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AN EXPLORATORY STUDY OF FLORIDA HIGH SCHOOL PRINCIPAL PRACTICES THAT IMPROVE STUDENT ACHIEVEMENT

by

DONNA MICHELLE REYNOLDS B.S. University of Central Florida, 1990 M.Ed. University of Florida, 1995

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Research, Technology, and Leadership in the College of Education at the University of Central Florida Orlando, Florida

Summer Term 2011

Major Professor: Rosemarye Taylor

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ABSTRACT

The primary purpose of this study was to examine the leadership practices of high school principals in the state of Florida who improved student achievement in schools with a 30% or greater economically disadvantaged student rate. The secondary purpose of this study was to examine principal and student demographics of the identified schools and determine what relationship existed between student demographics, principal demographics, and principal practices. The results of this study offered guidance for principals across the state of Florida who struggled to close the achievement gap between economically advantaged and disadvantaged students.

To achieve the purpose of the study, a 53 item survey instrument was distributed to principals in high schools that met the characteristics of a 30% economically disadvantaged student population that had shown growth on the 10th grade FCAT Reading test over three years from 2007 – 2009. 50 principals in 10 school districts were contacted. 18 of those principals responded to the online survey, and 5 principals participated in a follow-up phone interview. The survey instrument gathered quantitative data in four subdomains of principal practices: *Implementing a Standards Based Coherent Instructional Program; Providing Teacher Support and Encouraging Teacher Collaboration; Engaging Families*; and Using Assessment to Improve Student Achievement and Instruction. Quantitative data regarding principal demographics was also collected through the survey instrument. Qualitative data concerning principal practices was gathered through three open-ended response questions on the survey instrument as well as through follow-up phone interviews.

The descriptive statistics gathered from responses to the survey instrument showed the highest mean averages for principal practices associated with the following items: Clear vision on student learning outcomes; Set high standards for student learning; Expect teachers to take responsibility for student achievement; and Expect staff to adjust instruction based on various data. The lowest mean averages for principal practices were associated with the following practices: Model exemplary instructional practices; Remove teachers not committed to improving student achievement; Ensure families are engaged in subject-area events; and Use assessment data to determine professional development. In addition to the survey responses, research question one was addressed through the open-ended survey responses and the follow-up phone interviews. The qualitative data collected found the most self-reported best practices under the subdomain of *Providing Teacher Support and Encouraging Teacher Collaboration*. The most prevalent practices that emerged as a result of the interviews were fostering personal relationships with students and celebrating student success; conducting classroom walkthroughs in a meaningful and purposeful manner; implementing Professional Learning Communities; and reviewing assessment data with teachers to inform instruction.

The results of the Mann-Whitney statistical procedure found a significant difference between male and female respondents in the subdomain of *Providing Teacher Support and Encouraging Teacher Collaboration*. Males scored significantly lower than females. The Spearman correlations found a significant negative correlation between practices in the *Teacher Support* subdomain and the percentage of disadvantaged students

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at a school. In other words, the lower the percentage of disadvantaged students in a school, the higher the principal rated *Teacher Support* as an important practice.

The low number of respondents in this study (N = 18) limited the findings as well as the generalizability to schools with similar populations inside and outside of Florida. However, the results may provide guidance for principals in Florida high schools with high economically disadvantaged student populations. The results of this study placed emphasis on the need for principals to have a clear vision for their school and communicate high expectations for their students. According to the results of this study, principals should also find ways to connect with students and celebrate their successes, create avenues for teacher collaboration, and use assessment data to work with teachers in order to inform instructional decisions. This dissertation is dedicated to my late sister, Christy Reynolds, a teacher of 20 years, who dedicated her life to ensuring the success of all her students.

ACKNOWLEDGMENTS

I would first like to thank my committee for the time they spent advising me on my study, reviewing my work, and providing meaningful feedback. Dr. Rosemarye Taylor, my dissertation chair, deserves special recognition for having patience and expressing kindness when warranted; yet keeping me focused when I needed to push forward. Dr. George Pawlas is to be commended for his confidence in me, his expert feedback, and his masterful instruction. Dr. Melody Bowden provided a fresh perspective, and more importantly, gave me confidence in my writing and validation as an educator. Dr. Jacquelyn Flanigan is to be commended for her enthusiasm in coming aboard late in the game and helping to ensure I published a quality product.

I would also like to thank my family for their support of my doctoral pursuits. My parents, retired educators, provided the model for lifelong learning that has always served as a foundation for my continued education. My father, Don Reynolds, has continually expected I give my best as an educator. My mother, Ann Reynolds, provided the moral support necessary for me to complete this degree. My sisters, Vicky Talmadge and Tracy Fitzgerald, encouraged and supported me so that I might reach my goals. But it has been my husband, Mark Plemens, who has made the greatest sacrifice over the past few years. He always insisted I push forward to achieve my goals. This dissertation is as much a tribute to his sacrifice and his confidence as it is to the work I have done.

Finally, I would like to acknowledge my educator friends, Dr. Jean Schiffbauer, Dr. Connie Collins, and Jessica and Thomas Ruszczyk, who gave moral support and expressed their confidence that I, the smartest monkey, could complete this degree.

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CHAPTER 1 THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

The achievement gap between students who are considered economically disadvantaged and those who are not has long confounded educational researchers and practitioners who have worked to promote academic achievement for all students, regardless of their economic situation. The reality of the achievement gap goes far beyond school walls and is linked to societal problems such as unskilled workers, high rates of incarceration, low rates of civic participation, and high medical costs because of a large, uninsured population (McKinsey & Company, 2009). Even though extensive evidence reveals the damaging nature of a long-term achievement gap (Bell, 2003; Haycock, 2001; Ladson-Billings, 2006; Machtinger, 2007; Talbert-Johnson, 2004; Willie, 2001), and even though countless researchers, practitioners, parents, and community members have given considerable time and energy towards resolving the issue, the achievement gap between disadvantaged and advantaged students remains a persistent problem in public schools.

Conceptual Framework

Many researchers have linked the student achievement gap to environmental factors. Talbert-Johnson (2004) highlighted the reality that

Efforts to address the achievement gap have consistently focused on socioeconomic causes . . . it is not surprising that the effects of poverty remain the most significant sociocultural cause of the academic achievement gap. In 2000, nearly 12 million American children lived in poverty. African American and Latino children made up almost 7.2 million of that number (p. 24).

According to Payne (1996), "one important cause of the increase in child poverty rates is the increase in numbers of single parents – due either to divorce or children being born outside of marriage" (p. 120). Consequently, about 50% of mother-only families received welfare during the course of a year. Additionally, children who spent one to three years of their childhood living below the poverty line were about 60% less likely to graduate from high school than children who had never been poor (Payne). Such statistics highlight the urgency for finding the appropriate educational strategies and conditions that will reduce the impact of a student's economic background. Willie (2001) concluded that "... the achievement scores of students in black and white racial populations appear to be influenced and affected by the context within which learning occurs, such as the socioeconomic characteristics of the schools they attend," (p. 468). Even though the link between poor student achievement and poverty status has clearly been established, ongoing research is needed to inform the work of educators and policymakers so that poverty status does not automatically equate to poor achievement for our country's youth.

Regardless of the countless examples of poorly performing students attending high-poverty schools, there are also numerous examples in every state of high-poverty schools that demonstrate success with disadvantaged populations. Most of these schools have been characterized by "strong academic emphasis, a stress on positive rewards, consistent and shared values, and positive teacher expectations of students," (Ilg & Massucci, 2003, p. 65). Successful, high-poverty school programs provide opportunity

for educational researchers to further investigate the achievement gap. "The wide variation in performance among schools and school systems serving similar students suggests that the opportunity and output gaps related to today's achievement gap can be substantially closed," (McKinsey & Company, 2009, p. 6). Additionally, "differences in public policies, systemwide strategies, school site leadership, teaching practices and perhaps other systemic investments can fundamentally influence student achievement, (McKinsey & Company, p. 14). These findings provide motivation to school leaders. Although school leaders have little influence over the demographic makeup of the students in their schools, they do make hiring decisions and are responsible for the training and professional development programs offered to their teachers as well as providing instructional leadership. School leaders also make curricular decisions that have the potential for significant impact on disadvantaged students. Similarly, school leaders can strategically direct assessment practices to improve student achievement and instruction. Additionally, school leaders can engage families to partner with schools for the welfare of their children. School leaders exert control over many aspects of their school's programs, and their work has the potential for positively impacting student achievement (Cotton, 2003; Elmore, 2000; Heck, 1992; Leithwood & Riehl, 2003; Nettles & Herrington, 2007; Williams, Kirst, Haertel, et al., 2005). This recognition of the potential for principals to effect positive change in student achievement provided the theoretical basis for this research study.

Statement of the Problem

Reading achievement data from Florida high schools revealed an achievement gap between economically disadvantaged students (those who qualify for free and reduced lunch) and advantaged students (those who do not qualify for free and reduced lunch). The 2009 10th grade FCAT Reading results in 2009 showed 42% of free and reduced lunch students in the state scoring proficient or above on the test, while 68% of students in the state not receiving free or reduced lunch scored proficient or above (retrieved online at https://app1.fldoe.org/FCATDemographics/). Even though the No Child Left Behind Act of 2001 required high schools to show progress with students in the economically disadvantaged (free and reduced lunch) subgroup, few Florida high schools have been successful in closing the achievement gap between economically disadvantaged and advantaged students.

Literature Review

An abundance of research literature highlights the achievement gap between disadvantaged and advantaged student populations. Although much of the literature addresses the relationship between school demographics and student achievement, a portion of the literature discusses the role of school leaders in diminishing that gap. "The available evidence about the size and nature of the effects of successful leadership on student learning demonstrates that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school," (Nettles & Herrington, 2007, p. 725). Some of the well-researched practices of school leaders that impact student achievement include teacher recruitment, retention, and development; the function of the principal as the school's instructional leader; the use of data to guide school improvement; and the fostering of a school climate and culture that are conducive to achievement opportunities for all students (Cotton, 2003; Elmore, 2000; Heck, 1992; Leithwood & Riehl, 2003; Nettles & Herrington, 2007). The relationship between school demographics and student achievement have also been well researched (Borman, Eitle, Michael, & Eitle, 2004; Orfield & Lee, 2005). To a lesser degree, the correlation between principal demographics and student achievement has been investigated (Bulach, Booth, & Michael, 1999).

