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EFFECTIVE PRINCIPAL LEADERSHIP BEHAVIORS AND AYP ATTAINMENT: AN EXAMINATION OF DISTINGUISHED AND NEEDS IMPROVEMENT MIDDLE SCHOOLS IN GEORGIA

by

CHRISTOPHER M. MATTHEWS

(Under the Direction of Judith Repman)

ABSTRACT

The purpose of this study was to examine effective principal leadership behaviors in relation to the AYP attainment of middle schools in Georgia. The relationship was examined through analyses of teachers' ratings of principals' leadership behaviors via an e-mailed instrument. The instrument contained 32 specific leadership behaviors linked to the 11 Marzano et al.'s leadership responsibilities with the highest correlation to student achievement. Three major research questions guided the inquiry of the study. First, the study investigated the presence of the leadership behaviors in distinguished and needs improvement middle schools in Georgia. Secondly, the study investigated whether there were differences between principal leadership behaviors in distinguished and needs improvement middle schools in Georgia. Lastly, the study investigated whether the 11 leadership behaviors were related to and predictive of AYP status in Georgia middle schools. Descriptive statistics indicated that the mean ratings of teachers in distinguished middle schools were higher than the mean ratings of teachers in needs improvement schools for 10 of the 11 leadership responsibilities. Results of t-Test analyses indicated that teachers in distinguished middle schools had statistically higher ratings than teachers in needs improvement middle for the leadership responsibilities: order, resources, input, and change agent. Multiple Regression analyses were employed and revealed that the leadership

responsibility, order, was positively related to and predictive of AYP status. The leadership responsibilities, flexibility and culture, as well the school variables, the size of the school, percentage of students in the school with disabilities, and percentage of students in the school

receiving free and reduced lunch were all negatively related to and predictive of AYP status.

INDEX WORDS: Principal Leadership, AYP, Leadership Behaviors

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by

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Partial Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

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2009

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CHRISTOPHER M. MATTHEWS

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CHAPTER 1

INTRODUCTION

Background of the Study

There probably has never been a greater focus on accountability for schools and school systems than now due to the performance requirements contained in the No Child Left Behind (NCLB) legislation enacted into law by President George W. Bush on January 8, 2002 (U.S. Department of Education, 2006). Although the NCLB legislation is the reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965 and 1994, NCLB is unique in that it is has incorporated an all encompassing accountability for the qualifications of teachers and for the overall performance of students based on annually administered state-developed tests (National Education Association, 2002). Performance of students under the NCLB legislation is measured by whether they perform at a proficient level on annual high stakes state assessments. Students, or more importantly, groups of students, who do not perform at a proficient level on state assessments can lead to the school's not making Adequate Yearly Progress (AYP).

Attaining AYP requires that schools meet three criteria. First, schools as a whole, and each student group (i.e. disadvantaged students or students with disabilities) that meets the minimum group size of 40, must meet or exceed predetermined Annual Measurable Objectives (AMO) based on state assessments in the areas of mathematics and reading/language arts. Secondly, the school, as a whole, and all student groups consisting of a minimum of 40 students must demonstrate a 95% participation rate or higher on state assessments in the areas of mathematics and reading/language arts. Lastly, each school must demonstrate that it has met or shown progress on a second indicator (i.e. writing assessments, attendance, graduation rate). These three AYP criteria pose new challenges to school leaders as they have prompted an

expanded focus on how a school's overall performance, as now indicated by AYP attainment, is both measured and monitored within the current context of NCLB.

Soon after NCLB's inception in 2002, 19,644 schools nationwide failed to make AYP status (ASCD, 2006). During the 2005-2006 school year, 17,967 schools nationwide did not attain AYP status and subsequently were categorized as needing improvement (Education Projects in Education Research Center, 2006). In Georgia alone, 432 schools within 184 school systems did not meet their AYP goals during the 2007-2008 school year (Georgia Department of Education, 2008). Furthermore, 307 are schools currently listed on the needs improvement list, meaning that the school did not meet AYP for two or more consecutive years (Georgia Department of Education, 2008). Georgia currently uses four AYP attainment categories for all public elementary, middle and high schools. "Distinguished" schools are schools that have met or exceeded AYP for three or more consecutive years. "Adequate but did not meet" schools are schools that did not meet AYP for one year. "Adequate" schools are schools that have not met AYP for one year but then did meet AYP during the second consecutive year. "Needs Improvement" schools are schools that have not met AYP for two consecutive years (Georgia Department of Education, 2008).

Further examination of AYP attainment by Georgia schools yields variances across school levels. Of the 432 schools that did not meet AYP in 2007-2008, 136 were elementary schools, 94 were middle schools, and 197 were high schools. Eleven other schools did not meet AYP but their level was designated as "other" (Georgia Department of Education, 2008). Further variances are present across school level in regards to needs improvement status as 25 elementary schools, 128 middle schools, 148 high schools, and six other schools are currently on the needs improvement list in Georgia indicating that fewer Georgia middle and high schools

have met AYP than Georgia elementary schools (Georgia Department of Education, 2008). An examination of the previous 2006-2007 school year data in Georgia indicated that there were 35 elementary schools, 149 middle schools, and 135 high schools on the needs improvement list (Georgia Department of Education, 2008). Although some progress has been shown in Georgia middle schools in the last year, the apparent underachievement of middle schools in Georgia is consistent with recent national trends as 18% of all Title I middle schools were struggling to attain AYP status when NCLB was first introduced. This figure has since increased to 36%, or 2,100, of middle schools underperforming at the end of the 2004-2005 school year (Lewis, 2006). As school system leaders, as well as educational researchers, have examined and utilized effective school improvement strategies to ensure that schools meet the various requirements of No Child Left Behind, they have renewed the focus on the role and impact of the school principal, and thus principal leadership (Dunford, 2007; Johnson & Uline, 2005; LaPointe & Davis, 2006).

The characteristics that make a school effective have been the topic of much educational research over the last three decades as federal legislation, such as NCLB, and resulting school reform efforts have attempted to improve the quality of public education in the United States. As a result, much attention in the research community has been focused on the variables or characteristics of an effective school. The difficulty, as Hallinger and Heck (1996) found when examining the relationship of the principal's role on school effectiveness using 40 empirical studies conducted over a 15 year span, is determining what variables actually produce improved school performance while adequately accounting for the influence of complex internal and external variables. While this challenge continues to face researchers, current research on effective schools has identified several characteristics that are consistently reported by principals

and teachers working in effective schools (Craig et al., 2005; Finnigan, 2005; Johnson, Livingston, Schwartz, & Slate, 2000; Portin et al., 2003; Reed & Roberts, 1998; Zigarelli, 1996). Not surprising, much of this research has found that instructional leadership, leadership that directly and indirectly supports daily teaching and learning, is a characteristic commonly found in effective schools (Craig et al., 2005; Finnigan, 2005; Marzano et al., 2005; Portin et al., 2003). Some of the other characteristics found in effective schools include, but are not limited to, strong culture for teaching and learning, high levels of parent interest and involvement, effective instructional practices, curriculum aligned to state standards, respectful and supportive relationships between teachers and students, measuring success; risk-taking environment, wise use of technology and resources, employment of quality teachers and shared school vision (Craig et al., 2005; Foster, 1997; Johnson et al., 2000; Zigarelli, 1996).

In addition to studies that have examined commonalities among effective schools, Duke (2006) compared five studies that specifically examined turnaround schools, schools that are low performing that become high performing. The comparison demonstrated that in four of the turnaround studies, leadership (defined as actions of principals and teachers) was frequently associated with the processes used to improve the school's overall performance. This positive association between leadership and school performance has also been found in high poverty schools, or schools with low socio-economic status (SES) which are typically lower achieving and have lower graduation rates (Machtinger, 2007). Additionally, an examination of high poverty schools that are also high performing concluded 14 common practices in these schools. The three practices directly related to principal leadership were principals who model instructional leadership, principals who use persistence and innovative practices to secure resources for students, and shared leadership among principals, teachers, and parents (Bell,

2001). Leadership, more specifically principal leadership, plays an important role in the effectiveness of a school and as a result has been studied within many settings and contexts. However, a historical challenge to educational researchers has been operationally defining leadership so that the most effective leadership can be identified and thereby generalized.

Leadership has been defined by numerous educational and business researchers but still lacks a consistent definition with well defined constructs. Yukl (1994) summarized this lack of an agreed-upon definition by saying, "Like all constructs in social sciences, the definition of leadership is arbitrary and very subjective. Some definitions are more useful than others, but there is no correct definition" (p. 4). Yet, the lack of an agreed upon definition for leadership cannot negate the importance of having some understanding of the definition of leadership prior to attempting to understand its impact on student achievement and overall performance of schools. A review of the literature on leadership does yield a couple of common denominators across various researchers' definitions. Yukl (1994), although concluding a lack of consistent definition of leadership in the literature, did note that most definitions of leadership incorporate the process of "social influence," influence that would be exerted by a person or a group over another person or group that would in turn "structure the activities and relationships in a group or organization" (p.3). Northhouse (2004) also noted the vital role that influence plays in leadership when he defined leadership as a "process whereby an individual influences a group of individuals to achieve a common goal" even going so far as to state that "without influence, leadership does not exist" (p. 3).

Another common construct found in the literature containing definitions of leadership is that of vision. Starratt (1995) and Bennis (1984) both focused their definitions of leadership on the importance of vision. Starratt (1995) concluded that leaders must be able to communicate

their vision, provide opportunities for others to experience their vision, and translate their vision into goals and processes within a school. Bennis (1984), who studied leaders in successful organizations, concluded that a common denominator among the leaders was compelling vision. The importance of vision within leadership has continued to be stressed, a recent example being in the standards instituted by the National Policy Board for Educational Administration (NPBEA) for implementation by educational leadership training programs (NPBEA, 2002). The first standard (Standard 1.0) requires educational leadership candidates to be able to develop a vision, articulate a vision, implement a vision, steward a vision, and promote community involvement in the vision (NPBEA, 2002). Applying just these two constructs, it can be said that school leaders carry the primary responsibility for developing vision and influencing people and processes that lead to the accomplishment of the school's overall goals.

How school leaders exhibit vision and influence through various leadership roles and styles has been the focus of much of the modern educational leadership research (Finnigan, 2005; Hallinger, Bickman, & Davis, 1996; Leithwood & Jantzi, 1999; Marzano et al., 2005; Northhouse, 2004). Many leadership roles and styles, such as instructional leadership, transformational leadership, transactional leadership, and situational leadership, have been extensively explored in the leadership literature in an attempt to identify leadership actions, roles, or duties that are effective in impacting overall student and school success (Finnigan, 2005; Hallinger, Bickman, & Davis, 1996; Leithwood & Jantzi, 1999; Marzano et al., 2005; Northouse, 2004). Leithwood and Duke (1999) examined 121 articles that discussed leadership styles and concluded that the three leadership styles, in order from most frequently studied to less frequently studied, were instructional leadership, transformational leadership, and contingent leadership. The high frequency of attention and focus on instructional leadership is also

supported by other researchers (Leithwood, Jantzi, & Steinbach, 1999; Marzano et al., 2005). The second most frequently mentioned leadership styles (in rank order) were moral leadership, managerial leadership, and cultural leadership (Leithwood & Duke, 1999). The above mentioned leadership styles consist of a set of leadership behaviors that have been found to be applicable and effective across various environments and applications. For example, instructional leadership "typically focuses on the behaviors of teachers as they engage in activities directly affecting the growth of students" (Leithwood & Duke, 1999, p.47). However, similar to most of the leadership roles and styles examined in the literature, instructional leadership has been defined in many different ways, with some researchers using a narrow definitional scope and others using very broad definitional scopes (Marzano et al, 2005; Leithwood & Duke, 1999).

A review of modern educational leadership research, as well as any direct observation of a school principal, yields little doubt as to whether the school principal has active involvement in, and thus an impact on, the daily operations, scheduling, policy development, purchasing, and other managerial activities required to operate and manage a school (Leithwood & Jantzi, 2000; Marzano et al., 2005). However, consistently determining what roles or types of leaders are most effective in relation to student achievement and overall school performance has proven to be a daunting task. In an editorial submitted by the editor of *School Leadership and Management*, Harris (2004) acknowledged that "in spite of study after study of school leadership in various guises, there remains significant gaps in the knowledge base" (p.4). Harris (2004) continues by stating that educational literature has not clearly established what forms of leadership directly impact school improvement and what the most beneficial combination of a leader's experience, training, and professional learning is to improve overall school performance. In addition, few studies have focused on the direct relationship between leadership and student

achievement (Harris, 2004). Studies have attempted to identify this relationship by specifying what roles or styles are needed to be a successful school leader (Craig et al., 2005; Foster, 1997; Portin, Schneider, DeArmond & Gundlach, 2003). Portin et al. (2003), in a qualitative study of 21 different types of schools across four states, examined the core roles necessary for leadership and concluded that assessing the needs of the school and determining how to best meet those needs should be the primary role of the school principal. Seven areas of leadership need were identified: instructional, cultural, managerial, human resources, strategic, external development, and micro-political (Portin et al., 2003).

Educational leadership literature has yielded inconsistent findings regarding a school leader's impact on student achievement. For example, Hallinger et al. (1996), in a study of 98 elementary schools in Tennessee, concluded that principal leadership had no significant direct impacts on reading achievement. Additionally, Leithwood and Jantzi (2000) concluded that principal and teacher leadership had significant impacts on the overall school but that there were no significant impacts on the classroom. They did conclude that principal leadership, specifically transformational leadership, has an effect on student engagement although family educational culture had a larger impact (Leithwood & Jantzi, 1999; 2000). Other leadership research supports the link between principal leadership and student achievement, whether directly or indirectly. Hallinger and Heck (1996) examined 40 studies conducted between 1980 and 1995 that focused on the relationship between principal leadership and overall school effectiveness in relation to each study's specific research design and methodology. The results of this examination indicate that studies that were conducted using direct effects methodology, with and without antecedent variables, yielded weak or no significant relationship between leadership and school effectiveness (Hallinger & Heck, 1996). However, studies that used a

mediated effects methodology, with and without antecedent variables (indirect effects), yielded more consistently positive results, suggesting that principal leadership has more indirect impact on student learning or, as Hallinger and Heck (1996) concluded, impact by "influencing internal school processes that are directly linked to student learning" (p.38).

Many recent studies have taken a slightly different approach and examined specific principal leadership behaviors and their impact on student achievement and school performance as opposed to examining broad leadership styles or roles. Cotton (2003) examined 81 studies of varying research designs in an attempt to provide accurate descriptors of principals in high achieving schools and concluded that not only do leadership behaviors and traits impact student achievement but that there were 26 effective leadership practices of principals in high achieving schools. The practices ranged from safe and orderly environment to role modeling. Marzano et al. (2005) examined 69 studies on leadership and student achievement conducted from 1978 to 2001 to determine the relationship between principal behavior and the average academic achievement of the students in the school. The uniqueness of this study is that various statistical analyses were applied to the 69 studies and the questionnaires in an attempt to link principal leadership and student achievement. The results of the correlative and meta-analysis yielded an average positive correlation of .25 between general leadership behaviors of a principal and the average academic achievement of students in a school (Marzano et al., 2005). Although providing caution in using a single correlation to explain the findings of a meta-analysis, Marzano et al. (2005) summarizes the finding as "compelling" as principal leadership does have a positive relationship with student achievement. By nature of this relationship, as principal leadership behaviors improve, student achievement improves.

In search of specific leadership behaviors that impact student achievement, further analysis of the 69 studies by Marzano et al. (2005) indicated that specific leadership behaviors that were positively correlated with student achievement. These leadership behaviors were categorized by Marzano et al. (2005) as the 21 responsibilities of leaders and are listed in Table 1. The responsibilities with the highest correlation with student achievement were situational awareness (.33) and flexibility (.28) and the responsibilities with the lowest correlation with student achievement were relationships (.18) and affirmation (.19). Through factor analysis, Marzano et al. (2005) linked all of the 21 leadership responsibilities to what is called "managing the daily life of the school," or first order change, while seven of the leadership responsibilities were linked with more innovative change or what is called second order change (p.69). The significance of this study is that for the first time leadership behaviors were found to be statistically related, or positively correlated, to student achievement. This newly identified statistical relationship offers many applications to current and future research attempting to provide additional and in-depth understanding of the link between principal leadership and student achievement.

Statement of the Problem

The NCLB legislation, enacted in 2002, requires that schools and school systems ensure academic progress for all students on an annual basis or face various sanctions. In addition, it in essence redefined the process of measuring student achievement and overall school performance by requiring schools to demonstrate Annual Yearly Progress (AYP) by meeting three criteria: meeting AMO on state assessments in mathematics and reading/language arts, 95% student participation rate or higher on state assessments, and meeting or showing progress on a second

Table 1

The 21 leadership responsibilities associated with First-Order Change and the seven leadership responsibilities associated with Second-Order Change by Marzano et al. (2005).

Situational Awareness	.33
Discipline	.27
Outreach	.27
Culture	.25
Input	.25
Order	.25
Resources	.25
Contingent Rewards	.24
Focus	.24
Communication	.23
Involvement in Curriculum,	.20
Instruction, and Assessment	
Visibility	.20
Affirmation	.19
Relationships	.18
Flexibility*	.28
Monitoring/Evaluating*	.27
Change Agent*	.25
Knowledge of Curriculum,	.25
Instruction, and Assessment*	
Intellectual Stimulation*	.24
Ideals/Beliefs*	.22
Optimizer*	.20

^{*}Second-Order Change Leadership Responsibilities

indicator. This heightened and expanded level of accountability has in turn heightened and expanded educators' and researchers' attention on school leadership and school performance in relation to these three criteria.

An examination of AYP attainment by Georgia schools yields variances across school levels in regards to needs improvement status. Twenty-five elementary schools, 128 middle schools and 148 high schools are currently on the needs improvement list in Georgia. The underachievement of middle schools in Georgia is consistent with national trends as 36%, or 2,100 middle schools, were underperforming at the end of the 2004-2005 school year nationwide.

Research on effective schools indicates the important role that the principal plays in improving student achievement and therefore, overall school performance. Educational leadership literature on the impact of principal leadership on student achievement and overall school performance yields inconsistent findings. While some studies suggest little to no link between principal leadership and student achievement, more literature, especially more recent literature, supports the direct or indirect positive impact that principal leadership has on student achievement. Of significance is that recent studies have established positive statistical relationships between principal leadership and student achievement.

The relationship between principal leadership and AYP attainment is important to examine further for many reasons. First, there has been great focus and attention in the educational leadership literature on principal leadership and student achievement, as typically measured by state assessments. However, principal leadership in relation to overall school performance, as measured by AMO and categorized by AYP status, is not currently represented in educational leadership literature. In a time when AYP schools strategize on how to produce

the needed yearly improvements to maintain their AYP status and schools that have not met AYP or that are on the needs improvement list are motivated to implement effective school improvement strategies, establishing what leadership behaviors or actions impact AYP attainment is vital and timely. In addition, now that schools are categorized under NCLB as distinguished schools or needs improvement schools, it is important to ascertain the prevalence of principal behaviors that may have an impact on AYP attainment. Similarities and differences in principal leadership behaviors across distinguished schools and needs improvement schools will add to the understanding of principal leadership. Secondly, inconsistent results in the literature regarding the relationship of principal leadership and student achievement warrant the need for additional research, especially within the context of current NCLB accountability legislation. Finally, newly established statistical relationships between principal leadership and student achievement offer a new context in which to study effective principal leadership behaviors across various school settings.

This study was designed to examine the role of effective principal leadership behaviors within the current context of NCLB accountability for schools, specifically the role of such behaviors in the AYP attainment of middle schools in Georgia. Therefore, the purpose of this study was to examine effective principal leadership behaviors in relation to the AYP attainment of middle schools in Georgia.

Research Questions

The overarching question for this study was: What is the relationship between effective principal leadership behaviors and AYP attainment in Georgia middle schools? More specifically, the study attempted to answer the following sub-questions:

- 1) To what extent are effective principal leadership behaviors present in distinguished and needs improvement middle schools in Georgia?
- 2) To what extent are there differences between effective principal leadership behaviors in distinguished and needs improvement middle schools in Georgia?
- 3) To what extent do effective principal leadership behaviors relate to and predict AYP status in middle schools in Georgia?

