used to

answer the research questions developed in Chapter 1. In Chapter 2, the

literature review analyzed concepts related to teacher collaboration and school

improvement. The topics that were examined were: leadership, professional

learning communities, school culture, teacher collaboration, professional

development, and change theory.

Research Design

This study used a quantitative approach to identify a relationship

between leadership behaviors, teacher collaboration, and student achievement.

Correlational analysis was selected as the preferred method of investigation over

other potential research methods. Quantitative designs describe, test, and

explain, whereas qualitative designs explore and comprehend (Creswell, 2002).

The correlational study examines variables in their natural environments and

does not include researcher-imposed treatments. Correlational studies are a type

of *ex post facto* study, where the research is conducted after the variations in the independent variable have occurred naturally (Simon, 2006).

Appropriateness of Design

A correlational study was appropriate because the variables in this study could not be manipulated or controlled. This study identified complex relationships and multifactors that explained outcomes. Objectivity, generalizability, and numbers, are often associated with quantitative methodologies (Simon, 2006). Creswell (2002) noted that quantitative research should be used to study research problems requiring a description of trends or to test a theory regarding the relationship among variables. As a result, an attempt to prove cause-and-effect relationships between the variables was not to be made. Rather, the study determined if an association exists between two or more variables. If a relationship between principal leadership and teacher collaboration exists, the relationship could be a contributing factor to understanding the reasons why teacher collaboration is not widely practiced in schools. The use of quantitative research for the study is supported as "formal, objective, systematic process in which numerical data are utilized to obtain information about the world" (Burns & Grove, 1993, p. 140.)

A case study was considered to study the relationship between teacher collaboration and principal leadership at one or more schools in Mississippi. In a case study, cases that typify the major dimensions of the problem are selected; that is schools with high and low teacher collaboration. The search then would have been for a random sample but for some specified population, which is a

relatively pure example of the phenomenon under investigation. The element of typicalness, rather than uniqueness, is the intent and focus of case study research because uniqueness would preclude scientific abstraction and generalization of findings. Although the individual case study is a time-honored procedure in the field of social science research, it is often criticized for portraying what could be an atypical situation (Verschuren, 2003).

It was for these reasons that a correlational design with a larger sample of participants was used with the hope of making greater generalizations and recommendations than a case study would permit. By correlating teacher collaboration with elementary principal leadership behaviors and student achievement, the study sought to ascertain whether and to what extent the variables are correlated.

Research Questions

This quantitative correlational study examined the leadership traits of elementary principals and collaboration among teachers in their schools. The following research questions guided this study:

1. Which leadership traits are related to high levels of student achievement?

2. Which leadership traits are related to high levels of general teacher collaboration?

3. Which leadership traits are related to higher levels of personal teacher collaboration?

4. Is teacher collaboration related to age, years of experience, and the number of years working with a principal?

Research Hypotheses

1. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the mean language and math scale scores of Mississippi fourth graders as measured by the MCT2.

2. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the general collaboration ratings ascribed to elementary teachers.

3. A combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the personal collaboration ratings ascribed to elementary teachers.

4. There is a statistically significant relationship ($p < .05$), between the variables of age, years of experience, and years working with the current principal and the variable of personal collaboration ratings ascribed to elementary teachers.

Participants

The population for this investigation consisted of elementary teachers from the state of Mississippi. During the 2006-2007 school year, there were 149 school districts, 433 elementary schools, and 19,530 elementary teachers in Mississippi.

Data Collection

A school data file was developed containing a list of all eligible schools from which the sample was selected. This school data file contained the size of each school, meaning the number of teachers available for inclusion in the sample. Teachers for this study were selected from schools where the principal has at least two years longevity in the school. Since the analysis of scores was dependent upon teachers' perceptions of the principals' leadership behaviors, it was necessary for teachers to have had time to develop these perceptions. For this reason, schools where the principal had less than two years tenure were excluded from this study, and teachers from these schools were not invited to participate as part of the sample.

Upon approval of the superintendents of the participating school districts (Appendix A) and the University of Southern Mississippi's Institutional Review Board (Appendix B), the librarian from each school was sent a packet of questionnaires for the teachers in each school. Each questionnaire included an informed consent statement. These were placed in the teachers' mailboxes with directions to return them to the school librarian.

In order to ensure that each school district had an equal chance to be included in the sample, simple random sampling was used and included the names of all 149 districts in Mississippi. The investigation was limited to twenty-two elementary schools in eight districts.

Instrumentation

The researcher developed a questionnaire (Appendix C) in order to survey the teachers in this sample. The questions included in the survey were designed to determine the teachers' perception of leadership behaviors displayed by their principals and to provide a profile of the instructional leadership and collaborative school culture. The questionnaire was divided into the following sections: (A) demographics, (B) leadership, and (C) general collaboration, and (D) personal collaboration. The participants recorded their answers about the leadership behaviors of the principal on a 5-point Likert continuum with the following ratings: 1 (never or almost never), 2 (not usually), 3 (occasionally), 4 (usually),and 5 (always or almost always). The collaboration section of the questionnaire included a 4-point Likert scale that included the following ratings: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). The different rating scales were used because the leadership section measured the teachers' perceptions of the frequency that the principals displayed these behaviors, while the collaboration section measured the teachers' level of agreement with statements about collaboration within their schools. The section of the questionnaire that measured the teachers' personal collaboration used the 5-point Likert scale.

In order to test the validity of the instrument, a panel of experts was assembled. Each was given a copy of the questionnaire and interview protocol to study. These experts in the field of education studied the questions as they related to the research questions for this study. Dialog was held between the

panel members and the researcher. The experts were asked the following questions: What is missing? What should be added to gain further information? What should be changed or reworded? What was unclear? Feedback was then given by the experts. The comments and suggestions were considered and adjustments were made to the instrument. Items on the questionnaire in the collaboration section were reworded to eliminate the use of the phrase "teacher team meetings." It was decided that this was repetitive and possibly confusing, since collaboration could possibly occur without the existence of established "teams."

Two schools with a sample of 46 teachers were chosen for convenience to conduct the pilot study. An SPSS analysis using the Cronbach's alpha reliability index indicated that the questionnaire was highly reliable. The Cronbach's alpha coefficients for the subsections of the questionnaire were .909 for q1 to q25 (Leadership), .930 for q26 to q48 (Collaboration 1), and .813 for q49 to 54 (Collaboration 2), indicating a high level of internal consistency within each construct. The Cronbach's alpha coefficient for the overall questionnaire was .945. This instrument used to collect data was developed by the researcher based on an extensive review of the literature designed to determine the leadership behaviors most frequently identified in collaborative work cultures.

Summary

This study was concerned with the relationship between the leadership behaviors of elementary school principals, as perceived by teachers, and the collaboration ratings (general and personal) ascribed to elementary teachers in

those schools. It also examined the relationship that those leadership behaviors have on the achievement of students in those schools. The significance of age, years of experience, and years working with the current principal was also evaluated. This non-experimental, correlational research design utilized in this study incorporated statistical techniques that describe the degree of relationship among the variables in mathematical terms. Chapter IV describes the results of the research.

