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PRINCIPAL LEADERSHIP AND SCHOOL EFFECTIVENESS:
PERSPECTIVES FROM PRINCIPALS AND TEACHERS

by

Robert Herrera

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Submitted to the
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Advisor: Dr. Jianping Shen

Western Michigan University
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PRINCIPAL LEADERSHIP AND SCHOOL EFFECTIVENESS:
PERSPECTIVES FROM PRINCIPALS AND TEACHERS

Robert Herrera, Ed.D.

Western Michigan University, 2010

Principal leadership and its effect on student achievement have been well documented over the past two decades. However, the link between the principals' level of engagement in leadership practices and whether their schools met the accountability measure remains unexplored. The purpose of this study was to examine four research questions regarding (a) the extent of principals' engagement in seven leadership practices that are identified as enhancing student achievement in the literature, and (b) whether the level of engagement is associated with schools' success in meeting the accountability measure.

The study used data collected by the National Center for Education Statistics (NCES) and were taken from the 1999 - 2000 School and Staffing Survey (SASS). Data were collected from 4,842 districts and included 9,893 principals and 56,354 teachers. Among others, the survey collected data on teachers' and principals' perspectives on principals' engagement in various leadership practices and whether the schools met the accountability measure.

The findings indicated principals' perceived that they had a high level of engagement in leadership practices associated with order, discipline, resources, and input; and low level of engagement in culture, focus, and intellectual stimulation; and teachers

perceived their principals had a high level of engagement in intellectual stimulation and input, and low level of engagement in culture, order, discipline, resources, and focus.

The logistic regression analyses suggested that the principals' fulfillment of the leadership responsibilities, both from the principals' and teachers' perspectives, can be used to predict the likelihood whether the school would meet the accountability measure. From the principals' perspective, resources, focus, and culture are statistically significant predictors for school success; from teachers' perspective, resources and culture are statistically significant predictors for school success. Implications of the findings were discussed.

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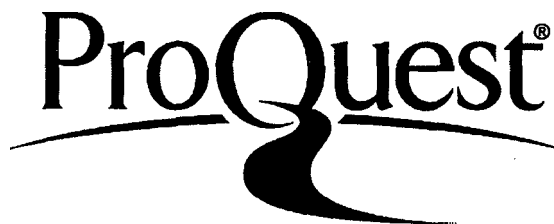
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Robert Herrera

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CHAPTER I

INTRODUCTION

Standards-based accountability is currently challenging many of our educational practices and beliefs. Over the past three decades, Federal educational reforms have led to rigorous performance goals in the core subject areas for all students and accountability measures that include sanctions for schools failing to make adequate progress toward the goals. In fact the most recent federal reform, No Child Left Behind (NCLB) Act of 2001, has accelerated changes in the educational environment by setting rigorous learning standards for all students and placing student achievement and school accountability in the public spotlight. The legislative expectation intended to reduce the achievement gap and insure all students test proficient in the core subject areas by 2014 is a standard that few schools will be able to achieve (Wiley, Mathis & Garcia, 2005). The reality of the reform is that school districts must now consider non-traditional programming and opportunities, as well as quality instruction for all students if they hope to meet the goals of NCLB.

Although this unprecedented focus on student achievement has received criticism from educators and their leaders, it has been generally accepted by the public. According to Paul D. Houston (as cited in Rose & Gallup, 2005),

Members of the public want to see the achievement gap closed and understand the achievement gap is created outside the schools; however,

they believe schools can overcome the ravages of social and economic conditions. While this belief is a vote of confidence for schools when coupled with the recognition that money is the biggest challenge facing schools and is increasingly difficult to find, these expectations could set schools up for failure if they cannot do what society will not do (p. 50).

Due to the complexity of this reform and our rapidly changing society, it is now essential for schools to have effective principals as leaders. As educational leaders, principals face the challenge of improving teaching and learning to ensure academic success for all students. According to Lashway (2003), the role of the principal is rapidly changing from simply encouraging teachers' efforts to leading teachers to produce tangible results. Presently, there is an abundance of research that supports the notion that leadership is one of the most important factors for improving student achievement. According to the Institute for Educational Leadership (as cited in NGA Center for Best Practices, 2003), the principal's main responsibility will be "instructional leadership that focuses on strengthening teaching and learning" (p. 1). The Mid-continent Research for Education and Learning (McREL) researchers concluded that effective principals have the capacity to improve student achievement by understanding the technical aspect of education, and knowing how and when to adjust their leadership practices (Waters, Marzano, & McNulty, 2003). In addition Fullan (as cited in Chappuis, 2004), "predicts that leadership will be to this decade what standards-based reform was to the last" (p. 18).

Historically, effective principals have only needed to possess sound managerial and political skills. However, 21st century expectations of schools are now requiring different types of leadership skills from principals. This stems from the fact that in addition to instructional and programming pressures, today's principals are also facing

challenges that include budgetary reductions, school safety, contract administration, supervision, data management and marketing. Thus, in addition to effective instructional leadership skills, a principal's effectiveness during this new educational era will also require complex knowledge and skills related to organizational culture and management. According to Elmore (as cited in Lashway, 2002) "this requires not just innovative practices, but a different mindset" (p. 3).

In summary, principals are in the midst of leading schools with higher academic standards and increased accountability measures from those of the past or even the last decade. Based on the external pressure created by NCLB today's principals will clearly require a different set of knowledge and skills. The fact that current research reports principal leadership as one of the most significant factors affecting student achievement clearly indicates principals must have a thorough understanding of their roles as instructional leaders. In addition, principals must also have the ability to fulfill each of their roles as instructional leaders by effectively utilizing researched based practices. However, considering the constraints, barriers, and realities principals face, their overall effectiveness, as judged by NCLB, will likely depend on their ability to select and implement the leadership practices that will have the greatest impact on student achievement.

Purpose of Study

This study will focus on seven of the 21 leadership responsibilities identified by McREL that correlate to improving student achievement. National data will be examined to determine principals' engagement and fulfillment of the seven leadership

responsibilities as reported by principals and teachers. Using the existing data the study will examine associated leadership practices of principals that align and support the McREL's leadership responsibilities: culture, order, focus, resources, discipline, intellectual stimulation, and input. More specifically the study will:

- Examine principals' engagement in associated practices reflective of seven leadership responsibilities as perceived by the principal
- Examine principals' engagement in associated practices reflective of seven leadership responsibilities as perceived by teachers
- Determine if the associated practice is a significant predictor of student achievement based on the level of engagement as reported by teachers and principals

Research Questions

Research Hypothesis/ Questions

1. What are principals' reported utilization of associated practices that support seven of the leadership responsibilities?
2. What are teachers' reports of principals' utilization of associated practices that support of seven of the leadership responsibilities?
3. To what extent do principals' perceptions of their utilization of practices associated with seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perceptions do predict whether their school passes the achievement standards, which of the seven leadership responsibilities are the significant predictors?
4. To what extent do teachers' perceptions of their principals' utilization of practices associated with seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perception does predict whether their school passes the achievement standards, which of the seven leadership responsibilities are the significant predictors?

Importance of Study

In general, this study is relevant because it examines principals' and teachers' observations of leadership practices and estimates the extent to which measures of principals' and teachers' observation of leadership practices can be used to predict the reported success of schools in meeting state mandated levels of student achievement. Evidence of a relationship between the measures of observed leadership behaviors and the reported success of schools in meeting mandated student achievement standards will be useful in helping to determine how principals allocate their time, prioritize their work and engage in specific leadership practices and behaviors.

Principal Perspective

From the principal's perspective this study has value because it continues to mine the existing research on specific principal practices to determine if leadership effects can be associated with specific practices and behaviors. The fact that leadership is rapidly evolving and has been defined in so many ways makes the results of research difficult to compare and generalize. Chappuis (2004), states "today's standards based environment is very different from when the focus was effective-schools research, and when instructional leadership and teacher supervision were the popular topics in principal training programs" (p. 18). Barth (as cited in Chappuis, 2004, p. 18) adds, "show me a good school and I'll show you a good principal. However, nailing down what defines 'good', especially as it relates to instructional leadership, has proved to be somewhat elusive" (p. 18). Therefore additional research illustrating the practical applications of

researched based leadership theories may enhance principals' abilities to effectively implement the leadership strategy.

Teacher Perspective

From the teacher's perspective, the study is of interest because it begins to explore the importance of teachers' perceptions of principals' leadership and their relationship to student achievement. There is an abundance of research that identifies principal leadership styles and behaviors that influences teachers' performance. For example, Marks and Printy (2003) state, "transformational leaders may challenge teachers to examine their assumptions about their work and to rethink their instructional processes; they may establish expectations for quality pedagogy and support teachers' professional growth." (p. 376). According to Edgerson and Kritsonis (2006):

Principals have the ability to improve teacher perceptions overall by simply attending to fundamental components inherent in quality relationships. As teachers begin to feel better about themselves and what their collective missions are as a result of significant interactions with their principals, they become more effective in the classroom (p. 2).

Unfortunately, there is limited additional research that focuses on the relationship between teachers and principals from the teacher's perspective. Therefore, this study is of interest because it begins to explore the relationship between teachers' perceptions of principals' leadership practices and student achievement.

Definition of Terms

Seven leadership responsibilities are continually discussed throughout this document. The definitions of the responsibilities and other commonly used terms are listed below for reference:

- Culture - Fosters shared beliefs and a sense of community and cooperation.
- Order - Establishes a set of standard operating procedures and routines.
- Discipline -Protects teachers from issues and influences that would detract from their teaching time or focus.
- Resources - Provides teachers with materials and professional development necessary for the successful execution of their jobs.
- Focus - Establishes clear goals and keeps those goals in the forefront of the school's attention.
- Input - Involves teachers in the design and implementation of important decisions and policies.
- Intellectual Stimulation - Ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture.
- Competencies - Set of knowledge, skills, and abilities.
- Leadership Models - Conceptual framework that allows the principal to make informed decisions and plan for effective implementation. The framework is typically developed by the principal's knowledge of leadership and past experiences.
- Roles - Actions and activities expected of the principal.
- Responsibilities - Functions and obligations that fall under the direct supervision of the principal.

- Associated Practices - Specific ways in which leaders directly participate in school related activities that can significantly impact student achievement.

Limitations of the Study

The study was limited by the fact that the data were collected from a survey instrument designed to collect general information regarding teacher and principal behaviors and perceptions on educationally related topics. Therefore, the survey questions used to establish teachers' and principals' perceptions of the associated practices reflective of each leadership responsibility may have been narrow in scope. In other words, the principal may have utilized other practices to address a leadership responsibility. In addition, the indicators of evidence reported by teachers that reflect the associated practices of the principal may also be narrow in scope, which may have influenced the results related to predictability of teacher perceptions to determine student academic success.

Summary

In summary, this study has merit because it attempts to move beyond general leadership theories and begins to examine certain aspects of principal behaviors and actions. First, the study will reveal extent to which principals engage in research based leadership behaviors and practices as reported by principals and teachers. Second, the study will reveal if principals' engagement in the practices as reported by principals and teachers can be used to predict the likelihood that school will meet state standards. The results of the study may lead to further investigation of specific principal behaviors and

actions that impact school conditions which lead to increased student academic success. In addition, the findings could also be used for the purpose of redesigning principal professional development programs and the restructuring the principal's role in schools.

Organization of Dissertation

The next chapter will consist of a review of the literature related to the study on a) general leadership theories and models b) impact of school reforms, c) the need for effective school leadership, d) leadership responsibilities and core practices, e) associated leadership practices, f) teachers' perceptions of effective principal practices and g) current realities that impact principal leadership. Chapter III will explain the instrument and methodologies used for answering the research questions. The finding of the research questions will be reported in Chapter IV and conclusions and implications will be discussed in Chapter V.

CHAPTER II

LITERATURE REVIEW

Seven research-based principal leadership responsibilities were the focus of this study. The leadership responsibilities were examined by identifying specific principal associated practices and teacher indicators in order to determine the degree to which the principal fulfilled each leadership responsibility. Initially the data were examined to determine the principals' and teachers' perceptions of the principals' fulfillment of each leadership responsibility. Further investigation of the data was then conducted to determine if the seven leadership responsibilities as reported by principals and teachers were significant predictors of student academic success.

The purpose of this chapter will be to review relevant literature related to the study of principal effectiveness and include the following: a) general leadership theories and models b) impact of school reforms, c) the need for effective school leadership, d) leadership responsibilities and core practices, e) associated leadership practices, f) teachers' perceptions of effective principal practices and g) current realities that impact principal leadership.

Effective Leadership Theories for Today's Principals

Early forms of effective principal leadership focused on the principal's ability to manage school processes and procedures related to instruction and supervision. However,

when considering the recent movements in education and changes in society it is understandable why principals must retool and acquire new knowledge and skills. Considering recent research there appears to be general agreement between researchers and practitioners that there are several leadership styles a principal could use to effectively lead today's educational organizations. However, the most effective leadership style would require less command and control, more learning and leading, less dictating, and more orchestrating (Dufour & Eaker, 1998). In fact, more recently effective principals have been viewed as transformational leaders that focus on establishing a vision and utilizing leadership skills such as innovation, influence and consideration for the individual in the school improvement process (Walters, Marzano, & McNulty, 2004).

Connelly and Goldman state, "initially transformational leadership was viewed as a personal quality or ability to inspire employees to look beyond self-interest and focus on organizational goals" (as cited in Lashway 1995). However, as leadership theories have continued to be researched another form of transformational leadership has evolved termed "Facilitative Leadership". Facilitative leadership is defined as "the behaviors that enhance the collective ability of a school to adapt, solve problems, and improve performance" (Connelly & Goldman, 1994). In this style, the facilitator's role is to foster the involvement of employees at all levels. In other words, a leader should create a school culture that promotes collaboration, involvement, and empowerment of teachers and the school community. In contrast, any form of leadership that focuses on manipulating teachers and school culture to reach a personal vision or agenda will only create a climate and culture that detracts from the district's vision. Stolp (1994) contends, "Healthy and

sound school cultures correlate strongly with increased student achievement, motivation, and with teacher productivity and satisfaction" (p.1).

Although much of the current research indicates that the most effective form of leadership reflects transformational or facilitative approaches, most would caution any educational leader who attempted to focus solely on one leadership style. Thomas Sergiovanni (1994) suggests that organizations, like people, exist at different developmental levels. A school that has traditionally operated with strong top-down decision-making may not be ready to jump into a facilitative environment. In this type of environment, a leader may chose to wear two types of hats- leader and administrator (Starratt 1995). As leaders, principals should not only foster the vision that expresses the school's values but also develop the structure and policies that provide support for the vision. Lashway (1996) adds, "In short running a school does not seem to require all-or-nothing strategic choices. Effective leadership is multidimensional" (p. 5).

Based on this research, it appears an effective principal's leadership style should incorporate facilitative or transformational models. However, the ability to choose or blend appropriate leadership theories and strategies seems to be an essential part of effective principal leadership.

Leadership Constructs

Effective principals must not only consider appropriate leadership theories and styles to shape their intentions and actions, they must also possess essential knowledge and skills in the context of education reform in order to be effective in a school setting. For example, effective principals must have an extensive knowledge base in the area of

school improvement and the skills to effectively implement the initiatives. Based on various models of effective leadership and without disregard to other aspects of good leadership, an effective instructional leadership model would include the following competencies: establishing a shared vision, communicating the vision, creating a culture and empowering others. The following paragraphs will provide a general overview of each of the aforementioned competencies within the overall model and discuss associated implications for competency.

