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A Study Of The Relationship Between Second-order Change Leadership Behaviors Of Principals And School Grades Of Florida Title I Elementary Schools

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A STUDY OF THE RELATIONSHIP BETWEEN SECOND-ORDER CHANGE
LEADERSHIP BEHAVIORS OF PRINCIPALS AND SCHOOL GRADES OF
FLORIDA TITLE I ELEMENTARY SCHOOLS

by

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ABSTRACT

The purpose of this study was to determine the relationship between second-order change leadership behaviors and the grade assigned to schools in large urban districts by the Florida Department of Education (FLDOE). A total of 101 Title I elementary school principals from large urban school districts with 60+% students on Free and Reduced School Lunch participated in the study.

Specifically, this study analyzed 7 of the 21 second-order change factor responsibilities. They include (a) knowledge of curriculum, instruction, assessment, (b) optimizer, (c) intellectual stimulation, (d) change agent, (e) monitoring/evaluating, (f) flexibility, and (g) ideals/beliefs.

The findings of this study were delineated through an examination of the data as it was related to the following questions: (a) What are the differences, if any, in the Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the FLDOE? (b) What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and the second-order change leadership behaviors? (c) What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the FLDOE?

Although Research Question 1 had no statistical significance, principals who had a higher mean on the Principal Actions Survey led A and B-rated schools. Statistical significance was found in Research Question 2 for the second-order change leadership

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behavior of Change Agent and Ideals/Beliefs. Though statistical significance was not found in Research Question 3, each mean score for each sub-group in each grade group indicated consistent answers between Strongly Agree and Agree, which demonstrated a large degree of agreement. Additionally, comments from telephone interviews with selected principals determined that these leadership behaviors could positively impact elementary schools and the field of education.

Recommendations of the study were to: (a) Conduct a follow-up study to gather the perceptions of teachers from the same Title I schools regarding their principals' second-order change leadership behaviors, (b) conduct a similar study with principals in Title I middle and high school settings, (c) conduct a qualitative study on second-order change leadership behaviors of non-Title I elementary, middle, and high school principals, (d) engage in further research to investigate professional development activities that may assist principals in enhancing second-order change leadership behaviors and improve instruction, (e) investigate the relationship between principals' second-order change leadership behaviors and achievement of Adequate Yearly Progress (f) replicate the study in states other than Florida (g) explore the relationship between second-order change leadership behaviors of district administrators and their district's academic success.

This dissertation is dedicated to Jesus Christ, my Lord and Savior.

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THE PROBLEM AND ITS CLARIFYING COMPONENTS

<u>Introduction</u>

A dramatic change has been seen in how public K-12 schools in the United States have approached education at the beginning of the 21st century. High stakes testing, student performance, and school-based accountability have replaced the traditional methods of educating children. Waters and Kingston (2005) stated that "the profound and rapidly increasing changes affecting schools call for standards that define a scope of essential research-based leadership responsibilities that reflect what school leaders need to know to achieve high levels of student achievement" (p. 15). Principals seeking sustained student achievement must attempt to make a difference in the lives of students, understand change, build strong relationships, and foster continuous learning in this changing environment (Fullan, 2002).

The No Child Left Behind (NCLB) legislation has significantly increased the pressure on school leaders to raise student achievement. According to Kaplan, Owings, and Nunnery (2005), "Never before has the U.S. public education system committed to ensuring that every child achieves at high levels and relied more heavily on the nation's nearly 84,000 principals to lead instructional improvements required to meet tough new state and federal mandates" (p. 28). Failure to increase the academic achievement of students may lead to school sanctions, school takeovers, and if all else fails, dismissal of principals.

Statement of the Problem

In the last 30 years of research, it has been clearly established that successful schools were led by effective leaders (Hallinger & Heck, 1998; Kelley, Thornton, & Daugherty, 2004; Leithwood, Louis, Anderson & Wahlstrom, 2005; Marzano, Waters, & McNulty, 2005), but schools throughout this country continued to perform at mediocre levels because of the lack of effective school leadership. Despite the vast amount of knowledge on school leadership that has been accumulated, questions have remained as to how good principals can be transformed into great leaders. In particular, questions related to resources or preparation needed by principals in urban, disadvantaged schools have persisted. These questions were a call to action to ensure academic success for all the nation's schools. The problem studied in this research was to determine the relationship between second-order change leadership behaviors and the grade assigned to each school by the Florida Department of Education.

Literature Review

"During the past decade, a growing body of evidence has demonstrated the impact of principal leadership on student achievement" (Waters & Grubb, 2004, p.1). Although leadership has been thoroughly investigated and a great deal of evidence has been introduced that indicates that effective leaders experience student success (Leithwood, Harris, & Hopkins, 2008), debate has continued as to which leadership styles were the most valuable in helping schools make substantial academic improvements. Leadership theories ranging from autocratic to democratic and instructional to transformational have

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been determined to affect the academic achievement of students (Leithwood & Jantzi, 2006; Lewin, Lippitt, & White, 1939; Marks & Printy, 2003). Still other researchers have concluded that leadership effects on academic achievement were minimal and complicated to measure (Hallinger & Heck, 1998; Witziers, Bosker, & Krüger, 2003). The effects of principal leadership on academic achievement have been a point of contention for low socioeconomic schools. Inadequate academic achievement, inexperienced teachers, unsatisfactory leadership, and inefficient school operations have been some of the problems facing urban schools (Leithwood et al., 2005).

The NCLB mandates, complex social issues, lack of community involvement, and low test scores provided the impetus for an overhaul of urban schools and their leadership. In a report conducted by the Institute for Educational Leadership, Hale and Moorman (2003) stated that,

> principals of today's schools must be able to (1) lead instruction, (2) shape an organization that demands and supports excellent instruction and dedicated learning by students and staff and (3) connect the outside world and its resources to the school and its work. (p. 7)

These priorities cannot be met with traditional leadership approaches; they must be accomplished through second-order change leadership behaviors. Leithwood (1994) posited that, "second-order changes require a form of leadership that is sensitive to organization building, developing shared vision, creating productive work cultures, distributing leadership to others and the like" (p. 501). Additionally, Waters and Grubb (2004) commented on the need for changes as follows:

> There is a growing recognition in communities around the world that dramatic, second-order changes are needed to improve education systems and that these

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changes must be led by school leaders who are able to distinguish and maintain relentless focus on what is essential. (p. 8)

Waters and Grubb believed that if successful reformation was to take place in urban schools, administrators must be competent in leading second-order change. School districts and higher education institutions must be serious about improving the fate of urban schools and their principals need to provide cutting-edge training on second-order change leadership behaviors.

<div align="center">Definitions of Terms</div>

Adequate Yearly Progress--AYP is the key measure in determining whether a public school or school district is making "annual progress" towards the academic goals established by each state (Florida Department of Education, 2008).

Change Agent--refers to the leader's disposition to challenge the status quo (Marzano, Waters, & McNulty, 2005).

Flexibility--refers to the extent to which leaders adapt their leadership behavior to the needs of the current situation and are comfortable with dissent (Marzano et al., 2005).

Florida Comprehensive Assessment Test (FCAT)--The FCAT is an assessment instrument used to evaluate student achievement of the higher order cognitive skills represented in the Sunshine State Standards in reading, writing, mathematics, and science (Florida Department of Education, 2008).

Ideals/Beliefs--refers to possessing well-defined beliefs about schools, teaching, and learning (Marzano et al., 2005).

Intellectual Stimulation--refers to the extent to which leader ensures that faculty and staff are aware of the most current theories and practices regarding effective schooling and makes discussions of those theories and practices a regular aspect of the school's culture (Marzano et al., 2005).

Knowledge of Curriculum, Instruction, and Assessment--Addresses the extent to which the leader is aware of best practices and on the acquisition and cultivation of knowledge (Marzano et al., 2005).

Monitoring/Evaluating--refers to the extent to which the leader monitors the effectiveness of school practices in terms of their impact on student achievement (Marzano et al., 2005).

No Child Left Behind Act (NCLB)--The No Child Left Behind Act of 2001 (Public Law 107-110), commonly known as NCLB, is a United States federal law that was passed in the House of Representatives on May 23, 2001 and signed on January 8, 2002. The NCLB reauthorized a number of federal programs aiming to improve the performance of U.S. primary and secondary schools by increasing the standards of accountability for states, school districts and schools, as well as providing parents more flexibility in choosing which schools their children will attend. Additionally, it promoted an increased focus on reading and re-authorized the Elementary and Secondary Education Act of 1965 (ESEA) (U.S. Department of Education, 2004).

Optimizer—refers to the extent to which the leader inspires others and is the driving force when implementing a challenging innovation (Marzano et al., 2005).

School grades--School grades are calculated based on annual learning gains of each student toward achievement of Sunshine State Standards, the progress of the lowest quartile of students, and meeting of proficiency standards (Florida Department of Education, 2008).

Second-order change leadership behaviors--These behaviors involve "deep change" which alter the system in fundamental ways, offering a dramatic shift in direction and requiring new ways of thinking and acting (Marzano et al., 2005).

Student academic achievement--Annual learning gains from one year to the next on the Florida Comprehensive Assessment Test are used to determine student academic achievement (Florida Department of Education, 2008).

Title I elementary school program--This program is intended to help ensure that all children have the opportunity to obtain a high-quality education and reach proficiency on challenging state academic standards and assessments. As the largest federal program supporting elementary and secondary education, Title I targets resources to the districts and schools where the needs are greatest (Florida Department of Education, 2008).

Urban School- schools are located in an urban area, relatively high rate of poverty, high proportion of students of color, high proportion of students who are Limited English Proficient, and designated as "High Need" (Center for Urban Schools, 2004).

Delimitations of the Study

The study was delimited as follows:

1. The survey was distributed to Title I elementary principals in Broward County School District, Duval County Public Schools, Orange County Public Schools, Pinellas County Schools, Saint Lucie County School District, and School District of Hillsborough County.

2. The study included Title I schools that were assigned a school grade by the Florida Department of Education.

3. Data analyzed for the study were collected from two sources: an on-line survey and phone interviews.

Limitations of the Study

The factors which limited the validity of this research included the following:

1. The study was limited by the approval of school districts to distribute the on-line survey and interview principals.

2. The study was limited to the survey responses of Title I elementary school principals.

3. The study was limited to the interview responses of Title I elementary school principals.

Significance of the Study

The intent of this study was to determine the extent to which a relationship between second-order change leadership behaviors and the school grade according to the Florida Department of Education existed in the elementary schools participating in the

study. If it could be determined that second-order change leadership behaviors have had an impact on a school's grade, school districts throughout the state of Florida can draw information from this study to shape leadership programs for urban school principals. It was anticipated that making principals aware of second-order change leadership behaviors could lead to improved academic achievement, efficient school operations and increased longevity of school leaders in their positions. Additionally, findings from this study could be helpful in assisting higher education institutions develop leadership programs for future school administrators. They can use the information from this study to help principals become aware of the challenges and demands of leading urban schools. Higher education institutions can also help future principals understand effective implementation of second-order change leadership behaviors through real-world experiences.

Finally, this study was conducted to add valuable information to the body of knowledge regarding the impact of second-order change leadership behaviors on school effectiveness. The information gathered from this study should advance the understanding of novice and veteran principals regarding how deep, decisive and immediate actions can help improve the academic achievement of students in urban schools.

Purpose of the Study

The purpose of this study was to determine the relationship between second-order change leadership behaviors and the grade assigned to each school by the Florida

Department of Education. Specifically, this study analyzed 7 of the 21 principal leadership responsibilities which were considered to be second-order change factor responsibilities. They include (a) knowledge of curriculum, instruction, assessment, (b) optimizer, (c) intellectual stimulation, (d) change agent, (e) monitoring/evaluating, (f) flexibility, and (g) ideals/beliefs which were considered second-order change factor responsibilities (Marzano et al., 2005).

In this study, the perceptions of Title I elementary principals were examined relative to second-order change leadership behaviors. This research was conducted to investigate the indentified second-order change leadership behaviors as they related to six elementary principals of schools with a Free or Reduced-Price School Lunch (FRSL) of 60% or higher who had received a grade of "A or B" by the Florida Department of Education in 2005, 2006, 2007. This study was focused on how these school principals implemented second-order change leadership behaviors to lead their schools to success. This study included principals of Title I elementary schools in the Broward County School District, Duval County Public Schools, Orange County Public Schools, Pinellas County Schools, Saint Lucie County School District, and the School District of Hillsborough County in the state of Florida.

Research Questions

1. What are the differences, if any, in the Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the Florida Department of Education?

2. What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, and gender) and the second-order change leadership behaviors?

3. What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?

Research Methodology

To determine if there was a relationship between second-order change leadership behaviors and the grade the school was assigned (based on the Florida Department of Education (FLDOE) grading system), data were collected from Title I elementary school principals. The data were collected from principals of participating schools using an on-line survey and telephone interviews. The on-line survey provided important quantitative data, and the interviews yielded qualitative data in that principals were afforded an opportunity to elaborate on their responses to the on-line survey. The school districts selected for the study were Broward, Duval, Hillsborough, Orange, Pinellas, and Saint Lucie counties. Table 1 displays the research questions and data sources for this study.

Table 1

Research Questions and Sources of Data

Research Question	Data Sources
1. What are the differences, if any, in the Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the Florida Department of Education?	Principal Actions Survey School Accountability Report (Florida Department of Education)
2. What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and the second-order change leadership behaviors?	Principal Actions Survey School Accountability Report (Florida Department of Education)
3. What are the differences, if any, in the second-order change leadership behavior subgroup scores based on have the 2008 school grade according to the Florida Department of Education?	Principal Actions Survey Accountability Report (Florida Department of Education) Phone Interview Data

Study Population

      This study targeted a sample of 263 Title I elementary school principals from several urban school districts in the state of Florida. The principals were from schools in Broward County School District, Duval County Public Schools, Orange County Public Schools, Pinellas County Schools, Saint Lucie County Schools, and the School District of Hillsborough County. These school districts were recognized as large, urban school districts by The Broad Prize for Urban Education (2008) using the following criteria: Student population of the district was 100,000+; 40+% of students were required to be eligible for Free or Reduced-Price School Lunch (FRSL); and 40+% of student

enrollment were required to be minority students. The principals included in this study were chosen from schools within these urban school districts. All of the schools led by these principals had 60+% students on FRSL and earned a school grade from the FLDOE.

Data Collection and Instrumentation

In order to conduct this study, a research application was submitted for approval to the University of Central Florida Institutional Review Board (UCF/IRB) (Appendix A) and the Department of Assessment and Accountability of School District of Hillsborough County, Department of Accountability, Research, and Accountability of Orange County Public Schools, Department of Planning, Research, and Evaluation of Saint Lucie County Schools, Department of Research and Accountability of Pinellas County Schools, Department of Research Services of Broward County School District, and Instructional, Research, and Accountability Department of Duval County Public Schools (Appendix B).

Survey data were collected through an internet survey service, known as Zoomerang©. Through this service, a Likert-type survey, The Principal Actions Survey, (Appendix C) was designed by the researcher and distributed via-email to principals with an introductory e-mail letter (Appendix D). The e-mail letter included an overview of the study and instructions on how to respond to the survey. Design of the Principal Actions Survey was based on the work of Marzano, et al., (2005) and current research.

The Principal Actions Survey consisted of a total of 21 statements which were considered second-order change leadership behaviors by Marzano et al. (2005). A sample

of the Principal Actions Survey was distributed to doctoral level students and two experts

in the field of educational leadership at the University of Central Florida during

November 2008. Dr. Rosemarye Taylor, Dr. George Pawlas and a total of 15 educational

leadership graduate students field-tested the survey to determine the validity of the items

and length of time required to complete the instrument. Content validity was established,

and edits were suggested to reduce redundancy and improve the clarity of directions on

the instrument. It was also determined that the average length of time required to

complete the survey was less than 10 minutes. The item responses included a 5-point

Likert scale statements with responses ranging from 1 to 5 where 1 = strongly agree, 2 =

agree, 3 = neither agree or disagree, 4 = disagree, and 5 = strongly disagree.

Demographic questions were included in the on-line survey. Additional data available for

analyses were obtained from school accountability reports, e-mails, and direct telephone

contacts. Sources of data included FLDOE databases, selected school district databases,

school websites, and school principals. The e-mail survey represented the most

significant quantitative data for each school.

Follow-up phone interviews were conducted using the Second-Order Change

Principal Protocol designed by Taylor (2007) and adapted for this study (Appendix E).

Six Title I elementary school principals were selected from those individuals who

volunteered to participate in an interview. The interviews were conducted in order to

collect information on recurring leadership practices of principals. Selected principals

had led the same urban school for at least three years and had a school population with a

FRSL of 60% or higher. The principals selected had varying demographic backgrounds

and their schools had received a school grade of "A" or "B" from the FLDOE for one of the 2005, 2006, or 2007 school years.

Informed consent letters were sent via email to those participants interested in participating in a phone interview. Phone interviews lasted approximately 30 minutes and were initiated as needed during the course of the data collection period.

Summary

This chapter has provided an introduction to the topic of second-order change leadership behaviors and school grade as they relate to elementary school principals. Chapter 2 contains a review of literature regarding school leadership. This review included a historical and contemporary analysis of leadership theories, leadership challenges, second-order change leadership behaviors, and principal training. The survey and interview research methodology used in the study are contained in Chapter 3. Chapter 4 presents a summary of the findings of the study. The results and implications for practice, along with recommendations for future studies, are discussed in Chapter 5.

CHAPTER 2
REVIEW OF LITERATURE

Introduction

This chapter has been organized to provide historical perspectives on the effectiveness of leadership theories and a thorough account of instructional and transformational leadership. Major leadership challenges including federal reforms on education, instruction of low performing students, and the training of principals to lead urban schools have been discussed. Finally, second-order change leadership behaviors and their implications for student academic achievement have been reviewed.

A History of Leadership Theories

The literature on leadership is considerable and lengthy. According to Wren (1995), "leadership is one of the most widely talked about [topics] and at the same time one of the most elusive and puzzling" (p 22). In a review of theory and research, Yukl (1989) concluded that numerous studies have been completed on leadership theories and that the results were ambiguous and inconclusive. Yukl further stated that "most theories are beset with conceptual weaknesses and lack strong empirical support" (p. 253). In contrast, Hallinger and Heck (1996) found that leadership plays an important part in improving the academic achievement of students.

In 1939, three different approaches to leadership were identified: (a) autocratic, in which the leader makes all decisions without consulting others, (b) democratic, which involves the participation of others in making decisions, and (c) laissez-faire, which

minimizes the involvement of the leader and gives subordinates the freedom to make their own decisions (Lewin, Lippitt, & White, 1939). At the conclusion of this study, Lewin et al. determined the democratic style to be more effective in leading people.

Beginning in the 1940s, a number of studies were focused on the traits of successful leaders. According to Wren (1995), the term, traits, was used broadly to refer to people's general characteristics including capacities, motives, or patterns of behavior. Yukl (1989) stated that, "early leadership theories attributed success to possessions of extraordinary abilities such as tireless energy, penetrating intuition, uncanny foresight, and irresistible persuasive powers" (p. 260). In Stodgill's (1948) research, over 120 traits were studied, and Stodgill declared that "the mass of inconsistent and contradictory results of the trait studies concluded that traits alone do not identify leadership" (p. 47). Since Stodgill's study, a number of other trait theories have been examined including McGregor's Theory X and Y, the Myers-Brigg Test, McClelland's theory of storytelling, all of which failed to link traits to leader success (Boje, 2003).

In the 1960s and 1970s, contingency and situational theories were central issues in the leadership arena. Rice & Kastenbaum (1983) stated that

> the basic thesis of Fiedler's contingency model is that the relationship between leadership style and leadership effectiveness is contingent upon the specific demands of the situation. That is, no one style of leadership is thought to be effective in all situations. (p. 374)

Wren (1995) also hypothesized that "like Fiedler's Contingency Model, and other contingency theories, it is assumed that there is no one best way to make decisions, and that the most effective style will depend on the characteristics of the situation" (p. 88).

The methodological and conceptual deficiencies found in contingency theory research have complicated the determination of leadership effectiveness (Yukl, 1989).

Hersey and Blanchard's (1982) situational leadership theory presumed that leaders should adapt their leadership styles to the maturity of the follower. This situational leadership model included the following four styles: S1, Telling/Directing; S2, Selling/Coaching; S3, Participating/Supporting; and S4, Delegating/Observing. According to Wren (1995), "Situational leadership assumes a dynamic interaction where the readiness level of the followers may change and where the leader's behavior must change appropriately in order to maintain the performance of the followers" (p. 207). Furthermore, "the more sensitive leaders are to their followers' different levels, the more they can enhance their organization's effectiveness" (Fairman & Renne, 1983, p. 30). Yukl (1989) determined that this leadership theory was popular in management but not among leadership practitioners.

From the 1980s to the present, transactional and system leadership theories have become popular in the field of education. "Transactional leadership seeks to maintain stability rather than promoting change within an organization through regular economic and social exchanges that achieve specific goals for both the leaders and their followers" (Lussier & Achua, 2004, p. 358). Bryant (2003) found the following:

> Transactional leaders have three primary characteristics. First transactional leaders work with their team members to develop clear, specific goals and ensure that workers get the reward promised for meeting the goals. Second, they exchange rewards and promises of rewards for worker effort. Finally, transactional leaders are responsive to the immediate self-interests of workers if their needs can be met while getting their work done. (p. 37)

The transactional theory uses rewards and punishments to promote performance, thereby making the leader-follower relationship an economic exchange system (Gellis, 2001; Jung & Avolio, 1999).