CHAPTER IV

RESULTS

Introduction

The purpose of this quantitative study was to examine the relationship between principals' leadership behaviors, the existence of a collaborative school culture, and student achievement. The study was designed to gather information from current Mississippi teachers regarding leadership behaviors displayed by their principals and the levels of collaboration in their schools. Existing literature assisted in the development of a survey instrument (Appendix C) designed to gather this information. A secondary purpose of the study was to analyze the relationship between levels of collaboration and student achievement. The Mississippi Schools Accountability System was used to gather data on student achievement for the participating schools. The non-experimental, correlational research design utilized in this study incorporates statistical techniques that describe the degree of relationship among the variables in mathematical terms. Chapter IV introduces the descriptive statistics and statistical analyses for the study. Mean and standard deviations for group statistics are presented. From Chapter IV's statistical analyses, one can make inferences regarding whether or not a relationship exists between the selected independent and dependent variables. Both descriptive and statistical test analyses were conducted using SPSS. The following research questions were addressed in this study:

1. Which leadership traits are related to high levels of student achievement?

2. Which leadership traits are related to high levels of general teacher collaboration?

3. Which leadership traits are related to higher levels of personal teacher collaboration?

4. Is teacher collaboration related to age, years of experience, and the number of years working with a principal?

Overview of Data Collection

The instrument used to collect data for the first part of this study was developed by the researcher based on an extensive review of the literature designed to determine the leadership behaviors most frequently identified in collaborative work cultures. This instrument was assessed for validity and reliability, critiqued by a panel of experts in the field of education, and field-tested prior to dissemination.

A random sample of 22 public elementary schools from eight school districts was drawn from the population of 433 public elementary schools located in 149 school districts in the state of Mississippi that offer an elementary program. The names of all public school districts in the state of Mississippi were enter into a Microsoft Excel spreadsheet and numbered. A set of random numbers was generated in Microsoft Excel and the simple random sample was drawn from the school districts in the state according to the random numbers generated. This sample represents 5% of the K-6 public elementary schools, 5% of the public school districts in Mississippi, and 15% of Mississippi's counties.

Mailings were made to the librarians of each of the selected schools. The packets contained questionnaires for each of the teachers and a letter with directions for the librarian to distribute the questionnaires to each of the teachers in the school. Librarians were requested to collect the questionnaires upon completion by the teachers and return them to the researcher in an enclosed postage-paid envelope. The librarian was chosen to distribute and collect the questionnaires for confidentiality purposes. The researcher made the decision that teachers might be more honest about the leadership traits of their principal if they did not have to return the questionnaires directly to him or her.

In order to link teacher questionnaires to their respective schools, each school was assigned a number. This number was entered into SPSS along with the teacher responses for each questionnaire.

At the conclusion of the data collection process, the researcher received completed instruments from 161 teachers representing 15 of the 22 schools included in the sample. This number reflected 3% of the K-6 public elementary schools in Mississippi, 5% of Mississippi school districts, 15% of Mississippi's counties, and 31% of the original sample. Seven schools, or 31% of the sample did not participate in the study.

<div align="center">Descriptive Statistics</div>

The data collection instrument, "Leadership for Collaboration," gathered information from teachers in four different areas. The first section included demographic data on the teachers surveyed. These questions gathered data on the age, gender, race, years of experience, level of education, and years working

with the current principal of the participants. The second section of the questionnaire (questions 1-25) gathered information about the leadership behaviors of the principal, as perceived by the teachers, from each of the schools. Section three of the questionnaire (questions 26-48) consisted of questions about general collaboration behaviors within the participating schools. Section four (questions 49-54) was concerned with personal collaboration behaviors of these teachers.

In order to gain a complete depiction of the participant sample of this study and assess the normality of distribution of the participants, a series of descriptive analyses were performed using the demographic variables collected from the demographic survey. Frequencies were obtained to study the characteristics of each variable. Tables 1-8 present the demographic frequencies of this study's sample. As noted in Table 1, the grades taught by the elementary teachers who participated in this study were fairly evenly distributed between grades K-4, with fewer participating teachers teaching grades five and six. There were a few responses from teachers of grades 7 and 8 because of the configuration of their schools.

Table 1

Grade Level Taught by Teachers (N = 161)

Grade Level	Frequency	Percent
0	29	18
1	24	14.9
2	24	14.9

Table 1 (continued).

Grade Level	Frequency	Percent
3	30	18.6
4	25	15.5
5	16	9.9
6	7	4.3
7	3	1.9
8	1	.6

Participants were mostly white (69.6%) and overwhelmingly female (93.2%). Table 2 shows that elementary teachers in the 30-39 and 50-59 age brackets had the largest representation in the sample, while the 60-69 bracket had the smallest. Sixty percent of the teachers who participated in the study held a bachelor's degree and thirty-five percent had earned a master's degree. Teachers were fairly evenly distributed as to years of experience with the highest percentage having between 6 and 10 years (Table 3).

Table 2

Age of Teachers (N = 161)

Age	Frequency	Percent
20-29	30	18.6
30-39	42	26.1
40-49	27	16.8
50-59	48	29.8
60-69	9	5.6

Table 3

Teachers' Years of Experience (N = 161)

Years of Experience	Frequency	Percent
1-5	28	17.4
6-10	40	24.8
11-15	20	12.4
16-20	12	7.5
21-25	2	14.9
26-30	17	10.6
Over 30	20	12.4

Table 4 shows the breakdown of years each teacher had served in their current school. Fifty percent of participating teachers had been in the schools less than 5 years while twenty-one percent had been there between 6 and 10 years.

Table 4

Years in Current School (N = 161)

Years in Current School	Frequency	Percent
1-5	77	47.8
6-10	34	21.1
11-15	15	9.3
16-20	10	6.2
21-25	14	8.7

Years in Current School	Frequency	Percent
26-30	5	3.1
Over 30	6	3.7

Of particular interest for this study was the number of years that teachers had worked with their current principal (Table 5). Seventy-five percent of participants in this study had worked with their principal for less than five years. Given the data in Table 4, this would suggest that principal turnover is higher than teacher turnover.

Table 5

Years with Current Principal (N = 161)

Years With the Current Principal	Frequency	Percent
1-5	120	74.5
6-10	25	15.5
11-15	6	3.7
16-20	5	3.1
21-25	2	1.2
26-30	1	.6
Over 30	1	.6

Table 6 displays descriptive statistics for the 25 leadership behaviors measured in the study. Participating teachers rated principals according to the frequency that the individual behaviors were displayed using a 5-point metric (1 =

never or almost never to 5 = *always or almost always*). Item 13 was reverse

scored because a rating of *Never or Almost Never* was considered the most

favorable response. The items reported to occur most often were Item 1,

Focuses first and foremost on fostering achievement of student learning goals (*M*

= 4.70), and Item 23, *creates and maintains a shared sense of school purpose*

(*M* = 4.47). The items reported to occur least frequently were Item 13, [Does not]

tolerate ambiguity and uncertainty (*M* = 3.17), and Item 6, *Provides opportunities*

for teachers to observe each other (*M* = 3.48).

Table 6

Leadership Behavior Ratings Sorted by Highest Rated Frequency (N = 161)

Leadership Behavior	Minimum	Maximum	Mean	Standard Deviation
Focuses first on student achievement	3.00	5.00	4.70	.55
Creates a shared sense of school purpose	1.00	5.00	4.47	.86
Respects diversity among individuals	1.00	5.00	4.40	.83
Involves teachers in developing goals	1.00	5.00	4.39	.80
Monitors teachers' instructional progress	1.00	5.00	4.38	.89
Makes leadership a shared responsibility	1.00	5.00	4.37	.90
Provides positive performance feedback	1.00	5.00	4.31	.98
Encourages helping relationships	1.00	5.00	4.29	1.03
Trusts teachers' creative instincts	1.00	5.00	4.29	.92
Offers advice to teachers	1.00	5.00	4.22	.83
Supports inquiry and cooperation	1.00	5.00	4.21	.97

Table 6 (continued).