Significance of the Study

Schools, and therefore school leaders, are facing accountability standards at a level never seen before due to the implementation of the NCLB act in 2002. Schools that fail to meet such standards are faced with sanctions that have huge implications for the school and the school principal. Attaining and/or maintaining an AYP status of distinguished or adequate for a school has become a primary focus of the school principal by improving school performance indicators, as defined under NCLB. Therefore, due to the current climate of accountability for schools and school leaders, it is important to determine what factors positively impact overall school performance. Educational leadership literature provides support for the impact that the principal has on student achievement and the overall performance of a school in general terms. Although principal leadership and student achievement have been examined for many years, such examinations have often utilized student test scores as the primary measurement of student achievement, and thus, school performance. Examining leadership and its relationship to overall school performance, as categorized by AYP, will provide a modern accountability context for such examination that can provide useful implications for schools and school leaders. It is, therefore, both timely and relevant to ascertain the prevalence of effective principal behaviors across schools that have been consistently successful in meeting or exceeding AYP and schools

that have been less successful in meeting AYP so that relevant similarities and differences add to the understanding of school leadership, student achievement, and overall school performance. It is the goal of the current study to add to this understanding.

In addition to contributing to the research on principal leadership and student achievement, this study provides practical insights for school leaders that can prove useful in ensuring their schools meet annual expectations and accountability standards. It is vital that school leaders further their understanding of the direct and indirect impacts they have on the performance of students, and their schools. The intended benefit of providing comparative data on principal behaviors related to AYP attainment in schools that have attained distinguished status and schools that are in needs improvement status is that school principals can use such information to gauge and guide their own leadership practice. An additional benefit of determining effective principal behaviors in schools that have met AYP and needs improvement schools is that school system leaders can integrate such information into their observation, training and evaluation processes of school principals as an additional tool to impact overall school system performance. The current study has practical implications for school principals, school system leaders and educational leadership training programs.

The researcher's personal experience as an alternative middle school administrator has provided the basis of interest in the current topic. As a school leader for four years of a middle grades alternative school, it was necessary to continuously examine what could be done to positively impact the learning of at risk student populations. It was empowering to know that research supported that principal behaviors do directly or indirectly impact the performance of students, therefore to grow as a leader, it was important to be a reflective practitioner in order to refine leadership behaviors. As a current central office administrator, the researcher provides

direct and indirect support to principals and schools and therefore has a bird's eye view into very successful schools as well as less successful schools. It has been quite intriguing to observe the vastly different leadership styles and behaviors when in schools of both profiles. This research is an attempt to further the understanding of leadership and how it impacts student and school performance as well as to provide further basis for individual reflection and leadership growth.

Delimitations

- This study is delimited to middle schools in Georgia. Due to the scope of NCLB to
 primarily public schools, the teachers selected for this study were teachers from public
 schools only. Therefore, findings from the instrument may only be generalized to public
 middle schools in Georgia.
- 2. An instrument was used in this study due to its ability to most closely answer the research questions posed. The goal of the instrument was to obtain the experience of middle school teachers in regards to principal leadership behaviors in distinguished and needs improvement middle schools.
- 3. Teachers working in AYP middle schools in Georgia schools and teachers working in needs improvement middle schools in Georgia were administered the instrument.
- 4. Twenty-one specific leadership behaviors positively related to student achievement, as concluded by Marzano et al. (2005), were initially examined in this study.

Limitations

1. Due to logistical issues with obtaining teachers' names, e-mail addresses, and teaching content areas from public middle schools, a minimal number of teachers were selected at each school to complete the instrument. Although all teachers identified as meeting the requirements for the study at each of the selected middle school were sent the instrument

- and invited to complete, some teachers who met the requirements could not be identified. This may have negatively impacted the return rate, overall sample size of the study, and therefore any generalizing of the findings.
- 2. Teachers were asked to rate their level of agreement on the presence of their principal's leadership behaviors. Due to the nature of the supervisor/supervisee relationship, some teacher's responses may not have been valid (overly positive ratings) due to fearing their responses could be revealed, despite assured confidentiality.
- 3. The instrument used in this study heavily relied on the recent findings of Marzano et al. (2005). Although this study is based on 69 prior studies as well as supported by additional leadership research, using a single meta-analytic study as the basis of an instrument provides limitation.
- 4. Principal turnover, as well as teacher turnover, was a limitation in the current study. Identifying and obtaining the names of principals who met the requirement of the study, which were principals who have worked in the middle school for the last two consecutive years, was not possible as this information was not publicly available.
- 5. The timing of the distribution of the instrument to teachers, the beginning of the 2008-2009 school year, was a limitation since it required teachers to rely on their accurate recall of principal leadership behaviors for the previous academic school year.
- 6. Distributing the instrument via e-mail was a limitation due to various technological barriers. The number of undelivered or rejected e-mails indicated that various school systems and schools had network filters or other software that may have identified the e-mailed instrument as spam or junk e-mail.

CHAPTER 2

REVIEW OF RESEARCH AND RELATED LITERATURE

Introduction

Educational accountability and principal leadership are two very popular areas of modern educational research. With the inception of the NCLB legislation in 2002 and with the ever changing roles in principal leadership that have resulted from its implementation, there is little question why researchers continue to examine each of these areas as well as their relationship to each other. For example, schools currently face accountability standards at a level never seen before as a result of NCLB. Therefore, schools that fail to meet such standards are faced with sanctions that have huge implications for the school and the principal. Attaining and/or maintaining an AYP status of distinguished or adequate for a school has, in recent years, become a primary focus of the principal, renewing the focus on the role and impact of the principal in facilitating school improvement. To understand principal leadership and accountability in the current NCLB context, an examination of the history and evolution of both concepts is warranted. This chapter explores the history of educational accountability and the influence that various events, key legislation, and various reports have had on the current accountability model in schools today.

This chapter also explores and provides a framework of principal leadership from a broad perspective. This exploration will begin with an examination of many different researchers' attempts to determine the effective constructs of leadership and proceeds with an exploration of the many leadership styles and specific leadership behaviors that have been identified and defined over the years. Many of these heavily researched leadership styles and behaviors resulted from the large body of effective schools research that has consistently

supported the impact and influence of principal leadership on school performance. Therefore, a discussion of effective school research and its contribution to principal leadership and accountability are provided in this chapter. Finally, educational leadership literature provides a remarkable level of support for the direct or indirect impact that principal leadership has on student achievement and therefore the overall performance of a school. As a result, a summary of this body of research on principal leadership and student achievement is provided so that the groundwork for current leadership and accountability models can be established.

History of Accountability in Education

The history of accountability in public education inarguably traces back to a single significant event in American history, the launching of Sputnik by the Soviet Union in 1957 (Conti, Ellsasser, & Griffin, 2000; Flynn, 1995; Guillemette, 2008; Powell, 2007). The successful launching of the Soviet satellite instantly became the symbol of America's inability to compete globally. One glaring deficiency was the state of American public education. The panic the United States experienced after Sputnik spawned several educational initiatives. Math and science curriculums were quickly developed and implemented to prepare American students better to compete in a global arena. A close examination and scrutiny of public education ensued, and most notably, the National Defense Education Act (NDEA) was passed by Congress a year later in 1958 (Conti et al. 2000; Guillemette, 2008). This act increased educational funding across most levels, including low interest student loans for science and technical education, mathematics education, modern foreign languages, English as a second language and school libraries and media centers. The act also provided federal support for improvement in elementary and secondary schools (Columbia Electronic Encyclopedia, 2007; Powell, 2007). The NDEA of 1958 defined a new direction and level of accountability for public schools. Conti et al. (2000), who conducted an extensive literature review on school restructuring, referred to the era following Sputnik and NDEA as "an era of failed innovation in which outsiders from the federal government and universities attempted to 'fix' what was wrong inside of schools with little or no attention given to the beliefs and assumptions held by school insiders" (p.6). This failed innovation was believed to continue through much of the early 1960s.

Another significant attempt to change the landscape of reform and accountability for schools came in 1965 when President Lyndon B. Johnson enacted the Elementary and Secondary Education Act (ESEA). The ESEA is historically referred to as the first and largest federal education law that provided a comprehensive funding program for kindergarten through 12th grade education (National Education Association, 2002). This single act provided new programs and services to ensure that disadvantaged students had access to a quality public education. Provisions for disadvantaged students (Title I), safe and drug free schools, bilingual education, Head Start, class size reduction, technology, charter schools, and educators' professional development were all part of the ESEA Act. This act has been reauthorized every five years since its inception and is the genesis of the current national school accountability model. The 1970's introduced a shift from innovation and creation of new programs and services to an increased focus on accountability (Dufour & Eaker, 1992). Conti et al. (2000) attributed this shift to an accountability focus to a change in philosophy, from less concern with what was being taught to more concern with how students were taught and how schools could be assessed. This time period also marked the beginning of the Effective Schools Movement (Lezotte, 1986). The ten year span of 1966 to 1976 is the first of the four eras, as defined by Lezotte (1986), that began this movement which was characterized by several studies that examined whether school resources were linked to student outcomes and studies that examined whether effective schools

could be identified (Coleman, Campbell, Hobson, McPartland, Mood, Weinfield & York, 1966; Weber, 1971).

In the early 1980s, American public education was again under scrutiny as Secretary of Education Terrel Bell, under the direction of President Ronald Reagan, initiated a nationwide inquiry into the state of public education due to widespread concern. Two years later, the infamous report, A Nation at Risk: The Imperative for Educational Reform, was released by the National Commission on Excellence in Education (NCEE) in 1983. The commission was comprised of 18 members from the private sector, government, and education and was chaired by David Pierpont Gardner. The American nation was at risk, according to the commission, because "our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them" (NCEE, 1983, p. 9). The report contained disturbing statistics regarding the academic underachievement of American students. For example, the report indicated that SAT scores had dropped over 50 points in the verbal section and close to 40 points in the mathematics section between 1963 and 1980. In addition, the report provided unfavorable comparisons between American students and students in other countries, stating that American students were not 1st or 2nd on 19 academic tests and in fact performed in last place seven times (NCEE, 1983). Thirty-eight recommendations across five areas resulted from the report. The five areas were content, standards and expectations, time, teaching, and leadership/fiscal support (NCEE, 1983). One of the major recommendations that focused on school accountability was that standardized tests of achievement should be administered at critical transition points for students and should include state and local standardized tests. A Nation at Risk alleged that significant reform was needed to improve education by establishing new standards and means to measure school improvement.

Conti et al. (2000) even referred to *A Nation at Risk* as one of the key reports of this time period that could even be referred to at the "Sputnik of the 80s" due to its significant call to attention of the inadequacies of American education (p.9).

Although several reports focused the attention of legislators and educators on the need for school improvement during the late 1980s and throughout the 1990s, the next accountability and reform effort was introduced by President William J. Clinton when he signed into law the Goals 2000: Educate America Act in 1996. Two years later, the Goals 2000: Reforming Education to Improve Student Achievement report was released (U.S. Department of Education, 1987). The report supported states' efforts to develop and implement clear standards for what students should know and be able to do as well as provided support for the implementation of school improvement efforts focused on improving student achievement based on the established standards. As in the past, this new federally driven report provided a renewed focus on the need for improved school performance and the need for new standards and accountability for students. Despite over 30 years of effective schools research that had been conducted and which concluded that instructional leadership was consistently correlated with effective schools, it is remarkable and noted by Williams (2000), that neither the *Nation at Risk* nor the *Goals 2000* reports addressed or examined the role of the principal in school reform efforts. LaPointe and Davis (2006) also made this observation, stating that school leaders have been "a professional group largely overlooked by the various educational reform movements of the past two decades" (p.16).

The 1990s are known for the technological and global economic expansion. These expansions provided new challenges as America continued its efforts to maintain progress in providing the education, training, and expertise to students to compete in a global market

(Kennedy, 2005). Although progress had been made as federal education funding had increased dramatically since the Goals 2000 Act was enacted, legislators, educators, business leaders, and communities were still grappling with ways to increase student achievement and to introduce innovative and effective programs in schools. By 2001, 49 states had written standards that were measureable, the training and qualifications of teachers were being closely examined, and 15 states were assessing students annually to measure student progress (Kennedy, 2005). However, due to increased assessment and new standards for learning, many gaps in student achievement were exposed and amplified as minority students were performing well below that of other students. At the end of the 20th century, reading and math skills of minority high school graduates were on par with 13 year old white students, and one out of ten Latinos and one out of 20 African Americans dropped out of high school (Kennedy, 2005). In addition, only one third of teachers in 1999 reported feeling adequately prepared for the use of technology in their classrooms while overcrowding, lack of access to after school programs, and an overall inequality of education were all issues the American education community struggled to address (Kennedy, 2005).

Faced with these challenges, Congress reauthorized the ESEA Act with the passage of Public Law 107-110, better known as the No Child Left Behind (NCLB) Act of 2001. A primary provision of this act was that schools and school systems were given expanded flexibility and control over their federal funding. For example, for the first time, schools and school systems could transfer up to 50% of the their federal grant funds provided for programs such as Safe and Drug Free Schools (Title IV), Innovative Programs (Title V), Improving Teacher Quality and Educational Technology (Title II) to any one of these programs or to the Improving the

Academic Achievement of the Disadvantaged (Title I) without separate federal approval (U.S. Department of Education, 2002).

In regards to accountability, the NCLB Act attempted to address the areas of teacher quality, student testing, scientifically based research, and public school choice. The NCLB Act requires any state that receives federal funding to ensure that teachers are highly qualified. Highly qualified under this mandate is a teacher who has completed all state certification or licensure requirements, has at least a bachelor's degree, and has demonstrated a level of expertise in his or her specific content area (U.S. Department of Education, 2002). Elementary level teachers who were in the teaching profession for less than one year were now required, per the NCLB Act, to pass a state examination that would demonstrate their proficiency in core elementary curriculum areas such as reading, language arts, mathematics and writing. Secondary level teachers who were in the teaching profession for less than one year were now required to either pass a state examination in their specific academic area, complete an undergraduate major in their specific academic area, complete a graduate degree in their specific academic area, or obtain an advanced certification or credential in their content area (U.S. Department of Education, 2002). Experienced teachers were provided an option of participating in a state developed Highly Objective Uniform State Standard of Evaluation (HOUSSE) in order to obtain the highly qualified status under the NCLB legislation.

Scientifically based research is a term that is found 111 times in the NCLB Act (Wikipedia, 2008). It refers to the new mandate for schools to use scientifically based research strategies in the classroom and when providing professional learning to teachers. This requirement was included to ensure that programs and services for students had undergone the needed rigorous and scientific review and that they had been supported as effective within

educational research. Funding for such scientifically based research programs and services, such as the Early Reading First Program, was also supported by the NCLB Act.

The third component of NCLB, expanding parental option or school choice, attempted to provide a new benefit to one of the primary consumers of public education, namely parents. Parents of students attending schools that have not made the required yearly progress for two consecutive years are provided the option of selecting a higher performing school in the school system for their student to attend (U.S. Department of Education, 2002). In addition, this provision also requires that parents be kept informed about the performance of the school and school system through detailed school and school system report cards.

The fourth component of NCLB redefined the entire accountability system for public schools in the United States. Although several states had already implemented annual state and local assessments for students to better measure student progress, NCLB requires that all students be assessed annually for mathematics and reading in grades three through eight and at least once in high school (U.S. Department of Education, 2002). By the end of the 2007-2008 school year, this annual assessment requirement expanded to include mandatory state assessments in the area of writing. The types of assessments and overall accountability system to be used are left up to each state as long as the accountability system is within the parameters set by NCLB and is approved by the United States Department of Education (U.S. Department of Education, 2002). One important parameter set forth in the NCLB Act is that each state must establish a definition of Adequate Yearly Progress (AYP) that will be used to determine the achievement proficiency of students within each school and school system and that all students must be proficient in reading and math no later than 2013-2014 (U.S. Department of Education, 2002). Other important parameters require that a single statewide system of accountability must

be applied to all schools in the state, and all public school students must be included in the accountability system. In addition, all public schools and public school systems are held accountable for the achievement of all students and students in various subgroups (i.e. students with disabilities, Limited English Proficient students, students in a major ethnic/racial group), and a state's definition of AYP must include graduation rate for high schools and additional indicators for elementary and middle schools such as attendance rates (U.S. Department of Education, 2002). Finally, a state's accountability system must be statistically valid and reliable, and in order for a school to make AYP, a school must ensure that it has assessed at least 95% of all students enrolled and 95% of all students in each subgroup (U.S. Department of Education, 2002).

In addition to various parameters set for individual state accountability systems for student achievement and school performance, NCLB introduced sanctions for schools and school systems that do not demonstrate that they have met their AYP on an annual basis (U.S. Department of Education, 2002). Under NCLB, a school is labeled as a year one needs improvement school after it has not met its AYP goals for two consecutive school years. Sanctions begin with school choice and end with the restructuring of the school. Table 2 provides a list of the NCLB sanctions, labeled as school improvement options, associated with schools that are identified as Year One needs improvement through Year Five needs improvement (U.S. Department of Education, 2002).

Georgia has developed and implemented its own accountability model in order to fulfill the requirements under the NCLB Act. It is called the Georgia Single Statewide Accountability System (SASS) and integrates both federal and state requirements regarding educational accountability (Georgia Department of Education, 2007). AYP is the largest component of the

Table 2

NCLB School Improvement Options

Needs Improvement Year	School Improvement Option
Year One Year Two	 Student is offered school choice Local Educational Agency (LEA) is required to provide technical assistance to the school to specifically address the academic achievement problem that caused the school to be identified for improvement School must develop or revise a two-year improvement plan Provide supplemental educational services
	2. LEA continues to offer technical assistance
Year Three	1. LEA must take at least one of the following corrective actions: -Replace school staff responsible for the continued failure to make AYP -Implement a new curriculum based on scientifically based research -Significantly decrease management authority at school level -Extend the school day or school year -Appoint an outside expert to advise the school on its progress toward making AYP in accordance with the school plan -Reorganize the school internally
Year Four	Develop a plan that would restructure the school by carrying out one of the following options: -Reopen the school as charter school -Replace principal and staff -Contract for private management company of demonstrated effectiveness -State takes over school -Any other major restructuring of school governance
Year Five	Implement restructuring plan no later than the first day of school year following year four described above

Georgia SASS and requires that schools meet three criteria. The first Georgia AYP criterion is the 95% participation rule. This rule requires that each school as a whole, and all student groups with at least 40 students, must have a 95% participation rate or above on state assessments in reading, language arts, and mathematics (Georgia Department of Education, 2007). The second Georgia AYP criterion is the Annual Measureable Objectives (AMO) rule. Each school as a whole, and all student groups with at least 40 students, must meet or exceed the State's Annual

Measureable Objectives that are based on the percentage of students scoring proficient or advanced on state assessments in the areas of reading, language arts, and mathematics (Georgia Department of Education, 2007). The AMOs established in Georgia must ensure that all student groups, schools, school districts, and the state as a whole reach a 100% student proficiency rate by the school year 2013-2014. The third Georgia AYP criterion is the Second Indicator rule. Each school must meet a pre-established standard or show progress on a Second Indicator. The second indicator is typically graduation rate for high school. The graduation rate must be at or above the predetermined rate of 60%, or the rate must show improvement over the preceding school year to meet the graduation rate indicator. For elementary and middle schools, it is typically attendance rate or some other state assessment such as the state writing test. For a school to meet the attendance rate indicator, the percentage of students absent more than 15 days in a school year must be less than 15% or at least show a decrease from the preceding school year (Georgia Department of Education, 2007).