School Demographics and Student Achievement

One aspect of public schools that has warranted a considerable amount of researchers' attention in is the relationship between school demographics and student achievement. Contrary to the public school integration movement of the 1970s, modern patterns of student assignments have led to more segregated schools. Borman, Eitle, Michael, & Eitle (2004) commented that "federal courts have viewed patterns of increasing school segregation resulting from patterns such as changing demographics due to the growth of white suburbs, the expansion of city ghettos, and immigration as beyond the control of local school boards," (p. 614). The more recent tendency towards increasingly segregated schools has resulted from community pressure to allow students to attend schools in their own neighborhoods as well as a philosophical shift, prompted by No Child Left Behind legislation, that all schools should be held accountable for ensuring the academic growth of all students, regardless of their race or economic background.

According to Orfield and Lee (2005), "Socioeconomic segregation is a stubborn, multidimensional and deeply important cause of educational inequality. U.S. schools are now 41% nonwhite and the great majority of nonwhite students attend schools which now show substantial segregation," (p. 5). Borman et al. (2004) point out that Florida schools have followed a national trend towards resegregation of schools, and educational researchers have begun investigating the effects of this resegregation. In 2004, the aforementioned University of South Florida and University of Miami researchers examined the relationship between segregation, integration, and FCAT success. The study revealed a relationship between segregation and lower FCAT pass rates for black students in segregated schools.

Teacher Recruitment, Retention, and Development

Another characteristic of public schools that often reveals a discrepancy between the experience of poor and advantaged students is the dearth of highly qualified teachers in all classrooms. Clotfelter, Ladd, and Vigdor (2007) proposed that "students attending high poverty schools have access to teachers with weaker qualifications than their counterparts attending schools serving more advantaged students," (p. 5). Earlier, Talbert-Johnson (2004) reported that "poor children and children of color are . . . more likely to have teachers who completed an alternative certification program and are more likely to have substitute teachers," (p. 27). She also claimed that "shortages of qualified teachers translate into enlarged class sizes, lack of access to higher level courses, and poor teaching," (p. 27). Darling-Hammond (2006) stated that "by every measure of qualifications – state certification, content background for teaching, pedagogical training, selectivity of college attended, test scores or experience – less qualified teachers are found disproportionately in schools serving low-income and minority students," (p.16). Finally, Reeves (2006) criticized that "no matter how much we improve the quality of teachers, we allocate this precious resource in a perverse manner, giving the most effective teachers to economically advantaged students and denying those teachers to impoverished students," (p. 18).

Clotfelter et al. (2007) highlighted a trend in many urban school districts. "New teachers that the district hires are more likely to end up in the high poverty schools since that is where the openings are. To the extent that the new hires are novice teachers, the effect is to put the least experienced teachers in the schools with the harshest working conditions," (p. 20). As might be expected, inexperienced teachers in these harsh working conditions have limited staying power. Clotfelter et al. also noted that "high turnover rates are disruptive and make it difficult for schools to develop a coherent educational program and to provide consistent programming from one year to the next," (p. 22). To reveal just how problematic this constant turnover of inexperienced teachers to high poverty schools as the "dance of the lemons" (p. 3). The best of students could not be expected to benefit from such a situation; the weakest of students have little chance of surviving these conditions.

"Contrary to much conventional wisdom, it is possible to prepare teachers effectively for urban teaching," (Darling-Hammond, 2006, p. 17). Some researchers have highlighted successful teacher education programs. Their results have shown that teacher education programs around the country have been preparing teachers who can effectively teach all students and who have the confidence to assume teacher leadership roles early in

their careers. Darling-Hammond proposed key actions that are necessary to increase teacher capacity in this country. Her first recommendation was that "the federal government should launch a substantial, sustained program of service scholarships to underwrite teacher preparations for individuals who will teach in high-need fields and areas," (p. 20). Darling-Hammond's second recommendation was that federal grants should be established to create high-quality programs that will attract teachers to highneed areas. Her concept was that districts with the most desperate need for qualified teachers will develop a well-funded pipeline from college education to entry-level teaching positions. Such districts will place considerable effort towards recruiting talented individuals to participate in their teacher-preparation programs. Darling-Hammond's final suggestion for improving the qualifications of teachers centered on establishing incentives that would retain teachers in their positions. She cited a recent study that estimated "districts spend between \$8,000 and \$48,000 in costs for hiring, placement, induction, separation, and replacement for each beginning teacher who leaves," (p. 21). A district's pro-active approach towards retaining its teachers may result in considerable savings in the long run. Additionally, districts with a large bank of experienced teachers can capitalize on the positive effects of teacher relationships, such as mentoring, to improve the overall quality of instruction.

Principal as Instructional Leader

Over the past two decades, the primary role of the principal has shifted from manager to instructional leader. "During the 1980s, American educational policymakers, eager to change practice in schools, came to view school principals as key agents in the reform of schools and classrooms," (Hallinger, 2008, p. 2). In 1985, Hallinger and Murphy promoted a framework for instructional leadership that included three dimensions: *Defining the School's Mission, Managing the Instructional Program*, and *Promoting a Positive School Learning Climate*. The specific principal behaviors within this framework included framing and communicating the school's goals, coordinating the curriculum, supervising and evaluating instruction, monitoring student progress, protecting instructional time, providing incentives for teachers and learning, promoting professional developing, and maintaining high visibility. This framework was intended to inform principal practices in the direction of effective instructional leadership and add to the potential for principals to positively impact student achievement.

In 2001, the National Association of Elementary School Principals used the phrase "leading learning communities" to define the role of principals as instructional leaders. Blase and Blase (2000) more specifically defined the role of principal by delineating seven behaviors exhibited by the instructional leader. Those behaviors included: (a) making suggestions, (b) giving feedback, (c) modeling effective instruction, (d) soliciting opinions, (e) supporting collaboration, (f) providing professional development opportunities, and (g) giving praise for effective teaching. The recommendations of Blase and Blase (2000) and other researchers addressing instructional leadership have only served to support the framework for instructional leadership originally developed by Hallinger and Murphy (1985).

The modern educational environment of increased accountability and pressure for school principals to ensure progress in student achievement has underscored the importance of principals as instructional leaders. Hallinger (2008) described modern principals as finding themselves "at the nexus of accountability and school improvement

with an increasingly explicit expectation that they will function as *instructional leaders*," (p. 2). Marks and Printy (2003) acknowledged the importance of relations between principals and teachers in the process of instructional leadership with their study which examined "the potential of their active collaboration around instructional matters to enhance the quality of teaching and student performance," (p. 371). Their study, which conceptualized a model of *shared* instructional leadership, concluded that shared instructional leadership would not develop unless it was intentionally sought and fostered. Their conclusions also heralded "the effectiveness of integrated leadership . . . in eliciting the instructional leadership responsibilities with others would be less subject to burnout than principal 'heroes' who attempt the challenges and complexities of leadership alone," (p. 393).

Data-Driven Decision-Making

In the past decade, the pressure for school principals to use all available resources in response to greater accountability demands has forced the use of myriad data to make sound instructional decisions. Most modern, educational leadership researchers and writers have addressed some aspect of data-driven decision-making in their publications. Fullan (2006) included mobilizing the power of data as one of his six guidelines for system-wide reform. Wagner and Kegan (2006) defined data as "the quantitative and qualitative information we have or can gather that is related, directly or indirectly, to student success and well-being in schools," (p. 134). They included data as one of three change levers that should be evaluated during each step of the change process. Creighton (2007) claimed that "using the many different kinds of data collected at our school sites

to help with decision making legitimizes the goals and strategies we create for change and improvement," (p. 11). He called for a proactive stance in using data to search below the surface as opposed to a reactive stance of merely responding to directives and legislation.

Recent literature on the topic of data-driven decision-making has sought to guide principals with strategies for how to use data effectively. A group of faculty and doctoral students at the Harvard Graduate School of Education (Boudett, City, & Murnane, 2006) and school leaders from three Boston public schools published their recommendations for what school leaders needed to know and do to ensure that the piles of student assessment results landing on their desks were used to improve student learning in their schools. They found that organizing the work of instructional improvement around a process that had specific, manageable steps had the potential to help educators build confidence and skill in using data. They came up with an eight-step process called The "Data Wise" Improvement Process. It contained three main phases: Prepare, Inquire, then Act. Initially, schools Prepare for the work by establishing a foundation for learning from student assessment results. Schools then Inquire - look for patterns in the data that indicate shortcomings in teaching and learning – and subsequently Act on what they learn by designing and implementing instructional improvements. Although the expectations for school principals to become data experts has broadened the demands on principals' time and heightened their expected knowledge base, the potential benefits of data-driven decision-making are continually touted in the research literature.

School Culture

School principals do not work in isolation from a world of continual social and economic change. The pressure to properly prepare students with twenty-first skills in an age of ever-increasing accountability can profoundly impact principals and their staffs. One important aspect of an effective principalship is the development of a culture of achievement and excellence in an environment of constant change.