Leadership Behavior	Minimum	Maximum	Mean	Standard Deviation
Empowers teachers to problem solve	2.00	5.00	4.21	.86
Exhibits problem solving skills	1.00	5.00	4.21	.90
Reflects on administrative practices	1.00	5.00	4.20	.98
Structures teacher learning environments	1.00	5.00	4.12	1.02
Encourages teachers to teach each other	1.00	5.00	4.10	1.07
Mobilizes resources for teacher learning	1.00	5.00	4.09	.99
Orients new staff members to the school	1.00	5.00	4.09	1.08
Facilitates teacher learning networks	1.00	5.00	4.03	1.11
Provides time for sharing ideas	1.00	5.00	4.02	1.10
Gives specific performance feedback	1.00	5.00	4.02	1.01
Structures ways for teacher to collaborate	1.00	5.00	4.00	1.07
Solicits advice from teachers	1.00	5.00	3.99	.99
Provides ways for teachers to observe each other	1.00	5.00	3.48	1.39
Tolerates ambiguity and uncertainty.	1.00	5.00	3.17	1.33

[a] Ratings based on five-point metric (1 = *Never or Almost Never* to 5 = *Always or Almost Always*)

Table 7 displays the descriptive statistics for the 23 ratings the

participating teachers gave for the general level of collaboration within their

schools (questions 26-48). The ratings were given using a 4-point metric (1 =

Strongly disagree to 4 = *Strongly agree*). Collaboration items with the highest

rated agreement were Item 27, *My work with other teachers is beneficial to my*

students (*M* = 3.71*)* and Item 26, *My work with other teachers is professionally*

beneficial to me (*M* = 3.70). Collaboration items with the lowest rated agreement

were Item 36, *The team leader determines the majority of the content of our*

teacher meetings (*M* = 2.68)*,* and Item 37, *The team members determine the*

majority of the content of our teacher meetings (*M* = 2.71)*.*

Table 7

General Collaboration Ratings Sorted by Strongest Rated Agreement (N = 161)

Collaboration Ratings (General)	Minimum	Maximum	Mean	Standard Deviation
Beneficial to my students	2.00	5.00	3.71	.56
Professionally beneficial to me	2.00	5.00	3.70	.56
Purpose of collaboration is clear	1.00	5.00	3.63	.61
Principal supports collaboration	2.00	5.00	3.59	.68
Objectives of collaboration are clear	1.00	5.00	3.57	.65
I am an active participant	1.00	5.00	3.46	.78
Most teachers are active participants	.00	5.00	3.45	.79
Teachers are comfortable expressing opinions	1.00	5.00	3.45	.82
Objectives are usually met	1.00	5.00	3.43	.69
Principal is aware of accomplishments	1.00	5.00	3.42	.82
Principal plays a strong role	1.00	5.00	3.40	.86
Teachers respect others' difference	1.00	5.00	3.40	.82
I can express my opinion	1.00	5.00	3.38	.89

Table 7 (continued).

Collaboration Ratings (General)	Minimum	Maximum	Mean	Standard Deviation
There is sufficient time to accomplish goals	1.00	5.00	3.26	.89
Time is divided equally: curriculum, students, and teaching	1.00	5.00	3.23	.80
Principal determines content of meetings	1.00	5.00	3.24	.85
Teachers have similar teaching philosophies	1.00	5.00	3.20	.84
Time is mostly spent on curriculum	2.00	5.00	3.18	.77
Time is mostly spent on student concerns	1.00	5.00	3.12	.85
There are sufficient opportunities to meet	1.00	5.00	3.12	.91
Time is spent mostly on teaching practices	1.00	5.00	3.01	.78
Team members determine content of meetings	1.00	5.00	2.71	.88
Team leader determines content of meetings	1.00	5.00	2.68	.92

[a] Ratings based on a 4-point metric (1 = *strongly disagree* to 4 = *strongly agree*).

Table 8 displays the descriptive statistics for the six ratings the participating teachers gave for their personal collaboration behaviors (questions 49-54). The ratings were given using a 5-point metric (1 = *Never or almost never* to 4 = *Aways or almost always*). Personal collaboration items with the highest frequency rating were Item 51, *I have collaborated with another teacher in my*

subject area/grade this year (M = 4.14), Item 52, I have collaborated on

curriculum with another teacher in my subject area/grade this year (M = 4.08).

Personal collaboration behaviors that were rated as least frequently occurring

were Item 49, *I have asked another teacher to observe my teaching (M = 2.30),*

and Item 50, *I have observed another teacher teaching this year (M = 2.71).*

Table 8

Personal Collaboration Ratings Sorted by Highest Rated Frequency (N = 161)

Collaboration (Personal)	Minimum	Maximum	Mean	Standard Deviation
Collaborated within my grade/subject area	1.00	5.00	4.14	1.01
Collaborated on curriculum within my grade/subject area	1.00	5.00	4.08	1.06
Shared lesson plans with another teacher	1.00	5.00	3.67	1.23
Collaborated on curriculum outside my grade/subject area	1.00	5.00	3.47	1.23
Observed another teacher	1.00	5.00	2.71	1.43
Asked another teacher to observe me	1.00	5.00	2.30	1.10

[a] Ratings based on five-point metric (1 = *Never or Almost Never* to 5 = *Always or Almost Always*

Research Hypotheses

Hypothesis I

Hypothesis I stated that a combination of 25 leadership traits identified in

the literature as descriptive of principals in a collaborative setting is predictive, at

a statistically significant level ($p < .05$), of the language and math mean scale

scores of Mississippi fourth graders as measured by the MCT2. A simultaneous

multiple linear regression analysis was conducted for each achievement area (language and math). This multiple linear regression analysis with alpha set at .05 was calculated to predict student achievement in reading based on teachers' perceptions of leadership behaviors of the school principal (questions 1-25). The regression equation was not significant (F (25,115) = 1.538, $p > .05$) with an R^2 $_{adj.}$ = .08. The adjusted R^2 was used because of the small sample size relative to the number of predictors. Only eight percent of the variance in student reading achievement scores can be accounted for by the leadership predictors used in the model. These 25 leadership traits cannot be used to predict reading achievement scores for elementary students. Hypothesis 1 was rejected.

In order to test the second part of Hypothesis 1, a multiple linear regression analysis with alpha set at .05, was calculated to predict student achievement in mathematics based on leadership behaviors, as perceived by teachers, of the school principal (questions 1-25). The regression equation was not significant (F (25,115) = 1.575, $p > .05$) with an R^2 $_{adj.}$ = .09. The adjusted R^2 was used because of the small sample size relative to the number of predictors. Only nine percent of the variance in student mathematics achievement scores can be accounted for by the leadership predictors used in the model. The hypothesis was rejected. These 25 leadership traits cannot be used to predict mathematics achievement scores for elementary students.

Hypothesis 2

Hypothesis 2 stated that a combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at

a statistically significant level ($p < .05$), of the general collaboration ratings ascribed to elementary teachers. To accomplish this analysis a simultaneous multiple regression analysis with Alpha set at .05 was performed to assess the relationship between elementary principals' leadership behaviors, as perceived by teachers, and the level of teachers' general collaboration. The dependent variable, *collaboration,* was computed in SPSS by obtaining the mean for questions 26-48.

A significant regression equation was found (F (25, 115) = 3.347, $p <$ .001), with an $R^2_{adj.}$ of .295. The F value was significant and the the $R^2_{adj.}$ indicated that the combination of 25 leadership behaviors identified in the literature accounted for 30% of the variance in general collaborative rating ascribed to elementary teachers. However only one variable, Item 4, *Provides positive feedback to teachers about their performance,* was significantly and positively correlated with teacher collaboration (β = .288, $p < .05$). Hypothesis 2 was accepted.

Hypothesis 3

A simultaneous multiple regression analysis was conducted to test Hypothesis 3 which stated that a combination of 25 leadership traits identified in the literature as descriptive of principals in a collaborative setting is predictive, at a statistically significant level ($p < .05$), of the personal collaboration ratings ascribed to elementary teachers. The dependent variable, *collaboration2,* was computed in SPSS, by obtaining the mean for questions 49-54. Regression results showed that the linear combination of these 25 leadership behaviors, as

perceived by teachers, significantly predicted the personal collaboration ratings ascribed to elementary teachers. A significant regression equation was found (F (25, 115) = 1.630, p < .05), with an $R^2_{adj.}$ of .101. The F value was significant and the $R^2_{adj.}$ indicated that the combination of 25 leadership behaviors identified in the literature accounted for 10% of the variance in general collaborative ratings ascribed to elementary teachers. Although none of the individual predictors was statistically significant, Item 9, *Provides time for sharing ideas and activities* (β = .338, p = .055) was the strongest positive predictor in the model. Item 21, *Trusts teachers' creative instincts as much as his/her own* (β = - .260, p = .106)* had the strongest negative influence on the variance in personal teacher collaboration ratings.