Shared Vision

Shared vision relates to the leader's ability to create and communicate a realistic, credible, and desirable future for the organization (Bennis, 1997; Dufour & Eaker, 1998; Fullan, 2001). According to Bennis, Sprietzer, and Cummings (2001), one of the most important aspects of leadership is the ability to develop a vision. Bennis (1997) also suggests the quality of effective leaders is determined by their capacity to create and realize a vision.

In order to develop a shared vision, the leader must consider two aspects. First, the leader must be able to envision a future with exciting and ennobling possibilities. Second, the leader must be able to enlist others in a common vision by appealing to the group's aspirations (Burns, 1978; Fullan 2001; Kouzes & Posner, 2002). One of the keys to developing a vision that is exciting, realistic, and credible is to make sure the vision has moral purpose. Fullan (2001) defines moral purpose as "acting with the intention of making a positive change" (p. 13). For example, an educational leader may be committed to educating students but must also treat staff fairly. Treating everyone fairly can be

obtained by encouraging interaction among different groups and welcoming diverse interests and goals. Therefore, in order to influence others to commit to a vision the leaders must focus on making deeper connections with people and the relationships should be genuine (Bush, 1995; Fullan, 2001; Maxwell, 1998).

More often than not, leaders fail by their inability to create a vision that is realistic and exciting and considers the values and interests of the staff. Effective leaders find creative ways to develop visions that do more than simply focus on measurable products (student achievement). Effective leaders acknowledge they must also recognize the importance in developing and establishing relationships so that people feel connected and part of the greater whole.

Communication

As we know, a principals' ability to communicate is a key factor to their effectiveness. Effective principals are continuously searching for new strategies and means of communicating with their external and internal publics. Bennis (1997) maintains that a vision that is not understood remains a mere occurrence, but one that is understood can become a living experience. Therefore one determining factor of a principal's ability to effectively communicate is whether he or she can connect with the intended audience. Burns (1978) states, "one of the leader's fundamental acts is to induce people to be aware or conscious of what they feel—to feel their true need so strongly, to define their values so meaningfully, that they can be moved into purposeful action" (p. 44). To do this, principals must establish a connection or rapport with their staff. After establishing the connection, the principal may take many approaches towards

communicating the organization's goals and vision to move the staff into action. One way communication can move teachers into action is by illustrating to them the disequilibrium and disorder that exists and how it has reached a point where it can no longer be ignored (Fullan, 2001; Wheatley, 1999). In addition, principals need to realize that it will take more than verbal rhetoric to effectively communicate the goals and priorities of the school. As leaders, principals' non-verbal communications are equally important in determining the effectiveness of their leadership by positively or negatively influencing the school culture. Therefore, principals need to continuously be aware of their behaviors (Morgan, 1997). Effective principals can build trust and credibility, ensuring their behaviors and actions are consistent and align with the communicated vision and goals (Dufour & Eaker, 1998; Kouzes & Posner, 2002; Maxwell, 1998; Manns & Sims, 2001).

Unfortunately, no matter how effective a principal's communication skills are, there will always be uncertainty in the goals established by the district. Bush (1995) suggests that this ambiguity keeps the staff from fully understanding their purposes because the goals of the organization are unclear. In addition, if there are no clear goals then principals have an inadequate basis for assessing the actions and achievements of the organization. One strategy to improve communication and reduce the ambiguity associated with goals would be to focus less on comprehensive planning. Implementing school improvement activities in more subtle ways and considering school reform as a process rather than an event will help the principal to ensure the goals are constantly communicated and embedded in the daily work of the school.

In summary, in order to improve the effectiveness, principals need to develop strategies to effectively communicate the vision and then model the way. A principal's

ability to create a vision and communicate the reality of the vision to others is what separates managers from leaders (Bennis, 2000). However, it is important that principals not overlook the degree to which the goals and purpose of the school remain unclear to some of its members.

Creating Culture

In general, culture can be defined as "the assumptions, beliefs, values, and habits that constitute the norms for that organization" (DuFour & Eaker, 1998, p. 131).

Based on this definition, how important is a healthy culture to the improvement efforts of a school? Sarason (1996) states:

To put it as succinctly as possible, if you want to change and improve the outcomes of schooling for both students and teachers, there are features of the school culture that have to be changed and if they are not changed, your well-intentioned efforts will be defeated (p. 340).

Based on Sarason's statement, it is obvious if principals want to implement effective school reforms, they must commit to developing healthy cultures in their schools. How important is it for principals to develop a healthy culture within their school? Sergiovanni (1994) adds, "the cultural aspect is the most important dimension of leadership. In fact, the net effect of the cultural force of leadership is to bond together students, teachers and others as believers in the work of the school" (Bush, 1995, p. 138).

However, even if the principal understands the importance of culture, their ability to change the culture is another matter. Although it seems reasonable to assume that all teachers and other adults have the ability to work collaboratively and innovatively

together, Dufour and Eaker (1998) state, "altering beliefs, expectations, and habits that have gone largely unexamined for many years is a complex, messy, and challenging task" (p. 133). Based on the complexity of school culture and climate what perspectives or strategies should a principal first consider in order to begin to effectively change the school culture in a positive way? Wagner (2006) suggests that principals first find a way to accurately assess their schools' culture then begin to address the critical aspects of school environment that impacts culture. The Center for Improving School Culture (2002) adds, "where there is no 'one size fits all' culture for classrooms, schools, or school districts, we have been able to identify and measure three discrete 'culture markers' that, when present, strengthen the culture. These markers include: (a) professional collaboration, (b) affiliation and collegiality, and (c) self-determination and efficacy."

Other research- based strategies for improving school culture include developing shared values, providing opportunities for reflective dialogue, and celebrating successes as effective means to help shape the organization's culture (DuFour & Eaker, 1998; Fullan, 2001, Kouzes & Posner, 2002; Maxwell, 2001). Bolman and Deal (1997) also indicate, "managers that understand symbolic forms and activities and encourage their use help shape an effective organization—so long as the organizational culture is aligned with the challenges of the organization" (p. 232).

In summary, if future leaders want to be effective they will need to move from ignoring the importance of culture to building a knowledge friendly culture by developing new skills and identifying strategies that will allow them to shape the culture of their organization (Bennis, Sprietzer & Cummings, 2001; Fullan 2001).

Empowerment

One of the most important competencies of today's principals is their ability to empower the staff. In an educational setting there are far too many areas for one person to have an expertise let alone manage. Kouzes and Pozner (cited in St John, 2006) state, "leaders strengthen and develop their constituents by sharing power and information, and by giving others visibility and credit. As coaches and teachers, they give constituents challenging tasks and support them with the tools they need to be successful." If the leader expects all staff to develop a strong commitment to the end goal then they must provide them with the independence to strategize and act. In an educational setting, this independence may take the form of the staff becoming the instructional leaders or experts and the principal becoming the lead facilitator. In this sense, effective leaders are those that act as transformational leaders who empower, motivate, teach and learn from the staff (Blanchard, Carlos & Randolph 2001; Burns, 1978; Dufour & Eaker, 1998; Fullan, 2001; Kouzes & Posner, 2002).

Leaders who find themselves unable to empower others often create barriers within the organization they can't overcome, which leads to people giving up or moving to another organization (Maxwell, 1998). Thus, leaders who do not understand empowerment and believe it is simply shared decision making will often find themselves in a transactional or supervising mode. Blanchard, Carlos and Randolph (2001) suggest, real staff empowerment is generated by effectively utilizing the knowledge, experience and enthusiasm that is already in people but is being underutilized.

History of School Reform

During the past three decades, the expectations of schools and educational leaders have been established in congruence with several state and national educational reforms stemming from the report, *A Nation at Risk*, the Federal Goals 2000 Initiative, and the Federal No Child Left Behind (NCLB) Act. As noted throughout the past three decades, schools have been pressured to transform in response to various federal initiatives but more recently schools have also had to respond to various societal demands.

Most recently, the push to transform schools to provide students with the 21st century skills necessary to compete in the global market is radically changing the expectations of schools and forcing educational leaders to reexamine their roles and responsibilities. According to the Institute of Educational Leadership (2000), these additional demands include increasing parental complaints about the quality of education, private sector requests for higher skilled workers, rapid advances in technology, and the growing popularity of school alternatives such as charter schools, schools of choice, private education, and virtual schooling.

In order to illustrate the changing educational environment that schools and their educational leaders have been challenged to address since the early 1980's. A brief synopsis of each reform will be highlighted and will include the implications each held for schools and their leaders.

A Nation at Risk

The report, *A Nation at Risk*, began to reveal the crisis in education in the United States by calling out schools for their poor performances. The National Commission on

Excellence in Education (1983) reported inefficiencies in K-12 public education, which were evidenced by low basic comprehension rates as well as high dropout rates. The report led the public to believe that the nation was at risk due to an ineffective educational system. The report made this concern clear by stating, "our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world" (National Commission on Excellence in Education, 1983, p. 1).

The report resulted in a push for school reform, which in turn caused states to quickly respond by becoming more involved in their educational systems. Immediately many states began to focus on improving graduation rates and implementing standards based outcomes to ensure equitable student testing programs. Unfortunately, as Owens (2004) indicates, attempts at improving schools did not result in the amount of successes intended. Owens (2004) states:

The lack of success was due to the fact that the top down reform efforts failed to consider "altering the central core of assumptions and structures...of schools" (p. 220). According to Datnow and Stringfield (2000) "we know that the improvement of schools is possible when the reform effort is well thought out, when teachers are active agents in the change process, when there are sufficient resources and time to support reform, when capable leadership is present, and when school cultures change along with school structures" (p. 184).

Due to the failed reform efforts, the remainder of the 1990s focused on more systemic approaches of reforming schools such as the Comprehensive School Reform (CSR) models. "Comprehensive School Reforms focused on reorganizing and revitalizing entire schools, rather than on implementing a number of specialized, and

potentially uncoordinated, school improvement initiatives" (Borman, Hewes & Brown 2002, p. 2). However, in most cases comprehensive school reform efforts did not translate into improved academic success for all students. This may have been because Comprehensive School Reforms affects so many aspects of the schools culture, it truly required systemic change. The fact that CSR models were so complex there was no single strategy to assure a school would succeed in the implementation of a CSR plan. Therefore, the primary burden of the reform effort fell on the principal who had to utilize a facilitative approach toward implementation by engaging and committing the teachers to the reform effort (Hord, 2002).

Unfortunately the most critical aspect, often overlooked, resulting in a failed CSR model was the teachers. According to the Education Commission of States report, *Comprehensive School Reform: Five Lessons from the Field* (1999),

Without the active support of a majority of teachers, comprehensive reform is doomed. Teachers are more likely to back an effort if they have been involved from the beginning. This means inviting teachers to help set goals, study models, interview developers and select the model. Teachers not involved in the decision making process may ignore comprehensive reform efforts or leave the school. Mandating a comprehensive reform model does not work (p. 16).

The Nation at Risk era of school reform closed with CSR and led to new approaches toward school reform, which focused on more local control. The new approaches utilized a facilitative model of leadership, which led to a site-based management philosophy that supported the concepts of decentralization, teacher empowerment, and parental involvement.

Goals 2000

Another federal attempt at educational reform was Goals 2000, initiated in 1994 by Congress and the Clinton administration. This reform called for the establishment of a National Education Standards and Improvement Council with the purpose of establishing and monitoring national and state standards and assessments. The initiative also broadened the nation's educational focus on a set of eight national goals, known as Goals 2000. The eight goals of the Educate America Act (1994) focused on school readiness, school completion, student achievement and citizenship, teacher education and professional development, mathematics and science, adult literacy and lifelong learning, safe and drug-free schools, and parental participation.

Unfortunately, the Goals 2000 initiative also failed to produce the intended results. According to Kirkpatrick (2003), "none of the eight education goals for the year 2000 was achieved and Congress shut down the national goals panel two years later. There was little or nothing to show for almost 20 years of increased effort and expenditures following *Nation at Risk*." Knudsen and Morrissette (1999) state, "when carefully examined, it appears that these objectives were designed without fully understanding social factors that influence American families and schools. Without the necessary support systems in place, such grandiose goals cannot be realized and reform will not be forthcoming" (para. 35).

No Child Left Behind Act

Continued concerns that public school systems were still not adequately preparing students for the 21st century, coupled with the large gap in student achievement and

parents requesting alternative school options ultimately led to the development of our most recent educational reform - the No Child Left Behind (NCLB) Act of 2001.

NCLB is based on the belief that setting high standards for all students and measuring each student's academic success will ensure improved educational outcomes. In general, the goals of NCLB act include: (a) the achievement of all students in reading/language arts, mathematics and science, (b) the requirement that all students be taught by highly qualified teachers, (c) the desire for all students to graduate from high school, and (d) the need for schools to be violence-free (ESEA, 2001). In addition, NCLB also requires each state to establish standards and assessments for reading/language arts, math, and science and hold schools accountable for meeting these standards.

Present day reform efforts continue to address many state and federal top down standards associated with NCLB, which are directing most of the changes in the public schools. However, the process of school change is at the discretion of local educators. Unfortunately, according to Bowman, Hewes and Brown (2002):

.. the problem is that the complex educational changes demanded by current standards-based reform initiatives, combined with an increasingly heterogeneous student population largely composed of students whom schools have traditionally failed, have pushed the technology of schooling toward unprecedented levels of complexity. In many ways, expecting local educators to reinvent the process of educational reform, school by school, is both unrealistic and unfair (p.1).

Effects of NCLB

Although many would agree that schools have failed to fully live up to the standards set in past reforms, it does appear there are some recent signs of success. In

fact, over the past few years it appears the nation's schools are making some progress in the NCLB standards-based system. According to the Center on Educational Policy (2008) report, *Has Student Achievement Increased Since 2002: State Test Score and Trends Through 2006-07*, it appears that student statewide and national test scores in reading and math scores have risen, and achievement gaps between various subgroups of students have also narrowed in states with sufficient achievement data since NCLB went into effect. In addition, the primary finding of a study conducted by Northwest Evaluation Association (NWEA) reports good and bad news indicating that since the implementation of NCLB, math and reading scores have improved and students in grades with state tests have higher achievement and growth than students who are not. However, student growth in every ethnic group has decreased slightly (Cronin, Kingsbury, McCall & Bowe, 2005).

However, on a less hopeful trend, Hall and Kennedy (2006) report:

Middle and high school achievement has improved somewhat, especially in mathematics. But four years into NCLB states have struggled when it comes to closing the achievement gap in these grades. And it is clear that they are not making progress at nearly the rate needed to get all students to at least grade level standards (p.1).

Plus, considering the fact that states have also been allowed to set their own proficiency levels on state achievement tests, our progress may be even more dismal. For example, in Michigan, a score of 34 percent on the 8th grade math test will earn students a proficient ranking. According to Hill and Harvey (2004):

The truth is that, after two decades of well-publicized effort, public school systems in the United States remain about where they were in 1983, particularly those systems in urban areas. When progress can be discerned,

it is fragmentary, fragile, and confined almost exclusively to the elementary school years. Middle schools have barely changed at all, and high schools have become the black hole of reform, into which good ideas are sucked, never to be seen again. Two enormous problems that have characterized big-city schools for years—a troubling achievement gap between minority and white students and high school dropout rates hovering around 50 percent for Hispanic and African American students—remain essentially unchanged (p. 1).

From a national perspective, US achievement rates look even worse. According to Katy Haycock (2009) the results of 17-year-old achievement scores in the US on the NAEP in reading and math have remained flat since 1984, but the gap between ethnic groups has gotten wider since 1990. Without surprise concerns continue to grow even more alarming on an international level when comparing the Programme for International Student Assessment (PISA) results of the US to the thirty member countries of the Organization for Economic Co-operation and Development (OECD). These results ranked the U.S at 24 of 29 in Math, 21 of 30 in Science and 24 of 29 in problem solving. In addition the U.S held the 4th largest socio economic achievement gap in science and the 6th and 8th largest achievement gap in problem solving and math (Haycock, 2009).