Systems theory has been a topic of discussion and debate since the 1940s and has gained recent momentum among school leaders. "Systems thinking is the ability to understand interactions (and sometimes to predict) interactions and relationships in complex, dynamic systems: the kinds of systems we are surrounded by and embedded in" (Senge et al., 2000, p. 239). Thornton, Peltier, and Perreault (2004) declared that "Systems thinking encourages leaders to use such concepts as continuous incremental improvement, organizational learning, and feedback loops. Systems thinking require leaders to see the whole school as a complex organization with many interdependent components" (p. 222). Furthermore, the correct implementation of systems thinking theory can lead to accomplishing short and long terms goals and can produce academic achievement (Thornton et al.).

Recent and massive demands on the principal have produced a need for the theory of distributed leadership in public schools. In a review of literature conducted by the National College for School Leadership, distributed leadership was defined as "a group or network of interacting individuals with openness in the boundaries of leadership in which varieties of expertise are distributed across the many, not the few" (p. 7). The successful implementation of distributed leadership can lead to a positive school climate, but there is insufficient research to imply that academic achievement is impacted by this type leadership style (Arrowsmith, 2005; Hartley, 2007). But with new and colossal

undertakings, school principals will have to consider delegating some of their complex tasks to other members of their leadership teams in order to pursue the target of improving academics (Spillane, Halverson, & Diamond, 2001).

Leadership theories have continued to emerge and evolve with every educational period of reform. A considerable amount of research and funding has been invested in discovering leadership styles that will help improve the academic achievement of all students and the overall perception of public schools. Over the past 25 years, instructional and transformational leadership theories have been researched and discussed more than any other leadership model. Hallinger (2003) stated that "Scholars have subjected both instructional leadership and transformational leadership to extended empirical study" (p. 330). Based on the popularity of these leadership models, the researcher has elected to concentrate this literature review on these two leadership theories.

<u>Instructional Leadership</u>

Over the last several decades, Thomas (1997) found that the role of "the principal has undergone a gradual transition from that of principal-teacher to general administrative agent of the school" (p. 3). The principal plays an important role in making decisions on managing the building, personnel, budget, and the achievement of students. The impact on the academic achievement of students has become the most important aspect of a principal's job. Silins (1994) discovered that "A number of North American studies have associated effective schools with principals who are strong instructional leaders" (p. 3). The effects of leadership qualities on academic achievement

have been researched and analyzed in numerous studies. Researchers have repeatedly stated that quality leadership had a positive effect on student achievement (Cawelti, 1980; Gullat & Lofton, 1996; Kelley, Thornton & Daugherty, 2004; Terry, 1996). Bolman and Deal (2003) found that "the ability to use multiple frames (structural, human resources, political, and symbolic) is associated with greater effectiveness for managers and leaders" (p. 16). It was validated in another leadership study (Waters, Marzano, & McNulty, 2004) that effective school leadership substantially improves academic achievement.

Hallinger and Heck (1998) reviewed over 40 research projects between 1980 and 1995 that focused on the impact of school leadership and school effectiveness. Hallinger and Heck discovered that "the general results drawn from this review supports the belief that principals exercise a measurable, though indirect effect on school effectiveness and student achievement" (p. 186). Hallinger and Heck also found that, "this review revealed several paths that begin to describe the means by which principal leadership influences student learning outcomes" (p.187).

In another study carried out by the Institute of Education at the University of London, Sammons, Hillman, and Mortimore (1995) identified professional leadership as one of 11 characteristics of effective schools. Sammons et al. described professional leadership as, "involvement in and knowledge about what goes on in the classroom, including the curriculum, teaching strategies, and the monitoring of student progress" (p. 14). Sammons et al. also claimed the following:

> Leadership is not simply about the quality of individual leaders although this is, of course, important. It is also about the role that leaders play, their style of

management, their relationship to vision, values, and goals of the school, and their approach to change. (p. 13)

Marzano et al. (2005) conducted a meta-analysis of leadership research over the last 35 years and discovered that of 5,000 articles on leadership, 69 pertained directly to the effects of principal practices on student achievement. Marzano et al. found a significant, positive correlation of .25 between effective school leadership and student achievement. A total of 21 leadership responsibilities, practices, knowledge, strategies, and tools that were linked to changes in students' test scores and achievement were identified and defined. The 21 responsibilities, their definitions and correlations to student achievement are listed below:

1. Affirmation (.19)--Recognition and celebrations of accomplishments and acknowledges failures.
2. Change (.25)--Is willing to challenge and actively challenges the status quo.
3. Contingent Rewards (.24)--Recognizes and rewards individual accomplishments.
4. Communication (.23)--Establishes strong lines of communication with and among teachers and students.
5. Culture (.25)--Fosters shared beliefs and a sense of community and cooperation.
6. Discipline (.27)--Protects teachers from issues and influences that would detract from their teaching time and or focus.
7. Flexibility (.28)--Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent.
8. Focus (.24)--Establishes clear goals and keeps those goals in the forefront of the school's attention.
9. Ideals/Beliefs (.22)--Communicates and operates from strong ideals and beliefs about schooling.
10. Input (.25)--Involves teachers in the design and implementation of important decisions and policies.
11. Intellectual Stimulation (.24)--Ensures faculty and staff are aware of the most current theories and practices and makes discussion of these a regular aspect of the school's culture.

12. Involvement in Curriculum, Instruction, and Assessment (.20)--Is directly involved in the design and implementation of curriculum, instruction, and assessment practices.
13. Knowledge of Curriculum, Instruction, and Assessment (.25)--Is knowledgeable about current curriculum, instruction, and assessment practices.
14. Monitoring/Evaluating (.27)--Monitors the effectiveness of school practices and their impact on school learning.
15. Optimizer (.20)--Inspires and leads new and challenging innovations.
16. Order (.25)--Establishes a set of standard operating procedures and routines.
17. Outreach (.27)--Is an advocate and spokesperson for the school to all stakeholders.
18. Relationships (.18)--Demonstrates an awareness of the personal aspects of teachers and staff.
19. Resources (.25)--Provides teachers with materials and professional development necessary for the successful execution of the jobs.
20. Situational Awareness (.33)--Is aware of the details and undercurrents in the running of the school and uses his information to address current and potential problems.
21. Visibility (.20)--Has quality contact and interactions with teachers and students. (Marzano et al., 2005, pp. 42-43).

These researchers also assumed that principals who received exceptional leadership training on the 21 leadership responsibilities would have a major impact on the academic achievement of students.

"Effective schools research has determined that schools which succeed are invariably led by a principal who is recognized as an instructional leader" (Terry, 1996, p. 1). Furthermore, "Successful schools are characterized as those that have a clear sense of purpose, strong instructional leadership, true professionalism among the staff, and ambitious academic progress" (Andrews, Basom, & Basom, 1991, p. 97). Andrews and Soder (1987) also found that "teacher perceptions of the principal as an instructional leader are critical to the reading and mathematics achievement of students, particularly among low-achieving students" (p. 11). As an instructional leader, a strong principal

plays a central role in the effectiveness of a school (Gray, 1990). Andrews et al. stated the following about the instructional leader:

> As an instructional resource, the principal performs a role more closely associated with a narrow, more popular definition of supervision. In this role, the principal conducts supervision in a clinical fashion. The principal knows the technology of teaching and learning, knows what good instruction entails, and accurately assess a teacher's effectiveness based on the criteria of good instruction. The principal can help teacher's analyze what enhances student success. The principal knows how students learn and what types of interactions will help them to achieve. The principals not only diagnosis good teaching but also provides the teacher with feedback that enables professional growth. (p. 98)

Additionally, "An effective instructional leader must also assess the school's ability to meet curriculum goals by monitoring information from sources such as standardized or criterion referenced tests" (Andrews et al., p. 99).

Hallinger, Murphy, Weil, Mesa, and Mitman (1983), in reporting on their school effectiveness research, reiterated that "principals in effective schools are perceived to be strong instructional leaders" (p. 85). These researchers also discovered three general dimensions that lead to school effectiveness: (a) defining the school's mission, (b) managing curriculum and instruction, and (c) promoting a positive school learning climate. In the research conducted by Kelley, Thornton, and Daugherty (2004), it was concluded that "educational leadership is possibly the most important single determinant of an effective learning environment" (p. 17). Hallinger et al. also found that "supervision and evaluation of instruction are important functions of the principal in the role of instructional leader" (p. 87).

Leithwood et al., (2005), concluded the following after completing their literature review:

> From this evidence, as a whole, is that leadership has very significant effects on the quality of the school organization and on pupil learning. As far as we are aware, there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership. (pp. 14-15)

Additionally, Leithwood et al. discovered evidence that four practices make up the core of successful school leadership practices: (a) setting directions, (b) developing people, (c) redesigning the organization, and (d) managing the instructional program.

In her review of the research from 1985 to 2003, Cotton (2003) discovered 81 articles dealing with principal effectiveness and student outcomes. These articles focused on student achievement, student attitudes, student behavior, teacher attitudes, teacher behavior, and dropouts. The majority of the studies were completed in the United States and were focused on low-socioeconomic status minority students. From her review, she was able to determine 25 principal characteristics that were positively associated with academic achievement. The leadership practices, which Cotton positively associated with academic achievement, are presented in their entirety in Appendix F.

Transformational Leadership

The end of the 20th century created an era of school reformation which produced the theory of transformation leadership. Jung and Avolio (1999) stated, "Transformational leadership involves developing a closer relationship between leaders and followers, one based more on trust and commitment than contractual agreements (p. 209). Gellis (2001) added to the concept in his statement that "the essence of transformational leadership is to produce organizational change through emphases on

new values, and a vision of the future which transcends the status quo (p. 18). According to Bass, Waldman, Avolio, and Bebb (1987) the three factors that determine the behavioral components of transformational leadership are (a) charisma, (b) individual consideration, and (c) intellectual stimulation. Charisma is a behavior that presents an appealing concept of the future, offers followers the opportunity to see meaning in their work, and also challenges them with high standards. Simic (1998) found that, "through motivational speeches and conversations and other public displays of optimism and enthusiasm, highlighting positive outcomes, and stimulating teamwork, transformational leaders encourage followers to become part of the overall organizational culture and environment" (p. 52). Transformational leaders empower followers by persuading them to propose new and controversial ideas without fear of punishment or ridicule (Stone, Russell & Patterson, 2003). Individualized consideration, according to Shin and Zhou (2003), "involves paying attention to followers' needs, showing empathy, and showing appreciation and support of individual followers' initiatives and viewpoints" (p. 704).

In his study of 289 K-12 schools throughout the United States, Leithwood (1994) determined that transformational leaders were identified by six dimensions which included (a) identifying and articulating a vision, (b) encouraging the acceptance of group goals, (c) conveying high-performance expectations, role model for the staff, (d) providing intellectual stimulation, and (e) providing personal support for the staff. He concluded that transformational leadership would help facilitate the reformation of schools but that all six dimensions must be used simultaneously. Leithwood further

emphasized this point by stating that "perseverating on one or several dimensions of leadership and ignoring the remainder will not get the job done" (p. 514).

In synthesizing the results of the studies reviewed, it has been concluded that transformational leadership has a positive effect on the overall academic achievement of students (Leithwood, Harris, & Hopkins, 2008; Leithwood & Jantzi, 1999; Ross, 2004; Silins, 1994) and on the scores of national, standardized mathematics and reading exams (Silins & Murray-Harvey, 1999). Leithwood and Jantzi (2005) further asserted that "in sum, results from these studies are mixed but lean toward the conclusion that transformational school leadership has significant effects on student achievement" (p. 192). It was evident in this review of literature that effective leadership plays a pivotal part in the success of schools and students.

Leadership Challenges

Since the 1970s, the demands on public schools across this nation have been massive. Three federal reforms addressing the need to improve academics have made a huge impact on school organizations and leadership practices. A Nation at Risk, Goals 2000, and No Child Left Behind have posed the most challenges for school administrators (Hunt, 2008).

In the early 1980s, American citizens began to question their dominance in the areas of commerce, industry, science, and technology throughout the world. With the uncertainty about the future of the United States, new legislation was created to address these concerns. A Nation at Risk legislation recommended "that schools, colleges, and

universities adopt more rigorous and measureable standards, and higher expectations for academic performance in every grade level, that four-year colleges raise their admission standards, and that standardized tests of achievement be implemented (Gardner et al., 1983, Standards and expectations, ¶ 1). A Nation at Risk was created using the following principle:

> All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. This promise means that all children by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgment needed to secure gainful employment, and to manage their own lives, thereby serving not only their own interests but also the progress of society itself. (Gardner et al., 1983, Introduction section, ¶ 1)

The Nation at Risk report was not only concerned with the academic achievement of students but questioned teacher preparation and the capabilities of school leaders to accomplish the principles of this reform. The commission recommended that "universities should have higher standards for their teachers and that school boards provide school administrators with the professional development and other support required to carry out their leadership roles effectively" (Gardner et al., 1983, Leadership and fiscal support, ¶ 2).

On March 31, 1994, the Goals 2000: Educate America Act (P.L. 103-227) was signed into law. The Act provided resources to states and communities to ensure that all students reach their full potential. "Goals 2000: Educate America Act" was enacted on the following premise:

> To improve learning and teaching by providing a national framework for education reform; to promote the research, consensus building, and systemic changes needed to ensure equitable educational opportunities and high levels of

educational achievement for all students; to provide a framework for reauthorization of all Federal education programs; to promote the development and adoption of a voluntary national system of skill standards and certifications; and for other purposes. (U.S. Congress, 1994, ¶ 1)

The Goals 2000: Educate America Act lead to well-defined means for measuring, reporting, and supporting progress in schools. This act made school leaders across America accountable for their schools and made them become aware of academic data.

The No Child Left Behind Act (NCLB) of 2001 reauthorized the Elementary and Secondary Education Act (ESEA) of 1965. The NCLB is the main federal law that has influenced the education of students from kindergarten through high school for several years. The NCLB resulted in federal involvement in education at a level never before experienced in the history of educational reform. NCLB was based on stronger accountability for results, more freedom for states and communities, proven education methods, and more choices for parents (U.S. Department of Education, 2004). The NCLB legislation was produced with the following rationale:

The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments. (U.S. Department of Education, 2004, Statement of purpose section, ¶ 1)

According to Billig et al. (2005), "NCLB calls for the development of accountability systems that hold schools responsible for improved student performance based on the outcomes of specific population, along with increasing overall levels of achievement" (p. 1). Under this accountability system, schools that have received federal Title I funds are identified as needing school improvement when they do not meet state-

defined Adequate Yearly Progress (AYP) for two consecutive school years. Immediately, after identification school officials receive technical assistance, and a two year plan is developed to help these schools reach their academic goals. Additionally, students are given the option to transfer and be transported to another public school in the district (one that has not been identified as in need of improvement), and schools are subject to a spending cap provided by the school district (U. S. Department of Education, 2008).

If the school does not make AYP for three consecutive years and remains in the category of needing school improvement, the district must continue to offer public school choice to all students. In addition, students from low-income families must be offered free tutoring (supplemental educational services). Parents can choose the services their child needs from a list of approved school providers. Schools that remain in improvement for additional years are subject to corrective action and restructuring, including a takeover or complete reorganization of the school (U. S. Department of Education, 2008).

NCLB has also had a major impact on public school administrators. The NCLB legislation has caused administrators to have a sense of urgency in regard to understanding curriculum and instruction, structuring staff development, and becoming knowledgeable with regard to using academic data to drive instruction. Hunt's (2008) position is that this legislation:

> has shifted the public focus, sometimes with laser-like intensity, to the building level. It has redirected attention from activities of teachers to the achievement of students, and set clear goals that focus on monitoring how well individual and specific groups of students are able to perform academically. (p. 583)

Waters and Kingston (2005) opined the following:

> The rapidly increasing changes affecting public education calls for research-based leadership responsibilities that reflect what school leaders need to know and be able to do to achieve high levels of student achievement, while at the same time leading the redesign of educational system. (p. 15)

Educating students in low performing schools has also proved to be a massive undertaking for school staffs and a critical leadership challenge for building administrators. Principals of urban schools have been required to face increasing challenges and deal with impediments to progress that include the following: high percentage of minority students, poverty, student mobility, attendance and disciplinary problems, poor nutrition, lack of instructional materials, low achievement scores in standardized tests, inexperienced teachers, and high teacher turnover (Bell, 1979; Duke, Tucker, Salmonowics, & Levy, 2007; Houle, 2006; Ylimaki, Jacobson & Drysdale, 2007). In a study conducted on urban school leadership, Cistone & Stevenson (2000) concluded that, "the principalship in urban places is more challenging than that in other localities because of entrepreneurial requirements, the need to manage social complexity, and demands for political leadership that is essential to advancing the interests of the school and its clients in a highly competitive environment" (p. 437). However, principals assigned to these low-performing schools were often inexperienced and lack adequate instructional leadership training to work effectively in urban schools (Kaplan, Owings, & Nunnery, 2005). These researchers discussed the impact of principals in the following statement: "Placing the weakest instructional leaders in the highest challenged schools

compounds the difficulties of developing a high achieving school culture with a cadre of mature, effective teachers committed to increasing at-risk students learning" (p. 41).

Principal Training

Several researchers have recommend that urban principals receive quality leadership training on managing the operations of the school, understanding instructional best practices, supervising teachers, and monitoring and utilizing data to drive instruction (Cistone & Stevenson, 2000; Houle, 2006; Kaplan, et al., 2005). Their results indicate that without effective and frequent training, principals will continue to be ineffective in addressing issues of poor student achievement, poverty, and a changing minority population. Houle (2006) reinforced this notion by stating that "In addition to the social issues that face principals in urban settings, accountability legislation at federal and state levels has brought with it additional challenges to improve student achievement by meeting annual yearly progress goals for student achievement as defined by NCLB (2001)" (p. 144). Researchers reinforced the fact that the urban school principal is in a constant battle that seems to get tougher, one that has new demands and fewer resources with which to address the challenges.

One way of increasing the number of effective urban school administrators and making the job more manageable has been identified as improved preparation. Björk and Ginsberg (1995), in their research of reform debates on educational leadership programs in the United States, stated that, "strong professional preparation programs were essential to guaranteeing an adequate supply of competent leaders" (p. 13). In a study completed

by Jacobson, Brooks, Giles, Johnson, and Ylimaki (2007), it was claimed that success for principals in high-poverty schools can be attained through preparation programs that stress (a) setting directions, developing goals, and establishing high-expectations for their staff; (b) developing their staff and role modeling appropriate behaviors; and (c) understanding change. Jacobson et al. also believed that higher education programs should pay particular attention to the application of these skills to urban settings and to developing mentoring programs with successful principals in high needs schools.

Training principals in the area of school leadership has always been a challenge. Critics have cited the theoretical nature of preparation programs and the fact that courses have often been disconnected from the needs of and demands on contemporary leaders. In the study conducted by Björk and Ginsberg (1995), the researchers noted the following:

> Departments of educational administration differ markedly from more mature departments in the sciences due to the noncohesiveness of the field, the disjointed research efforts, the lack of a dominant knowledge base with competing paradigms existing, the weak theoretical base and limited practical outcomes of research, and the high vulnerability of the field to external demands. (p. 21)

Levine (2005) studied 600 educational leadership programs in the United States and reached the conclusion that very few met the criteria of being worthy of distinction. Levine stated that the majority of leadership programs, "were weak in having curriculum irrelevant to the job of school leader, low admission standards, weak faculty, a disjunction between academic and clinical study, and a degree that did not meet the needs of practitioners" (p. 10). He concluded that leadership programs in higher education must

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make rapid changes to programs or be replaced by private industries that were willing to prepare leaders for the tough and challenging times ahead.

The National Staff Development Council (2000) considered that "principals' professional development should include deep knowledge of individual and organizational change processes and effective staff development strategies. Additionally, administrators should learn to use data in planning for continuous improvement" (p. 9). The National Staff Development Council report also indicated that the federal government, states, universities and schools districts should all become involved in establishing quality professional development in urban areas. Other recommendations were that these entities replace theory based academics with clinical education experiences, create leadership networks which would provide support, institute incentives for effective principal performance, improve selection of school administrators, and improve mentoring programs to provide support (2000). It was concluded that implementation of these measures could help improve the academic achievement of the most needy students by improving the principalship.

In 1996, The Interstate School Leaders Licensure Consortium (ISLLC) established a set of standards that have clearly impacted school leadership programs in more than 40 states. In discussing the standards, Jackson and Kelly (2002) stated that "the purpose of the ISLLC standards was to provide a clear, organized set of curriculum content and performance standards that could be used to drive the preparation, professional development, and licensure of principals" (p. 194). The six standards created by the ISLLC focused on (a) a vision for learning, (b) school culture and instructional

programs conducive to student learning and professional growth, (c) safe and effective

learning environments, (d) family and community involvement, (e) modeling of ethical

leadership, and (f) understanding the political, social, economic, and legal processes

affecting education. The ISLLC standards provided direction and common criteria for

the development and improvement of leadership programs throughout the country

(Council of Chief State School Officers, 1996; Hale & Moorman, 2003; Jackson &

Kelley).