Wagner and Kegan (2006) included culture in their Four Cs of systematic thinking about the challenges and goals of school change and defined culture as the "shared values, beliefs, assumptions, expectations, and behaviors related to students and learning, teachers and teaching, instructional leadership, and the quality of relationships within and beyond the school," (p. 102). For principals leading change efforts, Wagner and Kegan recommended that they develop strategies to transform organizational tendencies of reaction, compliance, and isolation into the more productive processes of purpose, focus, engagement, and collaboration. Wagner and Kegan also recommended that principals give considerable attention to relationships. They defined relationships as "the quality of attitudes, feelings, and behaviors of various individuals and groups toward one another as they engage in the work of helping all students learn," and went on to propose that "respectful and trusting relationships are essential if educators are expected to take the risks involved in change," (p. 135). Fullan (2006) also highlighted the importance of relationships between and among school staff and school leaders. "The central issue is never strategy or structure. [It] is always about changing the behavior of people," (p. 36). Additionally, Fullan addressed the emotional side of change by insisting

that the process taps into people's dignity and sense of respect and recognizing that these can provide a major source of motivation.

Adaptability, flexibility, and the willingness to share leadership also serve as common themes in the climate and culture rhetoric. Reeves (2006) promoted the metaphor of leaders as "architects of individual and organizational improvement," (p. 27). As architects, leaders developed their plans yet relied on numerous other experts to implement their plans and assist them in realizing their vision. Reeves further expanded on the architect metaphor when he described the dimensions of leadership and touted the importance of team members to complement each other and compensate for each other's weaknesses. Reeves heralded the significance of a common vision and encouraged leaders to "allow their vision to become a blueprint rather than public relations baloney," (p. 36).

Another important aspect of school culture, particularly with disadvantaged student populations, is building capacity and resiliency among students. "Resilience researchers note that school environments may provide protective factors that mitigate against school failure and that they may introduce additional stressors and adversities that place students at even greater risk of academic failure," (Borman & Rachuba, 2001, p. 2). In order to build capacity among students, researchers recommend that principals foster an environment where all students can succeed and where all staff and students believe in the ability of all students to succeed. Reeves (2006) wrote that educators who truly believe all students can achieve academic success, and who implement the kinds of instructional strategies that will lead to such success, are far more likely to realize

progress than those who get mired in the process of strategic planning and make excuses for why their students are not performing.

Principal Demographics

Most of the studies conducted on the relationship between principal demographics and student achievement have focused on the gender of the principal. Hallinger's 1983 study of instructional leadership found that female principals showed higher levels of instructional leadership. Cunningham (2004) concluded that female principals with an undifferentiated gender identity were perceived as having more effective instructional leadership behaviors than those with a feminine gender-role identity. Cunningham also concluded that teacher perceptions revealed a preference for instructional leaders who exhibited neither strong masculine nor feminine characteristics. Hallinger (2008) reported that years of experience as an administrator showed positive results in some studies.

Another aspect of principal demographics that warranted attention in the literature was the age of most principals due to the high percentages of principals scheduled to retire in the next decade. Peterson (2001) reported that "over the next 5 years, districts are expected to replace more than 60% of all principals. This new cohort of principals will lead their schools for some 15 to 20 years, through the first quarter of the new century," (p. 213). Peterson's interest in this fact lay in the need for high-quality preparation programs for potential school leaders. Morgan and Hawkins (2004) documented this fact for the purpose of investigating the differences between principals who experienced their tenure during more conservative, bureaucratic times, and the new generation of principals who are being trained in a more liberal, yet more demanding,

environment. This point is important for researchers in recommending strategies for how the transition from the old guard to the new guard can be made most effectively.

One further area of investigation into principal demographics has sought to identify the demographics of school leaders serving a high population of specific subgroups. A 2005 study conducted by De Cohen, Deterding, and Clewell focused on the demographic characteristics of principals serving in schools with high proportions of limited English proficient (LEP) students. Their findings indicated that principals serving in high LEP schools are more racially diverse than the national average and are also more likely to be female. They also found that principals at Low- and No-LEP schools have higher credentials on average than principals at High-LEP schools, although the latter are more likely to hold a PhD. Lastly, they concluded that principals in High-LEP schools have fewer years of experience as principals (on average), but roughly the same amount of prior teaching experience, than principals in schools with fewer or no LEP students.

Definition of Terms

Following is a list of terms and the corresponding definitions that were used for the purpose of this research study.

<u>Advantaged Student Populations</u> – The population of students attending K-12 public schools who do not receive economic assistance from the federal government through free or reduced lunch prices.

<u>Assessment</u> – The act of assessing, especially the evaluation of a student's achievement on a course (*Collins English Dictionary - Complete & Unabridged* 10^{th} Ed.).

<u>Economically Disadvantaged Student Populations</u> – All students eligible for free or reduced lunch price (2010 Guide to Calculating Adequate Yearly Progress, 2010).

<u>Data</u> – Individual facts, statistics, or items of information (*Dictionary.com Unabridged*).

<u>Family Engagement</u> – "Parent behaviors aimed at promoting or enhancing children's educational development . . . may occur directly or indirectly and across multiple contexts (school, home, community)," (Sy, Rowley, & Schulenberg, 2007, p. 1).

<u>Florida Comprehensive Assessment Test (FCAT) Reading</u>– Exam administered yearly in the state of Florida to all students in grades 3 through 10 to measure selected benchmarks in reading (*FCAT Achievement Levels*, 2008). The results of this exam are used to determine promotion, placement in courses, and eligibility for graduation.

<u>Free and Reduced Lunch Rate</u> – The National School Lunch program provides free and reduced-price lunches to schoolchildren from economically disadvantaged families. Program eligibility factors household income and size in relation to federal poverty guidelines (*Free/Reduced Price Lunch Eligibility*, 2007). The Free and Reduced Lunch Rate for each school corresponds to the percentage of the total student population at that school receiving free or reduced-rate lunches.

<u>Loose Coupling</u> – A principal management model where decisions about how and what students should be taught and how they should be assessed were left to individual teachers while principals protected teachers from any outside interference or disruption (Elmore, 2000).

<u>Minority Students</u> – For the purpose of this study, any students who are not included in the white racial subgroup on FCAT demographics reports.

<u>Principal Demographics</u> – The demographics for the high school principals participating in the study. These demographics are retrieved from the survey instrument and include years of experience, level of education, gender, age, and ethnicity.

<u>Principal Practices</u> – The behaviors or activities in which principals engage in order to manage and lead their schools. Examples of principal practices include implementing a coherent, standards-based instructional program; involving and supporting parents; using assessment data to improve student achievement and instruction; encouraging teacher collaboration and professional development; ensuring instructional resources; enforcing high expectations for student behavior; and prioritizing student achievement (Williams, Kirst, Haertel, et. al., 2005).

<u>Proficient</u> – Describes a student who earns a level 3, 4, or 5 on FCAT Reading. A proficient student is one who is considered to be reading at or above grade level (2009 *Reading, Mathematics, and Science FCAT Results Fact Sheet*, 2009).

<u>School Culture</u> – It is both a product that embodies accumulated wisdom from those in the school who came before, and a process that is constantly renewed and recreated as newcomers come on board (Bolman & Deal, 2003, p. 244).

<u>Student Achievement</u> – Student performance on the reading portion of the 10th grade Florida Comprehensive Assessment Test.

<u>Student Demographics</u> – Population characteristics of the schools targeted for this study; characteristics include the racial makeup of the student population and the percentage of students who receive a free or reduced-rate lunch.

<u>Urban</u> – Designation of a school population that exists in an urban area and has such characteristics as a high poverty rate and a large minority population including students from diverse cultures who may have limited English proficiency (Russo, 2004).

Delimitations and Limitations

This study was delimited by the use of only one measure (the tenth grade FCAT Reading) to determine student achievement. The study was also delimited by the principal practices addressed through the survey instrument. Not all possible principal practices were addressed with the survey instrument. Another limitation stemmed from the lack of guarantee that each principal served all three years, from 2007 to 2009. All principals surveyed did at least serve in the final year (2009) during which FCAT Reading data were considered for this study.

Another limitation of this study was the use of free or reduced lunch eligibility to determine which students are economically disadvantaged, particularly considering that high school students are less likely to apply for free or reduced lunch accommodations than students in lower grades. A further limitation of the study was the willingness of either district offices or individual principals to participate in this research study. High school principals in charge of large, comprehensive schools may feel so pressed for time that they do not participate in doctoral research studies. In the case of this study, after several months of contacting principals multiple times through a variety of methods, the participation rate of potential respondents was low. The focus of this study on Florida schools and their principals serves as another limitation. Because both the data collected to determine the study's population and the wording on the survey instrument were

specific to the Florida educational accountability environment, results of this survey were not generalizable to other states. Additionally, because of the low participation rate, the results of this study were not generalizable even to all high school principals within the state of Florida.

Significance of the Study

Nettles and Herrington (2007) noted that "actions taken to better understand and improve the impact of principals on the achievement of students in their schools have the potential for widespread benefit, as individual improvements in principal practice can impact thousands of students," (p. 724). Although numerous research studies have been conducted to determine which principal practices correlate most strongly with student achievement, few studies have sought to narrow the scope and determine which principal practices correlate with achievement among specific subgroups such as students who qualify for a free or reduced lunch rate. More specifically, no studies that this researcher has found have focused on the impact of principal practices on disadvantaged student populations in the state of Florida. Because the current accountability system defined in the No Child Left Behind Act of 2001 ties funding and potential federal interventions to achievement in student subgroups, such as those who receive a free or reduced lunch rate, principals are eager to learn practices that have proven effective.

The significance of this study lies in its potential to add to the body of research on closing the achievement gap between advantaged and disadvantaged students. More specifically, this study is intended to give high school principals in the state of Florida

guidance towards practices that will positively impact the achievement of disadvantaged student populations.

Purpose of the Study

The primary purpose of this study was to examine the leadership practices of high school principals in the state of Florida who have improved student achievement in schools with a 30% or greater economically disadvantaged student rate. The secondary purpose of this study was to examine principal and student demographics of the identified schools and determine what relationship exists between student demographics, principal demographics, and principal practices. The results of this study will offer guidance for principals across the state of Florida who strive to close the achievement gap between economically disadvantaged and advantaged students.