Georgia's SASS also provides consequences for schools that do not meet AYP requirements (Georgia Department of Education, 2007). Schools that do not meet their AYP goals for one

year face no consequences; however, schools that do not meet their AYP goals for two or more consecutive years are placed in needs improvement status. Not making AYP for two consecutive years is defined as a school that does not meet its 95% participation rate criteria for two consecutive years, a school that does not meet its AMO criteria in the same subject (reading, language arts, or math) for two consecutive years, or a school that does not meet their second indicator criteria for two consecutive years. School level consequences for schools classified as needs improvement are detailed in Georgia's SASS and range from school choice to school restructuring. Table 3 provides a list of the Georgia's SASS consequences that are imposed on schools that are identified as Year One needs improvement through Year Ten needs improvement (Georgia Department of Education, 2007). Any quick review of Georgia's SASS and school level consequences for schools that do not meet their AYP objectives annually clearly indicates that there is a new level of school accountability that has never been seen in the history of educational accountability. This new level of accountability has provided unprecedented challenges to states, school systems, schools, and most notably to the person in the highest position of accountability at the school level, the school principal. For the first time, the role of the principal in a large scale, nationwide accountability model had not been overlooked as was the case with previous reform movements (LaPointe & Davis, 2006; Williams, 2000). The school improvement options, or consequences, set forth by NCLB and Georgia's SASS have clear implications for the principal as this position would specifically be targeted for change when a school would reach the consequence level of school restructuring (Georgia Department of Education, 2007; U.S. Department of Education, 2002). Although NCLB appears to be the first piece of legislation of its magnitude and scope to include the principal in its accountability

Table 3

Georgia School- Level Consequences for Needs Improvement Schools

Needs Improvement Status	Consequences/Interventions	
Did not make AYP	No Companyoness	
Year 1	No Consequences	
	1. School Choice	
Needs Improvement Year 1		
(Did not make AYP for	2. Develop School Improvement Plan	
second consecutive year)		
Needs Improvement	1. School Choice	
Year 2	2. Supplemental Services	
1 cui 2	3. Implement School Improvement Plan	
Needs Improvement	1. School Choice	
Year 3	2. Supplemental Services	
	3. Continue School Improvement Plan	
	4. Develop/Implement School Corrective Action Plan	
Needs Improvement	1. School Choice	
Year 4	2. Supplemental Services	
	3. Implement School Corrective Action Plan	
	4. Plan for School Restructuring	
Needs Improvement	1. School Choice	
Year 5	2. Supplemental Services	
	3. Continue School Corrective Action Plan	
	4. Implement School Restructuring Plan	
Needs Improvement	1. School Choice	
Year 6	2. Supplemental Services	
	3. Implement School Restructuring Plan	
	4. GADOE School Performance Review and Needs Assessment	
	5. Develop Improvement Contract	
Needs Improvement	1. School Choice	
Year 7	2. Supplemental Services	
	3. Implement Improvement Contract	
	4. Contract Monitored School Year 1	
Needs Improvement	1. School Choice	
Year 8	2. Supplemental Services	
	3. Update Improvement Contract	
	4. Contract Monitored School Year 2	
	5. GADOE School Performance Review and Needs Assessment	
	6. Develop Management Contract	
Needs Improvement	1. School Choice	
Year 9	2. Implement Management Contract	
N. 1.7	3. Contract Managed School Year 1	
Needs Improvement	1. School Choice	
Year 10	2. Supplemental Services	
	3. Contract Managed School Year 2	
	4. Update Management Contract	

provisions, it is not the first time the importance and impact of the school principal on school performance and school improvement has gained widespread attention. There is a large body of research, widely known as Effective Schools Research (ESR), which has consistently concluded that principal leadership is one of the correlates to school effectiveness.

Effective Schools and Principal Leadership

The initial research efforts of Edmonds (1979) and others (Lezotte, 1979; Klitgaard & Hall, 1975; Weber, 1971) spawned an era of school improvement research commonly referred to as Effective Schools Research (ESR), and the timeframe in which it was conducted has been similarly coined as the Effective Schools Movement (Lezotte, 1986). Summarily, the above ESR studies and investigations concluded that instructionally effective schools had five core characteristics in common: strong leadership at the school level, high expectations for students, safe and orderly school atmosphere and climate, student's acquisition of basic skills take precedence of all other school activities and frequent and consistent evaluation of student progress (House Committee on Education and Labor, 1987). The basic underlying position and assumptions of Effective Schools Research was clearly summarized in a report conducted by the United States House Committee on Education and Labor that was presented to the House of Representatives, 100th Congress, during the 1st session in 1997,

Effective Schools research primarily posits that teachers, principals, and schools control many educational elements that can improve student achievement, student behavior, and teaching and learning practices. The underlying assumptions in Effective Schools programs are: all children are educable; and, their educational outcomes derive primarily from the nature of the schools to

which they are sent, not from the nature of the family or neighborhood from which they come.

These five characteristics of effective schools, or close derivatives of them, would continue to receive support throughout the Effective Schools Movement and Effective Schools Research.

Cohen (1982), who attempted to summarize Effective Schools Research conducted up until the early 1980s, concluded that while the five core characteristics or practices of effective schools were not all inclusive, they were "quite sensible" (p.15). Cohen (1982) provided further support for his conclusion about characteristics of effective schools by stating,

They imply that a school in which the principal and instructional staff agree on what they're doing, believe they can do it, provide an environment conducive to accomplishing the task, and monitor their effectiveness and adjust performance based upon such feedback, is likely to be an effective school (p.15).

The Effective Schools Movement is defined by researchers as the general timeframe beginning in 1966 and spanning up to the late 1980s to early 1990s. Mace-Matluck (1987) categorized the Effective Schools Movement into four eras. During the first era, 1966 to 1976, the first searches for effective schools began and initial research studies and identification of such schools ensued. The second era, 1976 to 1980, introduced effective schools case studies, program evaluations, and the origin of definitions for effective schools. The third era, 1980-1983, is characterized as the timeframe in which many effective school studies were examined collectively, studies were synthesized and critical reviews of ESR began to surface. The effective schools era from 1983 and forward is noted for the initial decline in the Effective Schools Movement, although many individual effective school studies continued nationwide across many settings (Mace-Matluck, 1987).

Jansen (1995) categorized effective schools research conducted in the 1960s and 1970s as large, quantitative studies, mid to late 1970s effective school studies as refined large sample quantitative studies, late 1970s to early 1980s studies as being primarily checklists and case studies, and described studies conducted in the late 1980s to early 1990s as refined methodologies and renewed critiques. Regardless of how the effective schools movement is best described or characterized, the movement provided a critically needed body of educational research regarding what worked in schools.

One of the earliest large scale effective school studies was conducted by Weber (1971) and represented the setting where much effective schools research was being conducted, inner city schools serving poor student populations. He conducted an in depth case study of four schools in Manhattan, Kansas City, and Los Angeles and concluded that were five commonalities across the four schools: strong leadership, high expectations, orderly climate, careful evaluation of pupil progress, and a focus on reading (Weber, 1971). In an attempt to determine whether effective schools even existed, Klitgaard and Hall (1975) conducted what has been referred to as both a historical and substantive study because it was the "first rigorous, large scale effort to identify effective schools" (Mace-Matluck, 1987, p.8). The study concluded that unusually effective schools existed even when factors such as socio-economic status (SES) and cognitive ability were controlled for (Klitgaard & Hall, 1975). And although high achieving schools in their study only represented 2% to 9% of all the schools studied, these schools were found to be more effective than other schools with similar student populations. In addition to being significant as one of the first effective schools study, Klitgaard and Hall's (1975) study is considered to be significant to the Effective Schools Movement as it provided support for future effective schools research as well as the foundation for future effective schools research

criticism. Another significant researcher in the early stages of the Effective Schools Movement is Ronald Edmonds, who is credited for discovering the original characteristics of effective schools. His landmark article in *Educational Leadership* in 1979 was based on his reviews of several large scale effective school studies that were conducted in schools across New York, California, and Michigan. He concluded that there were six characteristics of effective schools, the five characteristics or correlates listed above and a sixth characteristic which was that school energy and resources can be diverted from other areas in order to further primary objectives (Edmonds, 1979).

Another key researcher in the early stages of the Effective Schools Movement is Lawrence Lezotte. In a policy prospectus for improving urban education in Connecticut in the late 1970s, Lezotte (1979) concluded that there were five critical dimensions of instructionally effective schools. First, an effective school had an essential mission that was clear to school staff, and the staff had a clear understanding of the mission. Second, were teacher efficacy and teacher expectations which stemmed from the beliefs, norms, and attitudes within the school climate. In addition, Lezotte (1979) found that the most productive schools were schools where both students and teachers were most satisfied. Third, principals in effective schools provided strong instructional leadership in that they were involved in frequent evaluation of student progress and exhibited strong communication between and among staff. Fourth, students in effective schools had the greatest opportunity to learn and practice. Lastly, the home support system (i.e. parent involvement) is critical to the success of a school as the home and family system is critical for the education and socialization of the student (Lezotte, 1979). Lezotte (1991) would later refine his findings to seven correlates of effective schools: safe and orderly environment, climate of high expectations for success, instructional leadership, clear and focused mission, opportunity to learn and student time on task, frequent monitoring of student success, and home-school relations. Two other significant studies conducted in the early 1980s provided the firm foundation for Effective Schools Research (Glenn & McLean, 1981; Phi Delta Kappa, 1980). Phi Delta Kappa (1980) examined exceptional urban elementary schools by aggregating findings from 253 case studies, 515 research studies, and 25 interviews and determined that the characteristics of exceptional schools were leadership, staff development, emphasis on curriculum, level of funding, and parent involvement. Glenn and Mclean (1981) examined effective schools for poor black children in Virginia, Maryland and New York City and concluded that the school itself and characteristics of school personnel are more important determinants of student achievement than a student's family background. More specifically, efficient planning, teacher effectiveness, administrator/leadership characteristics, use of resources, and focus on basic skills were determined to be the most influential on school effectiveness (Glenn & McLean, 1981).

Once the Effective Schools Movement was well under way and the above researchers had laid a strong framework in which to examine the effectiveness of schools, many individual studies as well as empirical reviews of studies quickly began to emerge (Bedford, 1988; Bell, 2001; Cole, 2003; Craig et al, 2005; Grady, Wayson & Zirkel, 1989; Jansen, 1995; Reed & Roberts, 1998; Townsend, 1997). Some of the other characteristics found in effective schools include, but are not limited to, a strong culture for teaching and learning, a high level of parent interest and involvement, evidence of effective instructional practice, a curriculum that is aligned with state standards, respectful and supportive relationships between teachers and students, consistent measurement of success, a risk-taking environment, a wise use of technology and resources, the employment of quality teachers, and a shared school vision (Craig et al., 2005;

Foster, 1997; Johnson et al., 2000; Zigarelli, 1996). Some studies also began to examine schools that were becoming more effective. For example, Duke (2006) reviewed five studies that specifically examined turnaround schools, schools formerly low performing that become high performing. This examination yielded that in four of the turnaround studies, prompt assistance to students, teacher collaboration, data driven decision making, organizational structure, staff development, and leadership (defined as actions of principals and teachers) were frequently associated with the processes used to improve the school's overall performance.

Eventually, transnational studies on effective schools began to emerge. Townsend (1997) examined school communities in the United States and in Australia to determine what factors contributed to effectiveness of schools. His results indicated that elements related to staff such as dedicated and qualified staff, academic administrative leadership, together with elements related to total school environment, such as clear school goals, safe and orderly environment and positive school climate were found in both countries as the most important elements to effective schools (Townsend, 1997).

Although the Effective Schools Research conducted in the late 1960s to early 1990s provided fairly consistent findings in regards to the characteristics, commonalties or correlates of effective schools (Cohen, 1982), ESR has not been without criticism (D'Amico, 1982; Grady et al., 1989; Jansen, 1995; Mace-Matluck, 1987). These criticisms have primarily been based on definition issues or research methodology issues. D'Amico (1982) warned against using ESR correlates as any kind of "recipe" for school improvement due to previous researchers failing to link their data sources to their data findings as well their inability to account for the multitude of other characteristics of effective schools in their research (p.61). Grady et al. (1989) also provided many criticisms of what she refers to as the effective schools research formula.

Consistent with D'Amico's warning of any recipe, Grady et al. (1989) warns against the oversimplistic nature of the effective schools formula stating, "reducing the characteristics of truly effective schools to a brief list obscures what really happens to make a good school" (p.9). She continues to suggest that the effective schools research is not as conclusive as it claims to be as clear relationships have not been established, and there is a lack of multivariate, longitudinal studies to address causation. Other criticisms provided by Grady et al. (1989) are effective schools proponents promise quick results; the research has been limited to primarily elementary schools in urban systems with disadvantaged students, and the research is overly focused on outcomes such as achievement tests/scores. Jansen (1995) provided 11 different concerns regarding effective schools research, primarily methodological issues. Examples of such concerns were sample bias, definitional concerns, limited controls for background characteristics, observer bias, level of analysis issues, aggregation of achievement data (i.e. using average scores for school level data), and methodological limitations (i.e. large representation of qualitative investigations) (Jansen, 1995).

In spite of well documented criticisms of ESR, it cannot be overlooked that similar characteristics or correlates have been found in a multitude of studies on effective schools using various methodologies (Cohen, 1982). Cohen (1982) concluded that "enough research has been conducted, and enough findings have been successfully replicated, to permit a synthesis" (p.15). For example, principal leadership, or more specifically instructional leadership, has consistently been found to be an important component or correlate of an effective school (Cohen, 1982; Craig et al., 2005; Glenn & McLean, 1981; Phi Delta Kappa, 1980; Reed & Roberts, 1998; Townsend, 1997; Weber, 1971). Just as research has consistently indicated for over 30 years that leadership is as primary component of an effective school, research has attempted to establish a definable

relationship between principal leadership and a more specific indicator of effective schools, namely student achievement.

Principal Leadership and Student Achievement

The American public has consistently demanded more effective schools across the last several decades. This demand has in turn placed a consistent demand on the educational research community to continuously examine what contributes to school improvement. The Effective Schools Research, as discussed above, has overwhelmingly examined and supported the critical role that the school principal plays in effective schools. However, an examination of the educational leadership literature that has attempted to establish a relationship between school leadership and student achievement, provides no consistent conclusions. For example, research reviews, like those of LaPointe & Davis (2006), conclude that the literature base on leadership and student achievement provides "a growing consensus" that school leaders do influence student achievement (p.18). Providing even more support for this influence, Leithwood, Seashore-Louis, Anderson and Wahlstrom (2004) conducted an in depth review of the available evidence and research on leadership and student learning and suggested that the influence of school leadership on student achievement was second only to the influences of classroom instruction. Nettles and Herrington (2007) revisited major educational literature on the direct effects of school leadership and student achievement and concluded that "several decades of research on the topic has resulted in a body of knowledge that details the positive relationships between the practices of school principals and student academic achievement" (p.729). However, they suggest that there are many unanswered questions due to educational researchers not including specific leadership behaviors into research models and not using student achievement as a dependent variable (Nettles & Herrington, 2007). These oversights in the

literature, state Nettles and Herrington (2007), have resulted in a lack of consensus in the educational research community on what components of leadership impact school leadership which leaves many unanswered questions. Nonetheless, some researchers have concluded, through meta-analysis or other modeling methodology, sizeable direct or indirect effects of school leadership on student achievement (Hallinger & Heck, 1996; Leithwood & Jantzi, 2000; Marzano et al., 2005).

Some individual studies have applied specific models and methodologies to the examination of principal leadership and student achievement in specific schools, specific settings, and using specific educational personnel (Andrews & Soder, 1987; Biester, 1984; Cole, 2003; Eberts & Stone, 1988; Heck, Larsen & Marcoulides, 1990; Laroque, 2007). Cole (2003) studied 13 elementary magnet schools in Louisiana to determine the existence of Effective School Correlates that positively affected student achievement. The survey results of 226 staff members indicated that correlates were heavily intertwined but that the greatest predictors of variance were home school relations, instructional leadership, and opportunities to learn (Cole, 2003). Heck, Larsen and Marcoulides (1990) studied all public elementary schools and high schools in California that scored above or below predetermined cut off scores in reading and math for their third, sixth and twelfth graders. Their results demonstrated that principals in schools that were found to be high achieving were "substantially different" from principals in schools that were consistently low achieving (p.120). This study also concluded that these effects were present even when the variables of student socioeconomic status and language backgrounds were taken into account (Heck et al. 1990). Eberts and Stone (1988) examined various principal practices such as instructional leadership, organizing and participating in professional development and conflict resolution, in relation to the mathematics achievement of

over 14,000 elementary students across 300 schools. Their findings suggested that principal leadership in instructional activities and conflict identification and resolution were linked to student achievement. In a two year study of 67 elementary schools and 20 secondary schools in Seattle, Andrews and Soder (1987) examined principal leadership using the perceptions of teachers and staff. Their results indicated that teachers' perceptions of the principal as an instructional leader were crucial to the achievement of students in the areas of reading and mathematics, specifically for students identified as low achieving (Andrews & Soder, 1987). Using a different methodology, Laroque (2007) conducted a qualitative study in an urban middle school in Florida that had made dramatic improvements on state assessments in just three years. The school principal, teachers, parents and community partners were interviewed, and the results of such interviews indicated that the principal's leadership style, being collaborative, respectful, providing consistent support, and ensuring constant communication, was the "driving force behind student achievement" (Laroque, 2007, p.159).

However, other educational experts, such as Harris (2004), while acknowledging the large body of research that linking school leadership to student achievement, concluded that there remain "significant gaps in our knowledge base" and found "very few studies that have explored the relationship between leadership and student learning outcomes in any depth" (p.4). In addition, a number of studies have concluded that there is no direct link between principal leadership and student achievement (Bedford, 1988; Hallinger, Bickman, & Davis, 1996; Hallinger & Heck, 1996; Leitner, 1994; Zigarelli, 1996). Bedford (1988) examined the relationship between the characteristics of effective schools, including instructional leadership, to student achievement and six demographic variables (size of school, SES status, race of students, location of school, tenure of the principal, and gender of principal) in 131 middle schools in

Georgia. The results of the study indicated that there was a negative correlation between instructional leadership and student performance on state achievement tests. Demographic variables such as SES, race, and size of school were found to be significantly correlated to student performance on state achievement tests (Bedford, 1988). Using longitudinal data across the years 1988, 1990, and 1992 gathered on the effects of effective school correlates (i.e. instructional management) on student achievement (i.e. students' scores on 12th grade examination), Zigarelli (1996) examined survey data gathered from principals, parents and students using a linear regression analysis. The results of this analysis provided no evidence that a principal's involvement in the improvement of teaching impacted student achievement (Zigarelli, 1996). Finding similar results when examining the instructional management or leadership of the principal in relation to student achievement, Leitner (1994) surveyed principals and teachers in 27 elementary schools and examined prior student achievement and student SES for two school years. The results of the multiple regression analysis indicated that there was little to no relationship between any measure of student achievement and instructional management (Leitner, 1994). Further examination by Leitner (1994) suggested that while the relationship between leadership and student achievement was in a positive direction, other factors such as characteristics of the environment and the organization influenced this relationship.

The above discussion of the research on leadership and student achievement suggests that there is some impact of principal leadership on student achievement, but no specific type of impact is clear. For example, Hallinger et al. (1996), in a study of 98 elementary schools in Tennessee, concluded that principal leadership had no significant direct impacts on reading achievement but that a principal could have an indirect impact on the school's effectiveness by

performing leadership actions that impact the school's learning climate. In a widely known and cited research study, Hallinger and Heck (1996) examined 40 studies conducted between 1980 and 1995 that focused on the relationship between principal leadership and overall school effectiveness in relation to each study's specific research design and methodology. The results of this examination indicated that studies that were conducted using direct effects methodology, with and without antecedent variables, yielded weak or no significant relationship between leadership and school effectiveness (Hallinger & Heck, 1996). However, studies that used a mediated effects methodology, with and without antecedent variables (indirect effects), yielded more consistently positive results, suggesting that principal leadership has more indirect impact on student learning, or, as Hallinger and Heck (1996) concluded, impact by "influencing internal school processes that are directly linked to student learning" (p.38). Also finding mixed results, Leithwood and Jantzi (2000) concluded that principal and teacher leadership had significant impacts on the overall school but that there were no significant impacts on the classroom. They did conclude that principal leadership, specifically transformational leadership, has an effect on student engagement although family educational culture had a larger impact (Leithwood & Jantzi, 1999; 2000). Similar attempts to link specific types of leadership or leadership styles to student achievement or school effectiveness have been made as many different types of leadership roles and styles have emerged over the last several decades. Some of the most prominent leadership styles represented in educational leadership literature will now be discussed.