Overall, regardless of any progress we have made, it is clear that our schools are still far from effectively implementing strategic and sustainable initiatives to reduce the achievement gap. When considering adding the appropriate rigor and relevant instructional opportunities to curriculums to allow our students to compete internationally, our schools' failures have become even more transparent.

The Need for School Leadership

It is apparent that most schools have still not met legislative and societal expectations and the question of how well federal reform initiatives have improved schools success lies somewhere between little to none. In fact, even though schools have attempted to implement mandated reforms and initiatives they continue to be viewed as producing students that are less than prepared for the world of today (Jazzar & Algozinne, 2006). Thus, the real concern is whether our schools can be saved. If current reform efforts have been ineffective, what are the supports and guidance necessary for schools to address the achievement gaps and ensure our students have the 21st century skills to compete internationally?

Considering the most recent guidance from federal and state initiatives, the abundance of available research based instructional strategies and school improvement models even believers in public schools must ask "why the limited success?" Could it be our schools simply lack the ability and will to implement educational reforms and school improvement initiatives effectively? Many people believe the scarcity of capable educational leaders may be a root cause. One thing we know for certain is that the present day challenges associated with high academic rigor, within the context of a standards based reform initiated by the passage of No Child Left behind, will require strong leadership if schools plan to ensure all students academic success.

The Institute for Educational Leadership's Task Force on the Principalship (2000) reports, "without strong leaders schools have little chance of meeting any other challenge" (p. 1). The Task Force also suggests that exemplary schools have an effective

leader who sets the tone for the rest of the school and engages all stakeholders- teachers, students, parents and other staff around the common goal of improving student learning.

A survey of principals and superintendents completed by the public Agenda in 2001 found that 99% of superintendents and 97% of principals say that behind every great school is a great principal. In addition, it was also reported that more than two thirds of superintendents and principals believe that with strong leadership, even the most troubled schools can be reformed (National Conference of State Legislatures Task Force on School Leadership, 2002).

In addition to reports from those in the field, several research-based studies also support the relationship between effective leaders and student achievement. Reynolds (2002) states, "there is not an effectiveness study worth the name that does not show the leadership of the school as one of the keys to effective schooling" (p. 1). Specific research supporting Reynolds include the study of the Alignment of the Standards for School Administrators identified with student achievement in the state of Virginia, Kaplan, Owings and Nunnery (2005), indicated the following:

Although the principal's effect on student achievement may be indirect, it is crucial. The principal controls the most important factors affecting a school's teaching and instructional quality, including attracting, selecting, and keeping outstanding teachers; working with the school community to establish a common mission, instructional vision, and goals; creating a school culture grounded in collaboration and high expectations; facilitating continuous instructional improvement; finding fair, effective ways to improve or remove low-performing teachers; and producing excellent academic results for all students as gauged by external tests aligned with state academic standards (p. 29).

Leithwood (1996) adds, "nothing else outside of the school helps create

conditions in the school which foster the individual and collective learning of teachers as much as school leadership" (p.1). In addition, a study conducted by the Mid-Continent Research Laboratory for Education and Learning (McRel) analyzing over 70 studies of 2,894 schools, 14,000 teachers, and 1.1 million students, revealed that the quality of leadership has a significant relationship to student achievement. McRel researchers report the results of the investigation, which resulted in the conclusion that leadership matters, by finding a significant positive correlation between effective school leadership and student achievement (Walters, Marzano & McNulty, 2004).

Leithwood, Louis, Anderson, and Wahlstrom (as cited by the Center for Comprehensive School Reform and Improvement (2005) make two important claims:

" leadership is second only to classroom instruction among all school related factors that contribute to what students learn at school" and "leadership effects are usually largest where and when they are needed most" (p.1). Based on a review of several research studies, Gaziel (year) concludes, "the effective principal comes to fore as an instructional or educational leader who affects the school climate and student achievement" (p. 17).

Leadership Responsibilities / Core Practices

In addition to the aforementioned competencies within the context of a leadership model, research has also provided principals with more context specific roles and responsibilities to guide their actions in establishing effective schools.

In general, effective principals are able to increase the capacity and collective efficacy of their staff to ensure academic success for their students. Linda Lambert (2005) defines leadership capacity as, "an organizational concept meaning broad based, skillful

participation in the work of leadership that leads to lasting school improvement" (p. 38).

How do effective principals develop leadership capacity? Reeves (2007) states that effective leadership leverage depends on four essential leadership practices:

- The creation of a consistent definition of proficiency for students, teachers and leaders;
- Public reporting on progress towards proficiency,
- Continuous professional reflection on the gap between the ideal state of proficiency and the present reality of a school; and
- The establishment of a moral imperative for consistency in academic and behavioral expectations for students (p.1).

Another set of principal responsibilities for effective leadership identified by the Center for Comprehensive School Reform and Improvement indicates that effective principals focus on setting the direction, developing people, and redesigning the organization (The Role of the Principal in Improving Student Achievement 2005).

According to DeVita (2004) principals impact student achievement:

- By setting directions - charting a clear course that everyone understands, establishing high expectations and using data to track progress and performance,
- By developing people - providing teachers and others in the system with the necessary support and training to succeed, and
- By making the organization work - ensuring that the entire range of conditions and incentives in districts and schools fully supports rather than inhibits teaching and learning (p. 1).

Associated Practices

As illustrated, there is an abundance of information on the roles and responsibilities of effective principals that lead schools in the development of a culture that promotes high student expectations resulting in high achievement. However, in addition, many experts in educational leadership have also moved beyond principal competencies and responsibilities and identified specific associated practices that focus more on specific practices and behavior rather than styles or broader competencies.

Waters, Marzano and McNulty (2003), and Waters and Grubb (2004), describe these associated practices as the specific ways in which leaders (a) directly participate in curriculum design and implementation, (b) support and promote effective instructional practices, (c) recognize individual and school accomplishments and (d) adapt their leadership to address the context-specific needs of teachers, students, and other stakeholders. Is it possible to define leadership in terms of specific actions and behaviors? In other words, are there specific principal behaviors and practices that will predict student achievement?

McREL researchers Waters, Marzano and McNulty (2004) have identified 21 key areas of leadership responsibility that are significantly correlated to student achievement. The McREL researchers have also identified 66 related leadership practices that can be used to fulfill each of the 21 leadership responsibilities. Overall, the researchers concluded that effective leaders understand which school changes are most likely to improve student achievement, what these changes imply for both staff and community, and how to tailor leadership practices accordingly (Waters, Marzano & McNulty, 2004).

The Center for Comprehensive School Reform (2005) suggests that successful principals focus on three core practices for improving student achievement: (a) setting the direction, (b) developing people, and (c) redesigning the organization. However, in addition, they also provide more specific leadership practices for the practical application of each core practice such as (a) stimulating teachers intellectually, (b) providing teachers with individualized support, (c) building collaborative processes, (d) modifying organizational structures, (e) empowering others, and (f) providing instructional guidance.

The Maryland State Department of Education website lists 41 performance indicators to help provide clarity and specificity about the skills, beliefs, and knowledge a principal needs to demonstrate within five performance areas to be effective leaders in improving student achievement. Examples of the performance indicators are: (a) providing time for collaborative problem solving; (b) engaging the entire staff in analyzing student achievement data, (c) ensuring assessment, curriculum and instruction is aligned, (d) establishing a regular, predictable process to track the impact improvement efforts have on student achievement, and (e) aligning school resources with school improvement priorities.

Bulach, Boothe and Pickett (2006) developed a survey instrument approved by the National Council of the Professors of Educational Administration (NCPEA) that can be used to analyze 49 specific positive and negative behaviors of how principals interact with staff. The authors report, "the survey can be used to measure a principal's leadership behavior, as an early indicator of the schools culture, climate, and eventually student achievement" (p. abstract).

Examples of the behaviors measured by the survey are as follows: my principal

(a) demonstrates a caring attitude, (b) remains distant, (c) displays lack of trust, (d) makes snap judgments, (e) interrupts my teaching, (f) fails to follow-up, (g) holds people accountable, (h) delegates responsibility, (i) has double standards, (j) shows favoritism, (k) provides positive reinforcement, (l) models good communication skills, and (m) involves me in decisions (pp. 5-10).

Teachers' Perceptions of Effective Principals

Teachers' overall effect on student achievement has long been a topic of interest for Harry Wong. At the conclusion of a review of four decades of educational innovations intended to set out to increase student achievement, Wong (1999) found, "the only factor that increased student achievement was the significance of the teacher. Thus, administrators create good schools and good teachers create good classrooms." (p. 1) Therefore, any form of leadership that helps to increase teachers' knowledge of their content and improve their classroom management skills should be a consideration.

In essence, the primary role of the principal is to increase individual teacher efficacy and the staff's collective efficacy. Individual efficacy is often described as individual teachers' beliefs about their ability to influence student learning, whereas collective efficacy represents teachers' perceptions regarding the staff ability as a whole to ensure student learning.

In support of this concept, McQuigan (2009) states, "if the daily actions of principals make a difference in student academic achievement, schools can be improved by improving or replacing principals" (p. 2). Thus, every effort should be made to fully understand the role of principal leadership in improving teacher efficacy using qualitative

and quantitative evidence. The end goal would be to identify specific leadership behaviors that enhance teachers' efficacy, and design strategies to increase these behaviors among school principals.

Unfortunately, there has been little research of teachers' views on principal practices that positively influence their classroom practices. One study, conducted by Blase and Blase (2001), investigated teachers' descriptions of their principals' attitudes, strategies, behaviors and goals that had an influence on their classroom instruction. The survey results indicate, "there were two major themes that principals exhibit in effective instructional leadership: (a) "talking with teachers to promote reflection and (b) promoting professional growth" (p. 22).

Barnett, Marsh, and Craven's (2003) study on teacher satisfaction indicates, that teachers were positively influenced by their principals' individualized considerations and negatively influenced by their principals' laissez-faire leadership behaviors.

Berube, Gaston and Stephans (2004) state, teachers' perceptions of the principal as instructional leader can have a major impact on the school culture because, "if the teachers think their principal is only a manager, the culture of the school and professional development will reflect that" (p 1). According to a study by Hsieh and Shen (1998), teachers reported that empowerment, communication, problem solving, learning theories, integrity, trust, and credibility have the greatest impact on their instructional practices.

Bulach, Boothe and Pickett's (2006) research on teachers' perceptions of principals suggests that principals' human relation skills, levels of trust, the way decisions are made, and the failure to empower subordinates and deal with conflict are often why principals are either successful or not successful as educational leaders.

Realities of the Principalship

It is apparent there is an abundance of available research that provides models and specific strategies and actions to guide and support principals in the establishment of a culture that supports positive outcomes for students and their schools. Therefore, the question to be sought is not how can principals create high achieving learning environments for students but instead why are they not?

On the surface, it seems reasonable to assume that principals could learn and effectively implement the research based strategies and practices. However when considering the overall implications the past three federal reforms and our radically changing society has had on our schools, many have overlooked how the breadth of the principal's job has continued to expand. In fact, according to McGuire (2002), today's principal is under extreme pressure not only to be an instructional design and delivery experts but also to be expert consensus builders, marketing and public relations experts, security and safety experts, administration and building managers, and special education experts. Lezotte and McKee (2006) acknowledge these additional responsibilities by stating, "the effective leader must now be a "jack of all trades" and a "master of all" (p. 6). Unfortunately, the realities of these additional demands have made it difficult for principals to allocate adequate time and energy as an instructional leader. Jacob (2009.) states "while the conventional wisdom and educational research assert that instructional leadership correlates positively with quality teaching and learning, the sad fact is that most principals devote little time to supervising this absolutely crucial dimension of schooling enterprise.

Jacobs (2009) continues by stating "principals should spend 80% of their time attending to technology of schooling (that is, curriculum, teaching and learning matters) and the other 20% of their time attending to the more routine matter of school management". However Murphy's (1990) summary "indicates that in many cases principals would be devoting more than double the amount of time they presently do to curriculum teaching and learning" (as cited in Jacobs 2009). Cooley and Shen (2003) (as cited in Lashway), "found that secondary principals reported they were engaged in new roles that had simply been 'layered' over the old job. That is, instead of replacing former responsibilities or being integrated into the job, the new duties were simply added to what was already there" (p. 3). McGuire (2002) also reports that for principals:

Planning is difficult because the job is frequently reactive rather than proactive with the principal required to offer immediate response to much of what transpires in a typical day. Searching out a role model becomes a game of hide and seek because the job keeps evolving. Principals find themselves reinventing the position because structure and guidelines are so elusive (p. 2).

Thus, it seems even principals with the best intentions of focusing their efforts on instructional matters have found it almost impossible due to the nature and structure of the job. Once again, this may be never ending due to the fact that the principal's roles are always expanding and urgent issues will always take precedent. However, another reason for the lack of effective instructional leadership may simply be due to principal inability to fulfill the leadership practice. Leithwood (2004) states, " school leadership consists of practices that are unique to the particular school and reform context in which one is working, as well as practices that are an important part of being an effective leader in any

context" (p. 6). Lezotte (2006) states, "each demands a different set of knowledge and skills, most of which today's leaders have not had the opportunity to learn" (p. 6). One reason principals are ill-prepared for the job may be due to the lack of appropriate professional development opportunities. According to Frakas (2001) (as cited in Lashway 2003), a recent public agenda survey found that 69% of principals and 80% of superintendents believed that typical principal leadership programs "are out of touch with the realities of what it takes to run today's schools" (p. 33).

Frakas (2003) (as cited in Hess: Kelly 2005) also reports:

Principals themselves are among the first to agree that they need to be more effectively prepared for their jobs. All but 4% of practicing principals report that on-the-job experiences or guidance from colleagues has been more helpful in preparing them for their current position than their graduate school studies. In fact, 67% of principals reported that "typical leadership programs in graduate schools of education are out of touch with the realities of what it takes to run today's school districts (p.4).

Unfortunately, it appears the associated practices of effective instructional leaders will be difficult to fulfill. Especially if one considers all the demands placed on a principal in real world situations and the fact that principal preparation programs have not kept pace with changes in school environment. However, regardless of the barriers and challenges principals face, there are pockets of success. In fact, many principals have found ways to create exemplary schools despite the current realities. McGuire (2002) concludes, "when a school does achieve a high level of success, it is usually with the help of strong leadership and in spite of these tremendous barriers" (p. 2). Therefore, in order to find the answer to principal effectiveness we must really examine the following

questions. Do principals' daily actions and practices reflect the research? If so, how effective are the principals at implementing the practices and do these actions and practices significantly affect student achievement?

CHAPTER III

METHODOLOGY

This study examines principal leadership practices and observable indicators of evidence reflective of seven out of 21 leadership responsibilities identified by McREL that significantly impact student achievement.

Based on availability, efficiency and effectiveness the researcher will utilize a nationally representative data set established by the National Center for Educational Statistics which consists of data collected through the 1999 - 2000 Schools and Staffing Survey (SASS). The researcher will investigate the leadership responsibilities of culture, order, discipline, resources, focus, input and intellectual stimulation, due to the fact that SASS data can be used to successfully examine the targeted questions.

More specifically this study examined the extent to which principals engage in the leadership responsibilities associated with student achievement, from both teachers' and principals' perspectives. In addition, further investigation will determine the extent to which the seven leadership responsibilities as reported by principals (associated practices) and teachers (indicators of evidence) can be used to predict the reported success of schools in meeting mandated levels of student achievement.