Research Questions

- 1. What practices do principals implement to improve student achievement in Florida high schools with a 30% or greater economically disadvantaged rate?
- 2. What is the relationship between principal demographics such as gender, ethnicity, and years of experience and practices in Florida high schools that have shown improved student achievement in a student population with 30% or greater economically disadvantaged rate?
- 3. What is the relationship between student demographics and principal practices in Florida high schools that have shown improved student achievement in a student population with a greater than 30% economically disadvantaged rate?

Research Methodology and Instrumentation

The primary purpose of this study, to determine best practices among high school principals who have shown increased achievement with economically disadvantaged student populations, will be researched through the use of a survey instrument titled, "An Analysis of Principal Practices in High Schools that have Improved Reading Achievement among Economically Disadvantaged Students."

The survey instrument used for the purpose of this study has been adapted from a survey instrument developed during a large research study conducted in California schools in 2004. The California study titled, "Similar Students, Different Results: Why Do Some Schools Do Better," (Williams, Kirst, Haertel, et al., 2005) focused on principal leadership practices that impact student achievement. A team of researchers from EdSource, Stanford University, University of California, Berkeley and American Institutes for Research (AIR) developed the initial survey and analyzed the results. Validity and reliability tests were conducted on the original survey instrument by EdSource. The Executive Director of EdSource, Trish Williams, granted (Appendix B) permission to modify the survey for use with secondary school principals and for relevance in the Florida accountability system.

While the original survey contained 36 multi-part questions totaling 442 items, the revised survey, for the purpose of this study, contains 53 total items. The instrument addresses four of the seven sub-domains measured in the original instrument. The subdomains addressed in the revised survey instrument include: Implementing a standardsbased, coherent instructional program; Providing teacher support and encouraging teacher

collaboration; Engaging families; Using Assessment to Improve Student Achievement and Instruction. The survey will take 15 to 20 minutes for respondents to complete.

Although reliability and validity tests have been determined for the original survey instrument, additional testing was conducted to lend content validity to the revised version of the survey used for the purpose of this research. First, cognitive interviews were conducted with 15 doctoral students utilizing retrospective interviewing technique (Dillman, Smyth, & Christian, 2009). Then, the survey instrument was scrutinized for content by professors on the researcher's dissertation committee. Once content revisions had been completed, the survey was electronically field tested with ten high school administrators to test usability. The usability tests prompted final revisions to the survey instrument.

Population

Data from the tenth grade Florida Comprehensive Achievement Test (FCAT) during three consecutive school years (2006-2007, 2007-2008, 2008-2009) were collected from the Florida Department of Education web site for high schools with a free and reduced lunch rate that is 30% or greater. These data are accessible to the public in a searchable database on the Florida Department of Education website (https://app1.fldoe.org/FCATDemographics/). Once data were collected, high schools that showed improvement in the percent of tenth grade students scoring proficient on FCAT Reading over the three year period of 2006-2009 were selected as potential participants for this study. The population of potential participants was further narrowed to include only school districts with a least two high schools qualifying for the study.

The final population of potential participants was 58 high school principals in 12 Florida school districts.

Data Collection

After the process of developing an appropriate survey instrument had been completed, the survey was submitted to the Institutional Review Board (IRB) at the University of Central Florida for approval. Once the revised survey instrument was IRB approved for distribution, the district designee for approval of external research in the targeted school districts was contacted to obtain permission to conduct research in their school districts. The targeted school districts included Brevard, Broward, Columbia, Dade, Escambia, Hillsborough, Lee, Orange, Osceola, Palm Beach, Pinellas, and Polk County School Districts. Over the next five months, permission was obtained to conduct research in Brevard, Broward, Columbia, Dade, Escambia, Hillsborough, Lee, Orange, Osceola, and Polk Counties.

After receiving approval from the above ten school districts, electronic surveys were sent to the principals' email addresses. The initial email contained a letter of consent with an electronic link to the survey as well as a unique username and password. By logging in to the survey and using the login information provided, principals gave their consent to participate. Follow-up emails were sent as well as personal phone calls to encourage principals to participate in the study. The responses were stored in a database on a secure server. Only the researcher and a research consultant had access to the survey results. Research participants also had opportunity to participate in a followup phone interview. For principals who indicated, on their survey, a willingness to

participate in a follow-up interview, a phone interview was conducted to get clarification and solicit elaboration on the participants' open-ended question responses from the initial electronic survey.

Organization of the Study

The research study, its methods and results, are detailed in the five chapters included in this dissertation. Chapter 1 provided an introduction to the study by giving a background for the study, offering a brief literature review, stating the purpose and significance of the study as well as the research questions, definition of terms, the limitations and delimitations of the study and an overview of research methodology, instrumentation, and data collection.

Chapter 2 includes a review of the literature, providing a theoretical framework for the purpose of the study, the research questions, and the survey instrument utilized to answer those questions. The literature review is organized into the four subdomains of principal practices addressed by the survey instrument and the relationship of principal demographics and student demographics on principal practices. Chapter 3 describes the methodology used to conduct this study including the selection of participants, data collection, instrumentation, research questions, and data analysis.

Chapter 4 provides an analysis of the data and details the results of the study. Chapter 5 presents a summary of the findings, conclusions, and recommendations for future research.

CHAPTER 2 REVIEW OF LITERATURE

Introduction

The purpose of this literature review is to synthesize the research on the principal practices that are addressed through this study's survey instrument. Those practices include: implementing a standards-based, coherent instructional program; providing teacher support and encouraging teacher collaboration; engaging families; and using assessment to improve student achievement and instruction. Throughout the review of the above principal practices, special attention will be given to research specific to disadvantaged student populations. Additionally, research on how school demographics impact principal practices, as well as how principal demographics impact their own practices, will be addressed.

In an effort to conduct a complete and thorough literature review, this researcher followed the recommendations of Lunenburg and Irby (2008) for writing the literature review chapter. Initial consideration was given for structuring this chapter in a manner that both addressed the research questions and flowed logically from a wide perspective on principal leadership to a more specific look at literature supporting the research questions investigated in this study. It was decided that the literature review should begin with a historical perspective on principal leadership to provide context for the research questions. Leadership texts were consulted to gain insight into the evolution of principal leadership theory over the past 50 years. Those texts led to investigations of specific, historic studies that would be included in the review.

The next four sections of the literature review organized research into the four subdomains of principal practices addressed through the survey instrument. By organizing the review according to subdomains of principal practices, research-based justification was provided for the online survey questions as well as the questions posed to principals through the follow-up phone interviews. In the last two sections of the literature review, research related to the 2nd and 3rd research questions was investigated. These research questions were more specific in their analysis of principal demographics and student demographics, and their relationship to principal practices. Because of their more narrow scope and the limited research available, these topics were addressed at the end of the literature review chapter.

Once a logical organization for the literature review chapter was determined, the search for supporting literature began. The researcher had already collected a number of studies and books as a result of previous investigations into this topic for the purpose of doctoral coursework and development of the research proposal. To add to the body of literature already collected for each subtopic, peer reviewed research studies, dissertations, reviews of research, as well as prominent research-based books were reviewed for the most pertinent findings. For the most part, online databases available through the UCF Library such as the Educational Resources Information Center (ERIC), PsychInfo (Psychological Abstracts) as well as the database for doctoral dissertations were searched. Additionally, public search engines, particularly Google Scholar, and the Florida Department of Education's reference documents and online FCAT demographics database were utilized. One final technique for discovering the most important and relevant literature on each topic was to peruse the List of References on some of the most

important studies and texts and investigate literature not discovered through previous searches.

Once a substantial body of literature on each subtopic had been collected, the researcher addressed one subtopic at a time. First, all literature relating to that subtopic was reviewed for its appropriateness towards building a theoretical background, detailing prior research, or providing rationale for the research questions and/or the survey instrument. Some literature was selected for inclusion in the review while other literature was discarded. Then, a detailed outline was developed for each subtopic. Once an outline was fleshed out, the first version of the literature review on that subtopic was drafted. After the section on each subtopic was drafted, all of the sections/subtopics were put together and appropriate transitions inserted for flow and cohesiveness of the entire chapter. As a result of the above processes, the review of literature that follows represents a theoretical basis and rationale for this study.

Historical Perspective on Principal Leadership Theory

The role of the school leader has been widely researched and heavily debated in an effort to determine which leadership characteristics hold the most promise for positively impacting student achievement. According to Leithwood and Riehl (2003), "school leaders are those persons, occupying various roles in the school, who provide direction and exert influence in order to achieve the school's goals," (p. 1). Although school leaders do not directly impact student achievement in the manner that classroom teachers do, their ability to indirectly impact student achievement has been substantiated by research. According to Leithwood, Louis, Anderson, and Wahlstrom (2004), research

supports two claims about the effects of leadership on student learning. First, "leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school," and second "leadership effects are usually largest where and when they are needed most," (p. 5).

In order to understand the current environment of school leadership roles, the historical role of school leaders should be addressed. In the 1960s, the management model known as "loose coupling" was the norm (Elmore, 2000). Decisions about how and what students should be taught and how they should be assessed were left to individual teachers while the administrators served to "buffer the weak technical core of teaching from outside inspection, interference, or disruption," (p.6). Buffering existed to protect teachers from outside scrutiny of their work while creating the appearance of organizational effectiveness.

In 1966, the reputation of public schools came under criticism with the publication of *The Coleman Report* which concluded that schools do not make a difference in student achievement; rather, family background is the key influence (Sweeney, 1982). This report created a backlash among educational researchers who sought to prove that schools, and specifically, school leaders, do impact student achievement. In 1971, Weber published results of studies conducted in four inner-city schools in different cities that led him to conclude school leadership was a significant factor in student achievement. "By 1974 there were only four studies clearly connecting school leadership with school effectiveness," (p. 346). However, opinion was turning away from the belief that schools had little influence on student achievement to research that demonstrated the impact of effective school leaders. In the late 1970s and early

1980s, many researchers focused on school leadership and the educational community engaged in heated discussions regarding the impact of school leaders (Hallinger, 1983; Sergiovanni, 1984; Sweeney, 1982).