Hypothesis 4

Hypothesis 4 stated that there is a statistically significant relationship (p < .05) between the variables of age, years of experience, and years working with the current principal and the variable of personal collaboration ratings ascribed to elementary teachers. This hypothesis was tested by calculating a simultaneous multiple linear regression equation to predict the personal collaboration ratings for elementary teachers based on their age, years of experience, and years working with the current principal. Tables 20 and 21 present the results of this analysis.

The regression equation was not significant (F (3.151) = 1.335, p > .05) with an $R^2_{adj.}$ of .006. The combination of the variables age, years of experience, and years working with the current principal cannot be used to predict personal

collaboration of elementary school teachers. Although none of the variables were significant individual predictors, it should be noted that the variable, *Years in Education,* was negatively associated with the dependent variable, *personal collaboration.*

Summary

The purpose of this chapter was to present findings from the study. Quantitative data collected from elementary teachers was presented in the form of narrative descriptions and statistical tables. Data was organized according to research hypotheses following descriptive statistics reported to investigate the relationship between teachers' perceived leadership behaviors of elementary principals in Mississippi, teacher collaboration, and student achievement. Chapter 5 presents the implications, conclusions, and recommendations of the study.

CHAPTER V

DISCUSSION

Introduction

The purpose of this quantitative study was to determine the relationship between elementary principal leadership behaviors, as perceived by teachers, and the level of collaboration among teachers, as measured by the Leadership for Collaboration Survey (LCS). A second purpose was to determine if these leadership traits of elementary principals had an effect on the achievement of students in their schools, as measured by the Mississippi Curriculum Test II (MCT2). The final purpose of the study was to examine the relationship between the demographic variables of age, years of experience, and years working with the current principal and the personal level of collaboration among elementary teachers. This study reviewed the previous literature and research on leadership and teacher collaboration.

Multiple linear regression was used to analyze the data and the results were used to test the research questions. This study was conducted using survey results from the Leadership for Collaboration questionnaire and school assessment results from the Mississippi Department of Education website. One hundred sixty-one elementary teachers from 15 schools across the state of Mississippi responded to the survey. The results from the analysis are summarized in this section.

Summary

This non-experimental, correlational study included elementary teachers from the state of Mississippi. Teachers rated their principal's leadership skills and behaviors as well as the general and personal collaborative behaviors among teachers in their schools.

A review of the literature was conducted to determine leadership behaviors most frequently identified in collaborative work cultures. From this review, the researcher designed an instrument to gather data, submitted the instrument to a panel of experts for evaluation, tested it for validity and reliability, field tested the survey instrument, made necessary revisions, and finalized the instrument. The assessment tool include questions to collect data about 25 independent variables which described leadership traits exhibited by principals in collaborative settings and two dependent variables which yielded general and personal collaboration scores. The instrument also included eight classificatory variables, three of which were utilized as a part of this study.

This was a state-wide study of Mississippi's K-6 public elementary principals conducted during the 2009-2010 school year. A total of 161 teachers from 15 schools in eight counties, participated in the study. The data on student achievement was obtained from the Mississippi Department of Education. These data were analyzed using descriptive, correlational, and inferential statistics.

Discussion

The relationship between student achievement in language and math, as measured by the MCT2, and 25 leadership traits identified in the literature as

descriptive of principals in a collaborative school setting was tested by Research Question 1. The results of this regression analysis revealed no significant linear relationship between 4th grade language or math achievement and elementary principals' leadership behaviors, as perceived by teachers. This finding is not supported by the literature which asserts that effective leadership is a vital link for effective schooling and teaching (Cotton, 2003; Marzano, 2003; Marzano et al., 2005). Though the analysis did not find a statistical significance, it did show that teachers' perceived leadership behaviors explain 8% of the variance in reading achievement and 9% of the variance in mathematics achievement in the selected schools. While these results were not statistically significant, they do, however, support literature which suggests that an effective school leader can have a positive influence on the overall academic achievement of students (Cotton, 2003; Marzano et al., 2005).

The lack of statistical significance for this hypothesis was surprising considering the abundance of literature which points to a link between leadership and increased student achievement (Cotton, 2003; Marzano et al., 2005). One reason for this may have been that this study tested the relationship between principal leadership behaviors, as perceived by teachers, and student achievement rather than the relationship between teacher collaboration and student achievement. The results for Hypothesis 1 support the research by Hallinger and Heck (1996) that suggested the link between principal leadership behaviors and student achievement is small and indirect. These researchers

found that the greatest impact a principal makes is in the area of vision, mission, and goals.

Research Question 2 tested the relationship between elementary principals' leadership behaviors, as perceived by teachers, and the general collaboration levels of teachers within their schools. Consistent with the corresponding hypothesis, leadership behaviors of elementary principals significantly and positively predicted the general levels of collaboration among teachers in their schools. The results indicated that approximately 30% of the variance in the general collaboration ratings ascribed to elementary teachers could be accounted for by the leadership behaviors of their principals, as perceived by the teachers. This finding supported literature cited in Chapter 2 that it is the principal's leadership behavior that invites or impedes development of a collaborative culture within the school. Teachers can only collaborate effectively if the principal is able to cultivate that collaboration (Cotton, 2003; Fullan, 2001; Marzano, 2003; Schlechty, 2002; Sergiovanni, 2001).

The variable, *Provides positive feedback to teachers about their performance,* was the strongest predictor of teacher collaboration. It was noted that this variable is very similar to one of the positive predictors for Hypothesis 1, *Gives specific examples of ways teachers can improve their performance.* This was another finding that was somewhat unexpected. Although performance feedback is critical to improving instruction, its link to collaboration among teachers is less clear. When teachers get specific feedback about instructional

performance, they may be more inclined to collaborate with other teachers about that instruction.

Research question 3 sought to determine if there was a statistically significant relationship between the elementary principal's leadership behaviors, as perceived by teachers, and the personal collaboration ratings ascribed to the teachers in that school. Regression results showed a significant positive relationship between leadership behaviors, as perceived by teachers, and teacher personal collaboration. These results indicated that 10% of the variance in the personal collaboration ratings ascribed to elementary teachers could be accounted for by the leadership behaviors of the elementary principals, as perceived by the teachers. These findings provided additional support for the study's main hypothesis. Teacher collaboration is affected by the leadership traits of the principal. Administrative support for the collaborative process is a necessary factor for building collaboration (Dufour, 2004).

Although these findings are moderate, they are substantively important. In fact, the finding of a positive link between elementary principals' leadership behavior and the collaboration of teachers in their schools is timely and significant, particularly in light of the growing consensus that "command and control" leadership models do not and will not work in the educational systems of today (Hale & Moorman, 2003). Based on these results, the researcher suggests that systematic efforts be made to provide professional development for elementary principals that will allow them to create the necessary organizational structures for effective teacher collaboration. The extant literature indicates that

collaboration yields positive outcomes for teachers. Those findings, in conjunction with the important results of this study, further substantiate the need for principals to be involved in collaborative efforts aimed at improving instruction for their students. These results also contribute important new knowledge to the existing research base by linking elementary principal leadership behavior to teacher collaboration for school improvement.