Importance of Study

Even though there is an abundance of data supporting general models and strategies for educational leaders, much work still remains to determine what specific

leadership actions help to improve student academic achievement. This is evidenced by the fact that although many principals understand the broader roles and responsibilities of effective leaders, they appear to lack the knowledge and skills to engage and implement the practices effectively.

Currently, there are limited studies that focus on the associated practices of effective leaders and indicators of evidence which could provide evidence that the principal implemented the associated practice effectively and it significantly impacted student achievement. Therefore, many questions still remain regarding the impact that different associated leadership practices may have on student achievement. In addition, there is also limited information regarding effective leadership from the teacher's perspective. Blase and Blase (2001) indicate that very few studies have been conducted relative to what associated practices teachers think make principals effective and impact their classroom instruction.

This chapter will discuss the methodological approaches used by the researcher including the survey design (instrument, participants and data collection), variables (survey items and measurement scales), data analysis (methodologies), and limitations of study. This study is unique due to the fact that it examines nationally collected representative data, which allows for comparison of teachers' and their principals' perceptions on specific leadership practices. In addition, the study will also allow the researcher to determine the predictability of the associated practices for student academic success.

Research Hypothesis / Questions

1. What are principals' reported utilization of seven of the leadership responsibilities?
2. What are teachers' reports of principal's utilization of seven of the leadership responsibilities?
3. To what extent do principals' perceptions of their utilization of practices associated with seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perceptions do predict whether or not their school passes the achievement standards, which of the seven are the significant predictors?
4. To what extent do teachers' perceptions of their principals' utilization of practices associated with the seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perception does predict whether their school passes the achievement standards, which of the seven leadership responsibilities are the significant predictors?

Survey Design

Data collected by the National Center for Educational Statistics (NCES) through the 1999-2000 School and Staffing Survey (SASS) was utilized by the researcher. The survey was the method of data collection. SASS data allowed the researcher to link data provided by schools with their respective principals and teachers. In addition, the survey design also provided a means to allow the researcher the ability to examine information collected directly from the school personnel.

Instrumentation

The 1999-2000 version of SASS continued to collect information in the areas of teacher shortage and demand, characteristics of elementary and secondary teachers,

teacher workplace conditions, and characteristics of school principals and school programs. However, as compared to prior surveys, it also began to collect information on school and district performance reports, standards for home schooled students, charter schools, migrant students and availability and use of technology applications.

This study specifically examined the data from three questionnaires included in the 1999-2000 SASS survey: The Public School District Questionnaire, the Public Principal Questionnaire, and the Public Teacher Questionnaire. Brief descriptions of each survey are as follows.

Public School District Questionnaire

The Public School District Questionnaire collected data about conditions in schools such as student characteristics, staffing patterns, student/teacher ratios, types of programs and services offered, length of school day, high school graduation rates and if the school met state standards for academic progress.

Public Principal Questionnaire

The Public Principal Questionnaire required both objective responses and subjective responses. Objective responses collected demographic information on public school principals. Subjective responses collected information on principals' frequency of engagement in various school and school-related activities, their perceived degree of influence on student performance standards, barriers to recruiting retaining and dismissing teachers, and rewards and sanctions for meeting district or state performance standards.

Public Teacher Questionnaire

The Public Teacher Questionnaire also required objective and subjective responses. Objective responses collected information about education and training, teaching assignment, teaching experience, certification, and teaching workload. Subjective responses collected data on perceptions and attitudes about teaching, job mobility, workplace conditions, and decision making practices.

Participants

The participants included in this study are from traditional K-12 public schools, and include district level administrators, principals and teachers.

Data Collection/Response Rates

Data collection for 1999-2000 SASS took place during the 1999-2000 school year. The U.S. Census Bureau performed the data collection and began by sending advance notifications to the sampled Local Education Agencies (LEAs) and schools. Each round of data collection began with an initial mail out, followed by a second mailing, and additional non-response follow-up inquiries conducted by telephone.

Respondents to the School District Questionnaire were chosen by the district office in response to a notification letter. The School District Questionnaires were addressed to the school principal or school head but may have been filled out by other school staff. Approximately 89% of the 5,465 districts which took delivery of the survey responded.

The School Principal Questionnaires were sent to 9893 sampled individual secondary school principals resulting in a 90% return rate. Each component began with an initial mail out, followed by a second mailing, and an additional non-response follow-up conducted by telephone.

The teacher questionnaires were sent to 56,354 sampled individuals with a return rate of 83.1%. Again, each component began with an initial mail out, followed by a second mailing, and an additional non-response follow-up conducted by telephone.

Table 1 provides a summary of the sample sizes and response rates for each questionnaire used in this study.

Table 1: Questionnaire Response Rates

Questionnaire	Sample Size	Return Rate
District	5,465	88.6%
Principal	9,893	90.0%
Teacher	56,354	83.1%

The overall survey response tendencies of districts, principals and teachers can be viewed in greater detail through stratification by public, private, bureau of Indian affairs, and public charter school types. Sample sizes, respondent counts and response rates are reported in Table 2.

Variables and Measurement Scale

The purpose of this section is to describe the variables in the study and how they were measured in each of the three questionnaires. The dependent variables were related

to student achievement, which was reported as the school meeting state standards or not meeting state standards. All missing values (missing responses, i.e. school did or did not meet state mandated standards) were removed from both the teacher and principal data sets.

Table 2: Sample Size and Response Rate

1999-2000 SASS Sample Sizes and Response Rates		
Component	Sample Size Public Schools	Weighted Response Rate
District	5,465	88.6%
Principal	9,893	90.0%
School	9,893	88.5%
Teacher	56,354	83.1%
Teacher Listing Form		92.2%
Library Media Center	9,893	94.7%

Leadership Responsibilities

The independent variables include specific questions of the SASS survey used to assess seven of the leadership responsibilities from the perspective of teachers and their corresponding principals. The seven leadership responsibilities, their definitions and correlations to student achievement are listed below in Table 3.

Independent Variable Selection

For the purpose of this study, the questionnaire items used as the independent variables were chosen because they best reflected the associated practices identified by McREL for each of the seven leadership responsibilities examined.

Table 3: McREL Leadership Responsibilities and Average Student Achievement Correlation

Leadership Responsibility	Definition	Correlation to Student Achievement
Culture	Fosters shared beliefs and a sense of community and cooperation.	.29
Order	Establishes a set of standard operating procedures and routines.	.26
Discipline	Protects teachers from issues and influences that would detract from their teaching time or focus.	.24
Resources	Establishes clear goals and keeps those goals in the forefront of the school's attention.	.26
Focus	Involves teachers in the design and implementation of important decisions and policies.	.24
Input	Involves teachers in the design and implementation of important decisions and policies.	.30
Intellectual Stimulation	Ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture.	.32

Table 4: McREL Leadership Responsibilities and Associated Practices

Responsibilities	Associated Practice
Culture	<ul style="list-style-type: none"> • Promotes cooperation among staff • Promotes a sense of well-being • Promotes cohesion among staff • Develops an understanding of purpose • Develops a shared vision of what the school could be like

Table 4—Continued

Responsibilities	Associated Practice
Order	<p>Provides and enforces clear structure, rules, and procedures for students</p> <p>Provides and enforces clear structures, rules, and procedures for staff</p> <p>Establishes routines regarding the running of the school that staff understand and follow</p>
Discipline	<p>Protects instructional time from interruptions</p> <p>Protects/shelters teachers from distractions</p>
Resources	<p>Ensures teachers have necessary materials and equipment</p> <p>Ensures teachers have necessary staff development opportunities that directly enhance their teaching</p>
Focus	<p>Establishes high, concrete goals and expectations that all students meet them</p> <p>Establishes concrete goals for all curriculum, instruction, and assessment</p> <p>Establishes concrete goals for the general functioning of the school</p> <p>Continually keeps attention on established goals</p>
Input	<p>Provides opportunity for input on all important decisions</p> <p>Provides opportunities for staff to be involved in developing school policies</p> <p>Uses leadership team in decision making</p>
Intellectual Stimulation	<p>Keeps informed about current research and theory regarding effective schooling</p> <p>Continually exposes the staff to cutting-edge ideas about how to be effective</p> <p>Systematically engages staff in discussions about current research and theory</p> <ul style="list-style-type: none"> • Continually involves the staff in reading articles and books about effective practices

The fact that the survey items were subjective and respondent's choices were continuous on Likert scales ranging from 1 - 5 required the researcher to determine the level of response in which the practices would be classified as supportive or non-supportive. Supportive responses indicated that the principal or teacher believed the associated practice was fulfilled or there was sufficient evidence to suggest the associated practice had been implemented effectively. The following paragraphs will describe how each leadership responsibility was determined as supportive or non-supportive for both principal and teacher questionnaire items.

Principal Variables

The independent variables examined from the principal questionnaire were intended to measure the principals' participation and/or utilization of associated practices. Each survey item was chosen due to the fact that it described a specific associated practice that was reflective of one of the seven leadership responsibilities examined. The principal questionnaire items listed below (Table 5) were categorical data based on Likert scales of 1-4 with the exception of the variable representing resources and which was based on a Likert scale of 1-5, similarly the variable representing input was based on a Likert scale of 1-2.

Table 5 (below) summarizes survey items for the principal questionnaire, potential responses, and coding of selected responses as they relate to the seven leadership responsibilities. The table details each leadership responsibility with its corresponding survey item from the principal questionnaire, the stated associated practice, possible response selection and recoding selections. Recoding of response

selections was performed to define supportive or non-supportive responses which will be used in several data analysis.

Table 5: Leadership Responsibilities and Reflective Associated Practices with Response and Recoding Scales

Leadership Responsibility	Survey Item	Stated Associated Practice	Potential Responses	Response Coding
Culture	0202	How often did you engage in the following activities in your role as a principal of this school? Building professional community among faculty and other staff?	1. Never	Non-supportive
			2. Once or twice a month	
Order	0205	Manages school facilities, resources, procedures (e.g., maintenance, budget, schedule).	3. Twice a week	Supportive
			4. Everyday	
Discipline	0204	Maintains the physical security of students faculty and staff.	1. Never	Non-supportive
			2. Once or twice a month	
Resources	0162	How often is professional development for teachers at this school accompanied by the resources that teachers need (e.g., time and materials) to make changes in the classroom?	3. Twice a week	Supportive
			4. Everyday	
			5. Often	Non-supportive
			1. Never	
			2. Rarely	Non-supportive
			3. Sometimes	
			4. Frequently	Supportive
			5. Often	

Table 4—Continued

Leadership Responsibility	Survey Item	Stated Associated Practice	Potential Responses	Response Coding
Focus	0197	Facilitates the achievement of the schools mission through such activities as consensus building, planning, obtaining resources, monitoring progress, etc...?	1. Never 2. Once or twice a month	Non-supportive
			3. Twice a week 4. Everyday	Supportive
Input	0188	Does this school have decision making body such as a school site council?	1. Yes	Supportive
			2. No	Non-supportive
Intellectual Stimulation	0201	Provides and engage staff in professional development activities.	1. Never 2. Once or twice a month	Non-supportive
			3. Twice a week 4. Everyday	Supportive

Teacher Variables

The teacher questionnaire items were chosen due to the fact that they required teachers to respond to statements regarding specific principal behaviors that would result from their principal's fulfillment of an associated practice. The independent variables from the teacher questionnaire were examined in a manner similar to that utilized with the principal questionnaire. As with the principal questionnaire, all questions were accompanied with multiple choice answers resulting in interval data. As before, most of

the item responses were based on Likert scales of 1-4 with the exception of the variables input which were reported on Likert scales of 1-5. The details of each leadership responsibility, including survey item, statements of evidence, potential response selections and response recoding, are detailed in Table 6.

Table 6: Leadership Responsibilities - Statements of Evidence with Response Scale Range

Leadership Responsibility	Survey Item	Statements of Evidence	Potential Responses	Response Coding
Culture	0311	There is a great deal of cooperative effort among staff.	1. Strongly agree 2. Agree 3. Disagree 4. Strongly Disagree	Supportive Non-supportive
Order	0299	The principal lets staff members know what is expected of them.	1. Strongly agree 2. Agree 3. Disagree 4. Strongly Disagree	Supportive Non-supportive
Discipline	0306	My principal enforces school rules for conduct and backs me up when I need it.	1. Strongly agree 2. Agree 3. Disagree 4. Strongly Disagree	Supportive Non-supportive
Resources	0304	Necessary materials such as text book supplies and copy machines are available as needed by staff.	1. Strongly agree 2. Agree 3. Disagree 4. Strongly Disagree	Supportive Non-supportive

Table 4—Continued

Leadership Responsibility	Survey Item	Statements of Evidence	Potential Responses	Response Coding
Focus	0310	The principal knows what kind of school he/she wants and has communicated it to the staff.	1. Strongly agree 2. Agree	Supportive
			3. Disagree 4. Strongly Disagree	Non-supportive
Input	0287	How much influence do you think teachers have over school policy at this school in establishing curriculum?	1. No Influence 2. 3. 4.	Non-supportive
			5. A Great Deal of Influence	Supportive
Intellectual Stimulation	0178	The principal talks with me frequently about my instructional practices.	1. Strongly agree 2. Agree	Supportive
			3. Disagree 4. Strongly Disagree	Non-supportive

Imputation

For the purpose of this study, missing values were not imputed due to the facts that utilization of imputation would likely introduce a subjective bias into the dataset resulting in an underestimation of the standard errors and the introduction of additional random errors potentially resulting in false significance in the form of artificially low probability values (p-values). Observations with missing values were deleted prior to data analysis. Therefore, as shown in Table 7, 24.3% (2,406) of the principal observations

were removed while 51.9% (29,244) of the teacher observations were removed.

Table 7: Missing Value Rates for the Principal and Teacher Data Sets

Component	Sample Size	Complete Observations	Missing Value Rate
Principals	9,893	7,487	24.3%
Teachers	56,354	27,110	51.9%

Data Analysis

The following is a summary of the statistical methodologies employed to answer the research questions posed in this study. SAS 9.1 and SPSS were used for all statistical analyses reported herein.

Research Questions One and Two

1. What are the principals' reported utilization of seven of the leadership responsibilities?
2. What are the teachers' reports of principals' utilization of seven of the leadership responsibilities?

The data analysis utilized in Research Questions one and two employed one-sample proportions. Proportions are typically the most common and applicable statistic used for "success or failure" situations. Therefore, the use of one-sample proportions was appropriate in this situation as the responses for each question were recoded in binary form (supportive or non-supportive). Thus, one-sample proportions were

calculated for teachers and principals reporting supportive and non-supportive responses for each leadership responsibility. Estimated proportions were reported with corresponding 95% confidence intervals to provide a measure of error.

Research Questions Three and Four

3. To what extent do principals' perceptions of their utilization of the seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perception does predict whether their school passes the achievement standards, which of the seven leadership responsibilities are the significant predictors?
4. To what extent do teachers' perceptions of their principals' utilization of the seven leadership responsibilities predict whether their school passed the state minimum achievement standards? If their perception does predict whether their school passes the achievement standards, which of the seven leadership responsibilities are the significant predictors?

Research Questions three and four were designed to assess the degree to which principal and teacher responses could predict if the school would meet state mandated requirements. The independent variable for the questions was whether the school met state mandated requirements, which was binary in nature, in that it was either 'yes' or 'no'. The predictor (independent) variables (responses to leadership responsibility questions) were interval in nature (response varying from 'yes' & 'no' to 'strongly agree' through 'strongly disagree').