As early as 1979, Thomas Sergiovanni was arguing against the more traditional situational theory of leadership and arguing for the importance of a principal's mission and vision. He wrote that leadership behavior, "involves not only the supervisor's appreciation of the considerable human resources of subordinates, but it also involves the supervisor's own beliefs about and vision of the dramatic possibilities inherent in all educational activity. This vision or set of beliefs provides the substance of supervisory leadership," (Sergiovanni, 1979, p. 394). His recognition of the importance of a school leader's vision added to developing research and discussion on the potential impact of leadership behaviors in shaping school culture and promoting student achievement.

The 1980s saw a boom in the start-up of leadership academies and a curricular focus on the effective schools model (Hallinger, 2005). In 1984, Sergiovanni proposed five leadership forces: technical, human, educational, symbolic, and cultural. The educational force spoke to the idea of the principal as an instructional leader. Instructional leaders were described as strong, directive leaders and culture builders. Since the 1980s, Instructional Leadership and Transformational Leadership have dominated the leadership literature (Hallinger, 2003). According to Marks and Printy (2003), "transformational leadership builds organizational capacity whereas instructional leadership builds individual and collective competence," (p. 377). Other researchers such as Leithwood & Riehl (2003), Leithwood et al. (2004), and Hallinger (2003, 2005) have acknowledged the value of integrating both instructional and transformational leadership.

In their 2003 study, Marks and Printy concluded that, in schools where they found integrated leadership, "teachers provided evidence of high-quality pedagogy and students performed at high levels of on authentic measures of achievement," (p. 392).

Public schools have faced constant scrutiny under the light of the accountability movement. "Curriculum standards, achievement benchmarks, programmatic requirements, and other policy directives from many sources generate complicated and unpredictable requirements for schools," (Leithwood & Riehl, 2003, p. 1). As such, the job of a school leader has become increasingly more complex. The focus on accountability has found principals "at the nexus of accountability and school improvement with an increasingly explicit expectation that they will function as instructional leaders," (Hallinger, 2005, p. 2). Additionally, many student populations have become more diverse, and particularly in urban settings, large populations of students are considered as having low socio-economic status (SES). These factors have complicated school leadership and made it difficult for leaders to subscribe to one model of leadership. According to Leithwood et al. (2004), "we need to be developing leaders with large repertoires of practices and the capacity to choose from that repertoire as needed, not leaders trained in the delivery of one 'ideal' set of practices," (p. 10). The following sections review the literature on four subdomains of principal practices that represent research-based best practices. These sections also provide support and justification for the inclusion of these practices in the survey instrument used in this study.

Subdomain 1 of Principal Practices: Implementing a Standards-Based, Coherent Instructional Program

There have been two movements in educational research that have largely contributed to the current focus on instructional leadership. The first, effective schooling research, looked at high achieving versus low achieving schools with similar demographics to determine differences between them. The California School Effectiveness Study of 1976 studied 21 pairs of elementary schools with similar demographics but different student achievement results; " . . . the research team identified five factors that seemed to differentiate effective from less effective schools," (Sweeney, 1979, p. 347). Those factors included teacher support, learning atmosphere, decisionmaking, student progress monitoring, and an emphasis on achievement. The research on effective schools prompted a reform towards holding schools accountable for students' performance on educational standards. According to Heck (1992), "the effective schools research has been a driving force behind political efforts to improve public education, suggesting that improved student outcomes can be attained through strategic school organization and strong principal leadership," (p. 21).

Effective schools research spurred an interest in standards-based instruction and led to a second movement known as standards-based reform. According to Elmore (2000), standards-based reform (SBR) was a departure from the earlier practice of loose coupling, where principals protected teachers from any interference into classroom instruction, and expanded principal practices for several reasons. One, SBR went straight to the instructional core, making what gets taught and how it gets taught a matter of public policy. Two, schools were being held accountable for what students knew and

could do as a direct result of what happened in the classroom. Three, accountability for student performance shifted from the local board to individual schools. "It appears from early research that school systems that improve are those that have succeeded in getting people to internalize the expectations of standards-based accountability systems, and that they have managed this internalization through modeling commitment and focus," (Elmore, p. 31). Effective schools research and standards-based instruction expanded the role of the principal into one that should strategically address both school culture and instructional practice.

School Culture

School leaders who wish to implement a standards-based instructional program need to tend to several aspects of their school program in order for a strong instructional program to flourish. One such aspect is the culture of the school. Bolman and Deal (2003) defined school culture as both a product that embodies accumulated wisdom from those in the school who came before, and a process that is constantly renewed and recreated as newcomers come on board (p. 244). DuFour, DuFour, and Eaker (2008) indicated that "meaningful, substantive, sustainable improvement can occur in an organization only if those improvements become anchored in the culture of the organization: the assumptions, beliefs, values, expectations, and habits that constitute the norm for that organization, (p. 90).

Cultivating a culture that is ripe for student achievement in a school has become an important practice for principals. "The principal needs special capabilities for leadership . . . creating a culture in which deep knowledge of instruction and learning serves as the foundation for an interdependent professional community," (Fink &

Resnick, 2000, p. 6). Part of a principal's challenge for improving the culture of the school is in getting teaching personnel to view a standards-based program as positive. "We transform dysfunctional relationships into functional ones, not by continuing to do what we already know to do more intensely . . . but by learning how to attach positive value to the learning and the doing of new things," (Elmore, 2000, p. 19).

Beyond shaping teacher attitudes towards instructional reform, there are other ways principals can influence school culture. A principal's commitment to a safe and orderly school environment has been identified as a key element of effectiveness. Principals achieve this by such actions as "exhibiting personal warmth and accessibility, ensuring that there is a broad-based agreement about standards for student behavior, communicating high behavioral standards to students, applying rules consistently, and delegating disciplinary authority to teachers," (Cotton, 2003, p. 8).

"The most influential avenue of effects concerns the principal's role in shaping the school's mission," (Hallinger, 2005, p. 9). Instructional leaders should focus on the school mission, using it to direct all other processes. A strong mission can even inform principals on effective ways to manage their schools. "Instructional leaders both lead through building a mission and manage through activities that increase alignment of activities with those purposes," (Hallinger, 2005, p. 9). Beyond shaping the culture of a school by addressing teacher attitudes towards instruction, behavioral standards, and the school's mission, principals responding to the new recommendations of standards-based reform were prompted to look at the instructional practices of teachers in the school.

Teacher Instructional Practice

Another way that principals can effectively implement an instructional program is by focusing on improving teacher efficacy and teacher practice. A study of 10 Texas high performing school districts with high populations of low-income students revealed that building teacher efficacy played a critical role in the success of schools. "In the districts studied, leaders helped . . . school personnel feel like they had the power to produce desired student achievement goals. These leaders made available such a high level of knowledge, skills, resources, and support that educators felt efficacious, even in the face of challenging academic goals," (Ragland & Asera, 1999, p. 19).

The same Texas study revealed the importance of improving teacher practices. Leaders "created structures to help educators teach 'smarter' and continuously learn from their own practice, and from the practice of others," (Ragland & Asera, 1999, p. 21). Factors that have helped instructional leaders develop communities of practice are as follows: fostering a safe environment where teachers feel comfortable taking risks, encouraging open communication and opportunity for collaboration around instructional issues, developing teacher leaders to broaden the base of change, and engaging in symbolic acts to emphasize the importance of the message (Supovitz & Poglinco, 2001).

Researchers have touted the importance of instructional leaders focusing on concrete or specific teacher practices (Elmore, 2000, Fink & Resnick, 2000, Supovitz & Poglinco, 2001). "A focus on concrete instructional practice results in increased student learning," (Elmore, p. 17). Principals should make clear their expectations for what specific practices will render teachers effective. Instructional leaders "organize their

schools around an emphasis on instructional improvement supported by a distinct vision of instructional quality," (Supovitz & Poglinco, 2001, p. 1).

Principal Professional Development

Although the development of teacher efficacy and teacher practice is critical to an instructional principal's success, researchers also underscore the importance of principals thoughtfully engaging in their own professional development. Blase and Blase (1999) reported that "principals enhanced the value of staff development by becoming learners themselves and participating with teachers," (p. 364). A study by Fink and Resnick (2000) highlighted the exemplary practices of principals in the Community School District Two in New York City. Principals in this district collaborated to improve their own efficacy and practice, implementing the theory of cognitive apprenticeship. Principals engaged in shared intellectual activity through reading and thinking. In School District Two, "the shared theories of learning and instruction are played out in highly individualized learning settings – in small study and support groups, in peer interactions, and in a structured system of coaching and supervision that is individually tailored," (Fink & Resnick, p.8).

District Two also utilized monthly, day-long principal conferences that focused on instruction and learning to look at new instructional initiatives or revisit and evaluate older ones. Principal conferences were hosted at schools so that time could be spent observing student work and teaching practices. Additionally, principals buddied with other principals and participated in intervisitations to learn about a specific practice from another principal. In this way, principals modeled the kinds of behaviors they were facilitating in their own teachers (Fink & Resnick, 2000).

Principal Expectations of Students

A final aspect of successfully implementing a standards-based, coherent instructional program concerns students. An effective instructional principal will set high expectations for students. "The principal's expression of high expectations for students is part of the vision that guides high-achieving schools and is a critical component in its own right," (Cotton, 2003, p. 11). According to McEwan (2003), there are five ways for leaders to communicate high expectations to students:

- 1. Establishing inclusive classrooms that send the message that all students can learn.
- 2. Providing extended learning opportunities for students who need them.
- 3. Observing and reinforcing positive teacher behaviors in the classroom that ensure an academically demanding climate and an orderly, well-managed classroom.
- 4. Sending messages to students in a variety of ways that they can succeed.
- 5. The establishment of policies on student progress relative to homework, grading, monitoring progress, remediation, reporting progress, and retention/promotion. (p. 5)

Serving as an effective instructional leader requires shaping a culture conducive to learning, improving teacher efficacy and focusing on concrete and specific teaching practices, engaging in principal professional development, and holding high expectations for students.