Research question 4 tested whether there was a statistically significant relationship between the variables of age, years of experience, and years working with the current principal. The results of the regression equation showed that there is no linear relationship between the variables of age, years of experience, and years working with the current principal and the variable of personal collaboration ratings. This regression model had no positive predictor variables. One variable, *Years in education,* was a negative predictor for personal collaboration ratings.

The findings of this study are somewhat conflicting in light of a growing body of research that suggests that principals in successful schools exhibit a specific pattern of behaviors which can and do have an impact upon student achievement in schools (Cotton, 2003; Marzano et al., 2005; Spillane, et al., 2004). This study did not find that a statistical relationship exists between leadership behaviors and the achievement of students. There may be several reasons for these findings.

The leadership behaviors used for the purposes of this study were identified in the literature as having the greatest potential for influence upon the

collaboration of teachers. A consensus on the definition of effective school leadership has not been reached; however there are several identifiers that are commonly held as being critical factors of effective leadership. These include (a) safe and orderly environment, (b) mission and vision, (c) stakeholder involvement, (d) monitoring school progress, (e) instructional focus, (f) high expectations for student performance, and (f) professional development (Nettles & Herrington, 2007). Since the design of this study focused on collaboration variables, the influence of several important dimensions of principal leadership were not measured.

The relationship between those leadership behaviors identified in the literature (Edmonson et al., 2002; Gideon, 2002; Rosenholtz, 1989) as having the greatest influence on the levels of collaboration (general and personal) among teachers were examined in detail. This study found that the leadership behaviors of the principal are related to the levels of teacher collaboration in a statistically significant way. These findings contribute important new knowledge to the existing research base regarding teacher collaboration. As mentioned in Chapter 1, most of the existing research in the area of teacher collaboration is qualitative in nature, and/or focuses only on teacher outcomes (Goddard et al., 2007).

In order to facilitate implementation of collaboration successfully, it is necessary to identify and address variables associated with teacher receptivity to collaboration. For this reason, teachers' age, years of experience, and years working with the current principal were investigated relative to their levels of teacher collaboration. This study found no significant relationship between the

selected demographic variables and the teachers' levels of collaboration. There is minimal literature to either support or refute this finding. Wood and Anderson (2003), however, found that newer teachers were more open to working collaboratively in professional learning communities than were the more veteran teachers. Simarly, Wade, Welch, and Jensen (1994) noted that teachers with 10 or more years of teaching experience and a long history in the same school were less interested in collaboration than those with less experience and less tenure in one school. Perhaps this was because teachers who have been in a particular school for a long time have assimilated the norms, values, and attitudes of its culture. These researchers found the reverse to be true as well. Teachers with less experience and less tenure in one school were more willing to collaborate with colleagues.

<div align="center">Limitations</div>

The following are considered as limitations of this study:

1. While correlational studies can suggest a relationship between variables, they cannot prove that one variable causes a change in another variable. Correlation does not prove causation (Simon, 2006). This study attempted to determine whether a relationship exists between certain administrator behaviors, teacher collaboration, and student achievement in elementary schools. However, these relationships cannot lead to a determination that certain leadership behaviors cause increased teacher collaboration or that they do not cause changes in student achievement.

2. The relationships found in this study can only be generalized to schools within the state of Mississippi since Mississippi teachers were the participants and Mississippi student assessment scores were analyzed.

3. The student achievement data for this study were for the school year 2008-2009. The survey data from teachers from these schools was for the school year 2009-2010. The teachers who participated in the study were most likely not all the same teachers who taught at the schools during the year that students tested.

4. Some of the schools had a much higher questionnaire return rate than others. This would cause the schools with the higher return rate to have a greater influence on the outcome of the analysis.

5. The principals' leadership traits were measured from the perceptions of their teachers. A variety of factors could have influenced the ratings that the teachers gave each principal, including personal like or dislike, past confrontations, or teacher performance evaluations.

6. The sample size was too small for the statistical power desired for the study.

Recommendations for Policy and Practice

High-stakes testing and accountability have become the focal point of today's educational landscape, and school leaders are under significance pressure to meet success and document the achievement of all students. Many

current reform initiatives include teacher collaboration as a critical element (Dufour & Eaker, 1998; Friend & Cook, 1990; Fullan, 1995).

When teachers collaborate, they share experiences and knowledge that promote learning for instructional improvement. From the perspective of organizational theory, collaboration is a form of lateral coordination that can improve organizational performance by fostering "creativity and integration around specific problems" (Bolman & Deal, 2003, p.55). Such learning can help teachers solve educational problems, which in turn has the potential to benefit students academically.

This study found that certain leadership traits of elementary principals are related to higher levels of teacher collaboration. With this information, principals and other educational leaders may improve their efforts to achieve high levels of teacher collaboration. As Schlechty (2002) has advised, school leaders should take stock of how things are, note what is needed to improve, then develop the capacity of the organization to make the changes needed to improve.

A shift in focus from being a "leader of teachers" to being a "leader of learners" is one of the most powerful changes a principal can make. A true collaborative environment requires that everyone is contributing member whose purpose is to learn from and teach one another. The results of this study indicate that, although teachers are the key players in the act of collaboration, school leaders have an important responsibility to foster an environment in which collaboration can be successful.

Recommendations for Further Research

Based upon this study's findings, several possibilities for future research are recommended.

1. This study did not find a statistically significant relationship between elementary principals' leadership behaviors, as perceived by teachers, and student achievement of students in Mississippi schools. Based upon the growing body of research to the contrary, more research is needed in this area. Specifically, this study should be replicated using student achievement data for schools for the year in which the teacher survey data is gathered.

2. This study only used data which represented the perception of teachers. Future studies could include a separate survey for principals and include the data in the design.

3. Research should be conducted which expands upon the effects of principals' vision, mission, and goal development. Clearly, this is an important responsibility of the elementary principals which calls for future research.

APPENDIX A

SUPERINTENDENTS APPROVAL LETTER FROM ONE SELECTED DISTRICT

AMITE COUNTY BOARD OF EDUCATION
533 MAGGIE STREET
P.O. BOX 376
LIBERTY, MISSISSIPPI 39645
TELEPHONE: (601) 657-4361
FAX: (601) 657-4291

April 5, 2009
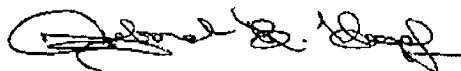
Ms. Angela N. McHenry

P.O. Box 466

Quitman, MS 39355

Dear Ms. McHenry:

This letter shall serve as verification that you have been granted permission to include the Amite County School District in your study to identify leadership behaviors related to teacher collaboration. Please feel free to send your questionnaires out to the two elementary schools in our district. Additionally, the school principals will be happy to assist you in gathering the information you need for your study.

I hope everything goes well in the completion of your dissertation. If I may be of further assistance with your project, please call me at 601-657-4361, ext. 300.

Respectfully;

Deborah B. Hopf

Superintendent of Education

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 29051101
PROJECT TITLE: **Administrator Behaviors Which Influence Teacher Collaboration**
PROPOSED PROJECT DATES: **05/01/09 to 08/31/09**
PROJECT TYPE: **Dissertation or Thesis**
PRINCIPAL INVESTIGATORS: **Angela Nix McHenry**
COLLEGE/DIVISION: **College of Education & Psychology**
DEPARTMENT: **Educational Leadership & Research**
FUNDING AGENCY: **N/A**
HSPRC COMMITTEE ACTION: **Expedited Review Approval**
PERIOD OF APPROVAL: **05/19/09 to 05/18/10**

Lawrence A. Hosman

_5-28-09_

Lawrence A. Hosman, Ph.D.
HSPRC Chair

Date

APPENDIX C

SURVEY INSTRUMENT

Leadership for Collaboration
Teacher Questionnaire

The purpose of this study is to determine how frequently public school principals in Mississippi exhibit leadership traits as important in collaborative school settings. It is part of a study being conducted by a doctoral student at the University of Southern Mississippi.