In addition, the researcher also incorporated a categorical variable — percentage of students who are minority—as a control variable. Studies indicate that minority status is among the factors that are related to academic achievement. In fact according to the National Governors Association (2009), the "achievement gap" is a matter of race and

class. Across the U.S., a gap in academic achievement persists between minority and disadvantaged students and their white counterparts. This is one of the most pressing education-policy challenges that states currently face. Therefore, based on the available information within the data set used for this study the variable of "percent minority" was used for control purpose. In addition, school level was also included for control purpose because the accountability measures tend to differ for elementary and secondary levels. Thus, the leadership effects of principals based on principals' and teachers' reported responses were independent of the school's level and percentage of minority students.

This particular variable was matched to the principal and teacher data sets by the school identification number.

The additional of this categorical variable results in additional loss of cases. The principal data set used for the analyses regarding Research Question 3 had a missing value rate of 43.2%; while the data set used for teachers had a missing value rate of 56.7%. The previously mentioned data attributes were also accounted for in the determination of the appropriate statistical methodology. Information regarding the new data sets is located in Table 8 below.

Table 8: Missing Data After the Introduction of The Categorical Variable of "Percentage of Students Who are Minority"

Component	Sample Size	Complete Observations	Missing Value Rate
Principals & Demographic	9,893	5,615	43.2%
Teachers & Demographic	56,354	24,402	56.7%

The purpose of questions three and four was to determine the extent to which leadership responsibility responses and an ethnicity measurement, specifically a categorical measurement of the percentage of K-12 minority students would predict the likelihood a school meets state mandated requirements.

The categorical variable coding of fewer than 5%, 5-19%, 20-49% and more than 50% of the total student body consisting of minority student was used to determine the ethnicity measurement. Due to the binary nature of the dependent variable and interval nature of the independent variables, logistic regression was the appropriate statistical technique for the analysis.

Therefore, logistic regression with all variables entered simultaneously was utilized to develop two models that were used to predict the probability of a school meeting state mandated requirements; one model was used with principals' responses and the other for teachers' responses. All regression analyses were performed at a 5% level of significance. Results of the logistic regression models were then used to identify which independent variable (survey items) would optimize the probability of a school meeting state mandated requirements.

CHAPTER IV

RESULTS

The purpose of the study was to examine seven leadership responsibilities reported from principals' and teachers' perspectives. An analysis of the principals' and teachers' perspectives was conducted which revealed the principals' perceptions of their level of engagement in the responsibilities and the teachers' perceptions of indicators that support their principal's effective application of the leadership responsibility. Further investigation was then conducted to determine if the seven leadership responsibilities as reported by principals (associated practices) and teachers (indicators of evidence) were significant predictors of student academic success as measured by the schools meeting state standards.

Analysis

Data analysis began by establishing an understanding of the response rate tendencies of teachers and principals in regard to their corresponding surveys. It was observed that 90.0% of the 9,893 principals responded whereas 83.1% of 56,354 teachers responded. Prior to data analyses missing values were deleted as explained in the methodology section. Approximately 24% of principal responses had missing values which were deleted resulting in the final principal data set of 7,487 observations.

Approximately 52 % of the teacher responses had missing values which were deleted resulting in a final teacher data set of 27,110 complete observations. Therefore only principal and teacher data sets consisting of complete observations were used for analysis.

Research Question One

What are Principals' Perspectives on Their Application of the Leadership Responsibilities?

The first research question was designed to obtain insight into principals' general perception of their fulfillment of the seven leadership responsibilities. The 7,487 principal responses were used in conjunction with one-sample proportions and 95% confidence intervals to identify what percentage of principals reported fulfilling each leadership responsibility. It should be noted that the supportive responses are reported as estimated proportions and therefore margins of error have been included. For example the researcher's interpretation of a 95% confidence interval for culture is that 95% of the time the true population proportion of principals reported supportive responses of their fulfillment of the culture leadership responsibility resulting in a confidence interval ranging from 66.2% to 67.3%. The statistical purpose of including a confidence interval is to provide additional information and assurance as to where the true percentage of reported responses would fall.

Table 9 below lists each leadership responsibility, the estimate proportion that provided supportive responses, and the corresponding 95% confidence interval for each estimated proportion.

Table 9: Principals' Fulfillment of Seven Leadership Responsibilities

Leadership Responsibility	Estimate Proportion	95% Confidence Interval for Estimated Proportion
Culture	66.7%	66.7 +/- 0.5%
Order	94.6%	94.6 +/- 0.3%
Discipline	82.4%	82.4 +/- 0.4%
Resources	88.1%	88.1 +/- 0.4%
Focus	71.1%	71.1 +/- 0.5%
Input	75.7%	75.7 +/- 0.5%
Intellectual Stimulation	38.1%	38.1 +/- 0.6%

Figure 1 is a graphical representation of principals' perceptions of their fulfillment of the seven leadership responsibilities. In general the findings indicate the majority (more than 75%) of principals feel that they are supportive of order, resources, discipline and input. However, on the other hand, very few principals (less than 40%) feel that they are supportive of intellectual stimulation.

Research Question Two

What are Teachers' Perspectives on Their Principals' Applications of the Leadership Responsibilities?

Teachers' perspectives regarding leadership responsibilities were examined to better understand how their administrators are perceived in the application of the leadership responsibilities. The 27,110 teachers' survey responses were used in conjunction with the one sample proportion method used in research question one.

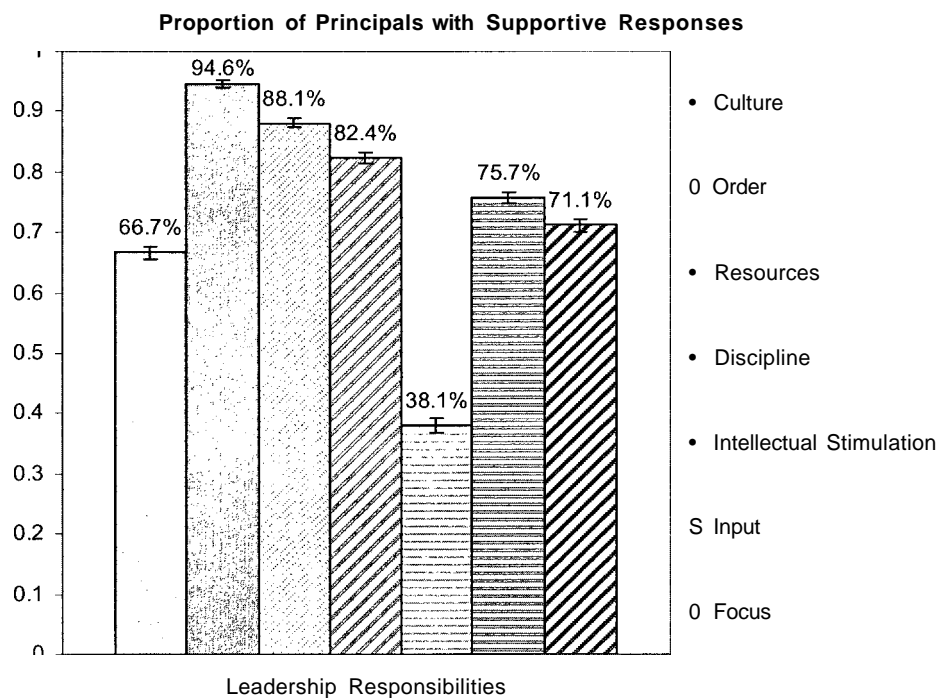


Figure 1. Comparison of Principals' Supportive Responses to Seven Leadership Responsibilities

Results indicate that approximately 75% of the teachers surveyed perceived their principals to be supportive of input and 88% of teachers who responded felt that their administrator was also supportive of intellectual stimulation. On the other hand a majority of teachers perceived their administrator as being non-supportive of the remaining five leadership responsibilities which include culture, order, discipline, focus, and resources. The summarized information is tabulated in table 10 below and presented graphically in figure 2.

Table 10: Teachers Perceptions of Their Principals' Fulfillment of Seven Leadership Responsibilities

Leadership Responsibility	Estimate Proportion	95% Confidence Interval for Estimated Proportion
Culture	23.9%	23.9 +/- 0.3%
Order	13.6%	13.6 +/- 0.2%
Discipline	19.2%	19.2 +/- 0.2%
Resources	23.6%	23.6 +/- 0.3%
Focus	19.0%	19.0 +/- 0.2%
Input	74.9%	74.9 +/- 0.3%
Intellectual Stimulation	88.3%	88.3 +/- 0.2%

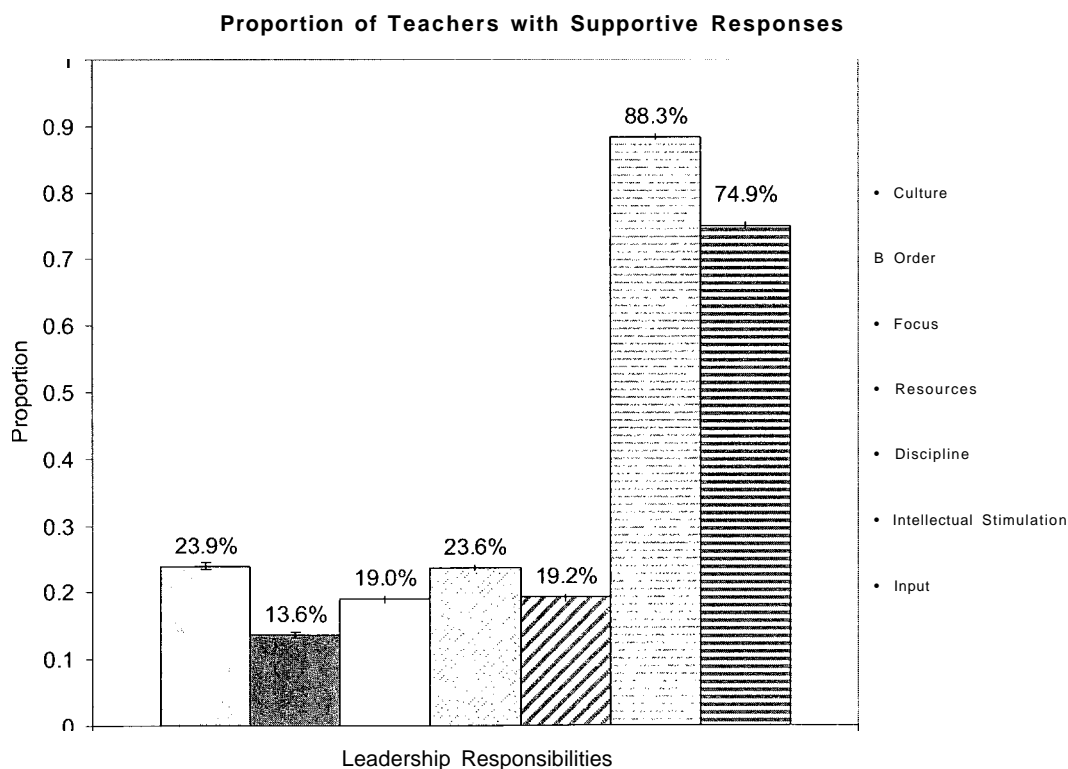


Figure 2. Comparison of Teachers' Supportive Responses of Their Principals' Fulfillment of Seven Leadership Responsibilities

Regression Model

Logistic regression was used to examine the remaining research questions to determine to what extent principals' and teachers' responses predict whether a school meets state standards. Separate logistic regression models were developed for the research questions related to both principals and teachers at a 5% level of significance. Principal and teacher models were developed by testing the statistical significance of each survey item (relating to leadership responsibilities) and incorporating a race/ethnicity (demographic) variable to control for variance. The presentation of the remaining results for research questions 3 and 4 will include the results of a regression analysis and findings for the principal and teacher data sets.

Research Question Three

To what extent do principals' perceptions of their effectiveness in the seven leadership responsibilities predict whether or not their school passed the state minimum achievement standards controlling for student demographics? If their perceptions do predict whether or not their school passes the achievement standards, what are the significant predictors among the seven leadership responsibilities?

This question was developed to determine if principals' responses to any of the seven leadership responsibilities (predictor variables) significantly predict whether a school meets state mandated requirements. Therefore, binary logistic regression analysis of the seven predictor variables and the outcome measure of the school meeting state mandated requirements was conducted. The predictor variables were resources, input, focus, intellectual stimulation, culture, discipline and order. The analysis used a simultaneous method for including all predictor variables in the regression equation.

In order to predict membership in meeting state mandated requirements the outcome measure representing meeting state mandated requirements was dummy coded as "1" meeting state mandated requirements and "0" not meeting state mandated requirements. In addition, the percentage of minority students in the school and school level were used as two control variables. For "Percentage of minority students in the school" "50 percent or higher" was used as the indicator; for "School level", "elementary" was used as an indicator.

Before conducting the regression, some diagnostic procedures were conducted to ensure the data quality and the suitability for the model. Among the diagnostic procedures conducted was an analysis to determine the correlation among the seven predictor variables. Table 11 illustrates the findings which indicate that colinearity was not a concern for the regression model.

The model appears to be able to predict whether the school would meet state mandated requirement, with chi-square = 256, df= 12, and $p < .001$. Overall the model was able to correctly classify 67.7% of the cases. The results of the binary regression were displayed in table 12.

Table 11: Correlations Among the Seven Leadership Responsibilities as Reported by Principals

	Resources	Input	Focus	Intellectual Stimulation	Culture	Discipline	Order
Resources	1.00						
Input	-.08**	1.00					
Focus	.13**		1.00				
Intellectual stimulation	.14**	-.08**	.25**	1.00			
Culture	.12**	-.08**	.34**	.22**	1.00		
Discipline	.06**	.07**	.22**	.18**	.27**	1.00	
Order	.06**	-.07**	.12**	.11**	.22**	.53**	1.00

*N = 8,491.

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

Table 12: Result of Logistic Regression with Whether School Passing the State Accountability Test as the Outcome Measure and Principals' Self-Perceived Leadership Practices as Predictors (Controlled for Percentage of Minority Students in School and School Level)

	B	S.E.	Wald	df	Sig.	Exp(B)
Resources	.100	.029	11.503	1	.001	1.105
Input	.025	.061	.162	1	.687	1.025
Focus	.106	.033	10.637	1	.001	1.112
Intellectual stimulation	-.067	.041	2.696	1	.101	.935
Culture	.086	.032	7.105	1	.008	1.090
Discipline	.105	.055	3.649	1	.056	1.110
Order	-.049	.053	.862	1	.353	.952
Percent of minority student in school			216.579	3	.000	
0-4% vs 50% or more	.784	.071	121.338	1	.000	2.190
5-19% vs 50% or more	.909	.070	168.712	1	.000	2.482
20-49% vs 50% or more	.702	.070	100.317	1	.000	2.018
School level			1.970	2	.373	
Secondary vs elementary	.045	.053	.698	1	.404	1.046
Middle vs elementary	.119	.091	1.709	1	.191	1.126
Constant	-.864	.252	11.724	1	.001	.422

Using the typical 0.05 as the cut-off point for p value, resources, focus, and culture were statistically significant predictors of the school meeting state mandated requirement. It is also important to note that to some extent the predictor variable discipline was marginally significant with $p = .056$. As expected, the variables representing the percentage of minority students in the school were also significant. However, the variable for school level was not significant.

When the principal reported one response level higher on a 5-point scale (ranging from "never" to "often") for "resources," the odds ratio for the school to pass the state accountability test increased by 10.5%. When the principal reported one response level higher on a 4-point scale (ranging from "never" to "everyday") for "focus", the odds ratio for the school to pass the state accountability test increased by 11.2%. When the principal reported one response level higher on a 4-point scale (ranging from "never" to "everyday") for "culture", the odds ratio for the school to pass the state accountability test increased by 9.0%. In addition, the marginally significant variable of "discipline" indicates that when the principal reported one response level higher on a 5-point scale (ranging from "never" to "often"), the odds ratio for the school to pass the state accountability test increased by 11.1%.