Subdomain 2 of Principal Practices: Providing Teacher Support and Encouraging Teacher Collaboration

An important component of effective principal practice is teacher support and development. Principals can support teachers in many ways. According to Supovitz and Poglinco (2001), effective school leaders "cultivated a community of instructional

practice in their schools, creating safe and collaborative environments for teachers to engage in their work and draw upon a wide network of individuals to deepen their work," (p.1). Leithwood et al. (2004) also listed optimal teacher working conditions that were evidenced in research. Among those conditions were opportunities for teacher leadership, peer assistance, teaming with other teachers, and high levels of perceived support by school administrators. According to a study by Blase and Blase (1999), "talking to teachers in and outside of instructional conferences was the cornerstone of effective instructional leadership; principals valued dialogue that, above all, encouraged teachers to become aware of and critically reflect on their learning and professional practice," (p. 359). A second key theme revealed by the Blase and Blase study highlighted the effectiveness of instructional leaders who promoted teacher professional growth in the areas of teaching methods and interactions with other colleagues around teaching and learning.

Johnson, Kardos, Kauffman, Liu & Donaldson had similar findings in their 2004 study. They wrote, "to succeed with their students, teachers indicated they needed . . . experienced colleagues who mentored and supported them, curriculum that was aligned with district and state standards, teaching assignments that were fair and appropriate, and schoolwide approaches to student support and discipline," (p. 4). All of the above researchers had common findings to direct principal leadership. First of all, principals should foster teacher leadership in their schools; second, principals should provide individualized teacher support and offer meaningful feedback; third, principals should promote teacher collaboration; and fourth, principals should strategically schedule

teaching assignments, provide proper facilities, equipment and supplies, and schedule meaningful professional development opportunities.

Facilitating Distributed Leadership

One way that principals who aspired towards effective leadership could foster teacher leadership in their schools was by distributing leadership opportunities and responsibilities. Halverson, Grigg, Pritchett, and Thomas (2005) described distributed leadership theory as "a descriptive tool that considers how leadership tasks are distributed socially and situationally in schools," (p. 7). According to Hallinger (2005), "leadership must be conceptualized as a mutual influence process, rather than as a one-way process in which leaders influence others," (p. 15). Principals and their administrative staffs constantly struggle to meet all of the leadership demands necessary in schools. One way to expand leadership in a school is to distribute leadership opportunities to qualified teachers. "In a knowledge-intensive enterprise like teaching and learning, there is no way to perform these complex tasks without widely distributing the responsibility for leadership among roles in the organization, and without working hard at creating a culture, or set of values, symbols, and rituals," (Elmore, 2000, p.15).

The notion of distributed leadership does not mean that no one person should be held responsible for the school's performance, but rather that a principal's job is "enhancing the skills and knowledge of people in the organization, creating a common culture of expectations . . . holding the various pieces of the organization together . . . and holding individuals accountable for the collective result," (Elmore, 2000, p.15). There are five principles that lay the foundation for a model of distributed leadership focused on large scale improvement (Elmore). They are as follows:

- 1. The purpose of leadership is the improvement of instructional practice and performance, regardless of role.
- 2. Instructional improvement requires continuous learning.
- 3. Learning requires modeling.
- 4. The roles and activities of leadership flow from the expertise required for learning and improvement, not from the formal dictates of the institution.
- 5. The exercise of authority requires reciprocity of accountability and capacity. (pp. 20-21)

Principals face considerable challenges in finding the time and skills to sufficiently provide instructional leadership to all staff members. Distributing instructional leadership responsibilities to expert teachers provides another level of instructional support. According to Cotton (2003), "a large and growing volume of research repeatedly finds that, when principals empower their staffs through sharing leadership and decision-making authority with them, everyone benefits, including students," (p. 21).

Providing Teacher Feedback

A second way that instructionally-minded principals can lead teachers is by providing individualized support and offering meaningful feedback. Examples of leadership practices that positively and significantly influence teachers include "offering intellectual stimulation, providing individualized support, and providing appropriate models of best practice and beliefs considered fundamental to the organization," (Leithwood, et al, 2004, p. 9). Effective instructional leaders take time to visit classrooms and give specific feedback to teachers whose classrooms they visit. According to Heck (1992), "increasing principals' expertise as clinical supervisors, as well as the amount of time principals allocate to this activity, appears to be one policy choice that pays dividends in terms of school performance," (p. 30). Classroom visits and subsequent feedback given to teachers demonstrate a principal's personal commitment to improving teachers' instructional practices. "Recent evidence suggests that emotional intelligence displayed . . . through a leader's personal attention to an employee . . . increases the employee's enthusiasm and optimism, reduces frustration, transmits a sense of mission and indirectly increases (teacher) performance," (Leithwood, et al., p. 24). According to Kirkpatrick (2009), "teachers' descriptions of their schools' professional cultures indicate that school leaders can have a profound influence on the way teachers approach their work. When school leaders are knowledgeable about and involved with instruction . . . a spotlight is focused on what happens in the classroom," (p. 38). Principals who directly engage in teacher observation and feedback send a clear message that they value effective instruction and that teacher support for instruction is a priority.

Principals can also provide individualized support through structuring and supporting teacher mentoring. Johnson et al. (2004) reported that "mentoring can provide critical support for new teachers," and that "new teachers who are mentored early in their careers are more effective teachers and are likely to remain in their schools or in teaching longer," (p. 9). Mentors assist new teachers through activities such as helping decide what to teach as well as how to teach, helping teachers create new instructional materials, discussing classroom management strategies, and observing new teachers and offering valuable feedback (Johnson et al., 2004).

Promoting Teacher Collaboration

Another effective means of principals supporting teachers, one that has been well documented by research, is promoting teacher collaboration. Teachers' interest in

collaborating with other teachers has increased since the 1980s, most likely because of the school reform movement and the large number of our teaching force retiring in recent years (Johnson, Berg & Donaldson, 2005). Leithwood et al. (2004) discussed the development of teacher professional communities as "a key sociological contribution to the study of school culture and change," (p. 65) that affects school culture by making "collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student outcome," (p. 66).

Teacher collaboration has been discussed in terms of professional learning communities. Louis, Marks, and Kruse (1996) defined professional communities in terms of five elements of practice: shared values, focus on student learning, collaboration, deprivatized practice, and reflective dialogue. Instructional leaders have opportunity to structure support for the development of professional learning communities. "School administrators, in particular, help develop professional community through their attention to individual teacher development, and by creating and sustaining networks of conversation in their schools around the issues of teaching and learning," (Leithwood et al, p. 66).

When principals give priority to establishing professional learning communities, they are communicating their belief that teachers' have the knowledge and experience to tackle and find viable solutions to problems of practice. "Teacher community enhances teachers' ability to learn how to teach challenging students more effectively, increases their certainty that what they do can make a difference, and increases their commitment to the task," (Leithwood & Riehl, 2003, p. 6). Another positive effect of teacher collaboration is teacher retention. Principals can increase teacher retention by the

structure and support required for teacher collaboration. According to Johnson et al. (2005), "given that teachers value working in concert with their colleagues . . . principals might increase teacher retention by supporting collaboration and engaging teachers in school improvement," (p. 71).

Principals who want to ensure student achievement gains plan meaningful professional learning opportunities for their teachers. "Rigorous research suggests that sustained and intensive professional learning for teachers is related to studentachievement gains, (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009, p. 9).

Other Support: Planning for Professional Learning, Scheduling Teaching Assignments, and Providing Teacher Resources

Beyond fostering teacher leadership, providing instructional support and cultivating a culture of teacher collaboration, there are other means by which principals can support teachers. Principals who want to ensure student achievement gains plan meaningful professional learning opportunities for their teachers. "Rigorous research suggests that sustained and intensive professional learning for teachers is related to student-achievement gains, (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009, p. 9). Additionally, principals typically either directly or indirectly make decisions regarding teaching assignments. In making decisions regarding teaching assignments, principals should consider who is most qualified to teach which subjects as well as how many preparations are given to each teacher. "Out-of-field placement unnecessarily increases many teachers' dissatisfaction with their jobs by making the work difficult day to day and diminishing the likelihood they can feel pride in their accomplishments,"

(Johnson et al., 2005, p. 57). Teaching multiple preparations and teaching in multiple classrooms also cause dissatisfaction (Johnson et al., 2005).

One final area where principals can support teacher instruction is by ensuring that teachers have proper facilities, equipment, and supplies. Teachers who face run-down facilities on a daily basis and who must deal with insufficient resources and supplies have difficulty focusing on effective instructional practices. "Teachers may do their best to cope with such deficits, but ultimately their students' opportunities to learn in poorly maintained and ill-equipped schools falls short," (Johnson et al., 2005, p. 50). Although the issues of maintaining facilities and ensuring proper resources do not typically fall under the umbrella of instructional leadership, these issues actually form the foundation for an environment conducive to effective instructional practices.

Principals who aspire to provide instructional leadership to teachers should aspire towards distributing leadership to teachers, providing individualized teacher support, and building structures to support teacher collaboration. According to Blase and Blase (1999), "instructional leadership is being shared with teachers, and in its most progressive forms it is being cased as coaching, reflection, collegial investigation, study teams, explorations into uncertain matters, and problem solving," (p. 350). In a poignant statement about the importance of principals supporting teachers, Johnson et al. (2004) wrote "only when schools are engaging places for talented and dedicated adults will they also be vibrant places where young people can learn and thrive," (p. 17).

Subdomain 3 of Principal Practices: Engaging Families

School leaders intuitively know that they should engage the families of their students to promote student achievement. The most effective methods for engaging families, however, are not so obvious. In fact, most of the research on this topic has been conducted in the past twenty years, and the results of this research are sometimes murky and conflicting. In the following paragraphs, the research regarding leadership strategies for engaging families will be reviewed and documented best practices will be highlighted.