Because your school has been randomly selected to participate in this study, some of your teaching colleagues will receive this same invitation to respond. Your participation is vital to the success of this study.

Thank you for participating in this study. Your responses are confidential.

Please return this questionnaire in the envelope provided to your principal

A.   INFORMATION ABOUT YOU

1.   CURRENT POSITION: TEACHER, GRADE (s) _____

2.   GENDER: _____MALE   _____FEMALE

3.   RACE: _____BLACK
              _____WHITE
              _____OTHER
                    PLEASE SPECIFY:_____

4.   AGE: _____21-29 _____30-39 _____40-49 _____50-59 _____60-69

5.   HIGHEST LEVEL OF EDUCATION:
      _____BS _____MS _____DOCTORATE

6.   NUMBER OF YEARS WORKING IN EDUCATION SETTINGS:

      ____1-5 ___6-10 ___11-15 ___16-20 ___21-25 ___26-30 ___OVER 30

7.   NUMBER OF YEARS IN YOUR CURRENT SETTING:

      ____1-5 ___6-10 ___11-15 ___16-20 ___21-25 ___26-30 ___OVER 30

8.   NUMBER OF YEARS WORKING WITH THE CURRENT PRINCIPAL:

      ____1-5 ___6-10 ___11-15 ___16-20 ___21-25 ___26-30 ___OVER 30

B.   LEADERSHIP SECTION

Read the question and rate each characteristic using the scale below.

Never or Almost Never	Not usually	Occasionally	Usually	Always or Almost Always
1	2	3	4	5

HOW FREQUENTLY DOES YOUR BUILDING PRINCIPAL EXHIBIT THE FOLLOWING CHARACTERISTICS?

DESCRIPTION OF CHARACTERISTIC   RATING

1. Focuses first and foremost on fostering achievement of student learning goals   1._____

2. Involves teachers in developing shared goals about teaching   2._____

3. Frequently monitors teachers' progress in achieving instructional objectives   3._____

4. Provides positive feedback to teachers about their performance   4._____

5. Gives specific examples of ways teachers can improve their performance   5._____

6. Provides opportunities for teachers to observe each other   6._____

7. Mobilizes school resources to help teachers gain greater technical knowledge   7._____

8. Facilitates networks among teachers to exchange ideas about the best way
    to reach school goals   8._____

9. Provides time for sharing ideas and activities   9._____

10. Orients new staff members to the school   10._____

11. Exhibits effective problem-solving skills   11._____

12. Engages in communication that supports inquiry, cooperation, and the
    development of consensus   12._____

13. Tolerates ambiguity and uncertainty   13._____

14. Solicits advice from teachers   14._____

15. Offers advice to teachers   15._____

16. Empowers teachers to solve problems   16._____

17. Structures ways for teachers to work together to solve problems   17._____

18. Encourages helping relationships among teachers
    18._____

19. Encourages teachers to teach other through shared experiences, peer
supervision, etc.   19. _____

20. Respects diversity among individuals   20. _____

21. Trusts teachers' creative instincts as much as his/her own   21. _____

22. Makes leadership a responsibility for every teacher   22. _____

23. Creates and maintains a shared sense of school purpose   23. _____

24. Structures environments that help teachers learn to collectively discover and
receive acknowledgement for their own skills and talents   24. _____

25. Reflects on his/her own administrative practices   25. _____

C. COLLABORATION

Read the question and rate the degree of your agreement with each statement using
the scale below.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4

26. My work with other teachers is professionally beneficial to me. 26. _____

27. My work with other teachers is beneficial to my students.   27. _____

28. The purpose of working collaboratively with other teachers is clear.   28. _____

29. The objectives of my meetings with other teachers in my building
are clear.   29. _____

30. The objectives of my meetings with other teachers are usually met.   30. _____

31. The majority of the time in teacher meetings is spent
discussing/addressing student concerns.   31. _____

32. The majority of the time in teacher meetings is spent
discussing/addressing curricular issues.   32. _____

33. The majority of the time in teacher meetings is spent
discussing/addressing teaching practices.   33. _____

34. Time in teacher meetings is divided equally between
student concerns, curricular issues, and teaching practices.   34. _____

35. The building principal determines the majority of the content of
our teacher meetings.   35. _____

36. The team leader determines the majority of the content of our teacher meetings.

36. _____

37. The team members determine the majority of the content of our teacher meetings.

37. _____

38. The teachers in my team have similar teaching philosophies.

38. _____

39. I feel comfortable expressing my opinion even if it differs from the team.

39. _____

40. Most teachers on the team feel comfortable expressing their opinions even if it differs from the team.

40. _____

41. I am an active participant of the team.

41. _____

42. Most of the teachers on my team are active participants.

42. _____

43. The teachers on my team respect differences in each other.

43. _____

44. There is a sufficient amount of time in each teacher meeting to accomplish goals.

44. _____

45. There is a sufficient amount of consistent opportunities to meet with other teachers to accomplish goals.

45. _____

46. The school principal supports our meetings with other teachers.

46. _____

47. The school principal is aware of the accomplishments and personal dynamics of each teacher meeting.

47. _____

48. The school principal plays a strong role in the teacher collaboration process.

48. _____

Read the question and rate each characteristic using the scale below.

Never or Almost Never	Not usually	Occasionally	Usually	Always or Almost Always
1	2	3	4	5

HOW FREQUENTLY DO THE FOLLOWING ACTIVITIES TAKE PLACE IN YOUR BUILDING?

RATING

49. I have asked other teachers to observe my teaching?

49. _____

50. I have observed another teacher teaching this year?

50. _____

51. I have collaborated with another teacher in my subject area/grade this year.

51. _____

52. I have collaborated on curriculum with another teacher in my subject area/grade this year.

52. _____

53. I have collaborated by integrating curriculum with another teacher outside my subject area this year.

53. _____

54. I have shared lesson plans with other teachers this year.

54. _____

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. I APPRECIATE YOUR WILLINGNESS TO PARTICIPATE IN THIS STUDY. IF YOU WISH TO RECEIVE THE RESULTS OF THIS STUDY, PLEASE CHECK BELOW AND I WILL BE HAPPY TO SEND A COPY OF THE RESULTS TO YOUR SCHOOL.

_____ PLEASE SEND A COPY OF THE RESULTS TO MY SCHOOL.

Please return this questionnaire in the envelope provided to your librarian.

REFERENCES

Barth, R. (1988). School: A community of leaders. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 129-147). New York: Teachers College Press.

Barth, R. (1990). *Improving schools from within.* San Francisco: Jossey-Bass.

Barth, R. (2001). *Learning by heart.* San Francisco: Jossey-Bass.

Bass, B. M. (1985). *Leadership and performance beyond expectations.* New York, NY: Free Press.

Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public Administrative Quarterly, 17*(1), 112-121.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), 207-218.

Beaudoin, M., & Taylor, M. (2004). *Creating a positive school culture.* Thousand Oaks CA: Corwin Press.

Blankstein, A. M. (2004). *Failure is not an option: Six principles that guide student achievement in high-performing schools.* Thousand Oaks, CA: Corwin Press.

Blankstein, A. M. (2007). *Out of the box leadership.* Thousand Oaks, CA: Corwin Press.

Blase, J., & Blase, J. (2002). Teachers' perceptions of principals' instructional leadership and implications. *Leadership and Policy in Schools, 1*(3), 256–264.

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

Bottoms, G., & O'Neill, K. (2001). *Preparing a new breed of school principals: It's time for action.* Atlanta, GA: Southern Regional Education Board.

Bray, J. N. (2002). Uniting teacher learning: Collaborative inquiry for professional development. *New Directions for Adult and Continuing Edcuation, 94,* 83-91.

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

Burns, J. M. & Grove, K. (1993). *The practice of nursing research: Conduct, critique, and utilization* (2nd ed.). Philadelphia: Saunders.