Levine (2005), concluded that though school principals were facing unyielding

demands to reform America's depraved schools, successful school administration

programs were inadequate and small in number. Hale and Moorman (2003) had earlier

expressed similar beliefs about principal preparation:

> While the jobs of school leaders-superintendents, principals, teachers leaders and
> school board members have changed dramatically, it appears that neither
> organized professional development programs nor formal preparation programs
> based in higher education institutions have adequately prepared those holding
> these jobs to meet the priority demands of the 21st century, namely improved
> student achievement. (p.1)

Leadership programs must provide principals with progressive training to address the

needs of urban schools (Cistone & Stevenson, 2000), and careful consideration must be

taken when structuring professional development for leaders in underperforming schools

(Houle, 2006). The National Staff Development Council (2000), summarized the

importance of effective principal training by the following statement: "Research and

common sense support the notion that improving school leadership at the building level

holds tremendous potential in helping schools bolster student academic performance,

particularly for low-income and minority students" (p. 4). Higher education institutions and school districts have been encouraged through these research reports to consider the facts of the research and make needed changes to improve the field of school leadership.

<u>Second-order Change</u>

Federal reforms and educational data have forced school leaders to seek more zealous leadership approaches to impact the academic achievement of the nation's most disadvantaged students. Researchers have declared that principals in low socio-economic status schools are usually younger, less likely to be instructional leaders, encounter resistance, and less inclined to implement second-order change behaviors (Evans & Teddlie, 1995; Leitner, 1994). Cotton (2003) affirmed this view when she stated that "principals in low performing schools are more likely to adapt to the norms that have been keeping the school's performance low than to bring change--or even try to do so" (p. 63). Current leadership practices have had a slight impact on achievement, but stronger and more direct leadership behaviors are needed to influence the achievement of the neediest schools.

Several researchers (Andrews et al., 1991; Fullan, 2002; Gurr, Drysdale, & Mulford, 2006; Leithwood et al., 2005; Sammons et al., 1995) have identified second-order change leadership characteristics as positively affecting the academic achievement of students. Leithwood (2004) considered empowerment, shared leadership, and organizational learning as second-order changes necessary to making drastic changes in school settings. The National Academy for Academic Leadership (2007) explained

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second-order change as "deciding--or being forced--to do something significantly or fundamentally different from what we have done before. The process is irreversible: once you begin, it is impossible to return to the way you were doing [things] before. (First- and second-order change section, 1). The National Academy for Academic Leadership (2007) also produced seven second-order change characteristics. The characteristics included a new way of seeing things, shifting gears, and recognizing the irreversible nature of acts. Second-order characteristics have been said to require new learning, often begin through an informal system, include transformation to something quite different, tell a new story.

Marzano et al. (2005), in their meta-analysis study of leadership, identified a total of 21 leadership responsibilities, of which 7 were critical to effective leadership for second-order change. Those critical responsibilities were (a) knowledge of curriculum, (b) instruction, (c) assessment, (d) optimizer, (e) intellectual stimulation, (f) change agent, (g) monitoring/evaluating, flexibility, and (f) ideals/beliefs. These seven characteristics were concluded to have the most impactful effect on improving instruction. Marzano et al. described second-order change as "deep change that alters the system in fundamental ways, offering a dramatic shift in direction and requiring new ways of thinking and acting" (p. 66). Marzano at al. also acknowledged that while second-order change might be needed in struggling schools, this type of change has not been eagerly accepted. In a paper written on the effects of leadership on student achievement, Waters, Marzano, and McNulty (2005) made the following statement in regard to second-order change:

> Second-order change requires leaders to work far more deeply with staff and the community. It is possible that second-order changes will disrupt cooperation, a sense of well being, and cohesion. Second-order changes may confront group identities, change working relationships, challenge expertise and competencies, and throw people into stages of "conscious incompetence. (p. 8)

Waters et al. suggested that in order to have sustainable change in the academic achievement of struggling students, principals must transform their leadership and school operations. Harris (2002) stated, "In a failing school context, immediate action is required and hence, leadership approaches are often very directive and task focused" (p. 17). While these changes might bring apprehension, second-order change leadership behaviors have been determined to be necessary in order to change failing schools and increase student achievement,

Marzano et al. (2005) stressed the importance of knowledge of curriculum, instruction, and assessment as well as the extent to which the leader is aware of best practices. According to Marzano et al., "the focus here is on the acquisition and cultivation of knowledge" (p. 54). Sammons et al. (1995) declared that "an effective headteacher (principal) is not simply the most senior administrator or manager, but in some sense a leading professional" (p. 14). Principals collect knowledge of curriculum, instruction, and assessment when they attend staff development or conferences featuring new research on instructional practices or when they stay aware of the latest educational research (Marzano et al.). Several researchers have affirmed in their studies that principals who are knowledgeable and are actively engaged in curriculum, instruction, and assessment will have students with superior academic achievement (Gullat & Lofton,

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1996). Cotton (2003) summarized the importance of principal involvement in the curricular program of the school as follows:

> Since the beginning of research about principals' impact on student results, studies have shown that principals who are knowledgeable about and actively involved with their school's instructional program have higher-achieving students than principals who manage only the noninstructional aspects of their schools. (p. 25)

> To be an optimizer "refers to the extent to which leaders inspire others and is the driving force when implementing a challenging innovation" (Marzano et al., 2005, p. 56). McGuigan & Hoy (2006) described academic optimism in the following way:

> Academic optimism is a shared belief among faculty that academic achievement is important, that the faculty has the capacity to help students achieve, and that students and parents can be trusted to cooperate with them in this endeavor--in brief, a schoolwide confidence that students will succeed academically. (p. 204)

In this same study, the researchers discovered that schools that possess academic optimism constantly demonstrate academic achievement (McGuigan & Hoy). In a study completed by Gullat and Lofton (1996) the researchers concluded that successful principals have high expectations (optimism) of their students and staff. Harris (2002) determined that schools that have demonstrated effective leadership in their schools, "shared a belief and had an optimism that people have untapped potential for growth and development" (p. 18). It was also found that optimistic leaders encouraged, spoke confidently of change, and addressed challenges in a caring manner.

"Intellectually stimulating leaders are willing and able to show their employees new ways of looking at old problems, to teach them to see difficulties as problems to be

solved and to emphasize rational solutions" (Bass, 1990, p. 21). Marzano et al. (2005)

explained the school leader's role in regard to intellectual stimulation as

> the extent to which the school leader ensures that faculty and staff [are] aware of the most current theories and practices regarding effective schooling and makes discussions of those theories and practices a regular aspect of the school's culture. (p. 52)

Bass et al. (1987) had earlier declared the following:

> Followers are supported for questioning their own beliefs and values and, when appropriate, those of their leaders, which may be outdated or inappropriate for solving the current problems confronting their organizations. As a consequence of being intellectually stimulated by their leader, followers develop their own capabilities to solve future problems that the leader may not have anticipated. Followers learn to tackle and solve problems on their own. (p. 75)

Waters & Kingston (2005) acknowledged that, "effective change leadership rests

on the ability of leaders to accurately estimate the magnitude of a change and adjust their

approach to leadership accordingly" (p. 16). In addition, "effective leaders understand

change and are able to implement it with minimal disruption" (Terry, 1996, p. 7). In the

meta-analysis conducted by Marzano et al. (2005), behaviors and characteristics

associated with being a change agent were identified as "consciously challenging the

status quo; being willing to lead change initiatives with uncertain outcomes;

systematically considering new and better ways of doing things and consistently

attempting to operate at the edge versus the center of the school's competence" (p. 45).

A study by Wasserstein-Warnet & Klein (2000) discovered that, "successful

principals were open to changing opportunities, and would foster dialogues on meaning

at different levels, inside the schools between staff members and with the surroundings.

They also showed ability to act and to plan with varying time spans" (pp. 448-449).

Additionally, it was confirmed in an earlier study that "effective low socioeconomic schools were more likely to have initiators as principals than were ineffective low socioeconomic schools" (Evans & Teddlie, 1995, p. 16). Finally, "school improvement depends on principals who can foster the conditions necessary for maintaining education reform in a complex, rapidly changing society" (Fullan, 2002, p. 20). Fullan offered six recommendations on how to lead and understand change: (a) innovate selectively, (b) find collective meaning and commitment to new ways, (c) understand the challenges of implementation, (d) find ways to address resistance and pessimism, (e) transform the culture with new values and teamwork, and (f) realize that change is complex. Studies on change have revealed that this behavior is difficult and time consuming but necessary to affect the academic achievement of students (Fullan, Heifetz & Linsky, 2004, Waters & Grubb, 2004).

Monitoring/evaluating was determined as "continually monitoring the effectiveness of the school's curricular, instructional and assessment practices and being continually aware of the impact of the school's practices on student achievement (Marzano et al., 2005, p. 56). In the study conducted by Andrews et al., they concluded that effective leaders interpret and communicate assessment data to the entire school community in order to convey student success. Dufour & Eaker (1998) believed that, "schools that are in the habit of asking themselves tough questions that focus on the achievement of their students are cited by researchers as the schools most likely to see significant gains as a result of their change efforts" (p. 109). Reeves (2009) and Terry (1996) believed that student achievement and professional practice could be improved by

continually reviewing and discussing data. In addition, Robinson, Lloyd, and Rowe

(2008), revealed the importance of monitoring and evaluation as follows:

> Among higher performing schools, leaders work directly with teachers to plan, coordinate, and evaluate teachers and teaching. They are more likely than their counterparts in lower performing schools to provide evaluations that teachers describe as useful, and to ensure that student progress is monitored and the results used to improve teaching programs. (p. 663)

Focused teacher observations with constructive feedback will in turn lead to instructional

improvements and student achievement (Cotton, 2003).

Flexibility "refers to the extent to which leaders adapt their leadership behavior to

the needs of the current situation and are comfortable with dissent" (Marzano et al., 2005,

p. 49). Their meta-analysis identified additional behaviors associated with flexibility that

included "adapting leadership style to the needs of specific situations; being directive or

nondirective as situation warrants; encouraging people to express diverse and contrary

opinions; and being comfortable with making major changes in how things are done."

(Marzano et al., p. 49). According to Neal, (2007), "It is the responsibility of the leader[s]

to evaluate the readiness of the follower, to accomplish the given task, and adapt their

style of leadership accordingly to fit the needs of their followers" (p. 3). Leithwood, et al.

(2008), in further research, pronounced that:

> evidence warrants the claim that, at least under challenging circumstances; the most successful school leaders are open-minded and ready to learn from others. They are flexible rather than dogmatic in their thinking within a system of core values, persistent, resilient, and optimistic. (p. 36)

The research reviewed on flexibility was conclusive and indicated that effective

principals must learn from others and adjust their strategies throughout the change

process in order to be successful.

Ideal/beliefs were the last of the second-order characteristics that was found to

affect the academic achievement of students. This responsibility was associated with

"possessing well defined beliefs about schools, teaching, and learning; sharing beliefs

about the school, teaching, and learning with the staff; and demonstrating behaviors that

are consistent with beliefs" (Marzano et al., 2005, p. 51). In a study conducted on

successful principal leadership, it was determined that core values and beliefs of

principals shaped teaching and learning, which led to positive learning outcomes of

students (Gurr et al., 2006). Gurr et al. listed the most common values and ideals shared

by principals in his study:

> Every child is important, every child can succeed, every child has unrealized
> potential, all members of the school community need to be supported, schools
> should focus on what was in the best interest of the children, and principals can
> and should make a difference. (p. 381)

In addition, Leitner (1994), discovered that effective principals promote school goals,

participate with staff in structuring professional development, and are actively involved

in the discussion of instruction. Although Leitner did not find evidence of academic

gains, he confirmed that leaders that have strong ideals/beliefs help motivate teachers to

accomplish school goals.

Summary

The literature on the effects of leadership on academic achievement, though considerable, provided mixed results on review (Bamburg & Andrews, 1991; Heck & Marcoulides, 1993; Leitner, 1994). There was one constant message, however. School leadership must be improved in order to address the many needs of the nation's urban schools (Fusarelli & Smith, 1999). The review of literature has provided historical perspectives on the effectiveness of leadership theories and a thorough account of instructional and transformational leadership. Major leadership challenges discussed in this review included federal reforms on education, instruction of low performing students, and the training of principals to lead urban schools. Finally, literature was reviewed on second-order change leadership behaviors and their implications for student academic achievement.

Chapter 3 describes the methodology used to determine the relationship between second-order change leadership behaviors of principals and school grades of Title I schools. Chapter 4 presents a summary of the analysis of the data collected. The study will culminate in Chapter 5 with a summary and discussion of findings, implications, and recommendations for future research.

CHAPTER 3
METHODOLOGY

Introduction

This chapter contains a description of the methodology and procedures used to obtain data for this study. Information collected contained descriptive and inferential statistics and both quantitative and qualitative data obtained through response to a survey and telephone interviews. Chapter 3 is organized into the following sections: (a) Population, (b) Data Collection, (c) Instrumentation, (d) Instrument Reliability and Validity, (e) Research Questions, (f) Data Analysis, and (g) Summary of Research Design and Analysis.

Population

The target sample for this study included 263 Title I elementary school principals in Florida; of which 74 were from Broward County Public Schools, 28 were from Duval County Public Schools, 59 were from Hillsborough County Public Schools, 47 were from Orange County Public Schools, 47 were from Pinellas County Public Schools, and 8 were from St. Lucie County Public Schools.

Title I schools in these districts were determined from the 2007-2008 list provided by the Florida Department of Education's Bureau of Student Assistance. Email addresses for Broward County Public Schools, Hillsborough County Public Schools, Pinellas County Public Schools, and Saint Lucie Public Schools principals were retrieved from the schools' web pages. Email addresses for Orange County Public School principals

were found by searching the Orange County Public Schools global address list within the district email system. Email addresses for Duval County Public School principals were provided by the district's Instructional Research and Accountability office.

<div align="center">Data Collection</div>

Prior to the collection of data, a copy of the Principal Actions Survey and the Second-Order Change Principal Protocol were submitted to the University of Central Florida Institutional Review Board (UCFIRB) for approval. After receiving UCFIRB approval, the study was initiated by requesting approval from each district to conduct research focused on their principals.

The Hillsborough County Public Schools research request form was printed, typed, and submitted to the Office of Assessment and Accountability. The approval letter for Hillsborough County Public Schools was obtained by mail from Dr. John Hilderbrand on January 27, 2009. The Orange County Public Schools research request form was obtained from the district web page and completed online. The document was submitted to the Office of Accountability, Research, and Assessment. The study was approved by Dr. Lee Baldwin on January 13, 2009. The Duval County Public Schools request to conduct research form was completed and submitted online to the Office of Instructional Research and Accountability. Additional documents such as a copy of the proposal, data collection instruments, University of Central Florida Institutional Review Board approval form, consent forms, and dissertation proposal approval were attached to the online form. The study was approved on February 9, 2009 by Timothy Ballentine, Executive Director

of the Office of Instructional Research and Accountability. The Pinellas County Public Schools research request was completed and mailed to the Department of Research and Accountability. The study was approved by Dr. Behrokh Ahmadi, Director of Program Evaluation on February 19, 2009. The research review application for St. Lucie County Public Schools was completed online and printed for submission to the Department of Accountability and Assessment. The study was approved by Dr. Christine Kerstyn, Director of Accountability and Assessment, and Dr. Kathleen Huie, Director of Teacher Development, on March 12, 2009. Copies of approval letters from the respective districts are included in Appendix B.

A series of email contacts with principals was initiated between February 2, 2009 and May 12, 2009. Copies of all email contacts are included in Appendix D. The first contact email message was sent to Orange County Public School principals on February 2, 2009. The initial message was sent through regular email and was intended to introduce the study and to give the participants notice that the survey would be arriving. The email message also contained the informed consent form and the Orange County Public Schools approval to conduct research document. One email was returned due to a principal's having a full inbox. A second email was sent to this principal and went through without any further issues. Duval County Public Schools and Hillsborough County Public School principals received their first contact with an attached copy of the approval to conduct research form and the informed consent through regular email on February 10, 2009.

On February 11, 2009, a second contact was sent to Orange County Public School principals. Duval County Public Schools and Hillsborough County Public School principals received their second contact email on February 18, 2009. The second contact was sent to all three school districts using the Zoomerang© on-line survey service. The second contact included a brief overview of the purpose of the study, a link to the survey, and a reminder that all information would be kept confidential. After the second contact, a total of 37 principals had completed the survey for a return rate of 27%.

A third contact, served as a reminder to complete the online survey and was sent to Orange County Public School principals on February 18, 2009. Duval County Public Schools and Hillsborough County Public School principals received their third contact email on February 25, 2009. The Zoomerang© on-line survey service was used to deliver the third contact email. This email expressed the importance of their participation and encouraged principals to complete the online survey. The link to the survey was provided on the third contact and an additional four principals completed the survey on this day, bringing the total to 47 for a return rate of 35%.

A fourth and final reminder email to complete the survey was sent to principals in Orange and Hillsborough County Public Schools who had not submitted the survey. The email was sent on February 25, 2009 and contained their name and a brief explanation on the importance of their response to the online survey. A fourth and final reminder email was sent to Duval County Public Schools principals on March 4, 2009. After the fourth contact, the total number of principals who had completed the survey was 62 with an overall return rate of 46%.

Due to the FCAT testing which was conducted in the state of Florida from March 10 through March 16, the data collection process was suspended in order to not disrupt the principals during this testing period. The data collection process was resumed on March 17, 2009 when the initial introductory email and attached informed consent form and corresponding approval to conduct research document were sent by regular email to 55 principals in Pinellas County and St. Lucie County Public Schools. On March 24, the second contact email was sent to principals in these counties including a brief overview of the purpose of the study, a link to the survey, and a reminder that all information would be kept confidential. The second contact was sent using the Zoomerang© on-line survey service. After sending the 55 principals in Pinellas and St. Lucie County Schools their survey link, 8 principals completed the survey and the overall return rate decreased to 37%.

A third contact, serving as a reminder to complete the online survey was sent to principals in St. Lucie County Public Schools on April 1, 2009. Pinellas County Public Schools received their third contact email on April 7 due to their Spring Break. No surveys were completed from principals in either school district after the third contact email. A final reminder email was personally sent to St. Lucie County Public Schools on April 8 and only one principal completed the survey. On April 13, Pinellas County Public Schools received their personal emails requesting that complete the online survey, and six principals completed the survey. At the conclusion of the survey period, a total of 20 St. Lucie and Pinellas County Public school principals had completed the survey for an overall return rate of 43%.

The application to conduct research in Broward County Public Schools was submitted and completed by email on February 3, 2009 and approved on April 15, 2009 by the School Board of Broward County and Dr. Maria Ligas, International Review Board Chair. The district and principal security approval documents can be reviewed in Appendix B. On April 19, 2009, the initial contact email message was sent to Broward County Public School principals. This message was sent using regular email and was intended to introduce the study and give the participants notice of the forthcoming survey. The email message contained the district and principal security approval documents as mandated by Broward County Public Schools. On April 27, a second contact email was sent to 72 principals in Broward County Public Schools with a brief overview of the purpose of the study, a link to the survey, and a reminder that all information would be kept confidential. The second contact was sent using the Zoomerang© on-line survey service and the overall rate of return decreased to 35%.

A reminder email was sent to Broward County principals on May 7 and an additional 4 principals responded to the survey. On May 12, a final reminder email sent to Broward principals yielded an additional 14 responses. Thus, at the conclusion of the data collection period, a total of 263 principals in 5 districts had been contacted. Of the 263, a total of 101 principals had responded by completing the Principal Actions Survey for an overall return rate of 38%.

During the survey completion period, six elementary principals from each of the school districts volunteered their contact information on the online survey to be involved in telephone interviews using the Second-Order Change Principal Protocol. Principals

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were contacted by email to confirm participation in the interview process, and a copy of the informed consent letter was attached. All principals returned their informed consent forms by fax or by email attachment. The interviews were initiated in late February and completed in mid-May.

Instrumentation

Data for this study were collected using the Principal Actions Survey designed by the researcher (Appendix C). Additional data were gathered through phone interviews using the Second-Order Change Principal Protocol designed by Taylor (2007) and adapted for this study (Appendix E). The Principal Actions Survey was designed using the online survey service, Zoomerang©. Subscription to this service was obtained for an annual fee and allowed the researcher to customize the survey to meet the needs of the study, with unlimited questions, formats, and respondents. Additionally, the Zoomerang© on-line service, provided unlimited responses, cross-tabulation, skip logic, export capabilities, tracking, and charting options. Through this service, the survey was created and emailed to all participants, and the data were collected and easily analyzed.

The Principal Actions Survey included a total of 34 questions. The first question was a Yes-No statement of consent. Participants who answered "Yes" to the consent question were allowed to continue the survey. For participants who answered "No" to the consent question, the survey ended and they were thanked for their time. The Principal Actions survey consisted of 23 statements which were considered second-order change leadership behaviors. Of the 23, a total of 21 of the statements were single-response,

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multiple choice questions. Nine statements consisted of demographic information and were single-response, multiple-choice questions. Two of the statements were completely open-ended, and one additional open-ended statement requested personal contact information. Participants were not penalized for skipping survey questions, as this study was completely voluntary. Once the participants completed the survey, the participants were not allowed to add or change their responses. The survey closed on May 17, 2009.

The first and second contact emails informed the participants that the Principal Actions Survey would take approximately 10 minutes to complete. Statements concerning second-order change leadership behaviors were included in the survey. Statements 2-22 were created for elementary principals to determine the extent of second-order change leadership behaviors. Statements 23 and 24 asked the participants to discuss leadership practices and challenges in making change at their schools. Statements 25-33 involved principal experience, school information, and background. Statement 34 asked principals to leave their contact information if they were willing to participate in a telephone interview. The survey was concluded with a thank you message provided by the Zoomerang© on-line service.