Leadership Roles and Styles

Many leadership roles and styles have been defined and explored in the leadership literature in an attempt to identify leadership actions, roles, or duties that are effective in

impacting overall student and school success (Finnigan, 2005; Hallinger, Bickman, & Davis, 1996; Leithwood & Jantzi, 1999; Marzano et al., 2005; Northouse, 2004). As a result, an expansive list of leadership roles or styles are represented in the literature that includes, but is not limited to, transformational, transactional, situational, collaborative, facilitative, managerial, cultural, instructional, strategic, value added and contingency (Bass & Avoilio, 1994; Lashway, 1997; Leithwood & Jantzi, 1999; Marzano et al, 2005; Northhouse, 2004; Portin et al., 2003; Rice & Kastenbaum, 1983; Taylor, 1994; Thomas, 1997). Leithwood and Duke (1999) examined 121 articles that discussed leadership styles or roles and concluded that the three leadership styles, in order from most frequently studied to less frequently studied, were instructional leadership, transformational leadership, and contingent leadership. Due to these three being highly represented in the educational leadership literature, they will be discussed more in depth.

Instructional leadership has been referred to as the most popular theme in educational leadership over the last two decades (Leithwood, Jantzi & Steinbach, 1999; Marzano, 2005). It gained much attention during the Effective Schools Movement in the 1970s as general descriptions and definitions of what principals were doing in effective schools were coined with the term instructional leadership. However, specifically defining and describing what instructional leadership is or what it entails has presented challenges to researchers over the years. Similar to most of the leadership roles and styles examined in the literature, instructional leadership has been defined in many different ways, with some researchers using a narrow definitional scope and others using very broad definitional scopes (Leithwood & Duke, 1999; Marzano et. al, 2005). Smith and Andrews (1989) describe instructional leadership using four dimensions: resource provider, instructional resource, communicator, and visible presence. Blasé

and Blasé (2002) describe it using five dimensions: encouraging and facilitating the study of teaching and learning, facilitating collaborative efforts among teachers, establishing coaching relationships among teachers, using instructional research to make decisions and using the principles of adult learning when dealing with teachers. Describing the term a little differently but encompassing some of the attributes described by Smith and Andrews (1989) and Blasé & Blasé (2002), Phillips (2007) concluded that effective instructional leadership involves establishing goals, providing resources to teachers, managing curriculum, monitoring instruction through lesson plans and evaluating teachers. Although it is apparent that instructional leadership does not have an agreed upon definition or agreed upon behaviors associated with it, the educational literature on instructional leadership does suggest that in general terms, instructional leadership encompasses the actions that principals take, or delegate to others, that promotes growth in student learning (Flath, 1989). Instructional leadership was a common model for schools in the 1980s and early 1990s, but due to the restructuring initiatives for schools in the early 1990s, additional leadership models emerged (Leithwood, 1992). Concluding that instructional leadership no longer represented what school leadership would require in light of the changes that were occurring, Leithwood (1992) suggested that at least in the 1990s that "transformational leadership evokes a more appropriate range of practice; it ought to subsume instructional leadership as the dominant image of school administration" (p.8).

Transformational leadership is a leadership style that resulted from a combination of many old and new ideas (Taylor, 1994). The term was originally coined by James MacGregor Burns in 1978. Burns (1978) defined this leadership style as evident when "one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality, their purposes (which may have started out as separate) become fused"

(p.20). He further described transformational leadership as being collective, dissentual, causative, and morally purposeful and further suggested that when present, transformational leadership could bring about substantial organizational change (Burns, 1978). Building upon this definition and description, Bass and Aviolo (1994) established what has become known as the Four I's of transformational leadership. The first I, individual consideration, refers to the need for leaders to ensure the needs of individual staff members are attended to. Second, intellectual stimulation involves the leader assisting staff members to think of new and alternative solutions to existing issues and problems. Third, the school leader must consistently communicate high expectations to teachers and students or provide inspirational motivation. And lastly, by demonstrating or modeling strong accomplishments and character, the principal should provide idealized influence to teachers (Bass & Avolio, 1994).

The person credited with developing the first model of transformational leadership is

Kenneth Leithwood in 1999. Building on the original work of Burns (1978) and incorporating
the Four I's (Bass & Avolio, 1994), Leithwood and Jantzi (1999) provided the six leadership
dimensions and four management dimensions of transformational leadership. The six leadership
dimensions were building school vision and goals, providing intellectual stimulation, offering
individualized support, symbolizing professional practices and values, demonstrating high
performance expectations, and developing structures to foster participation in school decisions
(Leithwood & Jantzi, 1999). As with many roles and models of leadership, Leithwood and
Jantzi (1999) noted that transformational leadership lacked specific practices and therefore
identified four management dimensions in their model: staffing, instructional support,
monitoring school activities, and community focus. Leithwood and Jantzi (2006) went on to
explore the impact and effects of transformational leadership on various school staff and

practices and found that transformational leadership did have significant effects on teaching practices but not on student achievement. In two separate studies, one with practicing educators and one with school leaders in training, Kirby, Paradise, and King (1992) found that followers were inspired by some leaders and not others and that the source of inspiration could not be pinpointed, they did note, however, that charisma, challenging the status quo, and modeling were behaviors that were linked to the preferences and persuasion of followers. In contrast, Kirby et al. (1992) concluded that followers preferred leaders who in engage in transformational behaviors associated with individual consideration, intellectual stimulation, and contingent reward. Although individual consideration and intellectual stimulation were characteristics well supported by other researchers who had examined transformational leadership, contingent reward was a characteristic or leadership behavior more commonly associated with another leadership style embedded in contingency theory (Fiedler, 1967).

Contingency theory, later developing into the contingency leadership style, can be defined as the dependency of a leader's effectiveness on the fit between a leader's style and the situation (Northhouse, 2004). A leader's style, as defined in this theory, is whether they are task motivated or relationship motivated (Fiedler, 1967). Situation, as defined in this theory, consists of three variables that determine the how favorable or unfavorable various situations are within an organization (Northhouse, 2004). The first situational variable is leader-member relations which refers to the level of confidence, loyalty, and attraction that a follower has towards their leader. The second variable is task structure which is the extent that a requirement or expectation is clear and understood by the follower. The third variable is position power which is the amount of authority that a leader possesses to reward or punish a follower (Northhouse, 2004). The underlying premise of contingency leadership style is that one can measure a leader's level of

task motivation or relationship motivation as well as the favorability of the three situational variables and determine whether a leader will be effective in a particular setting. Northhouse (2004) summarized this basic premise by stating, "if your style is a good match for the situation in which you work, you will be good at the job; if your style does not match the situation, you will most likely fail" (p.112). Contingency theory and leadership style is well represented and supported in the educational leadership literature (Northhouse, 2004; Tokarski 1997). However, consistent with other leadership styles or models, it is has not been without criticism, particularly criticisms surrounding the difficulty of measuring leadership style and situational favorableness, ambiguous validity across studies on contingent leadership, and concerns with implications for leadership training programs due to the large role that a leader's personality plays in a leader's style (Rice & Kastenbaum, 1983).

As mentioned above, many different leadership styles or roles have emerged in the literature and in leadership practice over the last 50 years. The three leadership styles discussed above represent the most commonly researched styles, it is also apparent that no one particular leadership style has proven dominant in both the training and practice of school leadership in modern times. Some researchers have either suggested a shift or have actually shifted the focus from specific leadership styles that have specific characteristics associated with them to specific leadership behaviors that positively impact schools (Cotton, 2003; Goldman, 1998; Marzano et al. 2005). Goldman (1998) suggested that if educational values in children are to be impacted or encouraged, then there should be a focus on how those values are portrayed in the behavior of leaders in schools. He also addresses the prior focus on leadership styles by stating that "leaders may call their leadership style whatever they wish, transactive, transformational, top-down, bottom-up, but ultimately, their deep seated values and beliefs are mirrored throughout the

school" (Goldman, 1998, p.21). In the early to mid 2000s, the shift from examining effective leadership styles to effective leadership behaviors was quite apparent. Two of the most well known and referenced studies on effective leadership behaviors have been that of Kathleen Cotton (2003) and Marzano et al. (2005).

Effective Leadership Behaviors

Cotton (2003) reviewed 81 studies that examined principal's behaviors in relation to student outcomes. The studies used in her examination consisted of 49 primary studies, 23 secondary (i.e. review or summary), five mixed studies, and four studies that consisted of textbook analysis or research guidelines. Cotton concluded four key points from her extensive examination. First, research from the 1970s and 1980s supports the understanding that school leadership is a primary component of high achieving schools. Secondly, the recent research on school leadership and student achievement provided support and confirmation of previous research on the topic. Thirdly, there was a wide representation of methodologies, research designs, subject groups and student outcomes across the studies examined. Lastly, there were 25 specific leadership practices or behaviors observed of principals in high achieving schools and one leadership behavior or practice that was not observed (Cotton, 2003). The behaviors were generally classified into five categories: establishing a clear focus on student learning, interactions and relationships, school culture, instruction, and accountability. The 25 specific leadership behaviors exhibited by effective principals and the one exclusionary leadership behavior, as defined and described by Cotton (2003), are briefly summarized below.

Safe and orderly school environment. Set high standards and expectations for student behavior and apply rules consistently. In addition, they established a sense of responsibility on

behalf of the students for their own behavior as well as established an environment that would encourage appropriate behaviors.

Vision and goals focused on high levels of student learning. Work collaboratively to define the mission and goals related to learning for the school.

High expectations for student learning. Expect, and instill in their staff the expectation, that all students can reach their learning potentials.

Self-confidence, responsibility, and perseverance. View themselves as responsible for the success of the school and work collaboratively with others to ensure success in spite of any challenges.

Visibility and accessibility. Ensure that they are frequently available to and interact with teachers, students, and community members.

Positive and supportive school climate. Encourage and promote a climate that communicates interest and care for student.

Communication and interaction. Build positive relationships by communicating and sharing pertinent information to various audiences related to the school.

Emotional/interpersonal support. Provide support and care to staff and students with personal needs.

Parent/community outreach and involvement. Seek out representation of parents and community members in decisions involving both instruction and governance in the school.

Rituals, ceremonies, and other symbolic actions. Strengthen affiliation with the school by supporting activities and ceremonies that are part of the school's rituals and traditions.

Shared leadership/decision making and staff empowerment. Involve teachers and other staff in the decision making process and ensures that all decision makers have the necessary information and training needed.

Collaboration. Create and maintain an environment whereby teachers and staffs plan and work together towards school improvement.

The importance of instructional leadership. Actively involved in the instructional and curriculum program in the school.

High levels of student learning. Continually focus on promoting and engaging others to improve student achievement.

Norm of continuous improvement. Always strive for improvement and they ensure an improvement process is part of the school's culture.

Discussion of instructional issues. Engage in and facilitate discussion about curriculum and instruction in the school.

Classroom observations and feedback to teachers. Frequently visit classrooms to observe, evaluate and coach teacher instruction.

Teacher autonomy. Recognize teachers' skill and judgment in addition to preventing unnecessary disruption to their classrooms.

Support risk taking. Take risks and encourage teachers to take risks through innovation and experimentation to improve the school.

Professional development opportunities and resources. Offer frequent professional development opportunities and secure the necessary financial, human, material and facility resources that the school needs to improve.

Instructional time. Protect instructional time and avoid interruptions to the classroom as well as ensure additional learning time is provided before, during and after the normal school day.

Monitoring student progress and sharing findings. Ensure there are appropriate monitoring processes in place for student progress and communicate results to school community.

Use of student data for program improvement. Interpret student data and know how to utilize it in curriculum and instructional planning.

Recognition of student and staff achievement. Provide recognition to staff and student achievements.

Role modeling. Provide the example of the behavior they expect from staff and students by working collaboratively with staff in professional development events, dedicating time to student learning and treating students, staff and community members with respect.

What principals don't do. Do not implement too much administrative control over others in the school. In addition, they balance their activities so that desk work and discipline do not outweigh more supportive roles.

Cotton's (2003) study identified specific leadership behaviors that were consistently present in effective schools. It also provided additional information on the role and influence of effective school leaders on student achievement and overall school effectiveness. Cotton's (2003) research synthesis included other notable findings about school leadership. For example, the research summary revealed that effective leadership behaviors and instructional leadership were observed more in female principals than males and elementary principals displayed more instructional leadership than secondary principals. Cotton (2003) also found that leadership

behaviors had little direct impact on student outcomes but had large indirect impacts. Again, of most significance, Cotton examined and synthesized many research findings to conclude, with more specificity than research in the past, what specific leadership behaviors impact student achievement and school effectiveness. However, the major limitation of the above study is that it was only able to provide descriptive conclusions about the established research on principal leadership and school effectiveness. What the educational leadership literature had still not established were statistical connections or relationships between specific leadership behaviors and school effectiveness. A significant meta-analytic study by Marzano et al. (2005) attempted to fill this research void.

Marzano et al. (2005) examined 69 studies on leadership and student achievement conducted from 1978 to 2001 to determine the relationship between principal behavior and the average academic achievement of the students in the school. The meta-analysis conducted involved studies across a total of 2,802 schools comprised of 1,319 elementary, 323 middle schools, and 371 high schools. 1,400,000 students and 14,000 teachers were estimated to be involved in the 69 studies examined. The uniqueness of this study is that various statistical analyses were applied to the 69 studies and the questionnaires in an attempt to link principal leadership and student achievement. The results of the correlative and meta-analysis yielded an average positive correlation of .25 between general leadership behaviors of a principal and the average academic achievement of students (Marzano et al., 2005). Although providing caution in using a single correlation to explain the findings of a meta-analysis, Marzano et al. (2005) summarizes the finding as "compelling" as principal leadership does have a positive relationship with student achievement. By nature of this relationship, as principal leadership improves, student achievement improves. In search of specific leadership behaviors that impact student

achievement, further analysis of the 69 studies by Marzano et al. (2005) indicated that specific leadership behaviors or responsibilities were positively correlated with student achievement. These leadership behaviors were categorized by Marzano et al. (2005) as the 21 responsibilities of leaders and were found to be associated with first and second-orders of change. The 21 firstorder change and the seven second-order change leadership responsibilities are listed in Table 1. The responsibilities with the highest correlation with student achievement were situational awareness (.33) and flexibility (.28) and the responsibilities with the lowest correlation with student achievement were relationships (.18) and affirmation (.19). Through factor analysis, Marzano et al. (2005) linked all of the 21 leadership responsibilities to what is called "managing the daily life of the school," or first-order change. First-order change is defined by Marzano et al. (2005) as change that is incremental or taking the next step in the change process in a school. Practically speaking, Marzano et al. (2005) stated, "First-order change is a by product of the dayto-day operations of the school. The routine business of schooling demands corrections and alterations that, by definition, are first-order in nature" (p.70). The results of the meta-analysis suggested that these 21 leadership responsibilities were required to effectively manage the daily school operations and thereby provide a list of "management tools of effective leaders" (p.70). The 21 leadership responsibilities as defined and described by Marzano et al. (2005) will be briefly summarized below.

Affirmation. Celebrates successes and acknowledges failures

Change agent. Willingly and actively challenges the status quo

Contingent rewards. Provides recognition for and rewards accomplishments of others

Communication. Exhibits strong communication with and among teachers, staff

and students

staff

Culture. Fosters shared beliefs, sense of community and cooperation

Discipline. Protects teachers from issues and influences that detract from instructional time and focus

Flexibility. Adapts leadership behaviors to the situation and is comfortable with dissent Focus. Clear goals and objectives are established are the focus of the school's attention Ideals/beliefs. Communicates strong beliefs and ideas about schooling and operates from those beliefs and ideas

Input. Involves teachers in the development and implementation of critical decisions and polices

Intellectual stimulation. Keeps teachers and staff abreast of current theories and practices and makes the discussion of these part of the regular school culture

Involvement in curriculum, instruction and assessment. Leader is directly involved with the design and implementation of curriculum, instruction and assessment practices

Knowledge of curriculum, instruction and assessment. Leader is knowledgeable about current curriculum, instruction and assessment practices

Monitoring/evaluating. The effectiveness of school practices and their impact on student achievement is closely monitored by leader

Optimizer. Encourages and takes leadership in new and challenging innovations

Order. Establishes a clear set of operating procedures and routines

Outreach. Leader provides advocacy and serves as the spokesperson for the school

Relationships. Displays an awareness of the personal aspects and needs of teachers and

Resources. Ensures teachers have the materials and professional development to successfully do their jobs

Situational awareness. Demonstrates awareness of the undercurrents in the running of the school and utilizes this awareness when addressing problems in the school

Visibility. Ensures quality contact and interactions with teachers and students

Factor analyses additionally revealed that seven of the 21 leadership responsibilities were linked with more innovative change, or what Marzano et al. (2005) called second-order change. The seven leadership responsibilities found to be associated with second-order change in rank order according to their relationship were knowledge of curriculum, instruction, and assessment, optimizer, intellectual stimulation, change agent, monitoring/evaluating, flexibility, and ideals/beliefs. Marzano et al. (2005) describes second-order change as being deeper than first-order change and is change that "alters the system in fundamental ways, offering a dramatic shift in direction and requiring new ways of thinking and acting." (p.66).

The significance of Marzano et al.'s (2005) study is that for the first time leadership behaviors were found to be statistically related, or positively correlated, to student achievement. In addition, Marzano et al.'s (2005) definitions and descriptions of his concluded 21 leadership responsibilities are directly aligned to at least 19 out of the 25 effective leadership practices of principals, as defined and described by Cotton (2003). Table 4 provides a comparison between the 25 leadership practices of Cotton (2003) and the 21 leadership responsibilities of Marzano et al. (2005). These newly identified statistical relationships concluded by Marzano et al. (2005) provided a new foundation upon which current and future research can build upon to strengthen the understanding of the relationship between principal leadership and student achievement.

Table 4

Comparison of Cotton's (2003) 25 Leadership Practices and Marzano et al.'s (2005)

21 Leadership Responsibilities.

Cotton's 26 Leadership Practices	Marzano et al.'s 21 Leadership Responsibilities
Safe and Orderly Environment	OrderDiscipline
Vision and Goals Focused on High Levels	• Focus
of Student Learning	 Ideals/Beliefs
Visibility and Accessibility	Visibility
Positive and Supportive School Climate	Culture
Communication and Interaction	Communication
Emotional and Interpersonal Support	Relationships
Parent and Community Outreach and	Outreach
Involvement	
Rituals, Ceremonies, and other Symbolic	Culture
Actions	
Shared Leadership, Decision Making, and	• Input
Staff Empowerment	
Collaboration	 Communication
	 Input
Instructional Leadership	 Involvement in Curriculum,
	Instruction, and Assessment
	 Knowledge of Curriculum,
	Instruction, and Assessment
Discussion of Instructional Issues	Communication
	 Intellectual Stimulation
	Input
Classroom Observation and Feedback of Teachers	Monitoring/Evaluating
Support of Risk Taking	Change Agent
	 Optimizer
Professional Development Opportunities	Resources
and Resources	
Protecting Instructional Times	 Discipline
Monitoring of Student Progress and	Monitoring/Evaluating
Sharing Findings	
Use of Student Progress Data for Program	 Monitoring/Evaluating
Improvements	
Recognition of Student and Staff	 Affirmation
Achievement	

	Contingent Rewards
High Expectations for Student Learning	
Support of Teacher Autonomy	
Self-Confidence, Responsibility and	
Perseverance	
Role Modeling	
Ongoing Pursuit of High Levels of	
Student Learning	
Norm of Continuous Improvement	
	Situational Awareness
	Flexibility

Summary

The above review of the literature indicates that educational accountability has evolved greatly since the historical launching of Sputnik in 1957. That single event launched an era of reform based reports, initiatives, and accountability models that still resonate in current accountability models in American education. Although accountability has been a part of a school's culture for many decades, the shift in focus from curriculum, school funding, and development of new programs for students to a laser like focus on specific student and school outcomes has made a major impact on the role of the school leader. Arguably, the most rigorous piece of accountability legislation that has faced schools in American history is the No Child Left Behind Act (NCLB) of 2001. Attempting to target improvements in the areas of teacher quality, student testing, the use of scientifically based research, and parental choice, the NCLB Act required that there be specific measureable objectives set for every public school in America and required annual attainment of those objectives. Failure to do so would lead to consequences or sanctions for the school. This mandated responsibility of reaching and maintaining a school's Annual Yearly Progress (AYP) provided major impact and challenge for school principals nationwide. For example, Georgia, through its Single Statewide Accountability System (SASS), requires that schools meet AYP by annually meeting three requirements. These requirement are 95% or more student must participate in state testing, a school must meet its Annual Measureable Objectives for student performance on state testing, and the school must meet or showing progress on a second indicator.