As expected, the variables representing the percentage of minority students in the K-12 student population is highly significant. For example, the odds ratio for the school to meet state mandated requirements is about 119% (1.19 times) higher for a school with a minority population ranging from 0-4% students than for a school with a student minority population of 50% or higher. The overall results indicate that as a principal reports increased engagement in activities that support or promote the leadership

responsibilities of resources, focus, culture, and discipline the school is more likely to meet state mandated requirements.

Research Question Four

To what extent do teachers' perceptions of their principals' utilization of the seven leadership responsibilities predict whether or not their school passed the state minimum achievement standards controlling for student demographics? If their perceptions do predict whether or not their school passes the achievement standards, what are the significant predictors among the seven leadership responsibilities?

This question was designed to determine if teachers' responses to any of the seven leadership responsibilities (predictor variables) significantly predict whether a school meets state mandated requirements. Therefore, binary logistic regression analysis of the seven predictor variables and the outcome measure of the school meeting state mandated requirements was conducted. All teacher responses from a single school were aggregated to form one record due to the fact that the variable of whether or not the school met state mandated requirements was only reported at the school level. In other words, similar to the previous question, there was one record for each school, in this case with the teacher-level variables calculated as the mean of the teacher responses for the school.

Also, in order to predict membership in meeting state mandated requirements the outcome measure representing meeting state mandated requirements was dummy coded as "1" meeting state mandated requirements and "0" not meeting state mandated requirements. In addition the percentage of minority students in the school and school level were used as two control variables. For "percentage of minority students in the school" "50 percent or higher" was used as the indicator; for "School level",

"elementary" was used as an indicator.

Before conducting the regression analysis, some diagnostic procedures were conducted to ensure the data quality and the suitability for the model. Among the diagnostic procedures conducted was an analysis to determine the correlation among the seven predictor variables. Table 13 illustrates the findings which indicate that colinearity was not a concern for the regression model.

The model appears to be able to predict whether the school would meet state mandated requirements, with chi-square = 266, df = 12 and $p < .001$. Overall the model correctly classified 68% of the cases. The results of the binary regression are displayed in table 14 and use the typical .05 as the cut-off point for p. The results indicate the predictor variables "resources" and "culture" along with the control measure "percent of minority students" were all statistically significant predictors of student achievement. In addition the variables representing the percentage of minority students in the school were also significant. However, the variable for school level was not significant.

It is also important to note that the survey scale for "resources" and "culture" was based on a reverse scale with 1 = strongly agree, 2 = agree, 3 = disagree and 4 = strongly disagree. Therefore, teachers reported responses that differed one point on the 4-point scale ranging from "strongly disagree" to "strongly agree" for the variable "resources", resulted in the odds ratio for the school to pass the state accountability test increasing by 28.7% ($1/.777 - 1 = .287$). Similarly, when responses differed one point on the 4-point scale ranging from "strongly disagree" to "strongly agree" for the variable "culture", the odds ratio for the school to pass the state accountability test increased by 27.2% ($1/.786 - 1 = .272$). In other words, the more teachers perceive that "there is a great deal of

cooperative effort among staff' and that "necessary materials such as textbooks, supplies and copy machines are available as need by staff', the more likely the school would meet state mandated requirements.

The following chapter will consist of a summary of the findings in relation to the literature reviewed in chapter II and other relevant research. In addition, a discussion including conclusions and implications as well as recommendations for principals and future studies will also be included.

Table 13: Correlations Among the Seven Leadership Responsibilities as Reported by Teachers*

	Resources	Input	Focus	Intellectual stimulation	Culture	Discipline	Order
Input	1.00						
Order	-.10**	1.00					
Resources	-.25**	.21**	1.00				
Discipline	-.18**	.62**	.26**	1.00			
Intellectual Stimulation	-.10**	.53**	.18**	.49**	1.00		
Focus	.84**	.76**	.22**	.54**	.55**	1.00	
Culture	-.16**	.45**	.27**	.44**	.37**	.49**	1.00

*N = 8,021.

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

Table 14: Result of Logistic Regression with Whether School Passing the State Accountability Test as the Outcome Measure and Teachers' Perceived Leadership Practices by Principals as Predictors (Controlled for Percentage of Minority Students in School and School Level)

	B	S.E.	Wald	df	Sig.	Exp(B)
Input	-.028	.035	.650	1	.420	.972
Order	-.134	.080	2.793	1	.095	.875
Resources	-.252	.047	29.223	1	.000	.777
Discipline	-.036	.062	.337	1	.562	.965
Intellectual stimulation	.080	.055	2.112	1	.146	1.083
Focus	.132	.075	3.131	1	.077	1.141
Culture	-.241	.057	18.161	1	.000	.786
Percent of minority student in school			130.818		.000	
0-4% vs. 50% or more	.612	.075	67.033	1	.000	1.844
5-19% vs. 50% or more	.767	.074	108.279	1	.000	2.152
20-49% vs. 50% or more	.590	.073	65.043	1	.000	1.803
School level			1.685		.431	
Secondary vs. elementary	.042	.057	.541	1	.462	1.043
Middle vs. elementary	.116	.094	1.505	1	.220	1.123
Constant	1.131	.205	30.369	1	.000	3.097

CHAPTER V

SUMMARY AND DISCUSSION

This chapter includes a summary of the examination of seven principal leadership responsibilities. Overall, the statistically significant findings are supportive of current research, but reveal the need for further exploration in regard to frequency of utilization and application. In addition, the results of the study revealed other aspects of principal leadership and teacher perceptions that should be considered for future studies. The remainder of this chapter will consist of summaries of the statistically significant findings while incorporating discussions of related research, implications and recommendations.

The purpose of the study was to examine principal and teacher perceptions of principals' fulfillment of associated practices that support seven of the 21 leadership responsibilities identified by McREL that positively correlate with student achievement. More specifically, the study investigated the following research questions.

Research Hypothesis/ Questions

1. What are principals' perceptions of their utilization of seven of the leadership responsibilities?
2. What are teachers' perceptions of their principals' utilization of seven of the leadership responsibilities?
3. To what extent do principals' perceptions of their effectiveness in the seven leadership responsibilities predict whether or not their schools pass the state minimum achievement standards controlling for student demographics? If their

perceptions do predict whether or not their schools pass the achievement standards, what are the significant predictors among the seven leadership responsibilities?

4. To what extent do teachers' perceptions of their principals' utilization of the seven leadership responsibilities predict whether or not their schools pass the state minimum achievement standards controlling for student demographics? If their perceptions do predict whether or not their schools pass the achievement standards, what are the significant predictors among the seven leadership responsibilities?

Data Collection

The data used to investigate the aforementioned research questions were obtained from the National Center for Educational Statistics and were collected through the 1999-2000 school and staffing survey. This study utilized data from the principal and teacher questionnaires to examine survey items related to principals' perceptions of their frequency of engagement in various school-related activities and teachers' perceptions of workplace conditions which corresponded to their principals' engagement in the school-related activities. Lastly, the district questionnaire survey item reporting schools' status on meeting state-mandated requirements was used to investigate the predictability of the principals' and teachers' reported responses as predictors of school success in meeting state-mandated student achievement scores.

Analysis

Several statistical techniques were used to analyze the four research questions. A one-sample proportion method was used to examine research questions one and two, to determine principals' and teachers' perceptions of associated practices and corresponding

indicators of evidence. The estimated proportions were reported with 95% confidence intervals to provide a measure of error. In order to investigate questions three and four, a logistic regression method was used to assess the degree to which principals' and teachers' responses could be used to predict schools' academic success. Separate logistic regression models were developed for the principal data set and the teacher data set. The outcome (dependent) variable for the questions was whether or not the school met state requirements. In addition, categorical predictor variables (K-12 ethnicity and school level) were incorporated to control for variance. All regression analysis was performed at a 5% level of significance.

Summary of Findings

The study allowed the researcher to more closely examine specific leadership responsibilities (associated practices) as perceived by both principals and teachers, and their correlation with student academic success. As previously mentioned, the results from this study support current research findings related to leadership responsibilities and practices. However, the findings also indicate the need for further exploration of associated practices of principals in terms of frequency of engagement and the context in which they are applied. .

Research Questions

What are principals' perceptions of their utilization of seven of the leadership responsibilities ?

This question was designed to obtain insight into principals' general perceptions of their engagement in the associated practices reflective of the seven leadership

responsibilities. According to McEwen (2003), "The question of how principals spend their time is a function not only of what they are expected to do but also of the tasks and responsibilities they most value" (p 86). The results indicate that a majority (more than 75%) of principals feel they fulfilled the leadership responsibilities of order, resources, discipline, and input. However, less than a majority of the principals felt they were supportive of the leadership responsibilities of culture, intellectual stimulation and focus. In fact only 38.1% of the principals felt they fulfilled the leadership responsibility for intellectual stimulation.

In general, the results suggest that a majority of principals believe they are supportive of managerial leadership responsibilities associated with managing facilities, maintaining the physical environment, and establishing a school site council. However, less than 40% of principals report supportive use of instructional leadership practices associated with building professional learning communities, facilitating the achievement of the school mission, and engaging staff in professional development activities. In fact, of the seven leadership responsibilities examined, it appears that principals only reported fulfilling two instructional leadership responsibilities: providing time, materials, and other resources for professional development, and establishing a school site council.

Overall, the results of this study support the common perception that many principals do not spend an appropriate amount of time on instructional leadership practices, even though research positively correlates instructional leadership with effective teaching and student learning. Johnson (2009) reports:

According to our surveys of principals, 75 percent report that they spend more time "than they used to when it comes to working on the substance of teaching—for example, curriculum, teaching techniques, mentoring, and professional development." Even so, most would like more hours to devote to this aspect of their work. Just 1 in 10 principals is satisfied with the time spent on this area; 70 percent of principals say they would like to do "a lot more" here; 19 percent would like to do a little more. In fact, fighting for time for instructional leadership appears to be one of the main frustrations of being a principal today; nearly three-quarters of principals say that daily emergencies rob them of time "that could be better spent on academic or teaching issues" (p.76).

Based on the findings of this study and relevant research it appears that effective principals must not only understand the technical aspects of instructional leadership but also possess the will to seek out innovative ways to reallocate their time. For example, instructional leaders may need to reconsider how they delegate non-instructional tasks, prioritize and structure their day, and build leadership capacity within their teaching staff.

What are teachers' perceptions of their principals' utilization of the seven leadership responsibilities?

This question was designed to obtain insight into teachers' general perceptions of their principals' engagement in associated practices reflective of the seven leadership responsibilities. The development of the question was based on the assumption that teachers form perceptions of their principals' effectiveness by observation of actions and outcomes related to the leadership responsibilities. Billingsley (1995) states, "in most cases, teachers formed perceptions about administrative priorities, not based on direct discussion with administrators, but rather on their interpretation of administrative decisions and/or actions taken over time" (para. 1). Therefore it is reasonable to assume

that if teachers believe their principals are effective leaders, their individual teaching efficacy should increase and positively impact student achievement.

Overall, the results of the analysis indicate that a majority (approximately 74% or more) of the teachers feel their principals fulfilled the leadership responsibilities of intellectual stimulation and input. However, less than 25% of the teachers reported that their principals were engaged in activities that supported the leadership responsibilities of culture, order, focus, resources, and discipline. Categorizing the results reveals that less than 25% of teachers believe their principals are supportive of managerial leadership practices associated with enforcing school rules, informing staff of expectations, or providing necessary classroom materials and supplies. On the other hand, teachers' responses of their principals' instructional leadership responsibilities indicate that less than 25% of the teachers believe their principal engaged in practices that support cooperative effort among staff, and communicating the kind of school the principal wants. Conversely 88% of the teacher responses suggest they believe their principals are actively engaged in instructional leadership practices such as talking to them about their instructional practices, and 75% indicate their principals provided them with opportunities for input on school policies and the establishment of curriculum.

To what extent do principals' perceptions of their effectiveness in the seven leadership responsibilities predict whether or not their schools pass the state minimum achievement standards controlling for student demographics? If their perceptions do predict whether or not their schools pass the achievement standards, what are the significant predictors among the seven leadership responsibilities?

The intent of this question was to determine if principals' perceptions of their

fulfillment of any of the seven leadership responsibilities would significantly predict whether or not the school would meet state-mandated requirements. Overall, findings indicate that supportive principal responses for culture, resources, and focus were the leadership responsibilities that were statistically significant predictors of whether a school would meet state-mandated requirements. However, in addition to the three leadership responsibilities, the leadership responsibility of discipline appears to be marginally significant with a p value of .056. Therefore the researcher will also include this predictor variable in the discussion.

Culture

Closer examination of the leadership responsibility of culture revealed that an increase in the frequency of a principal's engagement in activities and strategies intended to build professional learning communities was found to increase the predicted probability that the school would meet state-mandated requirements. Upon further investigation it can be noted that as principals' reported responses of engagement increased by one point on a frequency scale ranging from "never" to "everyday," the likelihood the school would meet state-mandated requirements increased by 9.0%.

As many educators know, the use of professional learning communities has become one strategy schools have implemented to aid their school improvement and decision making processes. In general, the basic premise of a professional learning community is to change the culture of a school system in which the school community builds its own capacity to improve by seeking out more collaborative ways to work and learn together. Lee, Smith, and Croninger (1995) indicate these schools show greater

student use of critical thinking skills, higher academic gains in the core content areas, and smaller achievement gaps than students in traditional schools.

Although there continues to be an increasing amount of research regarding the effectiveness of professional learning communities, one of the purposes of this study was to determine the effects of principal leadership in establishing a professional learning community. The results of the study support many researchers' thoughts and views regarding the importance of principals in the establishment of a professional learning community. For example, Fullan (2006) acknowledges that one of the most important factors in developing a culture reflective of a professional learning community is the district leaders, who must engage in changing the bigger context or system. Morrissey (2000) continues, "The principal's role is a critical one, orchestrating a delicate balance between support and pressure, encouraging teachers to take on new roles while they themselves let go of old paradigms regarding the role of school administrator" (p. 43).

Overall, the results of this study support the abundance of research on the effects of professional learning communities on student achievement. Therefore, if principals hope to effectively implement school reforms or innovative school initiatives they must also recognize the importance of establishing a culture reflective of a professional learning community and be willing to commit to learning and utilizing the essential research-based leadership behaviors and actions.

Resources

The purpose of this response item was to examine the effects of time and materials on professional development related to student outcomes. The results of the

analysis revealed that principals' engagement in behaviors supportive of the leadership responsibility for resources proved to be a significant predictor of whether or not the school would meet state-mandated requirements. More specifically, it appears the frequency in which a principal designed professional development activities that were accompanied by appropriate time and materials improved the school success. In this case, as principals' reported responses increased one response level higher on a 5-point scale ranging from "never" to "often," the predicted probability that their school would meet state-mandated requirements increased by 10.5%.

This finding supports the common belief that providing appropriate professional development activities and supportive resources is one of the most important investments of time and money that schools can make to improve student achievement. The American Educational Research Association (AERA) (2005) supports this notion, stating "While adequate time for professional development is essential, studies also show that by itself, more time does not guarantee success" (p. 4). In addition, most educators also agree the best measure of the quality of professional development for teachers is the impact it has on student achievement. Therefore, as principals creatively search for innovative ways to allocate time and supportive materials for teachers to learn, plan, and incorporate new practices into classroom instruction, they must also insure other critical components for quality professional development are included. Based on the results of this study, it appears that effective principals have found ways to routinely incorporate these strategies and behaviors into their practices.