The Second-Order Change Principal Protocol, designed by Taylor (2007) and adapted by the researcher, was used to guide the interviews. Table 2 lists actions school leaders can take in relation to second-order change leadership behaviors. The first section of the Protocol solicited information about the innovation design, implementation and evaluation as well as evidence of success. The second section of the Protocol, inquired

specifically about the extent to which principals had used second-order change leadership

behaviors to lead their schools to success.

Table 2

Actions Important to Second-Order Change

Responsibility	Actions of the Leadership Team
Knowledge of Curriculum, Instruction, and Assessment	Work individually with staff members regarding implementation of the innovation. Attend staff development opportunities regarding the innovation.
Optimizer	Speak positively about the innovation. Provides examples of other schools that have successfully implemented the innovation. Express a continued belief that the innovation will enhance student achievement. Identify roadblocks and challenges to the innovation.
Intellectual Stimulation	Include research about the innovation in conversations. Ask questions that cause teachers to be reflective in their practices related to the innovation. Lead discussions around current practices related to the innovation.
Change Agent	Raise issues around achievement related to the innovation. Share data related to other schools that have implemented the innovation. Compare where the school is and where it needs to be in terms of implementing the innovation. Demonstrate "tolerance for ambiguity" regarding the innovation.
Monitoring/Evaluating	Look at both formative and summative assessments in relation to the innovation. Conduct classroom walk-throughs related to the innovation
Flexibility	Continually adjust plans in response to progress and tension. Use situational leadership regarding the innovation. Use protocols that allow for input regarding the innovation without bogging down into endless discussion.
Ideals/Beliefs	Communicate ideals and beliefs related to the innovations in formal and informal conversations an model through behaviors. Ensure that practices related to the innovation are aligned with shared ideals and beliefs. Ask strategic questions regarding the innovation when actions don't reflect agreed-up purposes, goals, and understandings.

Note. Used with permission from McREL (Appendix G).

To avoid scheduling and financial complications, interviews were conducted by telephone rather than face-to-face. Prior to commencing the interviews, participants were reminded that the interviews would be voluntary, confidential, and that they were free to withdraw from the interview at any time without penalty. If the participants agreed to voluntarily participate, the researcher initiated the interview.

<u>Instrument Reliability and Validity</u>

The statements or items created for the Principal Actions Survey were carefully developed to provide for content validity of the instrument and were matched directly to the research questions of the study. Table 3 shows the linkage of survey statements and the interview protocol to the three research questions. The table demonstrates that the statements included in the Principal Actions Survey and the Second-Order Change Principal Interview Protocol provided answers to the three research questions, thereby providing content validity for the study.

Content validity and the reliability of the instrument were field-tested by administering the Principal Actions Survey to a group of doctoral students and professors at the University of Central Florida. The first group consisted of 15 doctoral level educational leadership students at the University of Central Florida. The group was given a copy of the Principal Actions Survey and were specifically asked to complete the survey as if they were actual school principals. They were asked to report how much time the survey took to complete, to determine validity of the items, to assess the accuracy of the questions in regard to content validity, to review the wording of the statements, and to

edit survey items. Field-testing determined the average length of time required to

complete the survey was less than 10 minutes.

Table 3

Correlation of Survey Items/Interview With Research Questions

Research Questions	Survey Items
1. What are the differences, if any, in Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the Florida Department of Education?	2-22 & 33
2. What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and the second-order change leadership behaviors?	2-22 & 25-33
3. What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?	2-22 Second-Order Change Protocol

Note. Survey items were created to identify correlations among variables in the research questions.

The Principal Actions Survey was also reviewed by Drs. Rosemarye Taylor and

George Pawlas, experts in the field of educational leadership. The survey was emailed to

Dr. Taylor and Dr. Pawlas through the online survey service, Zoomerang©. They

reviewed the survey for accessibility, aesthetics, and wording and revisions of items

related to content validity. This aspect of the field-test was performed to improve

guidelines, decrease redundancy, enhance wording of items, and ensure that survey

statements were written correctly.

The Principal Actions Survey and the Second-Order Change Principal Interview Protocol were reviewed and approved by the University of Central Institutional Review Board on January 23, 2009. The approval letter is located in Appendix A.

Research Questions

Based on the review of literature, the study sought to answer the following questions:

1. What are the differences, if any, in the Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the Florida Department of Education?

2. What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and the second-order change leadership behaviors?

3. What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?

Data Analysis

The purpose of the analysis was to determine the extent to which there was a relationship between second-order change leadership behaviors of principals and school grades of Title I elementary schools. Data analysis included descriptive and inferential

statistics and quantitative and qualitative data. The critical value with an alpha level 0.05

was used to perform inferential statistics. Data collected through the online survey

service, Zoomerang©, were downloaded into a Microsoft Excel spreadsheet. Each

research question was analyzed separately using the Statistical Package for the Social

Sciences 15.0 (SPSS), a statistics analysis software program.

Research Question 1 was answered using a One-Way Analysis of Variance (one-

way ANOVA) performed to examine the differences between the scores on the Principal

Actions Survey grouped by the independent variable of the current school grade

according to the Florida Department of Education. Research Question 2 was answered

using a multiple linear regression to analyze the relationship between the dependent

variable of second-order change leadership behavior subgroup scores and the independent

variable, professional demographics, which included years at the school, years as an

educator, years as an administrator prior to becoming a principal, years as a principal,

highest degree earned, age, and gender. Research Question 3 was answered using a one-

way Multivariate Analysis of Variance (MANOVA) to examine the second-order change

leadership behavior subgroup scores and the independent variable of school grade and

adjusting for years as a principal. The explanatory design which is a two-phased mixed

method design was applied to Research Question 3 to build upon the results of the one-

way MANOVA. Specifically, the follow-up explanation model was utilized to explain

and expand on the quantitative results gathered in analyzing data for Research Question 3

(Creswell & Clark, 2007). Qualitative data were gathered through phone interviews and

analyzed to discover recurring leadership practices of Title I elementary principals.

Subjects for the interviews represented various districts, schools, ages, experience, and education. The researcher also attempted to interview a balance of male and female participants. Subjects were contacted by phone and given a brief explanation of the study and the interview process.

Summary

The research design and methodology used in this study have been presented in this chapter. A survey was utilized to determine the relationship between second-order change leadership behaviors of Title I elementary principals and school grade according to the Florida Department of Education. Telephone interviews were also completed to recognize recurring leadership practices of Title I elementary principals. This chapter presented detailed information about the population, data collection, instrumentation (including reliability and validity of the instrument), research questions, and data analysis procedures that were used in conducting the research. Results of this study are reported in Chapter 4. Chapter 5 will include a discussion of the findings, implications for practice and recommendations for future research.

CHAPTER 4
ANALYSIS OF DATA AND RESULTS

Introduction

The intent of this study was to determine the degree to which a relationship

between second-order change leadership behaviors and the school grade according to the

Florida Department of Education existed in the elementary schools participating in the

study. In Chapter 4, the results of the analysis of the data are reported with the

anticipation that this study would lead to significant findings that second-order change

leadership behaviors can have an impact on a school's grade. It was anticipated that

making principals aware of second-order change leadership behaviors could lead to

improved academic achievement, efficient school operations and increased longevity of

school leaders in their positions.

The following research questions guided this study:

1. What are the differences, if any, in the Principal Actions Survey scores of Title I

   elementary principals based on the 2008 school grade, according to the Florida

   Department of Education?

2. What relationship, if any, exists among professional demographics of the

   principals (years at the school, years as an educator, years as an administrator

   prior to becoming a principal, years as a principal, highest degree earned, age,

   gender) and the second-order change leadership behaviors?

3. What are the differences, if any, in the second-order change leadership behavior

    subgroup scores based on the 2008 school grade according to the Florida

    Department of Education?

Analysis of the data for this study involved separating data accordingly to answer

each research question individually. Survey responses were downloaded from the

Zoomerang© internet survey into a Microsoft Excel spreadsheet. The final data used in

this study consisted of 101 survey responses. Collected data were analyzed using the

SPSS 15.0 program with the goal of answering each research question.

Lastly, information is included from the six participating principal interviews.

Each interview was evaluated to determine themes second-order change leadership

behaviors themes. Interviews were conducted to gather detailed information and

reoccurring themes of principals in Title I elementary schools.

Description of Sample Data

The original target population for the study was 263 Title I elementary school

principals in Florida school districts from Broward, Duval, Hillsborough, Orange,

Pinellas, and St. Lucie. The distribution of the online survey instrument was initiated in

February 2009 and completed in May 2009. A total of 101 principals completed the

online survey for a 38% return rate.

Results for several demographic items were collected to describe the principals

who actually participated in the study. There were 80 female (79%) and 21 male (21%)

principals who responded to the study. Additional statistics were collected on the

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graduate degrees held by the participating principals, along with their experience levels.

Table 4 contains the education levels of the participants. Florida requires all principals to

have at least a master's degree when working in Florida public schools.

Table 4
Education Level of Respondents

Response	n (%)	Male n (%)	Female n (%)
Master's Degree	72 (71%)	11(15%)	61 (85%)
Specialist Degree	10 (12%)	4 (33%)	6 (67%)
Doctoral Degree	19 (18%)	6 (33%)	13 (67%)
Total	101	21 (21%)	80 (79%)

Respondents were also asked to provide the years of experience as a school

administrator prior to becoming a principal. The majority (39%) had at least 4 years of

experience in an administrative role. Table 5 displays the various years of experience

prior to becoming a principal of the participating principals.

The number of principals who responded to the study by school grade as assigned

by the FLDOE in 2007-2008 is shown in Table 6. These data are presented to show the

range of schools whose principals participated in the study. The majority 40 (40%) of

elementary school principals who took part in the study received a grade of C.

Elementary schools graded B (24) and A (24) accounted for 48% of the total number of

participating schools.

Table 5
Prior Administrative Experience of Principals

Response	*n (%)*	Male *n (%)*	Female *n (%)*
Less than 1 year	1 (.01%)	0	1 (1%)
1-3 years	31 (31%)	6 (19%)	25 (81%)
4-6 years	39 (39%)	5 (13%)	34 (87%)
7-9 years	20 (20%)	8 (40%)	12 (60%)
10+	10 (11%)	2 (18%)	8 (72%)
Total	101	21	80

Table 6
School Grades of Participating Schools

School Grade	*n (%)*	Male *n (%)*	Female *n (%)*
A	24 (24%)	5 (21%)	19 (79%)
B	24 (24%)	6 (25%)	18 (75%)
C	40 (40%)	6 (15%)	34 (85%)
D	10 (10%)	4 (40%)	6 (60%)
F	3 (3%)	0 (0%)	3 (100%)
Total	101	21	80

Summary of Survey Responses by Leadership Factors

The Principals Actions Survey for Title I elementary school principals contained

21 questions that were single-response, multiple choice questions that guided the

research. The Principals Actions Survey also consisted of two additional open-ended

questions that solicited information from principals on leadership practices and

challenges in making change at their schools. Table 7 summarizes the survey responses

grouped by second-order change leadership behaviors from the 101 usable surveys that

were completed. These combinations were dictated by the results of the factor analysis

utilizing Principal Components Analysis shown in Table 9. Tables are presented for all

items in the survey. Detailed information about the factor analysis will be discussed in

the next section as displayed in the table below.

Table 7
Results of the Survey

Question #	*N*	Strongly Agree (%)	Agree (%)	Neither Agree nor Disagree (%)	Disagree (%)	Strongly Agree (%)
21	101	79	18	3	0	0
10	101	28	58	11	3	0
17	101	67	30	2	1	0
2	101	69	29	2	0	0
9	101	53	40	6	2	0
3	101	98	2	0	0	0
13	101	66	31	3	0	0
8	101	93	6	2	0	0
4	101	69	31	1	0	0
20	101	62	35	3	0	0
6	101	71	21	5	3	0
14	101	96	2	2	0	0
15	101	76	23	1	0	0
18	101	47	46	8	0	0
22	101	80	20	0	0	0
12	101	33	44	16	8	0
7	101	50	45	4	1	0
5	101	59	33	4	4	0
11	101	81	17	2	0	0
19	101	97	3	0	0	0
16	101	70	29	1	0	0

Knowledge of Curriculum, Instruction, & Assessment

Survey Question 21 solicited responses from principals on whether they had strong beliefs about data driven instruction. Of the principals, 79% interviewed had strong beliefs about data driven instruction; 18% of the principals surveyed agreed and 3% of the principals neither agreed or disagreed that they had strong beliefs about data driven instruction. Survey Question 10 requested responses from principals as to whether they provided feedback to teachers after performing classroom walk-throughs. Of those responding, 86% of the principals either strongly agreed or agreed with this statement; 11% of principals surveyed neither agreed or disagreed, and 3% disagreed that they provided feedback on performance after carrying out classroom walk-throughs. Survey Question 17 solicited responses from principals on whether they communicated essential instructional practices with teachers, with 97% of principals strongly agreeing or agreeing that they did so, while 2% of principals surveyed neither agreed or disagreed about communicating essential instructional practices with teachers.

Change Agent

Survey Question 2 implored responses from principals on whether they expected implementation of current research based curriculum. A large majority of principals (98%) strongly agreed or agreed that current research based curriculum should be implemented. Survey Question 9 sought responses from principals on whether they believed they made changes to the status quo. Of the respondents, 93% strongly agreed or agreed that they made changes to the status quo. Only 6% of the principals surveyed

neither agreed or disagreed and 2% disagreed that they made changes to the status quo. Survey Question 3 requested responses from principals on whether they believed that they clearly communicate with staff that all children can learn. Almost all (98%) of principals strongly agreed that they clearly communicate to staff that all children can learn. Survey Question 13 asked for responses from principals on whether they believed that they influenced the attitudes and/or beliefs of the staff. A majority of principals (97%) either strongly agreed or agreed that they influenced the attitudes and/or behaviors of the staff.

Optimizer

Survey Question 8 requested responses from principals on whether they believed teachers had the capacity to help students achieve academically. The majority of principals (99%) strongly agreed or agreed that teachers had the capacity to help students achieve academically. Survey Question 4 sought responses from principals on their belief that they acknowledged different points of view when making decisions. The principals unanimously (100%) either strongly agreed or agreed that they acknowledged different points of view when making difficult decisions. Survey Question 20 solicited responses from principals on whether they accepted input from staff when making change; 97% of principals strongly agreed or agreed that they accepted input from staff when making change. Only 3% of principals surveyed neither agreed or disagreed that they accepted input from staff when making change. Survey Question 6 asked for responses from principals in regard to their belief that all academic initiatives impacted academic

achievement. The majority of principals (92%) strongly agreed or agreed that all academic initiatives at school would impact academic achievement. Only 5% of principals neither agreed or disagreed that all academic initiatives at school would impact academic achievement.

Intellectual Stimulation

Survey Question 22 sought responses from principals as to their knowledge of instructional best practices. All (100%) responding principals strongly agreed that they had knowledge of instructional best practices. Survey Question 12 solicited responses from principals on whether they expected their staffs to attend conferences on effective schooling practices, and 77% of respondents either strongly agreed or agreed that they expected staff to attend conferences on effective schooling practices; 16% of principals surveyed neither agreed or disagreed and 8% disagreed that they had staff attend conferences on effective schooling practices. Survey Question 7 necessitated responses from principals on whether they believed that they challenged their staff to review and implement current research. The majority of principals (95%) strongly agreed or agreed that they challenged staff to review and implement current research; 4% of the principals surveyed neither agreed or disagreed and 1% disagreed that they challenged the staff to review and implement current research.

Monitoring/Evaluating

Survey Question 19 sought responses from principals on whether they had high expectations for all students to learn. All (100%) of the principals either strongly agreed or agreed that they had high expectations for all students to learn. Survey Question 16 solicited responses from principals as to whether they met with individual teachers to discuss student academic data. Of the principals surveyed, 99% either strongly agreed or agreed that they met with individual teachers to discuss student academic data. Only 1% of principals surveyed neither agreed or disagreed with the survey statement.

Flexibility

Survey Question 5 sought after responses from principals on whether they performed classroom walk-throughs on a weekly basis. A total of 92% of principals either strongly agreed or agreed that they performed weekly classroom walk-throughs; 4% of principals surveyed neither agreed or disagreed, and 4% disagreed that they performed classroom walk-throughs weekly. Survey Question 11 required responses as to whether the principal adapted to multiple situations. Of the responding principals, 98% of principals strongly agreed or agreed that they adapted to multiple situations. Only 2% of principals surveyed neither agreed or disagreed with the survey statement.

Ideals/Beliefs

Survey Question 14 called for responses from principals in regard to their expectation that staff adjusted instruction based on student achievement. Of the

principals, 98% either strongly agreed or agreed that they expected teachers to adjust

instruction based on student achievement. Only 2% of principals surveyed neither agreed

or disagreed with the survey statement. Survey Question 15 solicited responses from

principals on their belief that they had a strong philosophy about best practices on

instruction, and 99% of principals either strongly agreed or agreed with the statement.

Survey Question 18 asked for responses from principals regarding whether they

communicated research with staff through book talks and/or informal meetings. Of the

principals who responded, 93% strongly agreed or agreed, and 8% neither agreed or

disagreed that they shared research with staff through book talks and/or informal

meetings.

Quantitative Analysis

For this analysis, several combined variables were formed from individual

questions on the Principal Actions Survey. All of the contributing questions were on a 5-

point Likert-type scale; thus, each question contributed equally when linearly combined.

A total of eight combined variables were formed. One variable was a combination of all

survey questions, while the other seven represented combinations of subgroups of

questions. These combinations were dictated by the results of the factor analysis utilizing

Principal Components Analysis.

Principal components analysis (PCA) was a technique used to reduce a data set of

many variables to key components. In the context of the survey, the goal of PCA was to

reduce all of the survey's variables to the core groups the questions represented. They are

represented in Table 8. The first step in PCA was to determine the communalities. Communalities explain what proportion of a variable's variance is explained by the principal components, similar to the R^2 value in other statistical tests. As shown in Table 9, each variable had an initial variance of 1 to represent that each variable explained 100% of itself. The extraction column provides the aforementioned variances explained by the principal components.

Table 8
Factor Analysis Results and Combinations

Factors	Combination of Subgroups Questions	Scores
Overall Score	(All 21 Questions)	Mean Value: 97.26
Knowledge of Curriculum, Instruction, & Assessment	Q21, Q 10, and Q17	Mean Value: 13.50
Change Agent	Q2, Q9, Q3, and Q13	Mean Value: 18.71
Optimizer	Q8, Q4, Q20, and Q6	Mean Value: 18.79
Ideals/Beliefs	Q14, Q15, Q18	Mean Value: 14.07
Intellectual Stimulation	Q22, Q12, and Q7	Mean Value: 13.25
Flexibility	Q5 and Q11	Mean Value: 9.27
Monitoring/ Evaluating	Q19 and Q16	Mean Value: 9.65

Table 9
Communalities

Survey Question	Initial	Extraction
Q2	1.0	.527
Q3	1.0	.710
Q4	1.0	.564
Q5	1.0	.724
Q6	1.0	.533
Q7	1.0	.562
Q8	1.0	.635
Q9	1.0	.573
Q10	1.0	.555
Q11	1.0	.700
Q12	1.0	.664
Q13	1.0	.597
Q14	1.0	.801
Q15	1.0	.730
Q16	1.0	.688
Q17	1.0	.602
Q18	1.0	.576
Q19	1.0	.693
Q20	1.0	.645
Q21	1.0	.723
Q22	1.0	.543

Note. Extraction Method: Principal Component Analysis

The next step in the process involved determining the number of components into which the variables should be reduced. Eigenvalues based upon variable correlations are obtained for each number of components. The number of components begins with one, meaning all variables are grouped into a single component, and ends with as many components as there are variables, meaning no variables can be condensed. The eigenvalues are initially high and begin to decrease as more components are added. In order to determine the ideal number of components, the eigenvalue closest but not below one must be found. As shown in Tables 10 and 1l, the eigenvalue closest but not below

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one was seven components with an eigenvalue of 1.103 which explained 63.55% of the

total variance.

Table 10

Total Variance Explained: Initial Eigenvalues

Component	Total	% of Variance	Cumulative %
1	4.568	21.751	21.751
2	1.831	8.718	30.469
3	1.668	7.941	38.410
4	1.547	7.367	45.778
5	1.382	6.582	52.360
6	1.247	5.937	58.297
7	1.103	5.252	63.549
8	.977	4.653	68.202
9	.877	4.175	72.378
10	.804	3.831	76.208
11	.763	3.633	79.841
12	.709	3.377	83.218
13	.624	2.972	86.191
14	.576	2.743	88.933
15	.467	2.222	91.155
16	.404	1.922	93.077
17	.355	1.689	94.766
18	.323	1.537	96.303
19	.314	1.494	97.798
20	.251	1.196	98.993
21	.211	1.007	100.000

Note. Extraction Method: Principal Component Analysis

Table 11

Total Variance Explained: Sums of Squared Loadings

	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.568	21.751	21.751	2.252	10.725	10.725
2	1.831	8.718	30.469	2.185	10.406	21.131
3	1.668	7.941	38.410	2.052	9.770	30.901
4	1.547	7.367	45.778	1.966	9.364	40.265
5	1.382	6.582	52.360	1.834	8.733	48.998
6	1.247	5.937	58.297	1.584	7.545	56.543
7	1.103	5.252	63.549	1.471	7.006	63.549

Note. Extraction Method: Principal Component Analysis

After determining the number of components, the next step involved determining which variables comprised the seven components. In order to properly determine which variables go into each component, the Varimax rotation method was utilized. An unrotated matrix tends to have difficult interpretations because variables are loaded on multiple components. The Varimax rotation method is the most common rotation method and provides results that are easiest to interpret. Varimax rotation, like any rotation method, will alter the eigenvalues as shown in the last section of Tables 10 and 11. To obtain the rotated values, the non-rotated component matrix is multiplied by the component transformation matrix, a matrix that contains the correlations between the rotated and non-rotated components. Table 12 shows all the correlations of all the variables for all of the components. A total of 14 iterations were needed to complete the matrix.