A review of the literature on principal leadership clearly suggests that the principal plays a critical role in the progress of students and the overall school. Effective Schools Research (ESR) over many decades has consistently identified the presence of instructional leadership in

effective schools and although not without criticism, this large body of research provided a good foundation for future links between leadership and school effectiveness. For example, there are many studies in the literature that have examined the impact of principal leadership and student achievement. These studies have also predominantly concluded that leadership does impact student achievement, although specifically defining what parts of leadership make the most impact as well as if the impacts are more direct or indirect in nature has been less consistent.

Attempts in the literature to determine these parts of leadership that make the most impact is best represented in the many different types of leadership roles and styles that have been defined and examined in relation to school effectiveness. Leadership styles such as instructional leadership, transformational leadership, and contingency leadership have been examined extensively in the literature. Although some consistent definition and application for each has been established, single leadership styles have lacked the ability to clearly link leadership and school improvement with any specificity. As a result, a focus on specific leadership behaviors and their impact on student achievement ensued. Recent studies that have focused on specific leadership behaviors and student achievement or school effectiveness have produced promising results as study reviews, meta-analyses, and factor analyses have concluded statistical relationships between the two. While such relationships have predominantly substantiated using student outcomes such as test scores, the relationship between effective leadership behaviors and school effectiveness, as it is currently defined (i.e. a school's ability to meet AYP or not), is not clearly represented in the literature. The current study examines this relationship in order to provide more information on the impact of principal leadership on student achievement and school effectiveness within a current accountability context.

CHAPTER 3

METHODOLOGY

Introduction

The relationship between principal leadership and AYP attainment is a timely and important topic to examine. There has been great focus and attention in the educational leadership literature on the impact of principal leadership on student achievement, as typically measured by state assessments, and within the context of effective schools. However, principal leadership in relation to overall school performance, as measured and categorized by AYP status, is not currently represented in educational leadership literature. The NCLB Act requires schools to demonstrate Annual Yearly Progress (AYP) by meeting three criteria: meeting AMO on state assessments in mathematics and reading/language arts, 95% student participation rate or higher on state assessments, and meeting or showing progress on a second indicator. This heightened and expanded level of accountability has in turn heightened and expanded educators' and researchers' attention on school leadership and school performance in relation to these three criteria and overall AYP status.

This study was designed to examine the role of effective principal leadership behaviors within the current context of NCLB accountability for schools, specifically the role of such behaviors in the AYP attainment of middle schools in Georgia. Therefore, the purpose of this study was to examine effective principal leadership behaviors in relation to the AYP attainment of middle schools in Georgia.

Research Questions

The overarching question for this study was: What is the relationship between effective

principal leadership behaviors and AYP attainment in Georgia middle schools? More specifically, the study attempted to answer the following sub-questions:

- 1) To what extent are effective principal leadership behaviors present in distinguished and needs improvement middle schools in Georgia?
- 2) To what extent are there differences between effective principal leadership behaviors in distinguished and needs improvement middle schools in Georgia?
- 3) To what extent do effective principal leadership behaviors relate to and predict AYP status in middle schools in Georgia?

Procedures

Participants

The population used for this study was Georgia public school teachers who were teaching reading, language arts or mathematics in middle schools that had met AYP for three consecutive years, thereby earning distinguished status, and in schools that had not met AYP for two consecutive years and thereby are categorized as needs improvement schools. A list of distinguished public middle schools in the state of Georgia that had met AYP for the last three consecutive school years (2005–2006, 2006-2007 and 2007-2008) and a list of public middle schools on the needs improvement list (i.e. failed to attain AYP for the 2006-2007 and 2007-2008 school years) were obtained from the Georgia Department of Education website. According to the Georgia Department of Education's website, there were 458 middle schools in the 2007-2008 school year, 204 of those categorized as distinguished and 128 of those schools categorized as needs improvement (Georgia Department of Education, 2008). All 128 middle schools currently on the needs improvement list and 128 randomly selected middle schools categorized

as distinguished were selected for the study. However, teacher e-mail addresses were only available and obtained for 119 distinguished schools and 107 needs improvement schools. The 119 distinguished middle schools represented 45 Georgia school systems and the 107 needs improvement middle schools represented 32 Georgia school systems.

A list of reading, language arts, and mathematics teachers currently teaching in each of the targeted distinguished and needs improvement middle schools was obtained from each school district's or individual school's website. The common structure of middle schools in Georgia consists of sixth, seventh, and eighth grades with at least one teacher per grade level assigned to teach mathematics and at least one teacher per grade level assigned to teach language arts and reading. If the school system's or school's individual website did not specify the content area of core grade level teachers, e-mail addresses for all core teachers were obtained. To increase response rate, all reading, language arts and mathematics teachers identified for each school were invited to complete the instrument. A total of 3,487 teachers working in distinguished middle schools were e-mailed the instrument and invited to participate in the study. Of the 3,487 emails sent, 320 of the e-mailed instruments bounced, meaning they were not deliverable and an error message was returned. This was likely due to inaccurate teacher e-mail information posted on the school websites and network filters that refused to allow outside of system e-mails to be delivered. Of the 3,167 remaining potential respondents, 67 of the participants opted out of the survey and 49 of the instrument responses were incomplete or partial. 465 completed instruments were obtained from teachers working in distinguished middle schools resulting in a teacher response rate of 14.91%. A total of 2,929 teachers working in needs improvement middle schools were e-mailed the instrument. 692 of the e-mailed instruments bounced, 25 opted out and 36 were partially completed. A total of 295 completed instruments were returned from

teachers working in needs improvement middle schools resulting in a teacher response rate of 13.40%.

All completed instrument responses obtained from teachers who worked in the school during the 2007-2008 school year, who taught reading, language arts, or math, and whose school had the same principal for the last two consecutive years, as indicated on the instrument, were targeted for use in this study. Once this criterion was applied, the total number of eligible and completed teacher responses from each of the two AYP school categories totaled 273 teacher responses from 80 distinguished middle schools and 182 teacher responses from 60 needs improvement middle schools. These 455 teacher responses were used for all analyses, findings, and implications in this study. An analysis of the number of distinguished middle schools (N=119) and needs improvement schools (N=107) that were contacted and invited to participate in this study and the number of schools from each group where eligible teacher responses were obtained concluded a response rate of 67.2% and 56.1%, respectively.

Instrumentation

The instrument that was used in the current study was developed by the researcher and obtained information on effective principal leadership behaviors. Survey Monkey (Finley, 2008), a web-based survey tool, was employed for the distribution and tracking of the electronically administered instrument. An online, web-based instrument administration was selected for use in the study. Yun and Trumbo (2000) concluded that web-based surveys are less expensive, provide fast submission, produce quicker results, and are considered environmentally friendly due to no use of paper products. Other positives to using a web-based instrument administration were lower expenses, reduction in error, more interactive and dynamic for respondents, and the researcher can track respondents (Finley, 2008; Nardi, 2006). The positives of using a web-

based instrument were concluded to outweigh the identified negatives such as the possibility of technical issues, limited computer access, spam/privacy issues and multiple respondent submissions (Finley, 2008; Nardi, 2006). The Survey Monkey (Finley, 2008) web-based survey tool included countermeasures for these issues such as strong privacy and anti-spamming agreements, an e-mail invitation collector feature which tracks and limits responses based on e-mail address, and technical support services for most technical glitches that may arise during web-based administration.

The items in the instrument were specifically based on the results of a meta-analysis conducted by Marzano et al. (2005). Although Marzano et al. (2005) concluded that there were 21 leadership responsibilities correlated to student achievement, only 11 of the responsibilities were selected for use in this current study for three primary reasons. First, the results of the meta-analysis conducted by Marzano et al. (2005) indicated that the overall average correlation between leadership, as defined in general terms, and student achievement was .25. Therefore, only the 11 leadership responsibilities found to be correlated with student achievement at a .25 level or higher were selected for use. These 11 leadership responsibilities were change agent, culture, discipline, flexibility, input, knowledge of curriculum, instruction, and assessment, monitoring/evaluating, order, outreach, resources, and situational awareness. Secondly, an analysis of middle schools in Georgia that are on the needs improvement list indicated that over 90% of the schools did not make their AYP due to inadequate student achievement as measured by performance on state assessments. Therefore, an examination of leadership behaviors that have the highest correlation with student achievement was deemed the most appropriate for use in the current study. Thirdly, the researcher did not select all 21 leadership responsibilities for

use in the current study in order to keep the instrument concise enough and reasonable enough for participants to complete in an attempt to increase the instrument's response rate.

Marzano et al. (2005) also concluded from the meta-analysis that there were specific behaviors and characteristics that were associated with each of the leadership responsibilities. These behaviors and characteristics were used to develop the instrument items in the current study. In addition, Marzano et al. (2005) found that there were a total of 35 behaviors and characteristics associated with the 11 leadership responsibilities that correlated the highest with student achievement. The specific behaviors associated with each of the 11 leadership responsibilities are represented in Table 5. Some leadership responsibilities had a minimum of two associated behaviors while others had a maximum of four (Marzano et al., 2005). Therefore, the instrument used in the current study contained no less than two items and no more than four items for each of the 11 corresponding leadership responsibilities. The initial instrument contained 35 items that presented a leadership behavior that was individually linked to one of the leadership responsibilities explicitly defined by Marzano et al. (2005). Three instrument items were eliminated due to feedback obtained from expert reviewers, which is discussed below, resulting in 32 final instrument items. Since multiple items in the instrument were clustered to describe each of the 11 leadership responsibilities as identified by Marzano et al. (2005), a Cronbach's alpha was computed for each cluster of instrument items and are reported in Table 6. This analysis allowed the researcher to determine the coefficient of reliability, or consistency, for each instrument item. Lowenthal (2001) asserted that unlike other types of coefficients, Cronbach's alpha is not typically examined for statistical significance but rather a level of acceptability and that "an absolute value of .7 (or sometimes .8 or .6) is normally taken as the criterion of acceptability" (p.12). The computed Cronbach's alpha coefficients for the 32

Table 5
Specific Leadership Behaviors Associated with 11 Leadership Responsibilities

Leadership Responsibility	Specific Leadership Behaviors
Situational Awareness	 Accurately predicting what could go wrong from day to day Being aware of informal groups and relationships among the staff Being aware of issues in the school that have not surfaced but could create discord
Flexibility	 Adapting leadership style to the needs of specific situations Being directive and nondirective as the situation warrants Encouraging people to express diverse and contrary opinions Being comfortable with making major changes in how things are done
Monitoring/Evaluation	 Continually monitoring the effectiveness of the school's curricular, instructional, and assessment practices Being continually aware of the impact of the schools practices on student achievement
Discipline	 Protecting instructional time from interruptions Protecting teachers from internal and external distractions
Outreach	 Ensuring that the school complies with all district and state mandates Being an advocate of the school with parents Being an advocate of the school with the central office Being an advocate of the school with the community at large
Change Agent	 Consciously challenging the status quo Being willing to lead change initiatives with uncertain outcomes Systematically considering new and better ways of doing things Consistently attempting to operate at the edge versus the center of the school's competence
Order	 Establishing routines for the smooth running of the school that staff understand and follow Providing and reinforcing clear structures, rules, and procedures for staff Providing and reinforcing clear, rules, and procedures for students

Table 5 (continued)

Specific Leadership Behaviors Associated with 11 Leadership Responsibilities

Leadership Responsibility	Specific Leadership Behaviors
Knowledge of Curriculum, Instruction and Assessment	 Possessing extensive knowledge about effective instructional practices Possessing extensive knowledge about effective curricular practices Possessing extensive knowledge about effective assessment practices Possessing extensive knowledge about effective classroom practices
Resources	 Ensuring that teachers have the necessary materials and equipment Ensuring that teachers have the necessary staff development opportunities to directly enhance their teaching
Input	 Providing opportunities for staff to be involved in developing school policies Providing opportunities for staff input on all important decisions Using leadership teams in decision making
Culture	 Promoting cohesion among staff Promoting a sense of well-being among staff Developing an understanding of purpose among staff Developing a shared vision of what the school could be like

instrument items containing specific leadership behaviors that comprised the 11 Marzano et al. (2005) leadership responsibilities ranged from .63 for change agent to .89 for knowledge of curriculum, instruction, and assessment. Three of the leadership responsibilities had reliability coefficients ranging from .63 to .70, five had coefficients from .70 to .80, and three had coefficients from .80 to .89. The original wording of each instrument item was verbatim to Marzano et al.'s (2005) description of each associated behavior or characteristic. Table 6 provides each instrument item number, which leadership responsibility it is linked to, the correlation to student achievement as concluded by Marzano et al. (2005), and the computed Cronbach's alpha coefficient for each leadership responsibility based on the results of this study.

For each of the instrument items, teachers were asked to rate on a four point Likert scale their level of agreement as to whether their school principal exhibited the leadership behavior described. This type of intensity scale was selected to determine the level of teacher agreement that their principal exhibited effective leadership behaviors in their school (Nardi, 2006).

Demographic information was obtained through eight multiple choice response items positioned at the end of the instrument. The demographic items in the instrument assessed the respondent's gender, ethnicity, experience as a teacher, number of years principal has been at school, teaching level and content area, size of school, and percentage of students with disabilities (SWD) in the school. The percentage of students with disabilities in the school was assessed due to Georgia Department of Education data suggesting that most middle schools did not make AYP in the 2006-2007 school-year due to their special education subgroup performance on state assessments. One additional piece of school demographic information, the percentage of students in the school who receive free or reduced lunch, was obtained by the researcher from the Georgia Department of Education's website (Georgia Department of Education, 2009).

Table 6

Instrument item number associated with 11 Marzano's Leadership Responsibilities with the Highest Correlation to Student Achievement.

Instrument Item	Leadership Responsibility	Correlation to Student Achievement*	Cronbach's alpha coefficient
4, 5	Situational Awareness	.33	.68
10, 20, 24	Flexibility	.28	.74
1, 19	Monitoring/Evaluation	.27	.69
21, 32	Discipline	.27	.71
6, 7, 14, 17	Outreach	.27	.73
8, 9, 29	Change Agent	.25	.63
11, 15, 26	Order	.25	.88
13, 16, 23, 25	3, 16, 23, 25 Knowledge of Curriculum, Instruction and Assessment		.89
22, 28	Resources	.25	.71
3, 30, 31	Input	.25	.79
2, 12, 18, 27	Culture	.25	.85

Note: *Correlations between leadership responsibility and student achievement were concluded and reported by Marzano et al. (2005).

Pilot Study

To establish content validity for the instrument items, approximately 30 expert reviewers, such as university faculty who teach and/or research in the area of educational leadership and practicing district and school level leaders, were asked to preview the instrument to establish that the instrument items were appropriate, that the leadership behaviors are characteristic of effective principals, and that they were appropriately linked to the leadership responsibility they were purported to be by Marzano et al. (2005). The content validity measure used was modeled after the content validity survey developed by Rubio, Berg-Weger, Tebb, Lee, and Rauch (2003). A sample of the content validity measure used in the current study is represented in Appendix D. A total of 11 expert reviewers responded. Ratings and comments from the expert reviewers on each of the instrument items were reviewed and analyzed. Three of the 35 instrument items were consistently questioned by reviewers and thus removed from the instrument. Three additional instrument items were revised: one to increase clarity and two to eliminate double barreled items. (Nardi, 2006). The three items that were revised and the three items that were removed were associated with the leadership responsibilities, change agent, flexibility, and situational awareness.

In addition to this content review, a pilot study was conducted by administering the instrument via e-mail to approximately 50 teachers in regional private and charter schools. According to Iraossi (2006), a pre-test or survey pilot is important to obtain feedback regarding whether survey or instrument items are too long or too short, whether items are confusing, whether the survey is too long, whether answers obtained reflect information sought, and whether any items may be biased. Therefore, the purpose of the pilot study was to establish that the instrument has a reasonable completion time and for specificity, clarity, and appropriateness.

The instrument was administered in the same manner that the actual instrument was administered with the addition of three feedback questions at the end. The first feedback question assessed the time it took the teacher to complete the instrument and the second question assessed if there were any items the teacher thought were ambiguous or difficult to understand (Van Teijlingen & Hundley, 2001). The third question was open-ended and requested any other feedback the teacher has regarding the instrument. This pilot process was completed approximately four weeks prior to the actual distribution of the instrument by using the pilot survey feature within the Survey Monkey (Finley, 2008) web-based tool. A sample of the cover letter that was sent via e-mail to all pilot study participants is represented in Appendix E.

Pilot study responses were obtained from 16 teachers, with 15 complete and 1 partially complete. Results indicated that it took the pilot study participants an average of 9 minutes, with a range of 5 to 20 minutes, to complete the instrument. Regarding clarity of the instrument items, 86.7% of the respondents indicated that items were clear and understandable. Two of the pilot study participants, or 13.3%, indicated that there were items that were unclear or difficult to understand. One teacher responded that there were items that needed a "Don't Know" response and one was not provided on the instrument. The second respondent described an individual principal performance concern that was deemed irrelevant to the parameters of the current study. The open ended feedback item yielded three responses. Two of the responses indicated that some instrument items seemed repetitive and the third response identified a misspelled word. As a result, a "Don't Know" response was added to each of the 32 instrument items, instrument items were re-sequenced to reduce perceived similarity and the misspelling was corrected prior to distributing the instrument to actual study participants.

Data Collection

After receiving consent from the Institutional Review Board (IRB) at Georgia Southern University to conduct the research, a pre-notification e-mail was sent to all participants selected for the study approximately 60 days into the 2008-2009 school-year. A hard copy of the content of this pre-notification e-mail is included in Appendix G. Approximately two weeks after sending the pre-notification e-mail, an e-mail containing pertinent cover letter information as well as a link to the actual instrument was sent to teachers in the areas of reading, language arts and mathematics in each of the targeted distinguished and needs improvement middle schools. A hard copy of the instrument's cover letter that provided the purpose of the instrument, obtained informed consent, explained the rights of research participants, and provided contact information for study results or participant questions is included in Appendix B. An electronic derivative of both the cover letter and instrument was developed and distributed using Survey Monkey (Finley, 2008). A hard copy of the instrument that was sent electronically to study participants is represented in Appendix C.

Every middle school in Georgia is assigned a three digit system code and a four digit school code for state reporting purposes. Therefore, each instrument was coded with their respective seven digit code along with a "D" to signify distinguished AYP status or "N" to signify needs improvement status. This coding was only seen by the researcher in order to match responses to the specific middle school and AYP school classification (i.e. distinguished or needs improvement). It enabled teachers to respond and reply with no identifying information on the instrument and thus assured confidentiality. In addition, Survey Monkey provides a tool, entitled collectors, that allowed separate groups of participants to be surveyed as well as separate data sets for their responses. Therefore, a separate collector was established for distribution to

distinguished middle schools and needs improvement schools that assisted in conducting group comparisons after responses were obtained. Preliminary and descriptive data was also collected using the Survey Monkey (Finley, 2008) web-based tool.

Response Rate

Survey Monkey (Finley, 2008) data suggests that an average response rate for e-mailed surveys is 40%, with a 50% to 60% response rate being considered good. Kaplowitz, Hadlock, and Levine (2004) compared web-based survey response rates to those of mailed hard copy surveys and concluded that the rates were comparable when both were preceded with an advance notification. Sheehan (2001) concluded similar findings in a study that examined response rates for e-mail surveys for the last 15 years. E-mailed survey response rates were found to be consistent with other response rates using other distribution methods (Sheehan, 2001). In addition, it was concluded that there were several influences to response rate that should be considered when doing survey types of research: survey length, respondent pre-notification, follow-up contacts, and issue salience, or a respondent's association of importance and/or timeliness with the research topic (Sheehan, 2001).