First, a definition of family engagement should be explored. Sy, Rowley, and Schulenberg (2007) defined parent involvement as "parent behaviors aimed at promoting or enhancing children's educational development . . . may occur directly or indirectly and across multiple contexts (school, home, community)," (p. 1). Cotton and Wikelund (2000) also defined parent involvement in terms of activities that occurred in the home, at the school, or within the community. They listed a variety of activities that qualified as parent involvement. Those activities included such things as attending school functions and parent conferences, volunteering to assist with school activities, participating in the school's governance and decision-making, helping children with schoolwork, encouraging children, arranging for time and space at home where children can complete homework, actively tutoring their children, and even modeling academic behavior such as reading for pleasure. The ways in which school leaders engaged families were varied and potentially interacted with other leadership behaviors in beneficial ways.

One aspect of family engagement agreed upon in most of the literature was that principals should provide leadership in this arena to ensure the best possible outcomes

(Bryk & Schneider, 2002; Christenson, 2004; Cotton, 2003; Leithwood, Louis, Anderson & Wahlstrom, 2004;). Christenson asserted that "strong leadership and administrative support are essential to increasing meaningful family involvement," (p. 4). Cotton and Wikelund's (2000) review of literature on parent involvement led to their conclusion that not only is "parent involvement in children's learning . . . positively related to achievement," but also that "the more intensively parents are involved in their children's learning, the more beneficial are the achievement effects," (p. 3). They drew the following conclusions regarding how school leaders should best direct parent engagement for maximum student achievement:

- The most effective forms of parent involvement are those which engage parents in working directly with their children on learning activities in the home.
- The more active forms of parent involvement produce greater achievement benefits that the more passive ones.
- Providing orientation and training enhances the effectiveness of parent involvement; however, in the case of these activities, a little is better than a lot.
- Schools with the most successful parent involvement programs are those which offer a variety of ways parents can participate. (p. 4)

One view of public schools, the interdependent co-contributor view, held that principals must "consider the building of productive working relationships with parents and the wider community (as) part of the core mission of schools," (Leithwood et al., 2004, p. 46). Based on their research of school reform in Chicago, Bryk and Schneider (2002) stated that, "a broad base of trust across a school community lubricates much of a school's day-to-day functioning and is a critical resource as local leaders embark on ambitious improvement plans," (p. 5). According to these researchers, building trust was especially important in disadvantaged urban schools. Researchers have provided further guidance for principals. Cotton and Wikelund (2000) offered guidelines for the most effective parent participation programs. Those guidelines included:

- Offering parents a variety of roles in the context of a well-organized and long-lasting program.
- Communicating to parents that their involvement makes a difference in their child's school performance, and that they do not have to be formally educated or have a lot of free time to make a difference.
- Encouraging parents to get involved from the first time their children enter your school.
- Developing parent programs that focus on involvement in instruction at home with behaviors such as monitoring homework.
- Making a special effort to engage parents of disadvantaged students.
- Continuing to emphasize that parents are partners of the school and that their involvement is needed and valued. (pp. 9-10)

Other researchers have linked principal leadership for engaging families to highachieving schools. Cotton (2003) reported that "principals of high-achieving schools are more involved in outreach to parents and other community members than are less successful principals," (p. 18). Taylor (2010), in her interview research of principals successfully implementing second-order change, saw the theme of engaging families in learning emerge when principals were questioned about factors that led to their success. Taylor reported that, "leaders pointed to strategic family engagement as one of the second-order changes they led or targeted family engagement as a significant reason why they believed their student achievement increased," (p. 81).

Not all researchers agreed that the research connecting family engagement to student achievement had conclusively shown a positive effect. Domina (2005) noted that "research on the link between (parent) involvement and school success has been inconclusive," (p. 234). However, through his own research he found a "clear causal link

between parental involvement and children's behavioral problems," (p. 245). His research suggested that parents who get involved with their child's education may be thwarting behavior issues. Students with few behavior problems were better positioned to benefit from a school's learning environment, so even his research findings offered a loose link between parent involvement and student achievement.

Some research literature supported the need for principals to consider family background and cultural context when determining how best to engage families. Empirical evidence, reviewed by Leithwood et al. (2004) supported four claims regarding the role of family background in a child's education. First, a child's socio-economic status (SES) had a strong bearing on his learning and behavior. Second, a child's SES had a more indirect influence on his education due to the educational culture at home. Third, a strong educational culture in the home had a positive relationship with a child's achievement at school. Fourth, the community where a child lives did impact the child's ability to succeed in school. "This evidence makes clear that leaders cannot view the school and the students' homes in isolation from one another; leaders need to understand how schools and homes interconnect with each other . . . and how their schools can increase the productivity of such interconnections for student learning," (Leithwood et al., p. 48).

The economic or cultural backgrounds of families within a school should be considered by principals who strategize for how to engage families in student achievement. "Cultural values can shape parents' education-related behavior in ways that may not be obvious," so understanding cultural differences in parenting can help school

principals, "more effectively support and encourage involvement practices that are appropriate in their cultural context," (Sy et al., 2007, p. 8).

Researchers have also found that "minority or low-income parents are often underrepresented among the ranks of parents involved with the schools," (Cotton & Wikelund, 2000, p. 7) which can be due to a variety of issues from long working hours to parent discomfort entering the same kind of school setting where they were not successful. However, researchers have concluded that, "parents of disadvantaged and minority children can and do make a positive contribution to their children's achievement in school if they receive adequate training and encouragement in the types of parent involvement that can make a difference," (Cotton & Wikelund, p. 7).

Certainly, disadvantaged students can potentially gain the most from parent involvement (Cotton & Wikelund, 2000; Domina, 2005; Okpala, Okpala & Smith, 2001). Christenson (2004) made a poignant observation when noting that "families do not need to be fixed, but they need to be supported in their efforts to educate their children in ways they see fit . . . we support families when we meet (them) where they are and strive to understand their perspectives, desires, and needs," (p. 5). Christenson prescribed to the four A's of family-school partnerships: Approach, Attitudes, Atmosphere, and Actions. Principals who considered these four attributes when planning for family engagement may find themselves better positioned to engage families from diverse cultures and varying socio-economic situations.

One unexpected advantage for principals who provided leadership towards family engagement was the message of support sent to teachers through these actions. Parental involvement had the potential to enhance teacher job satisfaction and efficacy,

particularly in high poverty schools. Johnson, Berg, and Donaldson (2005) listed four ways that parent involvement can decrease teachers' uncertainty:

First, parents can help teachers to understand the student and enable the teacher to better individualize the student-teacher relationship. Second, teacher-parent partner ships build trust and common understanding that enable teacher and parents to work together in ways that are beneficial. Third, parent involvement motivates students to be more engaged and to see the importance of schooling. Fourth, the respect and positive communication that teachers receive from parents helps to increase teachers' sense of efficacy and satisfaction. (p. 68)

Johnson et al. (2005) also suggested that principals consider addressing parental involvement through professional development opportunities for teachers. Teachers may not know how to get parents involved and may need implicit instruction on best practices. Beyond understanding the many, different ways that strategizing for family engagement could benefit teachers and students, principals needed concrete strategies for partnering with families.

Christenson (2004) claimed that effective family-school partnerships should include a number of features including: a student-focused philosophy that prompts schools and families to collaborate on learning opportunities, educational progress, and school success: a sense of shared responsibility for educating children and providing resources; options for active, realistic participation; a preventive, solution-orientation focus for student learning, engagement, and development.

In summary, effective principals provide leadership towards engaging families in the education of their children. The research literature provided support for the importance of principals' direct engagement with this task and revealed that highperforming schools had principals who valued the involvement of families and

strategized for how best to engage them. The literature also highlighted the importance of principals' sensitivity to cultural and socio-economic differences among the families in their schools when planning how to partner with them. Finally, research has shown that principals who provided guidance to their teachers on how to engage families would see the benefits of improved teacher efficacy.

Subdomain 4 of Principal Practices: Using Assessment to Improve Student Achievement and Instruction

School leaders have long been responsible for using data to track information about the students in their schools. For decades, principals have managed systems that collected data on student attendance, discipline, grades, and demographics, and have used that data to help make decisions about how to best manage their schools. While school leaders have long been adept at handling the internal accountability required using the aforementioned data, it has only been since the start of the twenty-first century that principals have grappled with such stringent demands of external accountability for student achievement from federal and state government agencies (Halverson, Grigg, Prichett, & Thomas, 2005).

The No Child Left Behind (NCLB) Act of 2001 forced states to develop and implement assessments for students at every level so that schools could be measured according to student performance on those assessments. NCLB set forth a timeline by which all states should show that all students were making appropriate progress on annual assessments. This kind of external accountability had never before been imposed on public schools. Not only has school success on these accountability measures been

tied to funding and the right for schools to govern themselves, but also school success (or failure) has been widely publicized and attached to parents' rights to choose other options when their local public schools are failing them.

The pressure, then, for schools to ensure student success on statewide accountability measures lies largely on the shoulders of school leaders. "While teachers are ultimately responsible for improving student learning in schools, changing the organizational conditions for improvement across schools is the central task of schools leaders," (Halverson et al., 2005, p. 3). According to Creighton (2007), "using the many different kinds of data collected at our school sites to help with decision making legitimizes the goals and strategies we create for change and improvement," (p. 11). Creighton established the connection between instructional leadership and data-driven decision making. Principals who aspired to effect change in instruction would capitalize on the recent accountability requirements and use assessment data to align their school improvement goals with needs revealed by assessment data. Halverson et al. (2005) commented that, "the press for data-driven decision making . . . is not a call for schools to begin to use data, but a challenge for leaders to reshape the central practices and cultures of their schools to react intentionally to the new kinds of data provided by external accountability systems," (p. 5).