Table 12

Rotation Component Matrix[a]

Questions	Components						
	1	2	3	4	5	6	7
Q21	.811	.115	.212	.068	.014	-.004	-.048
Q10	.587	.081	-.122	-.035	.127	.356	.213
Q17	.570	.015	.067	.272	.405	.008	.186
Q2	-.193	.677	.065	.073	.103	.035	.101
Q9	.224	.653	.055	-.050	.268	.140	-.013
Q3	.331	.617	-.287	.038	-.017	-.227	-.290
Q13	.327	.575	.352	.081	.028	.027	.164
Q8	-.191	.232	.680	.123	.096	-.220	-.097
Q4	.229	.017	.654	.235	-.095	.111	.086
Q20	.349	-.186	.629	-.073	.097	.195	-.202
Q6	-.062	.189	.498	.092	.480	.042	.071
Q14	.001	-.084	.128	.851	-.169	-.040	.152
Q15	.096	.126	.157	.727	.379	-.063	.062
Q18	.359	.123	-.002	.454	.203	.428	-.040
Q22	.031	.217	-.120	.079	.686	.018	-,053
Q12	.237	-.158	.261	-.249	.613	-.053	.272
Q7	.225	.167	.129	.368	.495	.237	-.176
Q5	.085	-.011	.038	-.017	.025	.835	-.131
Q11	-.018	.458	.084	-.062	-.065	.502	.472
Q19	.088	.004	-.127	.133	.051	-.160	.789
Q16	.381	.313	.274	.320	.021	.249	.453

Note. Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 14 iterations

<p style="text-align: center"><u>Research Question 1</u></p>

What are the differences, if any, in the Principal Actions Survey scores of Title I elementary principals based on the 2008 school grade, according to the Florida Department of Education?

This question was answered by using a one-way analysis of variance (ANOVA). The dependent variable was the overall score of the principal Principal Actions Survey Score (score), while the 2008 school grade as determined by the Florida Department of Education served as the independent variable. The descriptive statistics for school grades are presented in Table 13.

Table 13
Descriptive Statistics of School Grades

Grade	Mean	Std. Deviation	N
F	95.67	5.508	3
D	97.00	6.289	10
C	97.20	5.621	40
B	96.54	4.530	24
A	98.38	4.790	24
Total	97.26	5.195	101

Assumptions for the one-way ANOVA were checked prior to running the analysis. The data were continuous and independent by nature of the collection process. In terms of homogeneity of variance in survey score between school grade groupings, Levene's Test for Equality of Variances was run ($F_{4, 96} = 0.46$, $p > .05$), and it was determined that the individual group variances were homogeneous. The results of the analysis are shown in Table 14.

Table 14

Tests of Between-Subjects Effects

Source	Between-subjects			
	df	*F*	η	*p*
Corrected Model	4	.459	.019	.766
Intercept	1	15725.697	.994	.000
Grade	4	.459	.019	.766
Error	96			
Total	101			
Corrected Total	100			

a. kkR Squared = .019 (Adjusted R Squared = -.022)

The results of the one-way ANOVA ($F_{4, 96}$ = 0.46, $p > 0.05$) indicated that there was no significant difference in overall survey score between principals at schools with different school grades. The R^2 value of 0.02 indicated that only 2% of the variance in survey score could be explained by school grade, which further reinforced its lack of strength as an explanatory variable. Despite the lack of statistical significance, it was still interesting to note that the scores from principals at F-rated schools (M = 95.67, SD = 5.51) were the lowest on average, while the scores from principals at A-rated schools (M = 98.38, SD = 4.79) were the highest on average.

Research Question 2

What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, and gender) and the second-order change leadership behaviors?

Multiple linear regressions were performed to determine which independent variables (Years at the school, Years as an educator, Years as an administrator prior to becoming a principal, Years as a principal, Highest degree earned, Age, and Gender) could predict a relationship between second-order change leadership behaviors. One of the seven regression models was significant through the model building process. The F-value of 2.658 ($p = 0.038$) implied that when ethnicity, age, and gender were held constant, the linear combination of individual professional demographic variables (highest degree earned, years as administrator prior to principalship, and years as principal in the current school) served as significant predictors in the second-order change leadership behavior of Change Agent. The R^2 change shown in Table 15 indicated that these additional variables alone explained 10% of the total variability in Change Agent. The ANOVA summary displayed in Table 16 indicates that $R^2 = .184$, $R^2_{adj} = .083$, $F(9,91) = 2.223$, $p = 0.027$. This implied that the independent variables had a significant predictive relationship on the second-order change leadership behavior of Change Agent. Table 17 explains a combined 18% of the total variability of Change Agent.

Table 15

Multiple Regression Model Summary for Change Agent

Model	R	R^2	R^2_{adj}	ΔR^2	$Fchg$	p	df_1	df_2
1	.291[a]	.084	.036	.084	1.753	.130	5	95
2	.425[b]	.180	.099	.096	2.658	.038	4	91
3	.429[c]	.184	.083	.003	.184	.832	2	89

a. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm
b. Predictors: (Constant), Q28Dumwhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32DumLT4, Q29DumSpec, Q29DumMast
c. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32LT4, Q29DumSpec, Q29DumMast, Q26LT4, Q33LT4Q30

Table 16

Analysis of Variance (ANOVA)[d] for Change Agent

	Model	Sum of Squares	df	Mean Square	F	p
1	Regression	15.430	5	3.086	1.753	.130[a]
	Residual	167.243	95	1.760		
	Total	182.673	100			
2	Regression	32.925	9	3.658	2.223	.027[b]
	Residual	149.749	91	1.646		
	Total	182.673	100			
3	Regression	33.543	11	3.049	1.820	.062[c]
	Residual	149.131	89	1.676		
	Total	182.673	100			

a. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm
b. Predictors: (Constant), Q28Dumwhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32LT4, Q29DumsSpec, Q29DumMast
c. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT, Q32LT4, Q29DumSpec, Q29Mast, Q26LT4, Q33LT4
d. Dependent Variable: Change Agent

Table 17

Coefficients for Variables Selections for Change Agent

	Variable	B	SE B	β	t	p
1	Change	18.729	.478		39.193	.000
	Female	-.401	.327	-.121	-1.228	.222
	<40 Years	.777	.342	.253	2.275	.025
	40-49 Years	.541	.312	.186	1.734	.086
	Afr. Am.	-.397	.429	-.131	-.927	.357
	White	.072	.393	.026	.183	.855
2	Change	19.406	.548		35.381	.000
	Female	-.180	.328	-.054	-.547	.586
	<40 Years	.895	.346	.291	2.587	.011
	40-49 Years	.625	.310	.214	2.017	.047
	Afr. Am.	-.616	.420	-.203	-1.464	.147
	White	.033	.382	.012	.087	.931
	Masters	-1.096	.354	-.369	-3.097	.003
	Specialist	-.268	.510	-.059	-.525	.601
	< 4 Years	-.322	.296	-.112	-1.090	.278
	<4Years	.162	.272	.060	.595	.554
3	Change	19.432	.606		32.057	.000
	Female	-.156	.333	-.047	-.469	.640
	<40 Years	.878	.350	.286	2.506	.014
	40-49 Years	.612	.313	.210	1.952	.054
	Afr. Am	-.591	.432	-.194	-1.368	.175
	White	.045	.388	.017	.117	.907
	Masters	-1.100	.364	-.370	-3.019	.003
	Specialist	-.277	.517	-.061	-536	.594
	<4 Years	-.353	.307	-.122	-1.149	.254
	<4 Years	.156	.338	.058	.461	.646
	<4 Years	.151	.292	.056	.516	.607
	<4 Years	-.134	.380	-.041	-.354	.724

Note. Dependent Variable: Change Agent

Tables 18, 19 and 20 present the results of the analysis for Ideals/Beliefs. The

model summary for Ideals/Beliefs indicated an $F(4,91) = 3.544$ $p = 0.010$ which implied

that when ethnicity, age, and gender were held constant, the linear combination of

individual professional demographic variables (highest degree earned, years as

administrator prior to principalship, and years as principal in current school) served as

significant predictors of the component for Ideals/Beliefs. The R^2 change indicated that

these additional variables alone explained 13.1% of the total variability of the component

of Ideals/Beliefs. While the model was significant when the non-professional

demographics were held constant, the model was not significant $F(9,91) = 1.907$, $p =$

0.061 when both the non-professional and individual professional demographics were

entered as predictors. This indicated that the effectiveness of the block 2 demographics as

predictors was diluted by the block 1 predictors.

Table 18
Multiple Regression Model Summary for Ideals/Beliefs

Model	R	R^2	R^2_{adj}	ΔR^2	F chg	p	df_1	df_2
1	.166[a]	.028	-.024	.028	.539	.746	5	95
2	.398[b]	.159	.075	.131	3.544	.010	4	91
3	.403[c]	.163	.059	.004	.208	.813	2	89

a. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm
b. Predictors: (Constant), Q28Dumwhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32DumLT4, Q29DumSpec, Q29DumMast
c. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32LT4, Q29DumSpec, Q29DumMast, Q26LT4, Q33LT4Q30

Table 19

Analysis of Variance (ANOVA[d]) For Ideals/Beliefs

Model		Sum of Squares	df	Mean Square	F	*p*
1	Regression	3.326	5	.665	.539	.746[a]
	Residual	117.188	95	1.234		
	Total	120.515	100			
2	Regression	19.120	9	2.124	1.907	.061[b]
	Residual	101.395	91	1.114		
	Total	120.515	100			
3	Regression	19.591	11	1.781	1.571	.121[c]
	Residual	100.924	89	1.134		
	Total	120.515	100			

a. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm
b. Predictors: (Constant), Q28Dumwhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT4, Q32LT4, Q29DumsSpec, Q29DumMast
c. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT, Q32LT4, Q29DumSpec, Q29Mast, Q26LT4, Q33LT4
d. Dependent Variable: Ideals/Beliefs

Table 20

Coefficients for Variables Selections for Ideals/Beliefs

	Variable	B	SE B	β	t	p
1	Ideals/Beliefs	14.169	.400		35.423	.000
	Female	.179	.274	.066	.653	.515
	<40 Years	.108	.286	.043	.377	.707
	40-49 Years	.163	.261	.069	.624	.534
	Afr. Am.	-.296	.359	-.120	-.825	.411
	White	-.411	.329	-.186	-1.250	.214
2	Change	14.584	.451		32.312	.000
	Female	.017	.270	.006	.065	.949
	<40 Years	.058	.285	.023	.205	.838
	40-49 Years	.028	.255	.012	.108	.914
	Afr. Am.	-.270	.346	-.109	-.781	.437
	White	-.518	.315	-.234	-1.646	.103
	Masters	-.015	.291	-.006	-.051	.959
	Specialist	-1.397	.420	-.382	-3.326	.001
	< 4 Years	.057	.243	-.024	.233	.816
	<4Years	-.090	.224	-.041	-.403	.688
3	Change	14.487	.499		29.051	.000
	Female	.001	.274	.000	.004	.997
	<40 Years	.064	.288	.026	.221	.825
	40-49 Years	.033	.258	.014	.129	.898
	Afr. Am	-.310	.355	-.125	-.872	.386
	White	-.536	.319	-.242	-1.681	.096
	Masters	.011	.300	.004	.036	.971
	Specialist	-1.376	.425	-.376	-3.236	.002
	<4 Years	.095	.253	.040	.375	.709
	<4 Years	-.149	.278	-.068	-.537	.593
	<4 Years	-.055	.240	-.025	-.228	.820
	<4 Years	.193	.312	.073	.617	.539

Note. Dependent Variable: Ideals/Beliefs

Prior to performing the analysis, some steps were taken in data preparation for

most of the independent demographic variables. When performing regression analyses,

some interpolative power is lost when groups are missing. This is a likely result with a

sample size of 101 respondents and many questions with six different response choices.

For example, Question 32 asked, "How many years have you served as a principal in

your current school including the 2008-2009 school year?" Respondents could select

from the choices of less than 1 year, 1-3 years, 4-6 years, 7-9 years, 10+ years, or not applicable. To maintain some level of discrimination and keep cell sizes sufficiently large, i. e., larger than 10, the not applicable group, less than 1 year and 1-3 year groups were combined to form a less than 4 years group, and the 4-6 years, 7-9 years, and 10+ years groups were combined to form a greater than 4 years group.

Each of the seven regression analyses on the seven dependent variables representing the seven second-order change leadership behavior scores was run with independent variables being entered in a block fashion so that changes in significance and overall R^2 values could be tracked. Table 21 contains information about the blocks and the dummy variables. The two second-order change leadership behaviors, Change Agent and Ideals/Beliefs, were found to be significantly predicted by the demographic variable. Regression models for the other five second-order change leadership behaviors were determined to be insignificant.

Table 21

Description of Blocks and Dummy Variables

Block Name	Variables	Dummy Variables
Block 1 – Non-Professional Demographics	Q25 (Gender)	Q25Fem (1=Female,0=Male)
	Q27 (Age)	Q27DumLT40 (1=<40YrsOld,0=Not< 40 Old) Q27Dum40_49 (1=40-49YrsOld,0=Not40-49Yrs Old)
	Q28 (Ethnicity)	Q28DumAfAm (1 = Afr.-Am.,0=Not Afr.-Am.) Q28DumWhite (1 = White, 0 = Not White)
Block 2 – Individual Professional Demographics	Q29 (Highest Degree Earned)	Q29DumMast (1 = Masters, 0 = Not Masters) Q29DumSpec (1 = Specialist, 0 = Not Specialist)
	Q30 (Years as Admin Prior to Principalship)	Q30DumLT4 (1=< 4 Years, 0=>=4 Years)
	Q32 (Years as Principal in Current School)	Q32DumLT4(1=< 4 Years, 0=>=4 Years)
Block 3 – School Demographics	Q26 (Time previous principal served in school)	Q26DumLT4 (1=< 4 Years, 0=>=4 Years)
	Q33 (Years school was rated as an A or B school under your leadership)	Q33DumLT4(1=< 4 Years, 0=>=4 Years)

The ANOVA model summary table (Table 22) contains the results of regression analyses for the five second-order change leadership behaviors for which findings were insignificant with all p-values less than .05.

Table 22

Analysis of Variance (ANOVA^d): Insignificant Second-order Change Leadership Behaviors

Model	Sum of Squares	df	Mean Square	F	*p*
KCIA					
Regression	16.190	11	1.472	.757	.681[c]
Residual	173.058	89	1.944		
Total	189.248	100			
Optimizer					
Regression	22.737	11	2.067	1.011	.443[c]
Residual	181.900	89	2.044		
Total	204.634	100			
Intellectual Stimulation					
Regression					
Residual	15.932	11	1.448	.729	.708[c]
Total	176.880	89	1.987		
	192.812	100			
Flexibility					
Regression	10.229	11	.930	.991	.461[c]
Residual	83.553	89	.939		
Total	93.782	100			
Monitoring/Evaluating					
Regression	2.749	11	.250	.652	.780[c]
Residual	34.123	89	.383		
Total	36.871	100			

c. Predictors: (Constant), Q28DumWhite, Q27Dum40_49, Q25Fem, Q27DumLT40, Q28DumAfAm, Q30LT, Q32LT4, Q29DumSpec, Q29Mast, Q26LT4, Q33LT4

d. Dependent Variables: Knowledge of Curriculum, Instruction, and Assessment, Optimizer, Intellectual Stimulation, Flexibility, and Monitoring/Evaluating.

Research Question 3

What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?

This question was answered by using a one-way multivariate analysis of variance (MANOVA). The dependent variables were the seven Principal Actions Survey sub-scores (second-order leadership behaviors). The 2008 school grade, as determined by the Florida Department of Education, served as the independent variable. The explanatory design, a two-phased mixed method design, was applied to Research Question 3 to build upon the results of the one-way MANOVA. Specifically, the follow-up explanation model was utilized to explain and expand on the quantitative results gathered in analyzing data for Research Question 3 (Creswell & Clark, 2007).

Prior to performing this analysis, the two lowest grade categories, "D" and "F" were combined into a single group, "D or below." When running a test such as MANOVA, it is important to have the groups as equal in size as possible. Additionally, it is a violation of assumptions to have any cell counts that are lower in value than the number of dependent variables (in this case, there were seven dependent variables). Only three respondents came from "F"-rated schools; thus, the two lowest groups were combined. The results are shown in Table 23.

Table 23

Between-Subject Factors

Group	Value Label	N
1	D or Below	13
2	C	40
3	B	24
4	A	24

The means and standard deviations of all seven dependent variables by school grade

grouping are presented in Table 24.

Table 24
Descriptive Statistics

Grade alt	Mean	Std. Deviation	N
Knowledge of Curriculum, Instruction & Assessment			
D or Below	13.85	.987	13
C	13.58	1.357	40
B	12.87	1.727	24
A	13.83	1.007	24
Total	13.50	1.376	101
Change Agent			
D or Below	18.23	1.691	13
C	18.88	1.265	40
B	18.62	1.610	24
A	18.79	.977	24
Total	18.71	1.352	101
Optimizer			
D or Below	18.31	1.888	13
C	18.67	1.366	40
B	19.21	.977	24
A	18.83	1.606	24
Total	18.79	1.431	101
Ideals/Beliefs			
D or Below	14.15	.801	13
C	14.00	1.109	40
B	13.88	1.513	24
A	14.33	.637	24
Total	14.07	1.098	101
Intellectual Stimulation			
D or Below	12.85	1.908	13
C	13.32	1.289	40
B	13.04	1.197	24
A	13.54	1.414	24
Total	13.25	1.389	101
Flexibility			
D or Below	9.69	.480	13
C	9.10	1.081	40
B	9.21	1.103	24
A	9.32	.770	24
Total	9.27	.968	101
Monitoring/Evaluating			
D or Below	9.62	.506	13
C	9.65	.736	40
B	9.67	.565	24
A	9.67	.482	24
Total	9.65	.607	101

Other assumptions for the one-way MANOVA were checked before running the

analysis. By the nature of the data collection process, all observations were independent.

Though Box's Test of Equality of Covariance Matrices indicated that the assumption of

homogeneity of covariances across the dependent variables was violated ($p < .001$), the

Levene's Test for Equality of Error Variances for each of the seven components indicated

that the variances among grade groups for each individual dependent were equal.

Therefore, that assumption was not violated. However, it is important to note that with

small sample sizes such as this one, Box's Test can be extremely sensitive to outliers. For

this research study, the multivariate tests were run as part of the MANOVA procedure,

Pillai's Trace, to test for multivariate differences as it is the most suited for small sample

sizes and violations of the subsequent homogeneity of covariances assumption. Tables 25

and 26 display the results of the tests for these assumptions.

Table 25
Box's Test of Equality of Covariance Matrices[a]

Box's M	223.088
F	2.224
df1	84.000
df2	8042.933
Sig.	.000

Note. Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
  a. Design: Intercept + Grade _alt

Table 26
Levene's Test of Equality of Error Variances[a]

Dependent Variables	f	df1	df2	Sig.
Knowledge of Curriculum	1.924	3	97	.131
Instruction & Assessment				
Change Agent	2.300	3	97	.082
Optimizer	2.123	3	97	.102
Ideals/Beliefs	1.521	3	97	.214
Intellectual Stimulation	.653	3	97	.583
Flexibility	2.536	3	97	.061
Monitoring/Evaluating	.150	3	97	.930

Note. Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
   a. Design: Intercept + Grade _alt

Another check for appropriateness of the test that was performed is a correlation matrix. MANOVA is most ideal when correlations between the dependent variables are weak to moderate; otherwise, collinearity is a probable risk. Table 27 indicates that correlations between variables range from 0.12 to 0.44, which are all in the weak to somewhat moderate range.

Table 27
Correlations[a] Between Dependent Variables

Pearson Correlation Sig. (2-tailed)	Knowledge of CIA	Change Agent	Optimizer	Ideals Beliefs	Intellectual Stimulation	Flexibility	Monitoring Evaluating
Knowledge of CIA	1.000	.310**	.247*	.387**	.395**	.258**	.439**
		.002	.013	.000	.000	.009	.000
Change Agent	.310**	1.000	.269**	.297**	.283**	.243*	.389**
	.002		.007	.003	.004	.015	.000
Optimizer	.247*	.269**	1.000	.315**	.374**	.120	.285**
	.013	.007		.001	.000	.232	.004
Ideals/Beliefs	.387**	.297**	.315**	1.000	.330**	.152	.426**
	.000	.003	.001		.001	.130	.000
Intellectual	.395**	.283**	.374**	.330**	1.000	136	.233*
	.000	.004	.000	.001		.174	.019
Flexibility	.258**	.243*	.120	.152	.136	1.000	.295**
	.009	.015	.232	.130	.174		.003
Monitoring/ Evaluating	.439**	.389**	.285**	.426*	.233*	.295**	1.000
	.000	.000	.004	.000	.019	.003	

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
    a. Listwise N=101

First, multivariate significance was tested to determine if there were any significant differences in the leadership behavior subgroup scores when considered jointly and when school grade was used as an explanatory factor? The results of the test are presented in Table 28. Pillai's Trace was used, as it is most robust when the homogeneity of covariances assumption is violated. The test ($F_{21, 279} = 1.29$, $p > 0.05$) indicated that the effect of school grade did not cause significant differences in any of the leadership behavior subgroup scores. Although the results of GCR ("Roy's Largest Root") did indicate significance, this test was the least robust when facing multivariate

normality assumptions. Thus, due to the small sample size issues, this test was not used.