In an attempt to positively influence the rate of return for the web-based instrument, a pre-notification e-mail was sent to all participants approximately a week before the actual e-mail containing the link to the instrument. This pre-notification briefly described the study, its objectives, the importance of participation, and when to expect the actual instrument via e-mail. In regards to issue salience, a brief statement emphasizing the timeliness and importance of examining variables possibly linked to schools' AYP status was included. Approximately two weeks following the date of the initial e-mailing of the instrument, a follow up e-mail was sent to all teachers who had not responded to the instrument. The follow up e-mail emphasized the

importance of responding due to the valuable information that they could provide as well as to increase the chances of an appropriate response rate for adequate study sample size. Information on how to obtain another copy of the instrument via e-mail was explained in the follow up e-mail. In addition, studies that have examined strategies that effect response rate for survey types of research have concluded that offering an incentive, especially monetary incentives, can increase return rates (Erwin & Wheelright, 2002; Biner, 1988). Therefore, pilot study and actual study participants were offered the opportunity to send an e-mail to the researcher to explicitly express their desire to be entered into a drawing for a one hundred dollar Visa gift card once the research project was completed. Participants were instructed to provide their name and mailing address in the e-mail in order to be entered into the drawing.

Summary

This study was designed to determine and describe the relationship between effective principal leadership behaviors and AYP attainment in Georgia public middle schools. It used a quantitative method that utilized instrument data to determine, describe and explain any established relationships found. After obtaining IRB approval and distributing a pre-notification e-mail to participants, a link to a web-based instrument was e-mailed to reading, language arts, and math teachers who were currently teaching in selected distinguished and needs improvement middle schools in Georgia. After employing an expert content review and a pilot study, the researcher developed and distributed an instrument that contained 32 items. These items were linked to the 11 Marzano's leadership responsibilities that were found to have the highest correlation with student achievement as well contain as eight additional demographic items. A total of 455 responses, 273 from 80 distinguished middle schools and 182 from 60 needs improvement schools, were obtained from teachers who worked in Georgia middle schools

during the 2007-2008 school year and who had the same school principal for the last two consecutive schools years and thus used in the study.

CHAPTER 4

REPORT OF DATA AND DATA ANALYSIS

Introduction

This study investigated the relationship between effective principal leadership behaviors and AYP attainment in Georgia public middle schools. It used an online, web-based instrument designed to obtain responses and data to determine, describe and explain any established relationships. The instrument contained 32 items that were linked to Marzano's 11 leadership responsibilities that were concluded to have the highest correlation with student achievement. Responses were collected and analyzed from 455 Georgia teachers of reading, language arts, and math who worked in 80 distinguished and 60 needs improvement middle schools during the 2007-2008 school year and from schools where the principal had been serving in their capacity for the last two consecutive school years. Descriptive statistical methods were employed to summarize and describe instrument responses. In addition, Cronbach's alpha tests to examine instrument item reliability, t-tests to examine differences between teacher's observations of leadership behaviors, and multiple regression analyses to examine the predictive value of the 11 leadership behaviors and various demographic variables on AYP status were conducted.

Demographics of Respondents

As noted in Chapter 3, usable data were gathered from 455 completed instruments.

Demographic statistics from these questionnaires are presented in Tables 7 and 8. Table 7 shows related teacher respondent demographics, such as sex, ethnicity, teaching area, teaching level and teaching experience. Table 8 shows related school demographics such as size of the school, experience level of principal, percentage of students in school that have disabilities, and

Table 7

Demographics of Participating Teachers

Characteristic	Distinguished (N=273)	Needs Improvement (N=182)
Sex		
Male	37 (13.6%)	21 (11.5%)
Female	236 (86.4%)	161 (88.5%)
Ethnicity		
Caucasian	227 (83.2%)	119 (65.4%)
African American	38 (13.9%)	51 (28.0%)
Hispanic	4 (1.5%)	5 (2.7%)
Asian	1 (.4%)	1 (0.5%)
Native American	1 (.4%)	0 (0.0%)
Other	2 (.7%)	6 (3.3%)
Teaching Experience		
<2 years	21 (7.7%)	10 (5.5%)
2-10 years	113 (41.4%)	91 (50.0%)
11-20 years	91 (33.3%)	55 (30.2%)
21-30 years	35 (12.8%)	19 (10.4%)
>30 years	13 (4.8%)	7 (3.8%)

Table 7 (continued)

Demographics of Participating Teachers

Characteristic	Distinguished (N=273)	Needs Improvement (N=182)
Teaching Area		
Reading	10 (3.7%)	11 (6.0%)
Language Arts	114 (41.8%)	69 (37.9%)
Math	118 (43.2%)	82 (45.1%)
Reading and Language Arts	20 (7.3%)	15 (8.2%)
Reading, Language Arts, and Matl	h 10 (3.7%)	4 (2.2%)
Language Arts and Math	1 (.4%)	1 (.5%)
Teaching Level		
Sixth	85 (31.1%)	60 (33.0%)
Seventh	84 (30.8%)	55 (30.2%)
Eighth	93 (34.1%)	59 (32.4%)
Six, Seventh, and Eighth	6 (2.2%)	4 (2.2%)
Seventh and Eighth	2 (.7%)	1 (.5%)
Sixth and Seventh	3 (1.1%)	3 (1.6%)

Table 8

Demographics of Participating Schools According to Teacher Response

Characteristic	Distinguished (N=273)	Needs Improvement (N=182)
School Size		
<300 students	9 (3.3%)	11 (6.0%)
300-600 students	68 (24.9%)	42 (23.1%)
>600 students	196 (71.8%)	129 (70.9%)
Principal Experience		
2-10 years	235 (86.1%)	166 (91.2%)
11-20 years	28 (10.3%)	8 (4.4%)
21-30 years	8 (2.9%)	7 (3.8%)
>30 years	2 (.7%)	1 (.5%)
Percentage of SWD		
0-9%	83 (30.4%)	27 (14.8%)
10-19%	135 (49.5%)	80 (44.0%)
20-29%	41 (15.0%)	50 (27.5%)
30-39%	11 (4.0%)	17 (9.3%)
40-49%	2 (.7%)	5 (2.7%)
50-100%	1 (.4%)	3 (1.6%)

Table 8 (continued)

Demographics of Participating Schools

Characteristic	Distinguished (N=273)	Needs Improvement (N=182)
Percentage of Free/Reduced Lunch		
Range	6.41 - 91.51	26.06 - 97.28
Mean	42.14	64.11
Standard Deviation	20.11	17.87

percentage of students in school eligible for free or reduced lunch. Of these demographics, it appears that differences between distinguished and needs improvement groups occurred in terms of teacher race, teacher experience, principal experience, percentage of students with disabilities in the school, and percentage of students who were eligible for free or reduced lunch in the school.

Findings and Data Analysis

The overarching question for this study was: What is the relationship between effective principal leadership behaviors and AYP attainment in Georgia middle schools? More specifically, the study was designed to answer the following sub-questions:

- 1) To what extent are effective principal leadership behaviors present in distinguished and needs improvement middle schools in Georgia?
- 2) To what extent are there differences between effective principal leadership behaviors in distinguished and needs improvement middle schools in Georgia?
- 3) To what extent do effective principal leadership behaviors relate to and predict AYP status in middle schools in Georgia?

The first research question, to what extent are effective principal leadership behaviors present in distinguished and needs improvement middle schools in Georgia, was addressed by computing frequency and descriptive data for each cluster of instrument items that corresponded to each of the 11 leadership responsibilities from both groups of distinguished and middle school teacher respondents. Means were calculated using the following corresponding coded values for each teacher response: 0 = Don't Know; 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree. The means and standard deviations as well as the minimum and maximum

values for both distinguished and needs improvement middle school teacher responses for each of the 11 leadership responsibilities are displayed in Table 9. Overall, the two leadership responsibilities with highest mean ratings were outreach and resources. The specific behaviors associated with outreach were ensuring that the school complies with district and state mandates and being an advocate for the school with parents, central office, and the community at large. The specific behaviors associated with resources were ensuring that teachers have materials and equipment and that they have the necessary staff development to directly enhance their teaching. Overall, the two leadership responsibilities with the lowest mean ratings were situational awareness and flexibility. The specific behaviors associated with situational awareness were awareness of informal groups and relationships in school and aware of issues that have not surfaced but could create discord. The specific behaviors associated with principal flexibility were adapting leadership style to the needs of specific situations, being directive or nondirective as the situation warrants, encouraging people to express diverse and contrary opinions, and being comfortable with making major changes in how things are done. An examination of the mean score ratings of teacher respondents from both groups indicated that the mean ratings for teachers in distinguished schools were higher than teachers in needs improvement schools for all of the leadership responsibilities, with the exception of the leadership responsibility, flexibility, which was lower.

The second research question, to what extent are there differences between effective principal leadership behaviors in distinguished and needs improvement middle schools in Georgia, was addressed by computing t-tests for independent samples. Table 9 also displays corresponding t-scores and df values for each of the 11 leadership responsibilities. Results of the

Table 9
Scores for 11 Leadership Responsibilities by AYP Status

Leadership Responsibility	Distinguished (N=273)	Needs Improvement (N=182)	t (df)
Situational Awareness			
Range	.00 - 4.00	1.00 - 4.00	
Mean	2.70	2.63	.80 (453)
SD	.94	.99	
Flexibility			
Range	.00 - 4.00	1.00 - 4.00	
Mean	2.74	2.76	21 (453)
SD	.89	.82	
Discipline			
Range	1.00 - 4.00	.50 - 4.00	
Mean	2.94	2.80	1.72 (453)
SD	.80	.85	
Outreach			
Range	1.00 - 4.00	.00 - 4.00	
Mean	3.33	3.26	1.15 (453)
SD	.70	.67	

Note: *p<.05, **p≤.01.

Table 9 (continued)

Scores for 11 Leadership Responsibilities by AYP Status

Leadership Responsibility	Distinguished (N=273)		
Monitoring/Evaluating			
Range	.50 - 4.00	1.00 - 4.00	
Mean	3.11	3.01	1.43 (453)
SD	.77	.75	
Culture			
Range	1.00 - 4.00	1.00 - 4.00	
Mean	3.09	3.05	.59 (453)
SD	.75	.69	
Order			
Range	1.00 - 4.00	1.00 - 4.00	
Mean	3.19	2.99	2.92** (453)
SD	.71	.73	
Resources			
Range	1.00 - 4.00	1.00 - 4.00	
Mean	3.20	3.04	2.55** (453)
SD	.68	.69	

Note: *p<.05, **p≤.01.

Table 9 (continued)

Scores for 11 Leadership Responsibilities by AYP Status

Leadership Responsibility	Distinguished (N=273)		
Knowledge of Curriculum, Instruction, and Assessmen	t		
Range	.00 - 4.00	.00 - 4.00	
Mean	3.09	3.02	.80 (453)
SD	.83	.83	
Input			
Range	1.00 - 4.00	.00 - 4.00	
Mean	3.01	2.84	2.32* (453)
SD	.75	.83	
Change Agent			
Range	.67 - 4.00	1.00 - 4.00	
Mean	3.02	2.82	2.64** (453)
SD	.77	.76	

Note: *p<.05, **p<.01.

analysis concluded that there were statistical differences between distinguished middle school teachers' and needs improvement middle school teachers' ratings for the leadership responsibilities: order, resources, input, and change agent. Distinguished middle school teachers (M = 3.19) reported statistically higher levels of agreement that their principal exhibited behaviors associated with the leadership responsibility, order (i.e. establishing and reinforcing routines, rules, and procedures for staff and students), than needs improvement middle teachers (M = 2.99). Distinguished middle school teachers (M = 3.01) also reported statistically higher levels of agreement that their principal exhibited behaviors associated with the leadership responsibility, input (i.e. staff input in decision making and in developing school policies), than needs improvement middle teachers, (M = 2.84). In addition, distinguished middle school teachers (M = 3.02) reported statistically higher levels of agreement that their principal exhibited behaviors associated with the leadership responsibility, change agent (i.e. challenging the status quo, leading change initiatives, and considering new ways of doing things), than needs improvement middle teachers (M = 2.82). Finally, distinguished middle school teachers (M = 3.20) reported statistically higher levels of agreement that their principal exhibited behaviors associated with the leadership responsibility, resources (ensuring teachers have materials, equipment, and staff development), than needs improvement middle teachers (M = 3.04).

The third research question, to what extent do effective principal leadership behaviors relate to and predict AYP status in middle schools in Georgia, was addressed by conducting correlation and multiple regression analyses. AYP status was coded in SPSS using the following values: 0 = Needs Improvement and 1 = Distinguished. Table 10 displays the Pearson product-moment correlation coefficients for all variables examined as well as corresponding means and

Table 10

Descriptive statistics and correlations among AYP status, 11 leadership responsibilities, and school demographics

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. AYP Status																
2. Change Agent	.12**															
3. Flexibility	01	.64**														
4. Sit. Awareness	.04	.48**	.55**													
5. Order	.14**	.67**	.62**	.42**												
6. Curriculum/Inst.	.04	.58**	.60**	.47**	.60**											
7. Monitoring/Eval.	.07	.63**	.80**	.53**	.67**	.63**										
8. Resources	.12*	.58**	.59**	.39**	.64**	.59**	.61**									
9. Input	.11*	.62**	.68**	.50**	.61**	.57**	.65**	.60**								
10. Culture	.03	.69**	.73**	.53**	.75**	.62**	.71**	.64**	.70**							
11. Discipline	.08	.50**	.56**	.37**	.62**	.52**	.53**	.63**	.55**	.63**						
12. Outreach	.05	.65**	.57**	.42**	.60**	.59**	.60**	.56**	.60**	.67**	.53**					
13. School Size	.03	.02	01	07	01	.08	.01	02	.01	01	03	.05				
14. Teaching Exp.	.04	.11*	.11*	.05	.08	.16**	.08	.14**	.14*	.05	.11*	.19**	.11*			
15. SWD	25**	08	04	07	12*	09	10*	15*	07	08	07	04	12*	07		
16. Free/Reduced	49**	08	.00	.00	05	03	02	03	09	05	04	06	36**	03	.19**	
M SD	.60 .49	2.94 .77	2.74	2.67	3.11	3.06	3.07	3.14	2.94	3.07	2.89	3.30	2.67	2.62	2.16 .97	

Note: AYP Status was coded as follows, 0=Needs Improvement and 1=Distinguished *p<.05, **p<.01.

standard deviations. There was a strong positive relationship between AYP status and the leadership responsibilities, order, change agent, resources, and input resulted. Therefore, as teacher ratings for order, change agent, and input increased, the school was more likely to have attained a distinguished AYP status. There was a strong negative relationship between AYP status and the school demographic variables, percentage of students with disabilities and free/reduced lunch. As teacher reported numbers of students with disabilities and state reported percentage of students receiving free or reduced lunch for each school increased, the school was less likely to have attained a distinguished AYP status.

Unlike simple correlations that are bivariate, the multiple linear regression analyses generated partial coefficients that account for the statistical contributions of covariates and other school and leadership measures. Table 11 displays the results of the multiple regression analyses for AYP status, all 11 leadership responsibilities, and the four school demographic variables that were examined. Two leadership responsibilities, flexibility (b = -.09, p = .03) and culture (b = -.15, p = .01), and three school demographic variables, school size (b = -.15, p = .00), percentage of students with disabilities (b = -.08, p = .00), and percentage of students with free and reduced lunch (b = -.01, p = .00) were statistically related, although negatively, to AYP status. As a result, as teacher ratings for the number of total students in the school, the percentage of students with disabilities in the school, and the percentage of students on free and reduced lunch in the school increased, the lower the likelihood the school obtained a distinguished AYP status. Likewise, the greater the teacher ratings for flexibility (adapting leadership style, comfortable making major changes, and encouraging diverse opinions) and culture (promoting cohesion and well being among staff and developing understanding of purpose and shared vision among staff)

Table 11

Regression results for AYP status, 11 leadership responsibilities, and school demographics

Predictor Variable	b	se b	β	t
Change Agent	.07	.04	.12	1.69
Flexibility	09	.04	16	-2.19*
Situational Awareness	.01	.03	.02	.38
Order	.11	.05	.16	2.32*
Curriculum/Instruction	02	.03	04	72
Monitoring/Evaluation	.05	.05	.08	1.11
Resources	.06	.04	.08	1.34
Input	.05	.04	.08	1.28
Culture	15	.05	22	-2.83**
Discipline	.01	.03	.02	.29
Outreach	02	.04	03	56
School Size	15	.04	17	-4.00***
Teaching Experience	.01	.02	.02	.56
Students with Disabilities	08	.02	15	-3.67***
Free and Reduced Lunch	01	.00	51	-11.85***

Note: AYP Status was coded as follows, 0=Needs Improvement and 1=Distinguished $*p<.05, **p\leq.01, ***p<.001$.

were, the lower the likelihood the school was classified as distinguished. The leadership responsibility, order (b = .11, p = .02), was concluded to be positively and statistically related to AYP status as the greater the teacher ratings for order (i.e. establishing routines and reinforcing rules and procedures for staff and students), the school was more likely to be classified as distinguished. Other covariates and leadership responsibilities such as teaching experience and the other eight leadership responsibilities were not statistically related to AYP status.

Summary

This chapter presented the data and data analysis for each of the three research questions as well descriptive data regarding the respondents and the schools that participated in the study. Participant demographics indicated that 273 teachers from 80 distinguished middle schools and 182 teachers from 60 needs improvement schools completed and returned the instrument. Comparatively, the demographics of teachers working in distinguished middle schools and teachers working in needs improvement middle schools differed among teacher race, perhaps teacher experience, perhaps principal experience, percentage of student with disabilities in the school, and percentage of free and reduced students in the school. The mean ratings of distinguished school teachers were higher than the mean ratings of needs improvement school teachers for every leadership responsibility except flexibility, which was lower. There were significant differences between the two respondent group ratings for the leadership responsibilities, order, input, change agent, and resources. Results of the multiple regression analyses concluded that three leadership responsibilities (flexibility, culture, and order) and three school demographic variables (school size, SWD, and free/reduced lunch) were strong predictors of AYP status, all having a negative, but significant, relationship with AYP status except the leadership responsibility, order, which had a significant positive relationship.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Introduction

This study was designed to examine the role of effective principal leadership behaviors within the current context of NCLB accountability for schools, specifically the role of such behaviors in the AYP attainment of middle schools in Georgia. Therefore, the purpose of this study was to examine effective principal leadership behaviors in relation to the AYP attainment of middle schools in Georgia and the overarching question for this study was: What is the relationship between effective principal leadership behaviors and AYP attainment in Georgia middle schools?

Summary of the Study

Educational accountability has evolved greatly since the historical launching of Sputnik in 1957. Arguably, the most rigorous piece of accountability legislation that has faced schools in American history is the No Child Left Behind Act (NCLB) of 2001. Attempting to target improvements in the areas of teacher quality, student testing, the use of scientifically based research, and parental choice, the NCLB Act required that there be specific measureable objectives set for every public school in America and required annual attainment of those objectives. Failure to do leads to state imposed consequences or sanctions for the school. This mandated responsibility of reaching and maintaining specific annual objectives, or Annual Yearly Progress (AYP), has provided major impact and challenge for school principals nationwide.

A review of the literature on principal leadership clearly suggests that the principal plays a critical role in the progress of students and the overall school. Effective Schools Research

(ESR) over many decades has consistently identified links between leadership, more specifically instructional leadership, and school effectiveness. However, attempts in the literature to determine what specific leadership behaviors makes the most positive impact is best represented in the many different types of leadership roles and styles that have been defined and examined in relation to school effectiveness. Recent studies that have focused on specific leadership behaviors and student achievement or school effectiveness have produced promising results as study reviews, meta-analyses, and factor analyses have concluded statistical relationships between the two. In search of specific leadership behaviors that positively impact student achievement, Marzano et al. (2005) conducted a meta-analysis on 69 studies and concluded that 21 leadership responsibilities positively correlated with student achievement. In addition, Marzano et al. (2005) concluded that 11 of these leadership responsibilities were correlated with student achievement at a .25 level of higher and that there were 35 specific leadership behaviors associated with them.