However the researcher would like to note that due to the nature in which this variable was examined, it is necessary to acknowledge the importance of other critical

aspects also associated with quality professional development. In other words, time and materials should not be considered in isolation of other essential design strategies, such as aligning professional development with student needs, providing on-going and continued support, and monitoring implementation with appropriate feedback.

Focus

Results of the study also indicate that as the principal reported an increase in the frequency in which he or she engaged in strategies to facilitate the achievement of the schools mission, the more likely the school was to meet state-mandated requirements. Principal participation in activities such as consensus building, planning, obtaining resources, and monitoring progress were supportive associated practices of the leadership responsibility. Examination of the data revealed that as a principal reported one response level higher on a 4-point scale of frequency ranging from "never" to "everyday," the predicted probability the school would meet state-mandated requirements increased by 11.2%.

In general, there is an abundance of research that suggests that a principal's ability to establish clear goals and maintain a school's efforts towards the goals will lead to improved student achievement. Leithwood and Montgomery (1984) concluded that "goals are the long term aspirations held by principals for work in their schools. No other dimension of principal behavior is more consistently linked to school improvement by current empirical research than goals" (p. 23). Studies by Marzano et al. (2005) also indicate that effective principals establish clear goals and help the school to continually work toward achieving these goals.

Although the importance of a principal vision or goals is apparent, the fact remains that not all principals utilize goals in a manner that positively impacts student achievement. In order for the principal to establish a school culture that is goal-oriented they must realize their overall effectiveness will be determined by the degree to which the principals and teachers share the vision or goals. However in many cases the two groups maybe have the same vision but attend to different aspects. According to Mendez-Morse (1992), effective principals have a vision and keep the vision in the forefront while engaging the school community to make the vision a reality. Therefore, principals must continuously seek out opportunities to frequently model behaviors and create conditions that help to shape and align teachers' values and behaviors with their schools' goals.

Discipline

Lastly, the results of the analysis of research question three indicated that the principal leadership responsibility of discipline was a marginally significant ($p = .056$) predictor of the school's effectiveness. Principals that reported engaging in supportive activities of one response level higher on a 5-point scale based on frequency ranging from "never" to "often" increased the predicted probability their school would meet state mandated requirements by 11%.

The ability to maintain the physical security of school and create a safe and orderly environment has always been an expectation of the principal. In general, it seems reasonable to assume most teachers and principals interpret discipline as the establishment and enforcement of rules, and the actions taken when school or classroom rules are not obeyed. As simple as this statement seems, the ability to effectively

establish a discipline program that meets the expectations of all teachers and addresses the needs of all students is difficult. This may be due to the fact that the definition of discipline itself is broad and is typically applied differently from classroom to classroom based on an individual teacher's rules and procedures.

Regardless of the challenges associated with managing a discipline program most educators support the notion that there is a relationship between positive student behavior and academic success. In support of this notion, several studies have reached the same conclusion. For example, Cotton (2000) (as cited in Cotton 1999) states "The largely correlational effective school research and the observational research on classroom management and discipline both point to the importance of a safe and orderly environment for student learning. This makes intuitive sense and is borne out by scores of research studies conducted over many years" (p. 6). In addition, the District Administration (2004) states,

Other findings suggest that a healthy school climate requires innovation, consistent enforcement of a written code of conduct, and teaching of social competency. One study linked lower levels of misconduct to increased levels of daily academic challenge and increased student perceptions of success (p. 1).

Despite the relevant research on effective discipline programs and strategies Gottfredson et al. (2004) indicates that most schools today still utilize prevention practices that are unproven or known to be ineffective, or the school will fail to implement the program properly, therefore limiting the program's effectiveness. Based on this finding, it is essential for principals to utilize evidence-based behavioral programs

and policies in their schools. In addition, principals' ability to be a visible leader in the process of implementing and managing a quality behavior program is also of importance. In fact, the results of the National Study of Delinquency Prevention in Schools identified a principal's ability to openly support prevention activities perceived by staff as one of the seven top predictors of high quality prevention activities (Gottfredson 2004).

In summary, it appears that regardless of educators' intuitions or the abundance of relevant research that clearly illustrates the relationship between student behavior and academic success, the reality is that student behavior is difficult to manage and modify, especially at the principal's level. Unfortunately, many of the previously stated issues associated with student discipline may be the primary reasons student behavior continues to be one of the most time consuming efforts that principals and teachers address in schools. Therefore, in order to be more effective principals must continuously strive to openly and visibly seek out ways to effectively address student behaviors that impact the learning environment while also working to bring teachers together on their beliefs and techniques used to address student behavior.

To what extent do teachers' perceptions of their principals' utilization of the seven leadership responsibilities predict whether or not their schools pass the state minimum achievement standards controlling for student demographics? If their perceptions do predict whether or not their schools pass the achievement standards what are the significant predictors among the seven leadership responsibilities?

The intent of this question was to determine if teachers' perceptions of their principals' fulfillment of any of the seven leadership responsibilities could be used to predict whether or not the school would meet state-mandated requirements. Overall,

findings indicate the leadership responsibilities of culture and resources were the only two variables that could be used to predict whether a school would meet state-mandated requirements.

Perception of Culture

The response item "there is a great deal of cooperative effort among staff" was the indicator of evidence used to measure the teachers' perceptions of the leadership responsibility culture. The findings indicate that as teachers' responses increased one point on a 4 point scale ranging from "strongly disagree" to "strongly agree," the likelihood the school would meet state-mandated requirements increased by 27.2%.

In general, teacher collaboration can be as simple as two teachers working on a lesson design or discussing a student, or as complex as a building of teachers working long-term on school improvement goals or curriculum development. According to Inger (1993), "In schools where teachers work collaboratively, students can sense the program coherence and a consistency of expectations, which may explain the improved behavior and achievement" (p. 1). However in order to for teachers to effectively work in collaboration, teacher leaders must exist. According to York-Barr and Duke (2004),

Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of the school communities to improve teaching and learning practices with the aim of increased student learning and achievement. Such team leadership work involves three intentional development foci: individual development, collaboration or team development, and organizational development (pp. 287-288).

Unfortunately one of the biggest challenges for today's principals is finding the time and resources to structure for collaborative time. The Center of Comprehensive School Reform states, "Inadequate time for collaboration, learning, and leading as well as a lack of incentives for engaging in leadership activities have been shown empirically to impede the development of teacher leaders" (p. 4). In addition, cultural norms of isolation and individualism within the teaching profession and the worst case scenario "crab bucket culture" can slow the progress of school improvement. However, even though principals face these challenges and barriers that impact teacher collaboration and cooperation, they cannot overlook the benefits of establishing a collaborative environment. Inger (1993) summarizes the issue best by stating "although principals may find it difficult to find the resources and time to establish collaborative time for teachers it will be essential for them to seek out creative solutions if they truly want to improve student achievement". Thus, in order to promote teacher collaboration principals must begin to utilize purposeful teams to address instructional issues, develop formal structures to allow for collaboration, and establish behavioral norms to promote collaborative interactions.

Perception of Resources

Similarly for the leadership responsibility of resources, teachers' supportive responses to the indicator of evidence "Necessary materials such as textbooks, supplies and copy machines are available as needed by staff" also increased the predicted probability the school would meet state-mandated requirements. More specifically, as teachers' responses increased one point on a 4-point scale ranging from "strongly agree"

to "strongly disagree," the likelihood the school would meet state-mandated requirements increased by 28.7%.

One of the most understudied variables of teacher effectiveness may be textbook use. In fact over fifty years ago Cronbach (1955) suggested more research be conducted on textbook use in the classroom. Unfortunately, since that time very few studies have been conducted. Therefore few studies exist on the availability and use of textbooks or their impact on teacher effectiveness or student achievement. More recently, Moulton's (1997) review of the studies that do exist on the topic has provided some insight by summarizing the following relevant findings:

In a study of 1,580 elementary school teachers and 141 elementary school principals, Barton and Wilder (1966) found that 98 percent of first-grade teachers and 92 to 94 percent of second and third-grade teachers used basal readers on "all or most days of the year." several studies illustrating the use of textbooks in schools. Turner's (1988) survey of 339 teachers found that 85 percent of them used basal readers, and that 56 percent of districts represented by the teacher sample required basals to be followed. Weiss (1987) found that 90 percent of science and math classes at each grade used textbooks (p. 17).

The findings of Moulton's review clearly indicate that textbooks are an integral part of a teacher's daily instruction; however, the question of their impact on student achievement remains unclear. The Appalachia Educational Laboratory (AEL) (2005) has determined that aligning textbooks to state standards and assessments as well as instructional content and strategies will lead to increased student achievement gains. Based on the results of this study and aforementioned research it is apparent that at the very least principals should ensure that teachers are aware of the importance of textbook

alignment to state standards, state assessments, and core instruction if they hope to positively impact student achievement through textbook use.

Summary and Implications

In general, the study examined seven research-based principal leadership responsibilities from both principal and teacher perspectives. From the principals' perspective, the study examines the frequency in which principals engaged in associated practices supportive of the seven leadership responsibilities. From the teachers' perspective, the study examined the degree in which teachers believed their principals' behaviors supported the leadership responsibilities. Lastly, the study determined if the principals' and teachers' perceptions could be used to predict their schools' achievement level. Overall, the statistically significant findings of this study are supportive of current research regarding principals' routine behaviors and activities, and the effects of principal leadership on student achievement.

Principals

The fact that the study used the frequency of a principal's engagement in an associated practice as the basis to determine whether or not the principal was supportive or non-supportive of the leadership responsibility allowed the researcher to confirm prior studies. For example, principals reported responses ranging from "never" to "everyday" revealed that a majority of principals reported they were more supportive of managerial leadership practices than instructional leadership practices. Based on the fact that principals often state that they cannot find time for instructional leadership practices

suggests a need for further exploration of how they determine their roles and responsibilities and establish priorities for their schools.

The study also revealed that the principals' levels of engagement in the associated practice were determining factors of leadership effects on schools' effectiveness. In this case, principals who reported more frequent engagement in the leadership responsibilities of culture, resources focus, and discipline led schools that were more likely to meet state-mandated requirements. In addition, the overall results of principals' fulfillment of the leadership responsibilities revealed that principals only reported supportive responses to two of the four statistically significant leadership responsibilities. More specifically, when the researcher compared principal responses from question one and question three, it became apparent that principals only provided supportive responses to the leadership responsibilities of resources and discipline. In other words, the results indicate that principals only felt they were supportive of 50% of the leadership responsibilities statistically linked to improving student achievement.

It is also important to note that a comparison of the results of the seven leadership responsibilities from this study to prior studies conducted by McREL revealed a conflict in the outcomes. According to McREL's findings, certain leadership responsibilities are more positively correlated (r value) with student achievement than others. In fact, of the 21 leadership responsibilities, the r values range from a lower correlation of $r = .15$ to a higher correlation of $r = .33$. Based on these findings, it seems reasonable to assume that of the seven leadership responsibilities examined those with the higher r values (as identified by McREL) would have a greater impact on the probability of the school meeting state-mandated requirements than those with lower r values. For example, one

would assume that the frequency of a principal's engagement in practices reflective of the leadership responsibility intellectual stimulation ($r = .32$), would be more likely to increase the probability the school would meet state-mandated requirements than the leadership responsibility focus ($r = .24$). However, the results of this study revealed dramatically different results. In fact, of the four statistically significant responsibilities, higher r values corresponded to a lower probability of the school meeting state-mandated requirements.

The conflict in results may have stemmed from the fact that this study examined data collected from a national survey designed to measure many school conditions and therefore did not consider the full range of associated practices reflective of each leadership responsibility. In other words, the associated practice in which the principal reported as fulfillment of a leadership responsibility may have been the least effective associated practice for that responsibility. Naturally, the limited scope in which the leadership responsibilities were examined may have impacted their significance related to school achievement levels and corresponding r values.

Overall, the defined associated practices of principals that led to increased student achievement should continue to be explored in order to determine how they can be incorporated into the principal's regular schedule. The fact that principals' roles have and will continue to expand will make it increasingly difficult for them to find the time to learn, practice, and utilize research-based practices. Therefore, having information related to established thresholds for frequency of engagement may assist principals in setting priorities and appropriately allocating their time in order to effectively fulfill the leadership responsibility.

Teachers

The fact that the study used a frequency scale to determine the extent that teachers perceived their principals fulfilled a leadership responsibility allowed the researcher to draw conclusions related to the principals' engagement in a leadership responsibility and their effects on school success. Overall results of the study revealed that as teachers' perceptions of their principals' fulfillment of a leadership responsibility increased, so did the likelihood the school would meet state-mandated requirements. For example, those who reported supportive responses of the leadership responsibilities culture and resources resulted in their schools being 27.2% and 28.7% more likely to meet state-mandated requirements. The effect size of this finding and the fact that the principal-teacher relationship is one of most important factors of schools' success indicate principals may need to be more sensitive towards teachers' perceptions of their leadership practices.

It is also of importance to note that when the researcher compared the teachers' perceptions of their principals' fulfillment of the leadership responsibilities, the overall results revealed that teachers did not report supportive responses to any of the statistically significant leadership responsibilities. More specifically, less than 25% of teachers reported their principals being supportive of the statistically significant leadership responsibilities of culture and resources. Based on the fact that two of the leadership responsibilities were statistically significant predictors of the school's success is an indication of a further need to examine the reasons for the gap between principals' perceptions of their leadership practices and teachers' perceptions of their principals' leadership behaviors.

In general, in order to gain the greatest insight related to these results further studies need to be conducted from the teacher's perspective. Unfortunately, there may be additional challenges when attempting to collect quality information from teachers as opposed to principals. For example, when conducting research based on principal behaviors and actions researchers can simply observe a single person's behavior. When researching principals' engagement in the associated practices from the teacher's perspectives the researcher may need to move beyond collecting subjective information to actually observing teachers' responses to principals' behaviors. However, by doing so the researcher could also collect helpful information regarding the context, situation and frequency in which the principal engaged in the associated practice.

Final Remarks

In reality no one person can possess all the knowledge and skills necessary to effectively address all aspects of the school environment that could potentially impact student achievement. However at the very least, principals must be able to accurately assess their schools' weaknesses and needs, and begin to develop the skills and allocate the time necessary to effectively address the areas of need. In order to best support principals with the increasingly complex challenge of improving student achievement further research should be conducted on factors that influence how principals establish priorities and allocate their time, and how teachers view their principals' leadership skills.

REFERENCES

- Abbott, M. L., Joireman, J., & Stroh, H. R. (2002). *The influence of district size, school size and socioeconomic status on student achievement in Washington: A replication study using hierarchical linear modeling* (Tech. Rep. #3). Lynwood, WA: Washington School Research Center.
- Algozzine, R., & Jazzar, M. (2005). *Critical issues in educational leadership*. Boston, MA: Allyn & Bacon.
- Anthony, T. D., & Kritsonis, A. W. (2006). National implications: An analysis of mentoring induction year programs for novice alternatively certified teachers [Electronic version]. *National Journal for Publishing and Mentoring Doctoral Student Research*, 7(1).
- Appalachia Educational Laboratory (2005, December). *School improvement specialist training materials: Performance standards, improving schools, and literature review module 6—aligned and balanced curriculum*. Charleston, WV: Edvantia. (ERIC Document Reproduction Service No. ED489150).
- Barnett, A. M., Marsh, H. W., & Craven, R. G. (2003). *What type of school leadership satisfies teachers? A mixed method approach to teachers' perceptions of satisfaction*. Sydney, Australia: SELF Research Centre, University of Western Sydney. Retrieved from the Australian Association for Research in Education Web site: <http://www.aare.edu.au/05pap/bar05419.pdf>
- Barth, R. (1990). *Improving schools from within: Teachers, parents, and principals can make a difference*. San Francisco, CA: Jossey-Bass.
- Berube W., Gaston J., & Stephans, J. (2004). The role of the principal in teacher professional development [Electronic version]. *NOVations Journal*, 2004(1).