Since the omnibus F was insignificant, it was not necessary to draw conclusions from the

ANOVA tests performed on the individual dependent variables.

Table 28
Multivariate Tests[d] Using Pillai's Trace

Effect	Value	F	H df	Error df	Sig.	Partial Eta Square e	Noncent. Parameter	Observed Power
Intercept	.997	4.665E3	7.000	91.000	.000	.997	32655.693	1.000
Grade alt	.266	1.294	21.000	279.000	.177	.089	27.184	. 886

a. Exact statistic
b. Computed using alpha= .05
c. The statistic is an upper bound on F that yields a lower bound on the significant level.
d. Design: Intercept + Grade_alt

Although the test did not show significance when the sub-scores were compared

by school grade group, it is of some interest to review the means and standard deviations

for each sub-score component. Each mean score for each sub-score in each grade group

indicated consistent answers between 4 ("Agree") and 5 ("Strongly Agree"), which

demonstrates a large degree of agreement. The highest and lowest average scores for each

component are presented in Table 29.

Table 29
Average Scores For Each Behavior

Variable	Grade	Lowest Group M	SD	Grade	Highest Group M	SD
Knowledge of Curriculum, Instruction, & Assessment	B	12.87	1.73	D or below	13.85	0.99
Change Agent	D or below	18.23	1.69	C	18.88	1.27
Optimizer	D or below	18.31	1.89	B	19.21	0.98
Ideals/Beliefs	B	13.88	1.51	A	14.33	0.64
Intellectual Stimulation	D or below	12.85	1.91	A	13.54	1.41
Flexibility	C	9.10	1.08	D or below	9.69	0.48
Monitoring/Evaluating	D or below	9.62	0.51	A	9.67	0.48

Telephone Interviews With Principals

Telephone interviews were conducted between late February and mid-May of 2009. Principals completing the Principal Actions Survey were asked to provide contact information if they were interested in participating in telephone interviews. Six elementary principals (1 male and 5 females) assigned to Title I schools participated in the telephone interviews. Three of the individuals were white and three were African American. Two interviewees had master's degrees, two had specialist degrees, and two had doctorates. All principals interviewed had more than 10 years of experience. The telephone interviews were voluntary and conducted using the Second-Order Change

Principal Protocol designed by Taylor (2007) and adapted for this study. The interviews were conducted in order to collect information on recurring leadership practices of principals. The interview protocol can be reviewed in Appendix E. Table 30 provides background information on the principals interviewed for this study.

The interviews were scheduled in advance by either telephone or email and the researcher informed the principals to reserve at least 30 minutes. The Second-Order Change Principal Protocol had a total of 28 questions, but only 11 of the questions were posed. Two of the questions asked about the implementation and success of an innovation and nine inquired about second-order change leadership behaviors. The researcher transcribed the significant statements of the principal by hand, and none of the telephone interviews were recorded in order to protect the privacy of the interviewees.

Table 30

Profile of Title I Elementary School Principals

Principal Demographics	School Demographics	School Accomplishments

Principal A: Orange County
   Gender: Female
   Race: African American
   Highest Degree: Doctorate
   Years in Education: 10+
   Years at Current School: 7
	61% Hispanic,
	21% African-American,
	11% White, 7% Other
	2007-2008 FRSL 85%
		2003-2008 "A" Grade
		2007-2008 Did Not Meet AYP
		2003-2007 met AYP

Principal B: Hillsborough County
   Gender: Female
   Race: White
   Highest Degree: Doctorate
   Years in Education: 10+
   Years at Current School: 5
	23% Hispanic,
	25% African-American,
	42%White, 10% Other
	2007-2008 FRSL 68%
		2007-2008 "A" Grade
		2006-2007 "B" Grade
		2005-2006 "C" Grade
		2007-2008 Did Not Meet AYP
		2006-2007 met AYP
		2005-2006 Did Not Meet AYP

Principal C: Duval County
   Gender: Female
   Race: African-American
   Highest Degree: Master's
   Years in Education: 10+
   Years at Current School: 4
	6% Hispanic,
	44% African-American,
	41% White, 9% Other
	2007-2008 FRSL 79%
		2007-2008 "C" Grade
		2005-2007 "B" Grade
		2005-2008 Did Not Meet AYP

Principal D: St. Lucie County
   Gender: Male
   Race: White
   Highest Degree: Master's
   Years in Education: 10+
   Years at Current School: 6
	19% Hispanic,
	39% African-American,
	39% White, 3% Other
	2007-2008 FRSL 77%
		2007-2008 "A" Grade
		2005-2007 "C" Grade
		2005-2008 Did Not Meet AYP

Principal E: Pinellas County
   Gender: Female
   Race: White
   Highest Degree: Specialist
   Years in Education: 10+
   Years at Current School: 10
	19% Hispanic,
	39% African-American,
	39% White, 3% Other
	2007-2008 FRSL 76%
		2007-2008 "A" Grade
		2006-2007 "A" Grade
		2005-2006 "B" Grade
		2005-2008 Did Not Meet AYP

Principal F: Broward County
   Gender: Female
   Race: African American
   Degree: Specialist
   Years in Education: 10+
   Years at Current School: 4
	1% Hispanic,
	98% African-American,
	<1% White, 1% Other
	2007-2008 FRSL 94%
		2007-2008 "A" Grade
		2006-2007 "C" Grade
		2005-2006 "C" Grade
		2007-2008 met AYP
		2005-2007 Did Not Meet AYP
		2004-2005 met AYP
		2003-2004 Did Not Meet AYP

Note. Data were retrieved from the Florida Department of Education Website.

Qualitative Analysis

Research Question 3: What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?

The analysis for Research Question 3 did not indicate statistical significance when the sub-scores were compared by school grade. In reviewing the comments from the Second-Order Change Principal Interview Protocol, it can be determined that these leadership behaviors can positively impact elementary schools and the field of education. Five of the six principals interviewed were able to maintain or move their schools to an "A" grade according to the FLDOE.

The success of these principals can be attributed to the application of second-order leadership behaviors at their school sites. All principals interviewed implemented research based programs and continuously monitored their effectiveness throughout the school year. The leaders interviewed at these schools were also aware of the positive outcomes that have been derived from effective instructional practices. Following are some of the notable direct responses from the principals about the leadership behavior of the knowledge of curriculum, instruction, and assessment.

Innovation made teachers realize that instruction is the most important factor to improve student achievement.

Assessments are not only used to measure student achievement, but to also plan instruction.

I began to notice that teachers replaced worksheets and busy work with more direct instruction

Principals also believed that they were change agents and were willing to challenge the status quo in order to have their schools achieve success. Principals indicated that changing the status quo was not a simple process, but was attained through district and teacher support. Following are some of the notable direct responses from the principals about the leadership behavior of being a change agent.

> Shared decision making with teachers and leadership team helped me move the innovation beyond the status quo.

> The innovation was moved beyond the status quo through many heart to heart conversations with the staff which helped them understand my vision and goals.

> I helped move the innovation from the status quo by sharing my past experiences and successes, which helped them buy-in.

> The principals of these successful Title I elementary schools believed that communicating the importance of any innovation to stakeholders and celebrating accomplishments was instrumental. The principals continuously expressed passion and a sense that the innovation was fail proof. Following are some of the distinguished direct responses from the principals about the leadership behavior of being an optimizer.

> Confidence was built on the results and the teachers believing that the innovation would be successful.

> I used a lot of praise and celebrations to instill confidence about the innovation.

> Used examples of successful school when discussing the innovation.

Following are some significant responses from the principals about the leadership behavior of ideals and beliefs.

My part is to monitor consistently and I believe what gets evaluated gets done.

Consistency takes time and plenty of patience, but it must take place or the innovation will fail.

Consistency was built from year one and I continue to be as consistent as possible.

Every principal interviewed for this study believed that consistency was the most important factor when implementing and sustaining an innovation. These leaders believed that the survival of any innovation rested on the consistency of the leadership.

The leaders interviewed for this study made their teachers aware of the research through discussions in small groups and faculty meetings. The leaders ensured that the staff understood how the innovation would help improve academic achievement. The principals in this study also made certain that the teachers would have the appropriate staff development and resources to make the research based innovation successful.

Following are some of the significant responses from the principals about the leadership behavior of intellectual stimulation.

Anything that we brought to the teachers was based on research. If it was not based on research, we did not waste their time. When I decided to bring the High Yields Strategies to our staff, I made sure that I understood the theory and that our staff would have ample opportunities to learn and implement the strategies.

Most of the theory behind my innovation was directly taken from the Continuous Improvement Model that the Florida Department of Education is stressing on Title I schools. This is a process that was implemented last year and we continue to support this process though ongoing staff development and small group meetings. I also played a large role in the implementation of the program by leading professional development.

Following are some distinguished responses from the principals about the leadership behavior of flexibility.

> Leadership has to be flexible and teachers can always come to me and if they can show me a better way of doing things, I have no problems in changing things.

> During the implementation of our new writing program, teachers were concerned and felt overwhelmed with the weekly writing prompts and meetings. They suggested monthly writing prompts and meetings and I had no problem with the suggestion. In the long run, teachers were more productive and results were better.

> If someone else can come up with a better idea which is best for kids, than I don't mind being flexible and making changes.

Successful principals with schools that achieved academically adapted to the changes of the staff and school environment. Principals in this study understood that when obstacles arose they had to open to different ideas and suggestions. Principals recognized that flexibility was a very important part of any innovative process but also recognized the need for data before adapting to change.

Leaders involved in this interview understood that in order to have an effective innovation, monitoring and evaluating must be completed regularly. Principals monitored academic progress through formative and summative assessments and reviewed results with their staffs. Following are responses from the principals about the leadership behavior of monitoring and evaluating.

> Progress monitoring meetings are completed quarterly, and new academic goals were created based on the data

> District benchmarks were used and discussed during our monthly data meetings

Although the quantitative analysis in the present study did not yield any statistical significance when the sub-scores were compared by school grade, the interviews determined that second-order leadership behaviors can have a positive effect on school grades. Principals that contributed to this study used these behaviors to implement innovations successfully at their elementary schools. It was also determined from the interviews that the effective use of second-order leadership behaviors had a positive impact on academic achievement and leadership development. The results of the principal interviews revealed that second-order leadership behaviors assisted principals to effectively operate their schools and confront the challenges and demands of urban settings.

<u>Second-Order Change Principal Interview Protocol Results</u>

Interview Question 1 in Section 1 of the Second-Order Change Interview Principal Protocol requested information about the innovation and the responsibility the principal played in designing, implementing, and evaluating change in their school. Table 31 presents a summary of the responses.

Table 31

Principal Responses to Interview Question 1 (Section I)

Describe the innovation (change) and the role you played in the design, implementation, and evaluation.

1. Paraprofessionals, members of the resource team, members of the specials team were pushed into classrooms for 30 minutes to teach reading through direct instruction. As the principal of the school, I brought the innovative idea to the leadership team and the team designed the major components which included choosing the right reading program, training the staff, and monitoring the implementation. I ensured that "eyeball to eyeball time" was taking place through classroom visitations.

2. The innovations that I implemented at my school were the Continuous Improvement Model (CIM) and Professional Learning Communities. The designs of these programs were already created so I made sure that the program were being implemented and monitored with fidelity.

3. Data analysis was the major innovation that I brought to my school. Through data analysis I made sure that teaches knew their students and were able to move their students forward. This innovation took almost three years before teachers began to feel comfortable. I met with teachers on a monthly basis to ask hard questions about students and how they were adjusting their lessons based on the data.

4. To ensure that all my students were receiving high quality instruction, a balanced curriculum and fidelity of pacing guides were stressed on my staff. I also decided to change the way reading instruction took place at this school. Teachers were trained in small group instruction and best practices. As principal, I "inspected what I expected" and so I monitored classrooms daily and provided feedback immediately. I also reviewed student data on a weekly basis to review student achievement.

5. Celebrations became a huge part of my school culture. In order to build culture I decided that it was very important to celebrate small and big accomplishments. These included staff and students accomplishments. I made sure that I celebrated academic data, birthdays, family events, staff participation, and any curricular competition.

6. In order to raise writing scores at my school, writing consultants were hired to train my staff.

Interview Question 2 in Section 1 of the Second-Order Change Principal

Interview Protocol requested data or evidence from the interviewees about the success of

the innovation. Table 32 presents a summary of the responses.

Table 32
Principal Responses to Interview Question 2 (Section I)

How do you know it (the innovation) was successful? Data? Evidence?

1. Writing scores improved from 3.2 to 4.0 on the writing portion of the test.
2. Scores on Benchmark testing, DIBELS, and common assessments improved dramatically.
3. Through the Continuous Improvement Model overall learning gains became evident.
   Teachers began to understand their data and how to use it to drive instruction.
4. School grade according to the Florida Department of Education went up.
5. Began to notice better instructional practices taking place throughout my school.
6. Teachers were using pacing guides effectively.
   Noticed more collaboration among staff during professional development and data meetings.

Interview Question 1 in Section II of the Second-Order Change Principal

Interview Protocol requested information about whether the curriculum, instruction, and

assessment were affected by the innovation. The preponderance of answers seemed to

reflect that teachers became more aware of curriculum, instruction, and assessment

because of the understanding of data and rigorous instruction. Table 33 presents a

summary of the responses from the principal interviews.

Table 33
Principal Responses to Interview Question 1 (Section II)

How did the innovation affect curriculum, instruction, and assessment?

Theme: The understanding of student data and effective instruction positively affected curriculum, instruction, and assessment.

1. The innovation helped teachers to feel supported with curriculum and instruction.
2. Teachers became more aware of data.
3. As the year matured, teachers became more aware of direct instruction.
4. Teachers became more aware of the needs of all students.
5. I began to notice that teachers replaced worksheets and busy work with more direct instruction.
6. Center activities became more rigorous and meaningful for struggling students.
7. Effective and efficient assessments of students were evident.
8. Better training of teachers on understanding data.
9. I began to notice that teachers began to share their lessons and experiences.
10. Instruction improved because teachers communicated better.
11. Teachers gained ownership of their students.
12. Innovation made teachers realize that instruction is the most important factor to improve student achievement.
13. The innovation made teachers more knowledgeable about reading instruction
14. There is more fidelity to the curriculum.
15. There is more evidence that teachers are working as a team during their planning times.
16. Instruction is no longer stand and deliver.
17. Teachers have moved beyond traditional instruction to more interaction with students.
18. Students are goal setting and are asking critical questions.
19. Assessments are not only used to measure student achievement, but to also plan instruction.

Interview Question 2 in Section II of the Second-Order Change Principal Interview Protocol requested information about the role the principal played in implementing the innovation. The second part of this question inquired as to how the principal encouraged staff to believe that the innovation would be successful. Table 34 represents a summary of the responses.

Table 34
Principal Responses to Interview Question 2 (Section II)

What role did you play in implementing the innovation?
How did you instill confidence in others that innovation would yield results?

Theme: Setting the vision, discussing the rationale, and communicating with stakeholders were important during implementation. Praising staff accomplishments and celebrating successes instilled confidence about the innovation.

1. I played a major part by reviewing research and discussing the findings with the staff.
2. I created and set the vision for the innovation.
3. I discussed the reasons with the staff for the innovation.
4. Expectations were shared with the staff.
5. It was very important to cast or paint the picture for the entire staff.
6. Conflicts were resolved by me or by my leadership team before embarking on any new plan.
7. I had conversations that mattered with my staff.
8. I asked tough questions about direct instruction and its implementation.
9. Had heart to heart conversation with individual team and discussed what is good for children.
10. Developed a top and bottom approach of modeling, delivering, sharing, and communicating with staff.
11. Used examples of successful school when discussing the innovation.
12. I found teachers that were respected by staff and had them discuss and present success of the innovation.
13. I had teams visit schools that had implemented the innovation effectively and then had them share with the staff.
14. I used a lot of praise and celebrations to instill confidence about the innovation.
15. My role was that of a leader of all learning.
16. I committed myself to being present at every meeting and workshops.
17. Was a huge cheerleader.
18. As the leader, I was a motivator, presenter, professional development trainer, and evaluator.
19. Confidence was built on the results and the teachers believing that the innovation would be successful.

Interview Question 3 in Section II of the Second-Order Change Principal

Interview Protocol requested information about the theory of the innovation and how the

staff became aware of the details of the innovation. Table 35 represents a summary of the

responses.

Table 35
Principal Responses to Interview Question 3 (Section II)

Can you tell me about the research or theoretical background of the innovation? How did professional staff learn about the theory and research behind it?

Theme: Innovations were based on research-based programs and centered on the needs of students. Staff development and continuous meetings throughout the year assisted with the learning process of the innovation.

1. The research behind my innovation dealt with the Accelerated Growth Catch-up model that was created by Dr. Torgensen. I scheduled small groups to discuss the Accelerated Growth Catch-up model and I feel this helped teachers understand the model and the reasons for implementation.
2. All research and rationale behind the innovation was discussed with teachers before the school year began and during the school year. Staff Development played a very important role in implementing the innovation.
3. Most of the theory behind my innovation was directly taken from the Continuous Improvement Model that the Florida Department of Education is stressing on Title I schools. This is a process that was implemented last year and we continue to support this process though ongoing staff development and small group meetings. I also played a large role in the implementation of the program by leading professional development.
4. A writing consultant was brought to our school because of our low scores in writing. I considered Mary Lewis because of her success in other counties throughout the state of Florida. The staff was informed about the innovation at pre-planning and meetings were scheduled throughout the school year to better understand her writing theories.
5. Anything that we brought to the teachers was based on research. If it was not based on research we did not waste their time. When I decided to bring the High Yields Strategies to our staff, I made sure that I understood the theory and that our staff would have ample opportunities to learn and implement the strategies.

Interview Question 4 in Section II of the Second-Order Change Principal

Interview Protocol requested information about how the principal was able encourage all

involved constituents to move past the status quo. Table 36 represents a summary of the

responses.

Table 36
Principal Responses to Interview Question 4 (Section II)

What political process was used to move the innovation beyond the status quo?

*Theme: Successful results and honest conversations with school staff and district
personnel allowed the innovation to move beyond the status quo.*

1. I worked very hard to make sure that there was no subversion from the staff by meeting and communicating with staff.
2. We had continuous conversations with staff about the vision and goals of the school
3. Shared decision making with teachers and leadership team helped me move the innovation beyond the status quo.
4. I felt that I had the support from the superintendent and my directors to make changes to the status quo.
5. I believed teachers moved past the status quo once they began to see positive results.
6. The innovation was moved beyond the status quo through many heart to heart. conversations with the staff which helped them understand my vision and goals.
7. I helped move the innovation from the status quo by sharing my past experiences and successes, which helped them buy-in.

Interview Question 5 in Section II of the Second-Order Change Principal

Interview Protocol requested information about how the principal monitored the progress

of the implemented innovation. The six interviewed principals responded that progress of

the innovation was supervised through district and state assessments. Table 37 represents

a summary of the responses.

Table 37
Principal Responses to Interview Question 5 (Section II)

What type of monitoring of results has taken place? (Formative & Summative)

Theme: District and school assessments facilitated with the monitoring of the innovation.

1. We used running records in our reading classes.
2. Writing prompts were completed on a monthly basis and discussed during monthly meetings.
3. Teachers used the Houghton Mifflin themes skills tests.
4. DIBELS scores showed me growth on fluency and nonsense words.
5. District benchmarks were used and discussed during our monthly data meetings.
6. Progress monitoring was administered on a weekly basis.
7. Success Maker data was reviewed with benchmark data.
8. Progress monitoring meetings are completed quarterly and new academic goals were created based on the data.

Interview Question 6 in Section II of the Second-Order Change Principal Interview Protocol requested information about the flexibility of the principal during the design, implementation, or evaluation of the innovation. The majority of the principals responded that with supporting data such as common and summative assessments they were flexible in making a change during the implementation process of the innovation. Table 38 represents a summary of the responses.

Table 38

Principal Responses to Interview Question 6 (Section II)

Provide me with an example of your being flexible during the design, implementation, or evaluation of the innovation.

Theme: Flexibility is important to change and to the successful implementation of an innovation.

1. Leadership has to be flexible and teachers can always come to me and if they can show me a better way of doing things, I have no problems in changing things.
2. During the implementation of my reading push-in model, 2nd grade teachers came to my office and stated that they needed additional hands to make the process run smoother. Once I had the opportunity to discuss their ideas and options with the teachers, I decided that adding paraprofessionals would indeed be helpful.
3. If someone else can come up with a better idea which is best for kids, than I don't mind being flexible and making changes.
4. The how of the process I am flexible, but I am not flexible on the end results.
5. If something was not working we adjusted and changed immediately.
6. If I don't see results of what we have implemented, I have no problem modifying.
7. If there is data to support change I am very flexible.
8. During the implementation of our new writing program, teachers were concerned and felt overwhelmed with the weekly writing prompts and meetings. They suggested monthly writing prompts and meetings and I had no problem with the suggestion. In the long run, teachers were more productive and results were better.
9. During meetings with teachers, if they can suggest a better way to achieve results than I am for it .