Collins, J. (2001) *Good to great.* New York: Harper-Collins.

Conley, S., & Bacharach, S. (1990). From school-site management to participatory school-site management. *Phi Delta Kappan, 71,* 539-544.

Cotton, K. (2003). *Principals and student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Merrill Prentice Hall.

Danielson, C. (2002). *Enhancing student achievement: A framework for school improvement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Darling-Hammond, L., (1998). Teacher learning that supports student learning. *Educational Leadership, 55*(5), 6-11.

Darling-Hammond, L. & McLaughlin, M. (1999). Investing in teaching as a

learning profession. In L. Darling-Hammond & G. Sykes (Eds), *Teaching*

as the learning profession (pp. 376-406). San Francisco: Jossey-Bass.

Deal, T., & Kennedy, A. (1982). *Corporate cultures.* Reading, MA: Addison-

Wesley.

Deal, T. E., & Peterson, K. D. (1999). *Shaping school culture.* San Francisco:

Jossey-Bass.

DePree, M. (1989). *Leadership is an art.* New York: Dell Publishing.

DiPaolo, M., & Tschannen-Moran, M. (2003). The principalship at a crossroads:

A study of the conditions and concerns of principals. *NASSP Bulletin*

87(634), 43-65.

Dufour, R. (2001). *Professional learning community.* Presented at CSD's

Leadership Conference - Systems Thinking in Education: From Theory to

Practice. Retrieved July 8, 2007, from

http://info.csd.org/staffdev/rpdc/darticle.html.

Dufour, R. (2004). What is a "professional learning community"? *Educational*

Leadership, 61(8), 6-11.

Dufour, R., & Eaker, R. E. (1998). *Professional learning communities at work:*

Best practices for enhancing student achievement. Bloomington, IN:

National Education Service.

Dufour, R., Eaker, R., & Dufour, R. (2005). Recurring themes of professional

learning communities and the assumptions they challenge. In R. Dufour,

R. Eaker, & R. Dufour (Eds.), *On common ground: The power of*

professional learning communities (pp. 1-29). Bloomington, IN: Solution Tree.

Eaker, R., Dufour, R., & Dufour, R. (2002). *Getting started: Reculturing schools to become professional learning communities.* Bloomington, IN: National Education Service.

Edmonson, S., Fisher, A., Brown, G., Irby, B., & Lunenburg, F. (2002). Creating a Collaborative culture. *Catalyst for Change, 32*(3), 9-12.

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

Erickson, F., & Christman, J. (1996). Taking stock/making change: Stories of Collaboration in local school reform. *Theory into Practice, 35*(3), 149-157.

Friend, M., & Cook, L. (1990). Collaboration as a predictor for success in school reform. *Journal of Educational and psychological consultation, 1*(1), 69-86.

Fullan, M. (1991). *The new meaning of educational change.* New York: Teachers College Press.

Fullan, M. (1992). *What's worth fighting for in headship?* New York: Open University Press/ McGraw-Hill Education.

Fullan, M. (1995). The school as a learning organization: Distant dreams. *Theory Into Practice, 34,* 230-235.

Fullan, M. (2001). *The new meaning of educational change.* New York: Teachers College Press.

Fullan, M. (2004). *Leadership and sustainability: Systems thinkers in action.* ThousandOaks, CA: Corwin Press.

Fullan, M., & Hargreaves, A. (1996). *What's worth fighting for in your school?* New York: Teachers College Press.

Garmston, R., & Wellman, B. (1995). Adaptive schools in a quantum universe. *Educational Leadership, 52*(7), 6-12.

Gideon, B. (2002). Supporting a collaborative culture. *Principal Leadership, 3*(1), 41-44.

Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly, 42*, 124-156.

Glaser, J. (2004). *Leading through collaboration.* Thousand Oaks, CA: Corwin Press.

Glickman, C. (1993). *Renewing America's schools.* San Francisco: Jossey-Bass.

Glickman, C. D. (2002). *Leadership for learning.* Alexandria, VA: ASCD.

Goddard, Y. L., Goddard, R. D., & Tschnnen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement student achievement in public elementary schools. *Teachers College Record, 109*, 877-896.

Goddard, Y. L., & Heron, T. E. (2001). The consultation process. In T. E. Heron & K. C. Harris, *The educational consultant: Helping professionals, parents, and mainstreamed students* (4th ed., pp. 3-37). Austin, TX: PRO-ED.

Gruenert, S. (2005). Correlations of collaborative school cultures with student achievement. *NASSP Bulletin, 89*(645), 43-55.

Guskey, T. (2003). What makes professional development effective? *Phi Delta Kappan, 84*, 748-750.

Hale, E., & Moorman, H. (2003). Preparing school principals: A national perspective on policy and program innovations. Washington, DC.: Institute for Educational Leadership.

Hall, G. & Loucks, S. (1979). *Implementing innovations in schools: A concerns-based approach.* Austin, TX: Research and Development Center for Teacher Education, University of Texas.

Hall, G., Rutherford, W.L., Hord, S.M., & Huling, L.L. (1984). Effects of three principal styles on school improvement. *Educational Leadership, 84(5),* 22-30.

Hallinger, P. (1984). *Principal instructional management rating scale.* New York: Leading Development Associates.

Hallinger, P. (2003). Leading Educational Change: Reflections on the Practice of Instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 329-351.

Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980–1995. *Educational Administration Quarterly, 32*(1), 5-44.

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *The Elementary School Journal, 86*(2), 217–247.

Hallinger, P., Murphy, J., Weil, M., Mesa, R. & Mitman, A. (1983). School effectiveness: identifying the specific practices and behaviors for

principals. *NASSP Bulletin, 67*(463), 83-91.

Hargreaves, A. (1991). Contrived collegiality: The micropolitics of teacher Collaboration. In J. Blasé (Ed.), *The politics of life in schools: Power, conflict, and cooperation* (pp. 46-72). Thousand Oaks, CA: Corwin Press.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the post modern age.* New York: Teachers College Press.

Hargreaves, A. (1995). Renewal in the age of paradox. *Educational Leadership, 52*(7), 14-19.

Harris, A. (2004). School leadership and school improvement: A simple and complex relationship. *School Leadership & Management, 24*(1), 3-4.

Hawley, W. D., & Valli, L. (2000). *Learner centered professional development* (Research Bulletin No. 27). Bloomington, IN: Center for Evaluation, Development, and Research, Phi Delta Kappan International. Retrieved April 3, 2007 from http://www.pdkintl.org/research/rbulletins/resbul27.htm

Hersey, P., & Blanchard, K. (1993). *Management of organizational behavior.* Englewood Cliffs, NJ: Prentice Hall.

Hersey, P., & Blanchard, K. (1996). *Management of human organizational behavior: Utilizing human resources.* Englewood Cliffs, NJ: Prentice Hall.

Heck, R. H. (2007). Examining the relationship between teacher quality as an organizational property of schools and students' achievement and growth rates. *Educational Administration Quarterly, 43,* 399-432.

House, R.J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly, 16,* 321-339.

Hord, S. (1999). Creating learning communities. *Journal of Staff Development,* *20*(2), 44-45.

Hord. S. (2004). Professional learning communities: An overview. In S. Hord (Ed.), *Learning together: Leading together* (pp. 5-14). New York: Teachers CollegePress.

Horsley, D., & Loucks-Horsley, S. (1998). CBAM brings order to the tornado of change. *Journal of Staff Development, 19*(4), 17-20.

Houlihan, T. (1988). *School effectiveness: The key ingredients of schools with heart.* Springfield, IL: Charles C. Thomas.

House, R.J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly, 16,* 321-339.

Huberman, M. (1993). The model of the independent artisan in teachers' professional relations. In: J. W. Little & M. W. McLaughlin (Eds.), *Teachers work: individuals, colleagues, and contexts* (pp. 187-211). New York: Teachers College Press.