- Billingsley, B., et al. (1995, May 26). *Working conditions: Administrator support*. (Working paper No. 5). Paper presented at the National Dissemination Forum on Issues Relating to Special Education Teacher Satisfaction, Retention, and Attrition, Washington D.C. (ERIC Document Reproduction Service No. ED389150).
- Blase, J. & Blase, J. (2001, Winter). Collegiality instead of control is one thing teachers appreciate in a leader. *Journal of Staff Development*, 22(1), 22-25.
- Blase, J. & Blase, J. (2001, Winter). The teacher's principal. [Electronic version]. *Journal of Staff Development*, 22(1).
- Borman, G., Hewes, G., Overman, L. T., & Brown, S. (2002). *Comprehensive school reform and student achievement: A meta analysis* (Rep. No. 59). [Electronic version]. Baltimore, MD: Center for Research on the Student Placed at Risk, Johns Hopkins University. (ERIC Document Reproduction Service No. ED472569).
- Boyd, V. (1992). *School context: Bridge or barrier to change?* Austin, TX: Southwest Educational Development Lab. (ERIC Document Reproduction Service No. ED370216).
- Bulach, C., Boothe, D., & Pickett, W. (2006, August 21). *Analyzing the leadership behavior of school principals*. Retrieved from the Connexions Web site: http://cnx.org/content/ml_3813/1.1/
- Center for Comprehensive School Reform and Improvement (2005). *Role of principal in improving student achievement*. Retrieved from the Reading Rockets Web site: <http://www.readingrockets.org/article/25981>
- Center for Comprehensive School Reform and Improvement (2005, September). *What does research tell us about teacher leadership?* Retrieved from http://www.centerforcsri.org/files/Center_RB_sept05.pdf
- Center on Education Policy (2008). *Has student achievement increased since 2002? State test score trends through 2006-07*. Retrieved from the Center for Education Policy Web site: <http://www.cep-dc.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentId=241 &documentFormatId=4309>

- Chappuis, S. (2004). Leading assessment for learning: Using classroom assessment in school improvement. *Texas Association of School Administrators Professional Journal - INSIGHT*, 18(3), 18-22.
- Connely, D., & Goldman, P., (1994). Facilitative leadership: How principals lead without dominating. *Oregon School of Study Council Bulletin*, 37(9). (ERIC Document Reproduction Service No. ED379728).
- Cotton, K. (2000). *School practices that matter most*. Alexandria VA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED469234).
- Cronbach, L. J. (1955). The text in use. In *Text Materials in Modern Education*. Urbana, IL: University of Illinois Press.
- Cronin, J., Kingbury G., McCall, ML, & Bowe, B. (2005). *The impact of the No Child Left Behind Act on student achievement and growth: 2005 Edition*. Lake Oswego, OR: Northwest Evaluation Association. (ERIC Document Reproduction Service No. ED491250).
- Datnow, A., & Springfield, S. (2000). Working together for reliable school reform. *Journal of Education for Students Placed at Risk*, 5(1/2), 184-204.
- DeVita, C., Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *Executive summary: How leadership influences student learning*. [Electronic version]. New York: Wallace Foundation Learning from Leadership Project
- District Administration (2004). *Discipline that supports achievement (Research corner: Essentials on education data and analysis from research authority AEL)*. Farmington Hills, MI: Professional Media Group LLC.
- Dufour, R., & Eaker, R. (1998). *Professional learning communities at work*. Bloomington, IN: National Education Service.
- Education Commission of the States. (1999). *Comprehensive school reform: Five lessons from the field*. Denver, CO: ECS Distribution Center. (ERIC Document Reproduction Service No. ED439514).

- Fullan, M. (2006, November). Leading professional learning: Think 'system' and not 'individual school' if the goal is to fundamentally change the culture of schools. *School Administrator*, 70(63).
- Gaziel, H. (2007). Re-examining the relationship between principal's instructional/ educational leadership and student achievement. *Journal of Social Science*, 75(1), 17-24.
- Goodman, R. H., & Zimmerman Jr., W. G. (2000). *Thinking differently: Recommendations for 21st century school board/superintendent leadership, governance, and teamwork for high student achievement*. Arlington, VA: Educational Research Service. (ERIC Document Reproduction Service No. ED480398).
- Gottfredson, G. D., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S. B., & Hantman, I. (2004, November). Toward safe and orderly schools: The national study of delinquency prevention in schools. *NIJ Research in Brief*(NCJ 205005). Washington D.C.: National Institute of Justice.
- Hall, D., & Kennedy, S. (2006). *Primary progress secondary challenge: A state by state look at student achievement patterns*. Retrieved from the Educational Trust website: <http://www2.edtrust.org/NR/rdonlyres/15B22876-20C8-47B8-9AF4-FAB148A225AC/0/PPSCreport.pdf>
- Haycock, K. (2009, April). *It's up to us: Going the distance to improve results and close gaps*. Paper presented at the Governor's Educational Summit, Lansing, MI.
- Hess, F.M., & Kelly, A. P. (2005). *Learning to lead? What gets taught in principal preparation programs* (Rep. No. PEPG 05-02). Cambridge MA: Harvard University. Retrieved from the Harvard Kennedy School Web site: http://www.hks.harvard.edu/pepg/PDF/Papers/Hess_Kelly_Learning_to_Lead_PE_PG05.02.pdf
- Hill, P., & Harvey, J. (2004). *Making school reform work: New partnerships for real change*. Washington D.C.: Brooking Institute Press.
- Holland, H. (2005, Summer). Teaching teachers: Professional development to improve student achievement. [Electronic version]. *Research Points*, 3{ 1).

- Hord, S. (2002). Strategies for success: Implementing a comprehensive school reform program. *Southwest Educational Development Laboratory*, 46. Retrieved from the SEDL Web site: <http://www.sedl.org/pubs/change46/Lhtml>
- Hsieh, C., & Shen, J. (1998). Teachers', principals' and superintendents conceptions of leadership. *School Leadership and Management*, 18(1), 107-122.
- Institute of Educational Leadership (2000, October). *Leadership for student learning: Reinventing the principalship*. Washington DC: Institute of Educational Leadership. Retrieved August 12, 2009, from <http://www.iel.org/programs/21st/reports/principal.pdf>
- Jacobs, R. (2009). *Thinking about... "Instructional Leadership": Creating the Conditions for a Professional Learning Community* (Web page for course EDU 8762). Retrieved from the Villanova University Web site: <http://www83.homepage.villanova.edu/richard.iacobs/EDU%208672/ill.html>
- Johnson, J. (2008, September). The positive classroom: The principal's priority 1. *Educational Leadership*, 66(1), 72-76.
- Kaplan, L., Owings, W., & Nummery, J. (2005). Principal quality: A virginail student connecting interstate school leaders licensure consortium standards with student achievement. *National Association of Secondary School Principals* , #9(643), 28-44.
- Kirkpatrick, D. W. (2003, April). A nation still at risk: Little to show for 20 years of effort. *School Reform News*. Retrieved from The Heartland Institute Web site: http://www.heartland.Org/publications/school%20reform/article/1_1776/A_Nation_Still_at_Risk.html
- Knudsen, L., & Morrissette, P. (1999). Goals 2000: An analysis and critique. *International Electronic Journal for Leadership and Learning* , 2(4).
- Kober, N., Chudowsky, N., & Chudowsky, V. (2008, June). *Has student achievement increased since 2002? State test scores trends through 2006-07*. Retrieved from the Center on Education Policy Web site: <http://www.cep-dc.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=241 &documentFormatId=4309>

- Lambert, L. (2005, Spring). Leadership at the school level. *Journal of Staff Development*, 26(2), 38-40.
- Lashway, L. (1995). Facilitative Leadership. *ERIC Digest*, 96. Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon. (ERIC Document Reproduction Service No. ED 381 851).
- Lashway, L. (1996). The Strategies of a Leader. *ERIC Digest*, 150. Eugene, OR: ERIC Clearinghouse on Educational Management, University of Oregon. (ERIC Document Reproduction Service No. ED406718).
- Lashway, L. (2002). Developing instructional leadership. *ERIC Digest*, 160. Retrieved June 12, 2009, from <https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/3383/digest160.pdf?sequence=1>
- Lashway, L. (2003). Transforming principal preparation. *ERIC Digest*, 165. Retrieved January 14, 2009, from <http://eric.uoregon.edu/publications/digests/digest165.html>
- Lashway, L. (2003). *Leaders for America's schools: Training, recruiting, and selecting principals for success*. [Electronic version]. Eugene, OR: ERIC Clearinghouse on Educational Management.
- Lashway, L. (2003). *Trends and issues: Role of the school leader*. Eugene, OR: ERIC Clearinghouse on Educational Management. (ERIC Document Reproduction Service No. ED479933).
- Lee, V. E., Smith, J. B. & Croninger, R. G. (1995, Fall). Another look at high school restructuring: More evidence that it improves student achievement and more insight into why. *Issues in Restructuring Schools*, 9(1), 1-10. (ERIC Document Reproduction Service No. ED391232).
- Leithwood, K. A., & Montgomery, D. J. (1984, April). *Patterns of growth in principal effectiveness*. Paper presented at the Annual Meeting of American Educational Research Association, New Orleans, LA.

- Leithwood, K. (1996). Research in Ontario Secondary Schools: Organizational learning and leading. *Ontario Institute for Studies in Education at the University of Toronto*, 2(3). Retrieved from the OISE Web site:
<http://www.oise.utoronto.ca/field-centres/TVC/RossReports/vol2no3.htm>
- Leithwood, K. (2001). *Educational accountability and school leadership*. National College for School Leadership, University of Toronto. Retrieved from the NCSL Web site: <http://www.nationalcollege.org.Uk/media/415/CA/educational-accountability-and-school-leadership.pdf>
- Lezotte, L. W., & McKee, K. M. (2006). *Stepping up: Leading the charge to improve our schools*. Okemos, MI: Effective Schools Products, Ltd.
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Education Administration Quarterly*, 39, 370-397.
- Maryland Department of Education. *Indicators for effective principal leadership in improving student achievement*. Retrieved from the School Improvement in Maryland Web site: http://mdk12.org/process/leading/p_indicators.html
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). School leadership that works. *Education Leadership*, 61(7).
- Mazzeo, C. (2003, September 12). *Improving teaching and learning by improving school leadership*. Washington D.C.: NGA Center for Best Practices. Retrieved from the NGA Web site: <http://www.nga.org/cda/files/091203LEADERSHIP.pdf>
- McEwan, E. K. (2003). *10 traits of highly effective principals: From good to great performance*. Thousand Oaks, CA: Corwin Press.
- McGuigan, L. (2009). *The improbably weak correlation between leadership and efficacy*. Retrieved from <http://www.leighmcguigan.com/custom.html>
- Mendez-Morse, S. (1991). *Principal's role in the instructional process: Implications for at-risk students*. *Issues about Change*, 1(3). Retrieved from the SEDL Web site: <http://www.sedl.org/pubs/catalog/items/cha19.html>

- MetLife (2003). *Survey of the American teacher: An examination of school leadership*. New York: MetLife. Retrieved from the MetLife Web site: <http://www.metlife.com/assets/cao/contributions/foundation/american-teacher/metlife-survey-american-teacher-2003-school-leadership.pdf>
- Moore, B. (2009, January/February). Improving the evaluation and feedback process for principals. *Principal*, 38-41. Retrieved from the National Association of Elementary School Principals Web site: http://www.naesp.Org/resources/2/Principal/2009/J-F_p38.pdf
- Morrissey, M. S. (2000). *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory.
- Morton, I. (1993, December). Teacher collaboration in secondary schools. *CenterFocus*, 2. Retrieved from the NCRVE Web site: <http://vocserve.berkeley.edu/centerfocus/CF2.html>
- Moulton, J. (1997). How do teachers use textbooks? *A Review of the Literature* (Tech. Paper No. 74). Washington D.C.: Office of Sustainable Development, Bureau for Africa.
- National Conference of State Legislatures Task Force on School Leadership (2002). *The role of school leadership in improving student achievement*. Washington D.C.: NCSL. (ERIC Document Reproduction Service No. ED479288).
- National Governors Association Center for Best Practices (n.d.). *Closing the achievement gap*. Retrieved from the National Governors Association Web site: <http://www.subnet.nga.org/educlear/achievement/>
- Owens, R. G. (2004). *Organizational behavior in education: Adaptive leadership and school reform* (8th ed.). Boston: Pearson Education, Inc.
- Pennington, J. (2009). *District characteristics: What factors impact student achievement?* Retrieved from the Iowa Department of Education Web site: <http://intersect.iowa.gov/admin/ckfinder/userfiles/files/Intersect%20NAEP%20Dist%20Char.pdf>
- Reeves, D. B. (2007, February). The principal and proficiency: The essential leadership role in improving student achievement. *Leadership Compass*, 4(3).

- Reynolds, D. (2000). *Effective school leadership: The contributions of school effectiveness research*. Retrieved June 15, 2009, from <http://forms.ncsl.org.ukymedia/603/D7/effective-school-leadership-contributions-of-school-effectiveness-research.pdf>
- Rose, L., & Gallup. (2005). The 37th annual Phi Delta Kappa/Gallup poll of the public's attitude toward the public schools. *Phi Delta Kappan*, 57(1), 41-57.
- Sergiovanni, T. (1994). *Building community in schools*. San Francisco: Jossey-Bass.
- Starratt, R. (1995). *Leaders with vision. The quest for school renewal*. Thousand Oaks CA: Corwin Press.
- St. John, C. (2006) *Enable others to act*. Retrieved from The Leadership Challenge Web site: <http://www.leadershipchallenge.com/WileyCDA/Section/id-131333.html#march2006>
- Stolp, S. (1994). *Leadership for school culture*. Eugene, OR: ERIC Clearinghouse on Educational Management. (ERIC Document Reproduction Service No. ED370198).
- Thomas, J., & Stockton, C. (n.d.). *Socioeconomic status, race, gender, and retention: Impact on student achievement*. Retrieved from the USC Aiken Web site: <http://www.usca.edu/essavs/vol72003/stockton.pdf>
- Waters, T. J., Marzano, R. J., & McNulty, B. (2004). Leadership that sparks learning. *Educational Leadership*, 61(7), 48.
- Wagoner, C. (2002). *Center for Improving School Culture*. Retrieved from <http://www.schoolculture.net/important.html>
- Wagoner, C. (2006, December). The school leader's tool for assessing and improving culture. *Principal Leadership*, 7(4), 41.
- Waters, J. T., Marzano, R. J., & McNulty, B. A. (Eds.) (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-continent Research for Education and Learning.

- Waters, T., & Grubb, S. (2004). *The leadership we need: Using research to strengthen the use of standards for administrator preparation and licensure programs*. Aurora, CO: Mid-continent Research for Education and Learning.
- Wiley, E. W., Mathis, W. J., & Garcia, D. R. (2005, September). *The impact of the adequate yearly progress requirement of the Federal "No Child Left Behind" Act on schools in the Great Lakes*. East Lansing, MI: The Great Lakes Center for Education Research & Practice.
- Wong, H. K. (n.d.). *There is only one way to improve student achievement*. Retrieved from <http://www.newteacher.com/pdf7only1way.pdf>
- Yared McGuire, M. (2002). *Elevating educational leadership taskforce report*. Retrieved from the Michigan State Board of Education Web site: http://www.michigan.gov/documents/ITEMB_36971_7.pdf
- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research* 74(3), 255-316.