Interview Question 7 in Section II of the Second-Order Change Principal

Interview Protocol requested information about the relationship between consistency in

leadership and implementing an innovation. The six principals interviewed believed that

consistency was related to success of any innovation. Table 39 represents a summary of

the responses.

Table 39
Principal Responses to Interview Question 7 (Section II)

How was consistency in leadership related to the innovation obtained?

Theme: Consistency is important and challenging, but it is important to students. Without consistency any innovation is destined to fail.

1. Anyone who has a hand in working with children needs to be consistent.
2. My part is to monitor consistently and I believe what gets evaluated gets done.
3. Consistency plays an important part in the perception of children.
4. Consistency is the most challenging part of my job and it is a struggle each and every day.
5. Consistency must be visible in data conferences and having honest conversations about children on their growth or decline.
6. In order for any innovation to make positive strides, one must be consistent in everything that is done and said.
7. In order to assure that teachers are effectively implementing instructional strategies, I am consistent about Classroom Walk-throughs and data meetings.
8. Consistency was built from year one and I continue to be as consistent as possible.
9. Principal and teacher need to be consistent for students.
10. The innovation was obtained by making sure teachers were doing what has been asked of them.
11. Consistency takes time and plenty of patience, but it must take place or the innovation will fail.

Summary

Chapter 4 focused on reporting and analyzing the data collected to address each of the three research questions. Tabular displays and accompanying narratives were organized around each of the research questions. Data gathered in interviews with principals in Title I elementary schools were also analyzed. The responses to interview questions and reoccurring themes were presented.

Chapter Five concludes the report of this study with a summary of the research, conclusions, and recommendations for future studies.

CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The final chapter of this study reviews the purpose of the study and summarizes the findings of the study. Also presented are conclusions, and recommendations for future research in the area of data collection and analysis.

Summary of the Findings

The purpose of this study was to determine the relationship between second-order change leadership behaviors and the grade assigned to each school by the Florida Department of Education. Specifically, this study analyzed 7 of the 21 principal leadership responsibilities which were considered to be second-order change factor responsibilities. They included (a) knowledge of curriculum, (b) instruction, (c) assessment, (d) optimizer, (e) intellectual stimulation, (f) change agent, (g) monitoring/evaluating, (h) flexibility, and (i) ideals/beliefs which were considered second-order change factor responsibilities (Marzano et al., 2005).

Chapter 2 provided an extensive review of literature related to school leadership, which included a historical and contemporary review of leadership theories. Also discussed were leadership challenges, second-order change leadership behaviors, and principal training.

Chapter 3 revealed the methodology that was used to address the research questions that guided the study. The research questions linked second-order change

leadership behaviors of principals and school grades of Title I elementary schools in Florida. Online surveys and mixed methods research were chosen to address the questions in the study (Appendix C and Appendix E).

Chapter 4 contained a summary of the analysis of the data collected from the Principals Actions Survey and the Second-Order Change Principal Interview Protocol. Collected data from the Principals Actions Survey was analyzed using the SPSS 15.0 program. The chapter was organized around the three research questions.

Research Question 1 asked about the differences, if any, in the Principal Actions Surveys scores of Title I elementary principals based on the 2008 school grade according to the Florida Department of Education. The results of the one-way ANOVA indicated that there was no significant difference in overall survey score between principals at schools with different school grades.

Research Question 2 inquired as to what relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and the second-order change leadership behaviors. The results of the multiple regression indicated that when ethnicity, age, and gender were held constant, the linear combination of individual professional demographic variables (highest degree earned, years as administrator prior to principalship, and years as principal in current school) served as significant predictor in the second-order change leadership behaviors of Change Agent and Ideals/Beliefs.

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Finally, Research Question 3 was used to solicit differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education. To answer Research Question 3, data collected from the survey and principal interviews were analyzed to see if differences existed in second-order change leadership behaviors subgroups and the 2008 school grade.

The results of the one-way MANOVA analysis did not show significance when the sub-scores were compared by school grade group. Interviews with principals at six Title I elementary schools were conducted with the goal of collecting information on recurring leadership practices of Title I elementary school principals. In reviewing the comments from the Second-Order Change Principal Interview Protocol it was determined that these leadership behaviors had positively impacted elementary schools.

<u>Conclusions</u>

The analyzed data revealed findings which may help school leaders understand second-order change leadership behaviors and how they can positively affect student achievement. Although very little statistical significance was found in the majority of the quantitative analyses, the information gained in interviews will be beneficial to school principals and to the field of education. The findings of the study have implications for both general and specific conclusions.

1. The majority of principals answered Strongly Agree or Agree to every question on the Principal Actions Survey. This may suggest that principals

who were surveyed believed that their school success may be attributed to second-order change leadership behaviors.

2. Although Research Question 1 had no statistical significance, it can be noted from the analyses that principals who had a higher mean on the Principal Actions Survey led A or B-rated schools according to the FLDOE (Table 13).

3. Statistical significance was found in Research Question 2. When ethnicity, age, and gender were held constant, the linear combination of individual professional demographic variables (highest degree earned, years as administrator prior to principalship, and years as principal in current school) served as a significant predictor in the second-order change leadership behavior of Change Agent and Ideals/Beliefs.

4. Although statistical significance was not found in Research Question 3, each mean score for each sub-group in each grade group indicated consistent answers between Strongly Agree and Agree, which demonstrates a large degree of agreement.

5. During the telephone interviews, it became apparent that principals who had knowledge of curriculum, instruction, and assessment increased staff awareness of student data, needs of students, and their instructional practices. From the interviews one can also conclude that the principals were very influential in regard to teachers' collaborating and increasing their abilities to improve student achievement.

6. The interviews also led the researcher to conclude that leaders who led effective schools were strong optimizers. Principals had clear expectations for teachers and students, celebrated all accomplishments, and had great confidence that the school would be successful. It appears that leaders built teacher confidence through this second-order change leadership behavior, which ultimately contributed to improved student achievement and an A or B-rated school by the FLDOE.

7. From the interviews, one can conclude that principals involved in the study did not implement any type of innovation or change unless it was research based and centered on the needs of students. Furthermore, principals provided continuous support through professional development in order for the innovation to have maximum potential of success.

8. Monitoring/Evaluating was the main component for the academic success of the principals involved in this study. Principals monitored school and district assessments and scheduled progress monitoring meetings with teachers to discuss academic data and instructional practices. It can be concluded that through detailed conversations on instructional practices and reviewing student achievement, school leaders were able to make modifications, and teachers were able to adapt their instruction. Constant monitoring and evaluation of school and district assessments helped address any instructional concerns without delay and in the process guaranteed success.

9. Ideals/Beliefs was an area in which all principals had strong beliefs. Principals were asked how consistency in leadership related to an innovation in their schools. Resoundingly, all six principals who were interviewed stated that there must be consistency or any innovation or change will not succeed. It can also be concluded that in order for a leader to have continuous success as a second-order change leader, all seven behaviors must be implemented with fidelity.

Although statistical significance was minimal in this research study, second-order change leadership behaviors are very important to the development of leadership, teacher progress and student achievement. Throughout the interview process, it was evident that the six principals who had academic success in their schools exhibited second-order change leadership behaviors.

The principals involved in this study were fully aware of best practices and communicated their knowledge with their teachers in order to provide resources for success. Principals involved in interviews also celebrated and acknowledged every accomplishment at their school which led to greater confidence about change initiatives.

The principals engaged in these interviews were also fully aware of the positive results that meaningful professional development can produce in a school setting. Principals understood that training on instructional best practices and providing awareness of successful schools would lead to school-wide achievement in the future. Principals interviewed also recognized the power of effective monitoring and evaluating and how this second-order change leadership behavior can positively impact academic

achievement and instructional practices. Principals clearly believed that "what gets monitored gets done" and by consistently following this statement, five of the six schools involved in this study were able to move or maintain their schools at an A grade according to the Florida Department of Education.

Every principal involved in this study had strong ideals and beliefs specifically in the area of consistency. Principals interviewed understood that consistency must be visible in leadership, instruction, and with students in order for any innovation to thrive. Principals also strongly believed that if consistency fails the innovation will fail. Flexibility was revealed to be an important second-order change leadership behavior because it helps improve innovations. Principals involved in these interviews were very hesitant to change their direction but indicated they would modify their plans if a better idea or suggestion were presented. Flexible leadership behavior was demonstrated as principals were willing to be part of a collaborative team and not always initiate change alone. Finally, the last second-order change leadership behavior that was of most importance was that of being a change agent. Without this leadership behavior, the innovation would have never taken flight. Principals involved in these interviews challenged the status quo by introducing a new innovation or change and by making teachers believe that these new ideas would bring positive results. Although the innovation may not have been popular at first, these principals had the commitment and determination to move the change initiative forward. In gaining staff and district support and having open and honest conversation, these principals were able to build a strong foundation and a future of sustainable student achievement.

The importance of second-order change leadership behaviors to present and future leaders is that if these behaviors can be implemented consistently and over time, schools of any background can maximize success. Leaders who can effectively comprehend how second-order change leadership behaviors operate within a school will be able to build a strong foundation among teachers and students for years to come. Second-order change leadership behaviors are not for principals who want modest school progress; but they are for those leaders that want "deep change" and sustainable academic advancement for all students no matter what ethnicity, race, gender, or economic background.

<u>Recommendations for Future Research</u>

Further research is suggested in the following areas:

1. A follow-up study should be conducted to gather the perceptions of teachers from the same Title I schools regarding their principals' second-order change leadership behaviors.

2. A similar study needs to be conducted on principals in Title I middle and high school settings.

3. A qualitative study should be conducted on second-order change leadership behaviors of non-Title I elementary, middle, and high school principals.

4. Further research should be conducted on how and what professional development activities may assist principals to enhance second-order change leadership behaviors and improve instruction.

5. A study should be conducted to investigate the relationship between principals' second-order change leadership behaviors and achievement of Adequate Yearly Progress.

6. This study should be replicated in states other than Florida.

7. A study should be conducted to determine the relationship between second-order change leadership behaviors of district administrators and their district academic success.

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

Chapter Five has presented a summary of the findings reported in Chapter 4. Conclusions were offered based on the findings and the literature reviewed in Chapter 2 that may be useful to school principals and the field of education. Finally, recommendations for future research have been offered.

APPENDIX A
UCF INSTITUTIONAL REVIEW BOARD APPROVAL

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Expedited Initial Review and Approval

From : **UCF Institutional Review Board**
FWA00000351, Exp. 10/8/11, IRB00001138

To : **Gonzalo La Cava**

Date : **January 23, 2009**

IRB Number: SBE-09-05996

Study Title: **A study of the relationship between second order change leadership behaviors of principals and school grades of Title I elementary schools.**

Dear Researcher:

Your research protocol noted above was approved by **expedited** review by the UCF IRB Vice-chair on 1/23/2009. **The expiration date is 1/22/2010.** Your study was determined to be minimal risk for human subjects and expeditable per federal regulations, 45 CFR 46.110. The category for which this study qualifies as expeditable research is as follows:

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

A waiver of documentation of consent has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

To continue this research beyond the expiration date, a Continuing Review Form must be submitted 2 – 4 weeks prior to the expiration date. Advise the IRB if you receive a subpoena for the release of this information, or if a breach of confidentiality occurs. Also report any unanticipated problems or serious adverse events (within 5 working days). Do not make changes to the protocol methodology or consent form before obtaining IRB approval. Changes can be submitted for IRB review using the Addendum/Modification Request Form. An Addendum/Modification Request Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at http://iris.research.ucf.edu .

Failure to provide a continuing review report could lead to study suspension, a loss of funding and/or publication possibilities, or reporting of noncompliance to sponsors or funding agencies. The IRB maintains the authority under 45 CFR 46.110(e) to observe or have a third party observe the consent process and the research.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 01/23/2009 04:09:52 PM EST

IRB Coordinator

Notice of Expedited Review and Approval
of Requested Addendum/Modification Changes

From: UCF Institutional Review Board
        FWA00000351, Exp. 10/8/11, IRB00001138

To: Gonzalo La Cava

Date: February 02, 2009

IRB Number: SBE-09-05996

Study Title: A study of the relationship between second order change leadership behaviors of principals and school grades of Title I elementary schools.

Dear Researcher:

Your requested addendum/modification changes to your study noted above which were submitted to the IRB on 02/02/2009 were approved by **expedited review** on 2/2/2009.

Per federal regulations, 45 CFR 46.110, the expeditable modifications were determined to be minor changes in previously approved research during the period for which approval was authorized.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Subjects or their representatives must receive a copy of the consent form(s).

This addendum approval does NOT extend the IRB approval period or replace the Continuing Review form for renewal of the study.

On behalf of Tracy Dietz, Ph.D., IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 02/02/2009 12:51:16 PM EST

IRB Coordinator

Internal IRB Submission Reference Number: 005053

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APPENDIX B
PUBLIC SCHOOLS RESEARCH REQUEST APPROVAL FORM

Submit this form and a copy of your proposal to:	**Orange County Public Schools**	Your research proposal should include:

Submit this form and a copy
of your proposal to:
*Accountability, Research, and
Assessment*
P.O. Box 271
Orlando, FL 32802-0271

Orange County Public Schools

RESEARCH REQUEST FORM

Your research proposal should
include:
- Project Title
- Purpose and Research Problem
- Instruments
- Procedures and Proposed Data Analysis

Requester's Name__Gonzalo Sebastian La Cava_____   Date__December 19, 2008_____

Address__9531 Painte Creek Court_____ __Orlando, Florida__ __32832__   Phone__407-782-3369_____
Street   City, State   Zip

Institutional Affiliation__University of Central Florida_____

Project Director or Advisor__Dr. Rosemarye Taylor_____   Phone__407-823-1469_____

Address_____

Degree Sought:
(check one)
☐ Associate   ☒ Doctorate   ☐ Bachelor's   ☐ Not Applicable   ☐ Master's   ☐ Specialist

---

Project Title:__A study of the relationship between second order change leadership behaviors of principals and school grades of Title I elementary schools._____

ESTIMATED INVOLVEMENT

PERSONNEL/CENTERS	NUMBER	AMOUNT OF TIME (DAYS, HOURS, ETC.)	SPECIFY/DESCRIBE GRADES, SCHOOLS, SPECIAL NEEDS, ETC.
Students	0		
Teachers	0		
Administrators	47	less than one hour	K-5
Schools/Centers	47	Less than one hour	K-5
Others (specify)	0		

Specify possible benefits to
students/school system:__If this study concludes that a relationship exists between second order change leadership behaviors and the school grade; then this school district can draw information from this study to shape leadership preperation programs for principals. Additionally, higher education institutions may consider the findings when developing leadership programs for future school administrators._____

ASSURANCE

Using the proposed procedures and instrument, I hereby agree to conduct research in accordance with the policies of the Orange County Public Schools. Deviations from the approved procedures shall be cleared through the Senior Director of Accountability, Research, and Assessment. Reports and materials shall be supplied as specified.

▸ RECEIVED Jan 8 2009

Requester's Signature_____

Approval Granted: ☒ Yes   ☐ No   Date:__1-13-09__

Signature of the Senior Director for
Accountability, Research, and Assessment_____

Hillsborough County
P U B L I C   S C H O O L S
Excellence in Education

January 27, 2009

Mr. Conzalo LaCava
9531 Painte Creek court
Orlando, Florida 32832

Dear Mr. LaCava:

The Hillsborough County Public School district has agreed to participate in your research proposal, *A study of the relationship between second order change leadership behaviors of principals and school grades of title I elementary schools.* A copy of this letter MUST be presented to each principal in your study along with your survey to assure them your research has been approved by the district. Approval is given under the following conditions:

1) At this time, your study includes principals only. This approval does not include contacting teachers, parents or students. If the scope of your research changes, you will have to resubmit your proposal for approval.

2) Participation by the principal is to be on a voluntary basis. That is, participation is NOT MANDATORY and you must advise all participants that they are not obligated to participate in your study.

3) Confidentiality must be assured for all. That is, ALL DATA MUST BE AGGREGATED SUCH THAT THE PARTICIPANTS CANNOT BE IDENTIFIED. This must be an anonymous survey.

4) If this project requires data from Hillsborough County Public Schools, there will be a charge for this service.

SERVE VOLUNTEER FORMS/FINGERPRINTING:
Your proposal indicates that you will not come into contact with any students. IF THIS CHANGES, YOU MUST contact us for further instructions.

Good luck with your endeavor. If you have any questions, please advise.

Sincerely,

John A. Hilderbrand, Ph.D., Director
Assessment and Accountability

JAH/dsr

February 9, 2009

Gonzalo S. La Cava
9531 Painte Creek Court
Orlando, Florida 32832

Dear Mr. La Cava:

Your request to conduct research in Duval County Schools has been approved. This approval applies to your project in the form and content as supplied to this office for review. Any variations or modifications to the approved protocol must be cleared with this office prior to implementing such changes.

Participation in studies of this nature is voluntary on the part of principals. Our approval does not obligate any principal to participate in your study. A signed copy of this letter must accompany any initial contact with principals.

Our approvals for research run through June 30th of each school year. If your research will extend beyond that date, you will have to submit an application again at the appropriate time. You will be required to supply copies of signed consent and assent forms at that time. If there have been no changes to the approved protocol you may refer to the previously submitted paperwork.

Upon completion of the study, it is customary to forward a copy of the finished report to the Office of Instructional Research and Accountability, 1701 Prudential Dr., rm. 326, Jacksonville, Florida 32207. This office also shall be notified, in advance, of the publication of any reports/articles in which Duval County is mentioned by name.

If you have questions or concerns, please don't hesitate to call me or Lisa Piscatelli-Harrison at 390-2548.

Sincerely,

Timothy Ballentine
Executive Director
Instructional Research and Accountability

February 19, 2009

Gonzalo Sebastian La Cava
University of Central Florida
4000 Central Florida Boulevard
Orlando, Florida 32816

Dear Mr. La Cava:

I received your request to conduct research in Pinellas County. Your study, "A study of the relationship between second order change leadership behaviors of principals and school grades of Title I elementary schools" proposal #010809-05 has been reviewed and the research has been approved.

Allow me to make it clear that this permission letter does not obligate schools, teachers, students or parents to participate in your study; the participation is totally voluntary.

You may contact school's principal and ask for their willingness to participate in your study. Provide the principal(s) with a copy of this letter. You must obtain an adult consent for this study.

As a public school district, we have to comply with the "Jessica Lunsford Act". According to this law any person who has access to school ground when students are present or has direct contact with students is required to meet level 2 screening requirements. For additional information regarding the Jessica Lunsford Act and level 2 screening requirements please visit our website, at http://www.pinellas.k12.fl.us/.

I also would like to reinforce our practice on monetary rewards to school board staff and students; the school board staff may not be paid for work performed related to this study during working hours and students may not be rewarded money for participating in a study. All monetary rewards shall be given to school(s) participating in the study.

Once the research is completed please forward a copy of the results to my office.

If there are any questions or if additional information is needed, please contact our Research and Accountability Department at (727) 588-6253.

Sincerely,

Behrokh Ahmadi

Behrokh Ahmadi, Ph. D.
Director, Program Evaluation

March 12, 2009

Mr. Gonzalo La Cava
9531 Pointe Creek Court
Orlando, FL 32832

Mr. La Cava,

As members of the St. Lucie County School Board Research committee, we give you permission to conduct your study "A Study of the Relationship between Second Order Change Leadership Behaviors of Principals and School Grades of Title I Elementary Schools" in St. Lucie County Schools. We have received and reviewed copies of your drafted proposal and the research protocol related to your study.

We understand the scope of this research and how the data will be collected and presented. All information gathered will be done in a confidential and appropriate manner as guided by the American Psychological Association standards. We require that we be notified of any new developments that may occur during the study that might change the scope or methodology of the study.

When contacting schools to participate, please make an appointment with the principal(s) to explain the nature and importance of your study. Present a copy of this letter to assure the principal(s) that the District approved of your efforts.

We look forward to hearing the results of the study and sharing your findings with appropriate members of the faculty and staff of St. Lucie County Schools.

Christine Kerstyn, PhD.
Director
Accountability and Assessment
St. Lucie County Public Schools
4204 Okeechobee Road
Fort Pierce, FL 34947
772-462-8553

Kathleen K. Huie, Ed.D
Director
Department of Teacher Development
St. Lucie County Public Schools
4202 Okeechobee Road
Fort Pierce, FL 34947
772-429-7503

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA
RESEARCH SERVICES

600 SOUTHEAST THIRD AVENUE • FORT LAUDERDALE, FLORIDA 33301 3125 • TEL 754-321-2500 • FAX 754-321-2722

MARIA R. LIGAS, Ph.D.
Institutional Review Board (IRB) Chair
marialigas@browardschools.com

April 15, 2009

Gonzalo La Cava
9531 Painte Creek Court
Orlando, FL 32832

Dear Mr. La Cava:

Thank you for submitting your proposal, #548 — *A Study of the Relationship Between Second Order Change Leadership Behaviors of Principals and School Grades of Title I Elementary Schools,* for consideration by the Broward County Public Schools (BCPS). Staff has reviewed your research proposal and security approval has been granted for the Principals of Title I schools only.