Huffman, J. (2003). The role of shared values and vision in creating professional learning communities. *NASSP Bulletin, 87*(637), 21-34.

Johnson, B. (2003). Teacher collaboration: good for some, not so good for others. *Eductional Studies, 29,* 337-350.

Joyce, B. & Showers, B. (2002). *Student achievement through staff development.* Alexandria, VA: Association for Supervision and Curriculum Development.

Katz, R. L. (1955). Skills of an effective administrator. *Harvard Business Review. 33*(1), 33-42.

King, D. (2002). The changing shape of leadership. *Educational Leadership,*
59(8), 61–63.

Kruse, S. (1999). Collaborate. *Journal of Staff Development, 20*(3), 14-16.

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

Lashway, L. (2003). Trends and issues: Role of the school leader. Retrieved
October 27, 2008 from
http://eric.uoregon.edu/trends_issues/rolelead/index.html

Lezotte, L. W. (1997). *Learning for all.* Okemos, MI: Effective Schools Products,
Ltd.

Little, J. (1987). Teachers as colleagues. In V. Richardson-Koehler (Ed.),
Educators' handbook: a research perspective (pp. 225-240). New
York: Longman.

Little, J. (1990). The Persistence of privacy: Autonomy and initiative in teachers'
professional relations. *Teachers College Record, 91,* 509-536.

Lopez, L. (2002). *Teacher talk: A community of colleagues that values practical*
teacher knowledge through sharing experiences (Doctoral dissertation).
Retrieved from ProQuest Digital Dissertations database. (Publication No.
AAT 3059786).

Lortie, D. (1975). *Schoolteacher: a sociological study.* Chicago: University of
Chicago Press.

Manouchehri, A. (2001). Collegial interaction and reflective practice. *Action in*
Teacher Education, 22, 86-97.

Marzano, R. (2003). *What works in schoolsl: Translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

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

Mitchell, C. (1999). Building learning communities in schools: The next generation or the impossible dream? *Interchange, 30,* 283-303.

Mississippi Department of Education. (2008) Retrieved July 31, 2009.

Morse, W. C. (2000). Foreword. In M. Friend & L. Cook, *Interactions: collaboration skills for school professionals* (3rd ed., pp. xi-xii). New York: Addison Wesley Longman.

Mumford, M., Zaccaro, S., Harding, F., Jacobs, T., & Fleishman, E. (2000). Leadership skills for a changing world: Solving complex social problems *Leadership Quarterly, 11,* 312-322.

Murphy, J., & Beck, L. (1995). *School-based management as school reform.* Thousand Oaks, CA: Corwin Press.

National Association of Elementary School Principals. (2001). *Leading learning communities: standards for what principals should know and be able to do.* Alexandria, VA: Collaborative Communications Group

National Center for Educational Statistics. (2008). Retrieved January 20, 2008. *No Child Left Behind,* www.ed.gov.

Nettles, S. M., & Herrington, C. (2007). Revisiting the importance of the direct

effects of school leadership on student achievement: The implications for school improvement policy. *Peabody Journal of Education, 82,* 724-736.

Northouse, P. G. (2004). *Leadership: Theory and practice* (3rd ed.). Thousand Oaks, CA: Sage.

O'Donnell, R. J., & White, G. P. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin, 89*(645), 56–71.

Pellicer, L. O. (2003). *Caring enough to lead* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Peterson, K.D., & Brietzke, R. (1994). *Building collaborative cultures: Seeking ways to reshape urban schools.* (Urban Monograph Series). Oak Brook, IL: North Central Regional Educational Laboratory.

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18,* 240-258.

Rey, J. (1999). *The effects of peer coaching on elementary teachers in the areas of district, school, and personal goals, cognitive development, and collegiality* (Doctoral Dissertation). Retrieved from ProQuest Digital Dissertations database. (Publication No. AAT 9926556).

Rosenholtz, S. J. (1989). *Teacher's workplace.* New York: Teachers College Press.

Saphier, J., & King, M. (1985). Good seeds grow in strong cultures. *Educational Leadership, 25*(4), 67-74.

Sawyer, L., & Rimm-Kaufman, S. (2007). Teacher collaboration in the context of

the *responsive classroom* approach. *Teachers and Teaching: Theory and Practice, 13*(3), 211–245.

Schein, E. (1985). *Organizational culture and leadership.* San Francisco, CA: Jossey-Bass.

Schlechty, P. (2002). *Working on the work.* San Francisco: Josey-Bass.

Schmoker, M. (1999). *Results: The key to continuous school improvement* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Schmoker, M. (2005). No turning back: The ironclad case for professional learning communities. In R. Dufour, R. Eaker, & R. Dufour (Eds.), *On common ground: The power of professional learning communities* (pp. 135-153). Bloomington, IN: Solution Tree.

Senge, P. (1990). *The fifth discipline.* New York: Currency Doubleday.

Sergiovanni, T. J. (1992). *Moral leadership: Getting to the heart of school improvement.* San Francisco: Jossey-Bass.

Sergiovanni, T. (2001). *The principalship: A reflective practice perspective.* Needham Heights, MA: Allyn & Bacon.

Shafritz, J., & Ott, S. (1996). *Classics of organization theory* (4th ed.). New York: Harcourt-Brace.

Sheppard, B. (1996). Exploring the transformational nature of instructional leadership. *The Alberta Journal of Educational Research, 42*(4), 325–344.

Simon, M. K. (2006). *Dissertation & scholarly research: A practical guide to start and complete your dissertation, thesis, or formal research project.*

Dubuque, IA: Kendall/Hunt.

Snow-Gerono, J. (2005). Professional development in a culture of inquiry: PDS

Teachers identify the benefits of professional learning communities.

Teaching and Teacher Education, 21, 214-256.

Spears, L. (1998). *Insights on leadership.* New York: Wiley & Sons.

Spillane, J., Halverson, R., & Diamond, J. (2004). Investigating school leadership

practice: A distributed perspective. *Journal of Curriculum Studies, 36,*

3-34.

Strahan, D. (2003). Promoting a collaborative professional culture in three

elementary schools that have beaten the odds. *Elementary School

Journal, 104,* 127-146.

Supovitz, J. (2002). Developing communities of instructional practice. *Teachers

College Record, 104,* 1591-1626.

Tollerfield, I. (2003). The process of collaboration within a special school setting:

An exploration of the ways in which skills and knowledge are shared and

barriers are overcome when a teacher and speech and language

therapist collaborate. *Child Language Teaching & Learning, 19*(1), 67-84.

Verona, G. S., & Young, J. W. (2001, April). *The influence of principal

transformational leadership style on high school proficiency test results in

New Jersey.* Paper presented at the meeting of the Annual Meeting of the

American Educational Research Association, Seattle, WA.

Verschuren, P.J. (2003). Case study as a research strategy: Some ambiguities

and opportunities. *International Journal of Social Research Methodology,*

6, 121-139.

Wade, S.E., Welch, M., & Jensen, J. B. (1994). Teacher receptivity to
collaboration: Levels of interest, types of concern, and school
characteristics as variables contributing to successful implementation.
Journal of Educational and Psychological Consultation, 5, 177-209.

Waters, T., & Cameron, G. (2006). *The balanced leadership framework:
Connecting vision with action.* Denver, CO: Mid-continent Research for
Education and Learning.

Wood, D. E., & Anderson, J. (2003). Towards the learning profession: Identifying
characteristics of successful continuing professional development in
schools. *Management in Education, 17*(5), 21-24.

Yukl, G. (2002). *Leadership in organizations* (5th ed.). Upper Saddle River, NJ:
Prentice Hall.

Zahorik, J. (1987). Teachers' collegial interaction: an exploratory study.
Elementary School Journal, 87, 385-396.

Zepeda, S. (2004). Leadership to build learning communities. *The Educational
Forum, 68,* 144-151.