While the relationship between principal leadership and student achievement has been predominantly established using student outcomes such as test scores and meta-analyses, the relationship between effective leadership behaviors and school effectiveness, as it is currently defined (i.e. a school's ability to meet AYP or not), is not clearly represented in the literature. The current study examined this relationship in order to provide information on the impact of principal leadership on student achievement and school effectiveness within the current NCLB accountability context. The following specific research questions guided this inquiry:

- 1) To what extent are effective principal leadership behaviors present in distinguished and needs improvement middle schools in Georgia?
- 2) To what extent are there differences between effective principal leadership

behaviors in distinguished and needs improvement middle schools in Georgia?

3) To what extent do effective principal leadership behaviors relate to and predict AYP status in middle schools in Georgia?

This quantitative study utilized instrument data to determine, describe and explain any established relationships between specific leadership behaviors and AYP attainment in Georgia middle schools. After obtaining IRB approval, an expert content review and a pilot study were employed to examine the instrument for content validity, reasonable completion time, item specificity, and item clarity. After revising the instrument using feedback from both the content review and pilot study, a pre-notification e-mail to participants and a link to a web-based instrument was e-mailed to reading, language arts, and math teachers who were currently teaching in selected distinguished and needs improvement middle schools in Georgia. The instrument contained 32 questions that were linked to Marzano's 11 leadership responsibilities that were found to have the highest correlation with student achievement as well as contained eight demographic items.

Responses obtained from 273 teachers working in 80 distinguished middle schools and 182 teachers working in 60 needs improvement middle schools that had the same school principal for the last two consecutive schools years were used for all analyses, findings, and implications in the study. Cronbach's alpha to examine instrument item reliability, descriptive data to summarize responses and respondents, t-tests to examine differences between teacher's observations of leadership behaviors in distinguished and needs improvement middle schools, and multiple regression analyses to examine the predictive value of the 11 leadership behaviors on AYP status were employed to answer the research questions for the current study.

Discussion of Research Findings

The focus of this study was to examine the relationship of effective principal leadership behaviors and the AYP status in Georgia middle schools. To conduct this examination, a few fundamental assumptions were obtained from the literature that guided the inquiry for this study. First, literature supports the role and impact of principal leadership on student achievement and school effectiveness (Cohen, 1982; House Committee on Education and Labor, 1987; Cotton, 2003; Edmonds, 1979; Lezotte, 1979; Marzano et al., 2005). Secondly, student achievement is one of the three, and arguably the most important, indicators used to determine a school's annual AYP attainment and status in Georgia (Georgia Department of Education, 2007). Lastly, Marzano et al. (2005) concluded, via a meta-analysis of 69 previous studies on leadership and student achievement, that there are principal leadership responsibilities and behaviors that are positively correlated to student achievement. Based on these assumptions, this study attempted to answer three research questions pertaining to the presence of Marzano et al.'s (2005) leadership behaviors in Georgia middle schools, any differences between the presence of these behaviors in distinguished and needs improvement middle schools, and the extent that any of these behaviors related to and predicted school AYP status.

Regarding the presence of Marzano et al.'s (2005) 11 leadership responsibilities in Georgia middle schools, teacher respondents in distinguished middle schools rated 10 of 11 responsibilities higher than teachers in needs improvement middle schools. The 10 behaviors rated higher were situational awareness, monitoring/evaluation, discipline, outreach, change agent, order, knowledge of curriculum/instruction/assessment, resources, input, and culture. The leadership responsibility that was rated higher by needs improvement middle school teachers than distinguished middle school teachers was flexibility. Overall, the highest rated leadership

responsibilities were outreach and resources and the two lowest two leadership responsibilities were situational awareness and flexibility. This finding supports previous research on the presence of these leadership behaviors in successful schools (Bell, 2001; Cotton, 2003; Crow, 2007; Edmonds, 1979, Glen and McLean, 1981; House Committee on Education and Labor, 1987; Lezotte, 1991; Marzano et al., 2005; Marzano, 2003; Weber, 1971). Interestingly, Cotton's (2003) review of 81 studies on principal behaviors and student outcomes, provided support for nine of the 11 leadership responsibilities used in this study. The two lacking clear support in her research were situational awareness and flexibility. The specific behaviors associated with principal flexibility were adapting leadership style to the needs of specific situations, being directive or nondirective as the situation warrants, encouraging people to express diverse and contrary opinions, and being comfortable with making major changes in how things are done. Additional discussion of the impact of principal flexibility is provided below.

Differences in the presence of principal leadership behaviors in distinguished and needs improvement middle schools were identified in this study. It is important to note that these differences were determined using simple t-tests that did not account for school differences other than AYP status. Teachers in distinguished middle schools rated the leadership responsibilities: order, resources, input, and change agent significantly higher than teachers in needs improvement middle schools. In addition, when the relationship between AYP status and the 11 leadership responsibilities included in this study was examined, these same four leadership responsibilities (order, resources, input, and change agent) had strong positive correlations to AYP status. The specific leadership behaviors associated with the leadership responsibility, order, consisted of establishing routines for the smooth running of the school that staff understand and follow and providing clear structures, rules, and procedures for staff and students

(Marzano et al., 2005). The importance of maintaining an orderly school environment is clearly supported in educational leadership literature (Cotton, 2003; Edmonds, 1979; House Committee on Education and Labor, 1987; Lezotte, 1991; Marzano, 2003; Weber, 1971). Additional discussion of the leadership responsibility, order, is provided below. The specific behaviors associated with the leadership responsibility, input, were providing opportunities for staff to be involved in developing school policies and important decisions as well as using leadership teams in the decision making process (Marzano et al., 2005). The positive impact of these leadership behaviors is supported in the literature. Cotton (2003) concluded that "when principals empower their staffs through shared decision making authority with them, everyone benefits, including students" (p.21) and that overall shared leadership, decision making, and staff empowerment was observed of principals in high performing schools. Rooney (2008) stressed the importance of new principals to obtain input from teachers by paying close attention to them, asking teachers lots of questions and to not forget about the wisdom that they possess. Additionally, the vital role of ensuring that teachers provide input and are involved in decision making was also concluded by Silins, Mulford, and Zarins (2002) by concluding that the level of shared and monitored mission of the school was "the extent to which teachers participate in all aspects of the school's functioning—including school policy decisions and review" (p.618).

The leadership responsibility, resources, consisted of specific behaviors such as ensuring teachers have the necessary materials, equipment, and that they have the necessary staff development opportunities to directly enhance their teaching (Marzano et al., 2005). Support for this finding was provided by Glen and McLean (1981) and Bell (2001) who found that the use of and securing of resources was influential on school performance and effectiveness. Crow (2007) conducted a comparative international examination of studies that identified successful

leadership practices. He concluded that effective principals should be able to balance their leadership responsibilities with managerial responsibilities such as managing resources to support the learning organization. The leadership responsibility, change agent, consisted of specific leadership behaviors such as consciously challenging the status quo, being willing to lead change initiatives with uncertain outcomes, and systematically considering new and better ways of doing things (Marzano, et al. 2005). The important role of the principal as a change agent, is also supported in educational leadership research (Cotton, 2003; Heichberger, 1975; Silins et al., 2002). Both Cotton (2003) and Silins et al. (2002) associated the role of change agent with risk taking behaviors on behalf of the leader. Cotton (2003) further concluded that "principals of high achieving schools are described in the research literature as supporters of teacher innovation who understand and accept that some new ideas will work and some will not" (p.35). Heichberger (1975) further concluded that the principal is the "chief accountable change agent" and is the "main component" for effective change in a school (p.112).

Regarding whether any of the 11 leadership responsibilities, or additional school characteristics measured, were strong predictors of AYP attainment, the results of this study indicated that three leadership responsibilities and three school characteristics were strong predictors of AYP status. First, the leadership responsibility, order, was found to have a statistically positive relationship to AYP status. Again, the important role of maintaining an orderly school environment so that the school can be effective is strongly supported in educational leadership and effective schools literature (Cotton, 2003; Edmonds, 1979, House Committee on Education and Labor, 1987; Lezotte, 1991, Marzano, 2003; Weber, 1971). Cotton (2003) concluded that "from the earliest research to the present day, the principal's establishment and maintenance of a safe, orderly school environment has been identified as the most

fundamental element of effectiveness" (p. 8). Further supporting the critical role that establishing a safe and orderly school environment plays in an effective school, Marzano (2003), after conducting a comparison of the five researchers in the area of school level factors and student achievement, concluded that a safe and orderly environment was the 4th highest ranking school level factor. This recent research supports much earlier findings in effective school literature by Weber (1971), Edmonds (1979), and the House Committee on Education and Labor (1987) that concluded that an orderly climate was a primary characteristic of an effective school. These findings support the conclusions of the current study that the higher teacher ratings were for leadership behaviors associated with the leadership responsibility, order, the more likely the school was classified as having a higher AYP status (i.e. distinguished).

Interestingly, the leadership responsibility, flexibility, was found to have a statistically negative relationship to AYP status once other leadership and school variables were statistically accounted for. As stated above, support for this leadership responsibility has not been clearly established in the literature. For example, Cotton (2003), in her review of 81 studies of principal behaviors and student outcomes, did not conclude that flexibility was one of the 25 specific leadership practices exhibited by effective principals. Marzano et al. (2005) associated this leadership responsibility, and its research base, with transformational leadership which is comprised of many leadership dimensions (Bass & Avolio, 1994; Leithwood & Jantzi, 1999). The current study's findings indicated that the higher teacher ratings for principal flexibility were in Georgia middle schools, the less likely the school was classified as having as distinguished AYP status. In review of the above, the higher teacher ratings were for leadership behaviors associated with the leadership responsibility, order, the more likely the school was classified as having a higher AYP status (i.e. distinguished). Based on the findings for these two leadership

responsibilities, it could be suggested that a school principal is perceived as being too flexible or overly adaptive to staff and situations in the school or who may be making too many major changes in how things are done in the school could have a negative impact on the AYP attainment of the school. It could also be suggested that due to the abstract and interpersonal nature of the behaviors used to assess flexibility, such as adapting leadership style, encouraging people to express diverse opinions, and being comfortable with making major changes, it is questionable as to how teachers may have directly observed or experienced principal flexibility. Furthermore, in regards to a principal being comfortable making changes, Fullan and Stiegelbauer (1991) described change as involving "ambiguity, ambivalence, and uncertainty for the individual about the meaning of the change" (p.105). Consequently, the level of ambiguity in measuring principal behaviors associated with making major change in the school may have had an impact on teacher responses.

Culture, which consisted of the leadership behaviors promoting cohesion and well being among the staff and developing purpose and shared vision among staff (Marzano et al., 2005), was also found to have a strong negative relationship to the AYP status of the school. This finding is contradictory to previous research regarding the important role of the principal in developing and maintaining a positive school culture that leads to school success (Purkey & Smith, 1982; Scribner, Cockrell, Cockrell, & Valentine, 1999). Scribner et al. (1999) concluded that principals are limited in their direct ability to impact student achievement but can impact it through ensuring an effective culture. Purkey and Smith (1982) also concluded that school culture, above other indicators of an effective school, more adequately provides the comprehensive context needed for effective school change. Other researchers have specifically addressed the importance of the school principal to model, stress, and introduce a positive, caring

school culture in order for effective school change (Ediger, 1997; Stolp, 1996). It is not understood why this leadership responsibility was negatively related to AYP attainment in the current study. It could be suggested that a principal who overemphasizes staff cohesion, well being among staff, and developing a shared vision and purpose with staff may be overlooking other critical leadership roles or behaviors in the school that could positively impact the overall AYP attainment of the school. In addition, culture, as a leadership responsibility, may be one of the most difficult of the 11 responsibilities used in this study to measure. Being quite abstract in nature, school culture is difficult to consistently observe across settings in addition to it still has no agreed upon definition in the literature (Stolp, 1996). Stolp (1996) specifically addressed the key role that multiple groups, such as teachers, staff, and students play in the creation, maintenance, and changing of a school's culture. Therefore, it could be further suggested that although the principal can exhibit behaviors that model and reinforce a positive culture, these behaviors may be quite difficult for teachers to observe and measure.

The three school demographic characteristics, percentage of students with disabilities, percentage of students receiving free or reduced lunch, and school size were all found to be negatively related to AYP status, and therefore strong predictors of AYP status. The challenges of making AYP for schools with high numbers of special education students and schools with high numbers of students on free and reduced lunch is well established in the research (Machtinger, 2007; Olson, 2005). Olson (2005) concluded that special education students on average "perform much lower on state tests, making it far more likely that schools with special education subgroups will fail to make adequate progress" (p.2). Machtinger (2007) concluded that schools with low socio-economic status (SES) typically are lower achieving and have lower graduation rates. However, the research on school size is mixed in its ability to support the

finding of this study. Some researchers have concluded that school size does not negatively impact student achievement while other research has concluded that it does (Wainer & Zwerling, 2006; Wyse, Keesler, & Schneider, 2008; Center for Public Education, 2008).

Conclusions

Based on the research questions and the data analyses for this study, the following are concluded:

- Principals in distinguished middle schools had higher occurrences of Marzano et al.'s
 (2005) principal leadership responsibilities than principals in needs improvement schools
 except for the leadership responsibility, flexibility. The highest rated leadership
 responsibilities were outreach and resources and the two lowest two leadership
 responsibilities were situational awareness and flexibility.
- Principals in distinguished middle schools were rated significantly higher for the leadership responsibilities: order, resources, input, and change agent than principals in needs improvement middle schools.
- 3. AYP status and the leadership responsibilities: order, resources, input, and change agent were positively correlated. AYP status and the school demographic variables, percentage of students in the school with disabilities and the percentage of students in the school receiving free or reduced lunch were negatively correlated.
- 4. The principal leadership responsibilities, flexibility, culture, and order as well as the school demographic variables, percentage of students with disabilities, percentage of students receiving free or reduced lunch and the size of the school were all strong predictors of AYP status.

5. Across measures used in this study, it can be concluded that the leadership responsibility, resources, had the second highest mean rating for distinguished schools, had statistically higher ratings in distinguished schools and was positively related to AYP attainment. In addition, it can be concluded that the leadership responsibility, order, had statistically higher ratings in distinguished schools, was positively related to AYP attainment, and was statistically related to AYP attainment.

Implications

In addition to contributing to the existing research on principal leadership and student achievement, the results and conclusions of this study provide practical insights for school principals that may prove useful in self reflection and self evaluation and thereby assisting schools to meet annual school performance expectations and accountability standards. It is hoped that the results of this study will also provide timely understanding of specific school leadership behaviors that impact or influence the overall performance of schools. Based on the conclusions of this study, as well as other recent educational leadership literature, principals should be cognizant of the level of orderly school environment that they have established and to the level of resources, materials, and staff development they provide teachers in order to fully promote student and school performance. In addition, the intended benefit of providing comparative data on principal behaviors related to AYP attainment in schools that have attained distinguished status and schools that are in needs improvement status is that school principals can use such information to gauge and guide their own leadership practices. Based on this study, some additional leadership behaviors to establishing an orderly school environment that might be beneficial for principals to gauge are the level of resources provided for teachers, the opportunities for teacher input and decision making, and how the principal serves as a change

agent for the school. The results of this study also suggest that it would be beneficial for principals of large middle schools, principals of middle schools with a high percentage of students with disabilities and/or principals of middle schools with a high number of students receiving free and reduced lunch to seek out all available federal, state, and local resources that have been shown to positively impact the performance and achievement of these groups.

An additional benefit of determining the level of effective principal behaviors observed in schools that have met AYP and needs improvement schools is that school system leaders can integrate such information into their existing programs of observation, mentoring, training, and evaluation of school principals as an additional tool to impact overall school system performance. Therefore, the current study's results have practical implications for school system leaders and educational leadership training programs as they prepare principals to establish an orderly school environment or enter the leadership ranks in a large school or in a school with a large disability population. Finally, information from this study can also provide benefit to federal and state legislators as they continue to develop or revise legislation that aims to improve school accountability models and legislation that aims to provide resources, personnel and additional support large schools, schools with high rates of students with disabilities, and schools with high levels of student poverty due to their apparent influence on AYP status.

Limitations

Due to some inconsistency between some of the findings of this study with leadership literature, it is important to review some of the limitations of this study. First, due to logistical issues with obtaining teachers' names, e-mail addresses, and teaching content areas from public middle schools, a minimal number of teachers were selected at each school to complete the instrument. Although all teachers identified as meeting the requirements for the study at each of

the selected middle school were sent the instrument and invited to complete, some teachers who met the requirements could not be identified. This may have negatively impacted the return rate, overall sample size of the study, and therefore any generalizing of the findings. Secondly, the instrument used in this study heavily relied on the recent findings of Marzano et al. (2005). Although this study is based on 69 prior studies as well as supported by additional leadership research, using a single meta-analytic study as the basis of an instrument provides limitation. Thirdly, distributing the instrument via e-mail was a limitation due to various technological barriers. The number of undelivered or rejected e-mails indicated that various school systems and schools had network filters or other software that may have identified the e-mailed instrument as spam or junk e-mail. This also may have negatively impacted the return rate, overall sample size of the study, and therefore any generalizing of the findings. Lastly, inconsistent findings could have been a result of statistical limitations such as multi-colinearity (i.e. difficulty for regression analysis to estimate coefficients or relationships), issues related to instrument validity, lack of a well defined regression model. or use of an incomplete regression model that was unable to account for all interactions.

Recommendations

Based on the results, conclusions, implications, and limitations of this study, the following recommendations for future investigation of principal leadership and student achievement are as follows:

1. The purpose of this study was to determine the existence of any relationship between effective principal leadership and AYP attainment and therefore used a quantitative design. Further investigation of this relationship should entail qualitative data so that additional school based and teacher based data can be collected and described.

Qualitatively examining both positive relationships and negative relationships between specific leadership responsibilities and AYP status that were concluded in the current study will provide a more in depth understanding of these relationships. Specifically, additional information is needed regarding the principal leadership responsibilities, order, culture, and flexibility as a result of the current findings.

- 2. Due to the high number of high schools in Georgia that are also not meeting their annual measureable objectives and therefore on the needs improvement list, the current study could be expanded to the high school level to determine what, if any, relationships between effective leadership behaviors and AYP attainment exist.
- 3. Since the current study examined distinguished and needs improvement middle schools in Georgia, a nation-wide examination of principal leadership and AYP attainment in middle and/or high schools would both provide a more expansive understanding of the relationship between the two as well as further the understanding of effective leadership practices in both classification of schools.
- 4. The current study used Marzano et al.'s (2005) meta-analytic findings to develop the instrument that was distributed to Georgia middle school teachers. Although these findings conclude positive correlations between the 11 leadership responsibilities used in the study and student achievement, additional instruments that contain items that are directly linked to AYP attainment should be developed and utilized in future studies.
- 5. Although this study examined the relationship between effective leadership behaviors and overall AYP attainment, additional examination of the relationship between effective leadership behaviors and each of the three criteria that comprises AYP status (i.e. participation on state assessments, student and group performance on state assessments,

and attendance/graduation rate) would allow for additional understanding of inference of the current study's results.

6. Due to the focus of this study being relationships, no causation can be concluded.
Therefore, it would be beneficial to design and conduct studies that would determine any direct or indirect effects of principal leadership on AYP attainment or the three specific criteria that comprise AYP attainment.

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Appendix A

Georgia Southern University Office of Research Services & Sponsored Programs

Institutional Review Board (IRB)

Phone: 912-478-0843 Veazey Hall 202!

P.O. Box 8005

Fax: 91 2-478-0719 IRB~GeorgiaSouthern.edu Statesboro, GA 30460

To: Christopher Matthews

2020 Chelton Way Smyrna, GA 30080

CC: Charles E. Patterson Associate Vice President for Research

From: Office of Research Services and Sponsored Programs Administrative Support Office for Research Oversight

Committees (IACUC!IBC/IRB)

Date: July I, 2008

Subject: Status of Application for Approval to Utilize Human Subjects in Research

After a review of your proposed research project numbered: 1108273 and titled "<u>Effective Principal Leadership Behaviors and AVP Attainment: An Examination of Distin~uislied and Needs Improvement Middle Schools</u>", it appears that (I) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable.

Therefore, as authorized in the Federal Polity for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your proposed research.