This security approval means that we have found your proposed research methods to be compatible with a public school setting and your research questions of interest to the school District. Based on the information you have supplied, your approval to conduct research will expire on *Tuesday, December 15, 2009*. If you are unable to complete your research by this date, you must contact the Research Services Department in writing four weeks prior to the above expiration date and request an extension.

Implementing your research, however, is a decision to be reached by the affected schools listed above, on a strictly voluntary basis. To assist these schools in their decision, please outline the operational steps to be performed by staff at their schools. You must also share this **District Security Approval Letter** signed by the IRB Chair and provide a copy of the attached **Principal Security Approval Memorandum,** which has been initialed by the Area Superintendent and the IRB Chair. Schools have been instructed not to cooperate unless you provide both pieces of **Security Approval Documentation** that contain the name of their schools only.

Based on the research methods described, campus visitation will be required. Note that any member of your research team who is not a current BCPS employee must comply with the District's Security Clearance procedures. To initiate the Security Clearance process, each researcher and/or team member has to register for fingerprinting services online at http://broward.sofn.net. An email address or the email address of the human resource contact person at your company is required in order to complete the registration process. Call the District's Security Clearance Department at 754-321-1213 if you have any questions. **Each researcher and/or team member must** bring with them the contents of this Security Approval Packet, a Photo ID, such as a valid State Driver's License, or U.S. Passport, etc. Please see the attached detailed information regarding the relocation of the off-site fingerprinting facility, directions, hours of operation, and new methods of payment. If you did not receive a Security Clearance Form in this Security Approval Packet, **please contact Ms. Beth Tillman at 754-321-2511, or e-mail via CAB to** beth.tillman@browardschools.com

Transforming Education: One Student At A Time
Broward County Public Schools Is An Equal Opportunity/Equal Access Employer

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This **Security Approval Packet** contains the following:

- District Security Approval Letter – Letter signed by the IRB Chair.
- Principal Security Approval Memorandum – Memorandum initialed by the Area Superintendent and IRB Chair.
- Security Clearance Form – Each researcher and/or team member who is not a current BCPS employee must fax the completed form to Research Services at 754-321-2722, or e-mail via CAB to beth.tillman@browardschools.com to be signed by the IRB Chair and returned to you via fax or e-mail as part of your Security Approval Packet.
- PrideRock Holding Company Fingerprint Information

Please be aware that the badge assigned to you and/or your research team members for this current research project are the property of The School Board of Broward County, Florida, and as such, must be returned upon completion of this research proposal. Again, if you are unable to complete your research by the expiration date indicated above, you must contact the Research Services Department in writing four weeks prior to the above expiration date and request an extension. The anticipated date for submitting an electronic copy of your research findings is *Thursday, April 15, 2010*. If additional assistance is needed from our staff, **please contact me at 754-321-2500.**

Sincerely,

Maria R. Ligas, Ph.D.

MRL/GKS:bt
Attachments

SECURITY APPROVAL EXPIRES TUESDAY, DECEMBER 15, 2009.

April 15, 2009

TO: Principals of Title I Schools only

FROM: Maria R. Ligas, Ph.D. *MRL*
            Institutional Review Board (IRB) Chair

VIA: Leontine B. Butler, Ed.D.
            North Central Area Superintendent

SUBJECT: **PRINCIPAL SECURITY APPROVAL MEMORANDUM FOR RESEARCH PROPOSAL — #548 — A STUDY OF THE RELATIONSHIP BETWEEN SECOND ORDER CHANGE LEADERSHIP BEHAVIORS OF PRINCIPALS AND SCHOOL GRADES OF TITLE I ELEMENTARY SCHOOL**

Staff has reviewed the research request #548 — *A Study of the Relationship Between Second Order Change Leadership Behaviors of Principals and School Grades of Title I Elementary Schools,* submitted by Gonzalo La Cava, at University of Central Florida, and security approval has been granted for the researcher and/or research group to contact you to request your participation.

The recently completed review of the proposed research involved school and/or District based staff, and a review of the proposed research methods. These steps were taken to determine if the proposed methods demonstrated reasonable promise of generating data/analyses that will accurately answer the main research questions of interest.

Your participation in this research project is strictly voluntary. To aid in your decision, the researcher and/or research group have been instructed to share with each selected school based staff a complete description of research activities, as well as all **Security Approval Documentation.** Based upon this information, each school based staff would then be asked to make a decision to participate or not and inform the requesting research parties of their decision.

LJB/MRL/GKS:bt

APPENDIX C
PRINCIPAL ACTIONS SURVEY

1. In regards to the informed consent document emailed from Gonzalo La Cava, I agree to all of the statements below: YES/NO
2. I expect implementation of current research based curriculum.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
3. I clearly communicate to staff that all children can learn.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
4. I acknowledge different points of view when making difficult decisions.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
5. I perform classroom walk-throughs weekly.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
6. I believe that all academic initiatives implemented at my school will impact academic achievement.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
  Strongly Disagree

7. I challenge the staff to review and implement current research.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
8. I believe that teachers have the capacity to help students achieve academically.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
9. I make changes to the status quo.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
10. I provide feedback on performance after classroom walk-throughs.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree
11. I adapt to multiple situations.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

12. I expect staff to attend conferences on effective schooling practices.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

13. I influence the attitudes and/or behaviors of the staff.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

14. I expect staff to adjust instruction based on student achievement data.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

15. I have a strong philosophy about best practices on instruction.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

16. I meet with individual teachers to discuss student academic data.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

17. I communicate essential instructional practices with teachers.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

18. I share research with staff through book talks and/or informal meetings.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

19. I have high expectations for all students to learn.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

20. I accept input from staff when making change.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

21. I have strong beliefs about data driven instruction.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

22. I have knowledge of instructional best practices.
- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

23. Please share leadership practices that you have provided in making change at your school.

24. Please share the greatest challenge that you have encountered in making change at your school.

Principal Demographic Section

25. Gender
- Female
- Male

26. Time previous principal served at this school.
- less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+
- N/A

27. Age
- less than 30 years of age
- 30-39
- 40-49
- 50+

28. Ethnicity
- African American
- Asian
- Hispanic/Latino
- White
- Other, please specify

29. Your level of education (highest degree earned)
- Masters
- Specialist
- Doctorate

30. How many years have you served as an administrator prior to becoming a principal?
- less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+
- N/A

31. How many years have you served as an educator?
- less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+
- N/A

32. How many years have you served as a principal in your current school including the 2008-2009 school year?
- less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+
- N/A

33. Number of year's school has been rated an "A or B' under your leadership.
- less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+
- N/A

34. If you would be willing to be interviewed for this study, please provide me with your name and number in the blank space. Once I receive your contact information, you will receive an informed consent document by email. Please make sure to review the document and sign if you agree to the telephone interview. Confidentiality will be ensured. Thank you!
glacava@cfl.rr.com

APPENDIX D
EMAIL CONTACTS (1, 2, 3, 4)

INTRODUCTION EMAIL TO ALL ELEMENTARY PRINCIPALS

To: ELEMENTARY SCHOOL PRINCIPALS
From: GONZALO LA CAVA
Cc: [DISTRICT CONTACT]
Subject: SECOND ORDER CHANGE LEADERSHIP
                BEHAVIORS

Dear Colleague,

Greetings to you, and thank you for taking a moment to read this message! My name is
Gonzalo La Cava and I am a doctoral student at the University of Central Florida and a
principal of a Title I school in Orange County.

In a few days from now, you will receive an email request to complete an online survey for
an important research study that I am conducting. The purpose of the research is to study
the relationship between second order change leadership behaviors of principals as
identified by researchers Robert Marzano, Timothy Waters, and Brian McNulty and school
grades of Title I elementary schools in the state of Florida. I am writing you in advance
because it has been found that many people like to know ahead of time that they will be
contacted. **As I respect your limited time, the survey will only take about ten minutes.**

There are no benefits, compensation, or anticipated risk for participating in the study. Your
participation is strictly voluntary and you are free to withdraw your participation at any
time without penalty. You will not be penalized for refusing to answer a question and your
identity and responses will only be published in aggregate form and will not link your
answer to your name or name of your school. The results of the survey will be provided to
you at your request.

Thank you, in advance, for your time and consideration in completing the survey when it
arrives.   I wish you a wonderful day!

Information on regarding your rights as a research volunteer may be obtained from:
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone at (407) 823-2901

The faculty advisor for this study is:
Dr. Rosemarye Taylor
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1469

Sincerely,
Gonzalo La Cava   136
Gonzalo S. La Cava
Doctoral Candidate, University of Central Florida

SURVEY EMAIL TO ALL ELEMENTARY PRINCIPALS

To: ELEMENTARY SCHOOL PRINCIPALS
From: GONZALO LA CAVA
CC: [DISTRICT CONTACT]
Subject: SECOND ORDER CHANGE LEADERSHIP
                 BEHAVIORS

Dear Colleague,

Last week, you received an email that briefly introduced my study, which involves learning about the relationship of second order change leadership behaviors of principals and school grades of Title I elementary schools. As a principal of an elementary school, your feedback will be especially valuable to me.
I am writing to respectfully request your help with this study by completing a brief survey. It takes about ten minutes to complete. Participation is strictly voluntary and you are free to withdraw your participation at any time without penalty. In addition, your answers will be completely confidential and will be released only in summaries in which no individual school's answers can be identified. By participating in this survey, you will be assisting in shaping future leadership performance of principals in the state of Florida. This will be very valuable information! I'll be happy to share my findings in summary once the study is complete. **To access the survey simply click on the link at the bottom of the page.**

If you have any questions, or have difficulty accessing the link, please contact me by email reply or by phone at (407) 782-3369. I can't thank you enough for your help with this study!

For a copy of your district approval for this study, please email me at:

glacava@cfl.rr.com

Information on regarding your rights as a research volunteer may be obtained from:
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone at (407) 823-2901

The faculty advisor for this study is:
Dr. Rosemarye Taylor
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1469

Sincerely,
Gonzalo La Cava
Gonzalo S. La Cava
Doctoral Candidate, University of Central Florida
Principal, Oakshire Elementary, Orange County Public Schools

SURVEY LINK

REMINDER EMAIL

To: ELEMENTARY SCHOOL PRINCIPALS
From: GONZALO LA CAVA
Cc: DISTRICT CONTACT
Subject: SECOND ORDER CHANGE LEADERSHIP
                BEHAVIORS

Dear Colleague,

Approximately one week ago, a survey seeking your feedback on second order leadership behaviors of principals was emailed to you. As an elementary principal, you hold valuable insight that will make this study successful. Your feedback is very important to me!

I'd like to offer you the opportunity to take the survey again today. It takes about ten minutes to complete. Participation is strictly voluntary and you are free to withdraw your participation at any time without penalty. In addition, your answers will be completely confidential and will be released only in summaries in which no individual school's answers can be identified. If you have any questions or concerns, please contact me by reply email or by phone at (407) 782-3369. To access the survey simply click on the link.

Again, thank you for your time and consideration!

For a copy of your district approval for this study or information regarding your rights as a research volunteer, please email me at:

glacava@cfl.rr.com

Sincerely,

Gonzalo La Cava

Gonzalo S. La Cava

Doctoral Candidate, University of Central Florida

Principal, Oakshire Elementary, Orange County Public Schools

FINAL REMINDER EMAIL

To:	ELEMENTARY SCHOOL PRINCIPALS
From:	GONZALO LA CAVA
CC:	[DISTRICT CONTACT]
Subject:	SECOND ORDER CHANGE LEADERSHIP BEHAVIORS

Dear [First Name][Last Name]

I am writing one final time, to thank you for helping me gather important information for my study. I sincerely appreciate all who took the time to respond to my survey. As promised, I will be sending a summary of my findings when the study is complete to all who requested one. If you are unsure if you have requested this, please feel free to contact me by reply email. I'm happy to share my results!

If you have not completed the survey, it will be open for a few more days. Participation is voluntary. The survey take about ten minutes to complete. I have included the link below, simply click on the link.

Again, thank you for taking part in this very important study!

Information on regarding your rights as a research volunteer may be obtained from:
Institutional Review Board (IRB)
University of Central Florida (UCF)
12201 Research Parkway, Suite 501
Orlando, FL 32826-3246
Telephone at (407) 823-2901

The faculty advisor for this study is:
Dr. Rosemarye Taylor
Educational Research, Technology and Leadership
University of Central Florida
Telephone: (407) 823-1469

Sincerely,
Gonzalo La Cava
Gonzalo S. La Cava
Doctoral Candidate, University of Central Florida
Principal, Oakshire Elementary, Orange County Public Schools

APPENDIX E
SECOND-ORDER CHANGE PRINCIPAL INTERVIEW PROTOCOL

Interviewee: Position:
Innovation: Interview date:
Interviewer:

Purpose: The purpose of this study is to determine the relationship between second-order change leadership behaviors and the grade assigned to each school by the Florida Department of Education. This research is not to evaluate the innovation, or the effectiveness in any way. The innovations discussed and leaders interviewed have volunteered to take part in this study.

Research Questions:

1. What relationship, if any, exists between the Principal Actions survey score of Title I elementary principals and the school grade according to the Florida Department of Education?

2. What relationship, if any, exists among professional demographics of the principals (years at the school, years as an educator, years as an administrator prior to becoming a principal, years as a principal, highest degree earned, age, gender) and total score on the Principal Actions Survey?

3. What are the differences, if any, in the second-order change leadership behavior subgroup scores based on the 2008 school grade according to the Florida Department of Education?

Directions: Selected principals for this study will participate in a twenty minute phone interview. A consistent set of questions will be asked using the Second-order Change Principal Protocol designed by Rosemarye Taylor (2007). The phone interviews will be conducted to collect information on recurring practices that have led to academic achievement. There are no benefits, compensation, or anticipated risk for participating in the study. Your participation is strictly voluntary and you are free to withdraw your participation at any time without penalty. You will not be penalized for refusing to answer a question and your identity and responses from this interview are confidential, so people will not know how you answered or what you did. The interview will take about 30 minutes to complete. Do you voluntarily agree to take part in the procedure? If yes, move to question 1. If no, thank them for their time.

<div align="center">Second-order ChangePrincipal Interview Protocol</div>

Interviewee:	Position:
Innovation:	Interview date:
Interviewer:	

Section I. Innovation

1. Describe the innovation (change) and the role you played in the design implementation, and evaluation.

2. How do you know it was successful? Data? Evidence?

Section II.

1. Knowledge of Curriculum, Instruction, and Assessment
  "Knowing how the innovation will affect these and provide conceptual guidance in these areas" (Marzano, Waters, & McNulty, p. 70).

  1. How did the innovation affect curriculum?
  2. How did the innovation affect instruction?
  3. How did the innovation affect assessment?
  4. Give an example of your work individually or in groups regarding the innovation?(Marzano, et. al., p. 120)

2. Optimizer
  "Being the driving force behind the innovation and fostering the belief that it can produce exceptional results if members are willing to apply themselves" (Marzano, et. al., p. 72).

  1. Who provided the most leadership for implementation of the innovation?
  2. What role did you play in implementing the innovation?
     Can you give an example of speaking positively about it? Providing examples of other schools being successful?
  3. How did you instill confidence in others that this innovation would yield results? Provide examples of you voicing continued confidence in the innovation's success and impact?
  4. How were roadblocks and challenges identified and addressed? (Marzano, et. al., p. 120)

3. Intellectual Stimulation
  "Being knowledgeable about the research and theory regarding the innovation and fostering the knowledge among staff through reading and discussion" (Marzano, et. al., p. 72).

  1. Can you tell me about the research or theoretical background of the innovation?
  2. How did professional staff learn about the theory and research behind it?
  3. Give an example of you including it in conversations, lead discussions, or ask questions? (Marzano, et. al., p. 120)

4. Change Agent
  "Challenging the status quo and being willing to move forward on the innovation without a guarantee of success" (Marzano, et. al., p. 72).

  1. What political processes were used to move the innovation beyond the status quo?

2. Give an example of you raising issues related to student achievement?
3. Give an example of you sharing data.
4. Give an example of you providing comparisons of where the school/district was and where it needs to be?
5. Can you think of a time when you demonstrated tolerance for ambiguity related to the innovation? (Marzano, et. al., p. 120)

5. Monitoring/Evaluating

"Continually monitoring the impact of the innovation" (Marzano, et. al., p. 72).
1. What type of monitoring of results has taken place?
Formative?
Summative?
2. What other monitoring or evaluations are planned?
3. Can you think of a time when you conducted walkthroughs or visits?
(Marzano, et. al., p. 120)

6. Flexibility

Being both directive and nondirective relative to the innovation as the situation warrants" (Marzano, et. al., p. 72).

1. Provide me with an example of your being flexible during the design, implementation, or evaluation of the innovation.
2. Provide an example of adjusting plans as needed.
3. What protocols for evaluation were used or did discussions bog down?
(Marzano, et. al., p. 120)

7. Ideals/beliefs

"Operating in a manner consistent with his ideas and beliefs relative to the innovation" (Marzano, et. al., p. 72).

1. How was consistency in leadership related to the innovation obtained?
2. What role did you play in achieving consistency?
3. How did you communicate regarding the innovation?
4. What are examples of strategic questions that you asked when actions were not aligned with the core beliefs/expectations?
(Marzano, et. al., p. 120)

APPENDIX F
PRINCIPAL CHARACTERISTICS AND TRAITS

Principal Characteristics and Traits
Positively Associated with Academic Achievement

1. **Safe and orderly school environment**
   Set standards for student behavior Environment
   Communicates high standards for student behavior
   Consistent rules from day to day
   Foster a sense of student responsibility
   Creates an environment that encourages positive behavior

2. **Vision and goals focused on high levels of student learning**
   Establish a vision of the ideal school
   Institute clear goals related to the vision
   Continuous emphasis of academic goals of school
   Stress importance of learning

3. **High Expectations for students**
   High expectations for students achievement
   Reassure students that staff believes in their endeavors

4. **Self-Confidence, responsibility and perseverance**
   Principals believe in their abilities in raising student achievement
   Assumes responsibility for schools success
   Peruse goals through adversity

5. **Visibility and accessibility**
   Available to teachers, students, and others in the school community
   Frequently visit classroom to observe teachers and students

6. **Positive and supportive school climate**
   Encourages school-wide communication
   Contributes to the overall school climate

7. **Communication and interaction**
   Good communicators who share and solicit information
   Build positive relationships that improve all schools functions

8. **Emotional/Interpersonal support**
   Capable and caring communicators
   Awareness and supportive of personal needs of staff and students

9. **Parent/Community outreach and involvement**
   Conduct vigorous outreach to parents and community members
   Seek and support parent/community involvement

10. **Rituals, ceremonies, and other symbolic actions**
    Use school rituals and ceremonies to honor tradition, pride, excellence, and reinforce affiliations

11. **Shared leadership/decision making and staff empowerment**
    Engage staff and constituents to participate in decision making
    Provides accurate information and appropriate training

12. **Collaboration**
    Establishes an environment in which staff learns, plans, and works as a team to improve their schools

13. **The importance of instructional leadership**
    Actively involved in the curricular and instructional life of their schools

14. **High levels of student learning**
    Sustains focus on promoting student achievement
    Makes decisions in the light of the potential impact on student learning
    Works to engage the efforts of others to promote high student performance

15. **Norm of continuous improvement**
    Continually pushes for improvement
    Ensures process is embedded to the life of the school

16. **Discussion of instructional issues**
    Facilitate and engage in discussion with staff on curriculum and instruction

17. **Classroom observation and feedback to teachers**
    Frequent visits to classrooms
    Observation and feedback on instruction

18. **Teacher autonomy**
    Considerable independence on organizing and managing teacher classrooms
    Protects staff from unnecessary interruption

19. **Support of risk taking**
    Undertake calculated risks to improve schools through innovation and experimentation

20. Professional development, opportunities and resources
  Offer more professional development activities than at low performing schools
  creative in acquiring resources (financial, human, time, materials, and facilities)

21. Instructional time
  Protects instructional time by diminishing disruptions
  Coordinates for additional learning time during and beyond the day

22. Monitor student progress and sharing findings
  Ensures regular procedures for monitoring student progress
  Communicates findings to everyone in the school community

23. Use of student data for program and performance improvement
  Understand how to interpret student performance improvement data
  Utilizes data to plan for curricular and instructional improvement

24. Recognition of student and staff achievement
  Recognizes achievement and improvement achievement of students and staff

25. Role modeling
  Demonstrate the proper behaviors they expect from staff and students
  Participate in staff development, support student learning, and treat students, staff, and constituents with respect

(Cotton, 2003, pp. 67-72)

APPENDIX G
McREL PERMISSION LETTER

February 27, 2009

Gonzalo La Cava
University of Central Florida
9531 Painte Creek Ct

McREL
Making a Difference

4601 DTC Blvd., Suite 500 ● Denver, CO 80237
303.337.0990 ● Fax: 303.337.3005 ● www.mcrel.org

Orlando, FL 32832

Permission is hereby granted to Gonzalo La Cava to quote from, adapt and cite in his doctoral dissertation the following material which is copyrighted by McREL:

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

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We request a standard scholarly citation to this material along with the statement "Used by permission of McREL."

We understand your dissertation will not be commercially published. This permission is limited to the material and purpose stated. Prior written permission is required for any additional uses.

Sincerely,

Linda Brannan

Linda Brannan
Director of Information Resources

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