This **IRB** approval is in effect for one year from the date of this letter. If at the end of that time, there have been no changes to the research protocol; you may request an extension of the approval period for an additional year. In the interim, please provide the IRB with any information concerning any significant adverse event, whether or not it is believed to be related to the study, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator prior to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a **Research Study Termination** form to notify the IRB Coordinator, so your file may be closed.

Sincerely,

Eleanor Haynes Compliance Officer

Appendix B



COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

May 30, 2008

Dear Colleague,

My name is Chris Matthews and I am currently a student in the Educational Leadership doctoral program at Georgia Southern University. I am completing the dissertation requirements for my Ed.D in Educational Leadership. I am conducting a statewide study of principal leadership behaviors in Georgia middle schools. Your middle school was selected from the Georgia Department of Education website based upon the school's Annual Yearly Progress (AYP) status for the last two school years.

It is important that you are aware that participation in this study is completely voluntary and simply involves completing the instrument via the below link. You may withdraw from the study at any time and the study should not pose any risk or discomfort to you. There is no penalty for deciding not to participate; however, your participation in this study will provide valuable information that can be used to examine the relationship between school leadership practices and school improvement. All instrument responses will be kept strictly confidential and each school and respondent involved in the study will be kept anonymous.

Please complete the electronic instrument by clicking on the below link, respond to each item presented, and then submit once completed. It is estimated that it will take only 10-15 minutes to complete the instrument. Completion and submission of the instrument will serve as your permission to use your responses in the study. Please complete and submit your instrument by August 30, 2008.

If you have any questions or would like to contact me, you can e-mail me at chrismatthews1@gmail.com. My mailing address is 554 Parkway Drive, Hapeville, GA 30354 and my telephone number is (404) 763-5600. You may also contact my faculty advisor, Dr. Judy Repman, at Georgia Southern University, P.O. Box 8131, Statesboro, Georgia 30460 or by telephone at (912) 478-5307. If you have any questions about your rights as a participant in this

study, you may contact the Georgia Southern University Office of Research Services and Sponsored Programs at (912) 478-0843 or at oversight@georgiasouthern.edu.

If you choose to complete the instrument in the below link, you are invited to submit your name, mailing address, and the instrument code listed at the top of your instrument in a separate e-mail and send to chrismatthews1@gmail.com Upon receipt of your e-mail, your name will be entered into a drawing for a \$100.00 Visa Gift Card once the study is completed.

Thank you for your participation in this study of principal leadership and AYP attainment. Your time and effort used in the completion and prompt submission of the instrument is greatly appreciated.

Sincerely,

Christopher M. Matthews

Title of Project: Effective Principal Leadership Behaviors and AYP Attainment: An Examination of Distinguished and Needs Improvement Middle Schools in Georgia

Principal Investigator: Christopher Matthews

554 Parkway Drive Hapeville, GA 30354 (404) 763-5600

chrismatthews1@gmail.com

Faculty Advisor: Dr. Judy Repman

Georgia Southern University

P.O. Box 8131

Statesboro, GA 30460-8131

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Appendix C

The purpose of this instrument is to obtain information on principals' leadership behaviors. Please take a few moments to respond to this instrument. Your responses to instrument items will remain absolutely confidential. Thank you in advance for your response.

Please circle the response that best describes your level of agreement with each of the following statements: For the 2007-2008 school year, my school principal:	A = D = SD = DK :	Agr Disa Stro Doi	ngree ongly 1 n't Kn	Agree	
1. continually monitored the effectiveness of the school's curricular, instructional, and assessment practices	SA	A	D	SD	DK
2. promoted cohesion among staff	SA	A	D	SD	DK
3. provided opportunities for staff to be involved in developing school policies	SA	A	D	SD	DK
4. was aware of informal groups and relationships among the staff	SA	A	D	SD	DK
5. was aware of issues in the schools that could create discord	SA	A	D	SD	DK
6. ensured school complied with all district and state mandates	SA	A	D	SD	DK
7. was an advocate of the school with parents	SA	A	D	SD	DK
8. consciously challenged the status quo	SA	A	D	SD	DK
9. was willing to lead change initiatives with uncertain outcomes	SA	A	D	SD	DK
10. adapted leadership style to the needs of specific situation	SA	A	D	SD	DK
11. established routines for the smooth running of the school that staff understood and followed	SA	A	D	SD	DK
12. promoted a sense of well-being among staff	SA	A	D	SD	DK
13. possessed extensive knowledge about effective instructional practices	SA	A	D	SD	DK
14. was an advocate of the school with central office	SA	A	D	SD	DK
15. provided and reinforced clear structures, rules, and procedures for staff	SA	A	D	SD	DK
16. possessed extensive knowledge about effective curricular practices	SA	A	D	SD	DK
17. was an advocate of the school with the community at large	SA	A	D	SD	DK
18. developed an understanding of purpose among staff	SA	A	D	SD	DK
19. was continually aware of the impact of the school's practices on student achievement	SA	A	D	SD	DK
20. encouraged people to express diverse opinions	SA	A	D	SD	DK
21. protected instructional time from interruptions	SA	A	D	SD	DK
22. ensured that teachers had the necessary materials and equipment	SA	A	D	SD	DK
23. possessed extensive knowledge about effective assessment practices	SA	A	D	SD	DK
24. was comfortable making major changes in how things are done	SA	A	D	SD	DK
25. possessed extensive knowledge about effective classroom practices	SA	A	D	SD	DK
26. provided and reinforced clear structures, rules, and procedures for students	SA	A	D	SD	DK
27. developed a shared vision of what the school could be like	SA	A	D	SD	DK
28. ensured that teachers had the necessary staff development opportunities to directly enhance teaching	SA	A	D	SD	DK

Please circle the response that best describes your level of agreement with each of the following statements: For the 2007-2008 school year, my school principal:	A = D = SD =	Agre Disa Stro	ee igree	Agree Agree	
29. systematically considered better ways of doing things	SA	A	D	SD	DK
30. provided opportunities for staff input on all important decisions	SA	A	D	SD	DK
31. used leadership teams in decision making	SA	A	D	SD	DK
32. protected teachers from internal and external distractions	SA	A	D	SD	DK

Demographic Information	Please circle the appropriate response:
Gender	Male Female
Ethnicity	Caucasian African-American Hispanic Asian Native American Other:
Teaching Level and Content during	Grade Level: Pre-K K 1 2 3 4 5 6 7 8 9 10 11 12
2007-2008 School Year	Content Area: Reading Language Arts Math
School Size in 2007-2008 School Year (number of students)	< 300 300 - 600 Over 600
Teaching Experience (in years)	< 2 $2-10$ $11-20$ $21-30$ over 30
Number of Years Principal has been at School in Principal Role	< 2 2 - 10 11-20 21 - 30 over 30
Percentage of Students with Disabilities during 2007–2008 School Year	0 - 9% 10 - 19% 20 - 29% 30 - 39% 40 - 49% 50 - 100%

Content Validity Survey

INSTRUCTIONS: This instrument was developed using a model developed by Rubio et al. (2003) to examine the content validity of an instrument or survey. The instrument that is being developed will be used in a study that will examine effective principal leadership behaviors and AYP attainment in Georgia Middle Schools through teacher ratings. The 34 effective leadership behaviors, as represented in each item below, were concluded by Marzano et al. (2005) to be positively correlated to student achievement.

Please rate each of the below 34 numbered items as follows (Using mouse, left click the box next to each selected rating):

- Please rate the level of representativeness on a scale of 1-4, with 4 being the most representative. Space is provided for you to comment on each item or to suggest revisions.
- Please indicate the level of clarity for each item, also on a four-point scale. Again, please make comments in the space provided.
- Please indicate to which factor the item most focuses on. If you do not think the item belongs with any factor specified, please circle number 3 and write in a factor that you think is more appropriate in the comment section.
- Please evaluate the comprehensiveness of the instrument item by indicating items that should be deleted or added. Thank you very much for your time and assistance!

	Representativeness	Clarity	Factors	Comprehensiv
	1- Item is not representative 2 - Item needs major revision to be representative 3 - Item needs minor revision to be representative	 Item is not clear Item needs major revision to be clear Item needs minor revision to be clear Item is clear 	1 - Focused on Effective Principal Leadership 2 - Focused on Student Achievement 3 - Other, please specify 4 - Focused on both factors	1- Item should be deleted 2 - Item should be retained
Theoretical Definition of Construct: Change Agent: willing to challenge and actively	4 - Item is <u>representative</u>			
challenges the status quo 1. My principal consciously challenged the status quo	□1 □2 □3 □4	□1 □2 □3 □4		□1 □2
Comments:				
2. My principal was willing to lead change initiatives with uncertain outcomes	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4	□1 □ 2
Comments:				

3. My principal systematically considered new and better ways of doing things	1 <u></u>] 2	1 🗆 1	□ 2 □3 □]4 🗆1	□ 2	□3 □4	□1 □ 2
Comments:								
4. My principal consistently attempted to operate on the edge versus the center of the school's competence	_1 <u></u>] 2	1 [□ 2 □3 □]4 🗆1	<u> </u>	□3 □4	□1 □ 2
Comments:								
Theoretical Definition of Construct: Culture: Fosters shared beliefs and a sense of community and cooperation								
5. My principal promoted cohesion among staff	1 <u></u>] 2	l □1 □	□ 2 □3 □]4 🗆1	□ 2	□3 □4	□1 □ 2
Comments:								
6. My principal promoted a sense of well-being among staff	_1 <u></u>] 2	1 🗆 1	□ 2 □3 □]4	□ 2	□3 □4	□1 □ 2
Comments:								
7. My principal developed an understanding of purpose among staff	□1 □	2 🗀 3 🗀 4	1 [2 🗆 3 🗆]4 🗆1	□ 2	□3 □4	□1 □ 2
Comments:								
8. My principal developed a shared vision of what the school could be like	□1 □] 2	1 [□ 2 □3 □]4 🗀	□ 2	□3 □4	<u>□</u> 1 <u>□</u> 2
Comments:								

Theoretical Definition of Construct:	Representative 1- Item is not representative 2 - Item needs marevision to be representative 3 - Item needs minrevision to be representative 4 - Item is representative	jor or	revision	n need 1 to be 1 need 1 to be	ot clear ds <u>major</u> e clear ds <u>minor</u> e clear	2 - For Achie 3 - Oth	cused or vement her, pleacused or	n Effective dership n Student ase specify	1- Item be dele	should ted 1 should
Discipline: Fosters shared beliefs and a sense of community and cooperation										
9. My principal protected instructional time from interruptions		3 □4	□ 1 [□ 2	□3 □4	□ 1	□ 2	□3 □4	□1	□ 2
Comments:										
10. My principal protected teachers from internal and external distractions		3 🗆 4	□1 [2	□3 □4	<u></u> 1	□ 2	□3 □4	□ 1	□ 2
Comments:										
Theoretical Definition of Construct:										
Flexibility: Adapts his or leadership behavior to the needs of the current situation and is comfortable with dissent.										
11. My principal adapted leadership style to the needs of specific situation	□1 □ 2 □:	3 □4	□1 [_ 2	□3 □4	<u>□</u> 1	□ 2	□3 □ 4	□1	□ 2
Comments:										

12. My principal encouraged people to express diverse and contrary opinions	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	4	<u></u> 1	□ 2	□3	4	□ 1	□ 2
Comments:														
13. My principal was comfortable making major changes in how things are done	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	4	<u></u> 1	□ 2	□3	□ 4	□ 1	□ 2
Comments:														
Theoretical Definition of Construct:														
Input: Involves teachers in the design and implementation of important decisions and policies.														
14. My principal provided opportunities for staff to be involved in developing school policies	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2
Comments:														
15. My principal provided opportunities for staff input on all important decisions	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	□ 4	□ 1	□ 2
Comments:														,
16. My principal used leadership teams in decision making	□1	□ 2	□3	□ 4	□ 1	□ 2	□3	4	□ 1	□ 2	□3	□ 4	□1	□ 2
Comments:														
Theoretical Definition of Construct: Knowledge of Curriculum, Instruction, and Assessment: Is knowledgeable about current curriculum, instruction, and assessment practices														

	Representativeness	Clarity	Factors	Comprehensiv eness of Item
	1- Item is not representative	1 - Item is not clear	1 - Focused on Effective Principal Leadership	1- Item should be deleted
	2 - Item needs major revision to be	2 - Item needs <u>major</u> revision to be clear	2 - Focused on Student Achievement	2 - Item should
	representative 3 - Item needs minor	3 - Item needs minor revision to be clear	3 - Other, please specify	be <u>retained</u>
	revision to be representative	4 - Item is <u>clear</u>	4 - Focused on both factors	
	4 - Item is <u>representative</u>			
17. My principal possessed extensive knowledge about effective instructional practices	□1 □2 □3 □4			□1 □ 2
Comments:				
18. My principal possessed extensive knowledge about effective curricular practices	□1 □2 □3 □4		□1 □2 □3 □4	□1 □ 2
Comments:				
19. My principal possessed extensive knowledge about effective assessment practices	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4	<u>□</u> 1 <u>□</u> 2
Comments:				
20. My principal possessed extensive knowledge about effective classroom practices	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4	□1 □ 2
Comments:				

Theoretical Definition of Construct:													
Monitoring/Evaluating: Monitors the effectiveness of school practices and their impact on student learning.													
21. My principal continually monitored the effectiveness of the school's curricular, instructional, and assessment practices	1	<u> </u>	□3 □4	□ 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2
Comments:													
22. My principal was continually aware of the impact of the school's practices on student achievement	□ 1	□ 2	□3 □4	□ 1	□ 2	□3	4	□ 1	□ 2	□3	4	<u></u> 1	□ 2
Comments:													
Theoretical Definition of Construct:													
Order: Establishes a set of standard operating procedures and routine.													
23. My principal established routines for the smooth running of the school that staff understood and followed	<u></u> 1	□ 2	□3 □4	□ 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2
Comments:													
24. My principal provided and reinforced clear structures, rules, and procedures for staff	□ 1	□ 2	□3 □4	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	□ 4	□ 1	□ 2
Comments:													
25. My principal provided and reinforced clear structures, rules, and procedures for students	<u></u> 1	□ 2	□3 □4	□ 1	□ 2	□3	☐ 4	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2
Comments:													

	Representativeness	Clarity	Factors	Comprehensiv eness of Item
	1- Item is <u>not</u> representative	1 - Item is <u>not clear</u> 2 - Item needs major	1 - Focused on Effective Principal Leadership	1- Item should be deleted
	2 - Item needs <u>major</u> revision to be	revision to be clear	2 - Focused on Student Achievement	2 - Item should be retained
	representative 3 - Item needs minor	3 - Item needs minor revision to be clear	3 - Other, please specify	oc <u>retained</u>
	revision to be representative	4 - Item is <u>clear</u>	4 - Focused on both factors	
	4 - Item is representative			
Theoretical Definition of Construct:				
Outreach: Is an advocate and spokesperson for the school to all stakeholders.				
26. My principal ensured school complied with all district and state mandates				□1 □ 2
Comments				
27. My principal was an advocate of the school with parents				□1 □ 2
Comments:				
28. My principal was an advocate of the school with central office				□1 □2
Comments:				
29. My principal was an advocate of the school with the community at large	□1 □2 □3 □4		□1 □2 □3 □4	<u>□</u> 1 <u>□</u> 2
Comments:				
Theoretical Definition of Construct: Resources: Provides teachers with materials and professional development necessary for the successful execution of their jobs.				

30. My principal ensured that teachers had the necessary materials and equipment	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	□ 4	□ 1	□ 2	□3	□ 4	□ 1	□ 2
Comments:														
31. My principal ensured that teachers had the necessary staff development opportunities to directly enhance teaching	□ 1	□ 2	□3	4	□ 1	□ 2	□3	☐ 4	<u></u> 1	□ 2	□3	□ 4	□1	□ 2
Comments:														
Theoretical Definition of Construct: Situational Awareness: Is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems														
32. My principal accurately predicted what could go wrong from day to day	<u></u> 1	□ 2	□3	4	<u></u> 1	□ 2	□3	4	□ 1	□ 2	□3	□ 4	□1	□ 2
Comments:														
33. My principal was aware of informal groups and relationships among the staff	<u></u> 1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	4	□ 1	□ 2	□3	□ 4	□ 1	□ 2
Comments:														
34. My principal was aware of issues in the schools that could create discord	□1	□ 2	□3	□ 4	<u></u> 1	□ 2	□3	4	□1	□ 2	□3	4	□1	□ 2
Comments:														

Appendix E



COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

May 30, 2008

Dear Colleague,

My name is Chris Matthews and I am currently a student in the Educational Leadership doctoral program at Georgia Southern University. I am completing the dissertation requirements for my Ed.D. in Educational Leadership.

I am conducting a statewide study of principal leadership behaviors in Georgia middle schools and would greatly appreciate your participation in the pilot study of the instrument that will be used. Participation in this pilot study is completely voluntary and simply involves completing the survey instrument via the below link and answering a few brief questions about the instrument.

Please complete the electronic instrument by clicking on the below link, respond to each item presented, and then submit once completed. It is estimated that it will take only 10-15 minutes to complete the instrument. After the instrument is completed, you will be asked three questions about the instrument itself. Please answer each question honestly and feel free to provide any additional feedback you feel is important. *Please complete and submit your instrument and feedback by <u>August 1, 2008.</u>*

If you choose to participate in the pilot study, you are invited to submit your name, mailing address, and the instrument code listed at the top of your instrument in a separate e-mail and send to chrismatthews1@gmail.com Upon receipt of your e-mail, your name will be entered into a drawing for a \$100.00 Visa Gift Card once the study is completed.

Thank you for your participation in this pilot study. Your time and effort used in the completion and prompt submission of the instrument is greatly appreciated.

Sincerely,

Christopher M. Matthews

Appendix F



COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

May 30, 2008

Dear Colleague,

My name is Chris Matthews and I am currently a student in the Educational Leadership doctoral program at Georgia Southern University. I am completing the dissertation requirements for my Ed.D in Educational Leadership. I am conducting a statewide study of principal leadership behaviors in middle schools.

I will be sending you an e-mail <u>in approximately two weeks</u> to invite you to complete a brief instrument. The e-mail will contain a link to the instrument and will only take 10 to 15 minutes of your time to complete and submit. Please know that the information you provide on this instrument will provide valuable information to researchers, administrators, and administrator training programs in the education profession.

If you choose to complete the instrument that will be soon e-mailed to you, you will then be invited to submit your name, mailing address, and the instrument code listed at the top of your instrument in a separate e-mail and send to chrismatthews1@gmail.com Upon receipt of your e-mail, your name will be entered into a drawing for a \$100.00 Visa Gift Card once the study is completed.

Please be assured that all instrument responses will be kept strictly confidential and each school and respondent involved in the study will be kept anonymous.

1	want to	personally	thank vou	in advance	for vour	participation	in this studv.
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Sincerely,

Christopher M. Matthews

Appendix G



COLLEGE OF EDUCATION

DEPARTMENT OF LEADERSHIP, TECHNOLOGY, AND HUMAN DEVELOPMENT

May 30, 2008

Dear Educational Leader and/or Educational Researcher,

My name is Chris Matthews and I am currently a student in the Educational Leadership doctoral program at Georgia Southern University. I am completing the dissertation requirements for my Ed.D. in Educational Leadership.

I am conducting a statewide study of principal leadership behaviors and AYP status in Georgia middle schools and would greatly appreciate your participation in the expert review of the instrument that I plan to distribute to teacher participants. Participation in this expert review is completely voluntary and simply involves completing the content validity survey instrument that is attached to this e-mail. The review entails rating 34 instrument items across four criteria. Instructions are provided at the top of the survey.

Please complete the attached content validity survey by clicking and opening the attachment to this e-mail, completing the survey, <u>saving the survey</u> and replying back to this e-mail with the saved document re-attached. I welcome any and all feedback on the instrument that you feel is important. Information obtained from you will be used to revise the instrument prior to sending to pilot study and actual study participants.

Please complete and submit your instrument and feedback by <u>July 15, 2008.</u>

Thank you very much for your expert feedback on this instrument. Your time and effort used in the completion of this content validity survey is greatly appreciated.

Sincerely,

Christopher M. Matthews