One of the requirements of NCLB was for schools, districts, and states to report disaggregated data according to student subgroups. One subgroup that routinely performed at the lowest level was that of economically disadvantaged students, typically defined by students' participation in free and reduced lunch programs. While the poor performance of this subgroup raised serious concerns among educational leaders, the

news from the research front was not all bad. Reeves (2006) drew some encouraging solutions from his Planning, Implementation, and Monitoring (PIM) study. He concluded that "while the relationship between demographic factors and the percentage of students who score proficient or higher is consistently negative . . . the relationship between demographic factors and gains . . . is negligible," (p. 74). In other words, Reeves found the absence of a relationship between student characteristics and gains in performance. The students he studied in the economically disadvantaged subgroup may not have scored as high on standardized tests, but they did show gains at the same rate as students in other subgroups. Reeves' research gave hope to school leaders that they could see gains in student achievement in the economically disadvantaged subgroup, and that by tracking student assessment data, they could acquire the information they needed to facilitate those gains.

A first step for school leaders who aspired to engage in data-driven decision making was to consider the relationship between data and decision-making and to build a conceptual model for how access to various forms of data can eventually result in instructional decisions that will raise student achievement. Researchers have developed numerous conceptual models for this task. Mandinach, Rivas, Light, Heinze, and Honey (2006b) promoted a conceptual framework that purported a continuum of data-driven decision making that "begins with data, transforms those data into information, and then ultimately into actionable knowledge," (p. 10). They further listed skills associated with the steps along this continuum. Data skills included collecting and organizing; information skills required analyzing and summarizing; and knowledge skills demanded synthesizing and prioritizing.

Halverson et al. (2005) established a Data-driven Instructional System Framework that included six component functions: data acquisition; data reflection or making sense of student data to improve teaching and learning; program alignment or ensuring that the school's instructional program is aligned with content and performance standards; program design or the policies, programs, and procedures adopted to address problems; formative feedback or evaluation cycles that create timely flows of information; and test preparation which includes activities designed to motivate students and teach strategies for improving performance on high-stakes assessments (p. 2). No matter to which conceptual framework school leaders prescribed, the important point was for principals to understand that there is a process involved in accessing data and effectively using it for the purpose of developing school improvement plans (Halverson et al., Mandinach et al., 2006b).

The effective use of assessment data to drive instructional practices in any school should begin with the principal. "A principal who is data-driven or technically savvy can exert substantial influence on the faculty, communicating the importance and thereby stimulating use," (Mandinach et al., 2006b, p. 12). School leaders should have access to technological tools that can appropriately store, manage, analyze, and report data in a useful way. Mandinach et al. (2006b) proposed six characteristics of effective technological tools: accessibility, feedback loop (time between when data is generated and when results are accessible), comprehensibility, flexibility, alignment (to standards and curriculum), and the link to instruction. Effective data tools were the first step towards meaningful use of data.

Once principals had the appropriate technological tools in place to manage and access data, a second step was for principals to consider how to facilitate teacher use of data. "Helping all schools and students achieve, regardless of ethnic and socioeconomic background, requires that we identify and develop processes and practices that support teachers' deep and sustained examination of data in ways that are aligned to local instructional goals," (Mandinach, Honey, & Light, 2006a, p. 5). Principal access to and examination of data was meaningless if principals could not facilitate data investigation with teachers and could not effect change in instructional practices. Additionally, school leaders should be able to use data to communicate with their extended school communities. School leaders "need to be able to work with teachers to help students test well while not reducing learning to testing, and will need to be able to justify changes in instructional and personnel practices to an increasingly well-informed community," (Halverson et al., p. 6).

The use of varying and abundant data for school improvement is not a process that comes naturally or easily to most school leaders. Mandinach et al. (2006b) listed a number of challenges to school leaders who were attempting to effectively use assessment data to drive instructional decisions. Those challenges included technical issues such as storing, entering, presenting and analyzing data; ensuring the quality and interpretation of the data; establishing a relationship between data and instructional decisions; establishing validity and reliability of the data; having proper knowledge of and training in the use of data. Consequently, there were many levels of leadership behaviors that were addressed through this process, and the effective principal was expected to tend to all of them.

Another challenge for school leaders was in staying ahead of the curve when it came to data-driven decision making. Many school leaders who were engaging in data analysis to inform instructional decisions were being reactive as opposed to proactive. "We must become much more proactive and move beyond the 'on the surface' work with data – and investigate 'below the surface' issues related to our data," (Creighton, 2005, p. 2). Similarly, Mandinach et al. (2006a) reported that many educators were data rich but information poor because all of the data that educators had at their fingertips was not easily translated into effective practices.

Mandinach et al. (2006a) cautioned that "the kinds of data-driven decision making tools that are proliferating in schools do not provide the kind of detailed data on individual students that could help teachers gather systematic evidence about the effectiveness of particular instructional strategies," (p. 5). In other words, neither school leaders nor teachers could yet use data tools to drill down to whether or not a specific strategy worked with an individual student. Conversely, teachers' focus on individual students could impede their ability to look for patterns in the data and take a systematic approach to the data that might lead to more broad-scale instructional decisions (Mandinach et al. 2006a). A principal's role should be not only to procure the most effective data tools, but also to facilitate teacher development of skills to both drill down to individual students and look for pattern across groups of students. "Helping all schools and students achieve, regardless of ethnic and socioeconomic background, requires that we identify and develop processes and practices that support teachers' deep and sustained examination of data in ways that are aligned to local instructional goals," (Mandinach et al., 2006a, p. 5).

Researchers have been able to provide guidance for school leaders on specific strategies that would help them use assessment information to improve instructional practices and thus student achievement. Mandinach et al. (2006b), in their interviews with principals from six large school districts, found the following commonalities in how they used data: for conversations and presentations to parents and community members; in viewing demographic and achievement data to determine student needs; with teachers to encourage the use of data to inform instruction; with students and teachers when discussing test scores and setting goals for improvement. Protheroe (2009) stressed the importance of principals asking the right questions about data. Examples included: "Are teachers and instructional strategies in given areas producing results? What kinds of professional development would help? How should we spend building resources in support of instruction? What does this teacher need to ensure student competence?" (p. 4). Protheroe (2009) also reported that "providing the opportunity for teacher collaboration and discussion about practice, using assessment data as a springboard, has been a powerful tool for improvement," (p. 5).

Further considerations for school leaders were the implementation of and function of summative versus formative assessments. Summative assessments, typically given at the end of a unit of study, could be considered assessment OF instruction. Formative assessments, on the other hand, typically given at frequent intervals during a unit of instruction, could be considered assessment FOR instruction. Reeves (2006) concluded that one characteristic of successful schools was the use of frequent common (formative) assessments. He further explained that

Schools are, indeed, overtested if we define tests as summative, evaluative, provided at the end of the year, and accompanied by feedback that is woefully late and inherently useless. By such a definition, we are overtested. But schools are underassessed. Assessments, in contrast to tests, are formative, provided during the year, designed to improve teaching and learning, and accompanied by immediate feedback (p. 86).

Reeves spoke to perhaps the biggest challenge facing principals: implementing the kinds of assessments that hold genuine promise for directing instructional decisions. Researchers have found the power in implementing common, formative assessments. Fullan (2011) reported, "In every case of schoolwide or districtwide significant improvement we have seen so far, leaders focused on common assessments frameworks linked to individualized instructional practices," (p. 45).

In summary, principals in the recent environment of standards and accountability have had to learn processes for utilizing data to make instructional decisions for improved student achievement. These processes represented a new kind of literacy for school leaders and teachers. Mandinach et al. (2006) identified three types of literacy required for the effective use of data in making instructional decisions. Those three types included data literacy, assessment literacy, and pedagogical data-driven decision making literacy. Not only did the requirement for school leaders to be well versed in these kinds of literacies mark a significant change from years past but also this type of knowledge marked an opportunity for school leaders to work with teachers and influence instruction so that all students could make gains in their learning.

The Relationship between Student Demographics and Principal Practices

In the late 1980s, the management model of loose coupling, where teachers were given freedom to make instructional decisions and principals buffered teachers from outside interference, was beginning to give way to effective schools research that touted the role of principal as an instructional leader (Elmore, 2000). During this time, researchers began to investigate the impact of school leaders on student achievement and even began to narrow their focus to effective principal practices for economically disadvantaged student populations. Thus, the discussion began regarding best principal practices for distinct student populations. In a 1989 study by Firestone and Wilson, the researchers sought to establish what kinds of relationships existed between principals, their teachers, and student achievement in low socio-economic status (SES) schools. Their findings indicated that principals in low SES schools exerted tighter controls on their teachers yet provided less instructional support. The researchers drew the following conclusion: "with regard to the question of what principals can do to contribute to student achievement, this study reinforces the view that principals can contribute most by supporting teachers' efforts . . . and giving them the autonomy to adjust to in-class and over-time variation in student ability," (p. 20).

Fifteen years later, similar conclusions regarding principal practices in schools with large economically disadvantaged populations are still being drawn. Cotton (2003) reviewed recent research on principal practices in low-SES and high-SES schools and found that school leaders in low-SES schools were more likely to act as managers than instructional leaders and were more likely to exercise control over their teachers than to provide support. "Meanwhile, research points to the instructional leadership of the

principal as the key element in the success of those low-SES schools where student achievement is higher than their demographic profile would predict," (p. 56). Although leaders in low-SES schools may tend towards tighter controls and strict management profiles, these were not the leadership features that researchers showed had the most impact with low-SES student populations. On the contrary, the leadership features that would actually lead to low-SES students' success included vision-building, holding high expectations for students, and providing support for teachers (Cotton, 2003; Firestone & Wilson, 1989).

In 2003, Hallinger published further researcher that confirmed the hypothesis that the demographics of school populations have a relationship to the type of leadership behavior exhibited. Hallinger (2003) concluded that "the school context does have an effect on the type of instructional leadership exercised by principals. . . school level as well as the socio-economic status of the school influence the requirements for and exercise of instructional leadership," (p. 334). Hallinger also concluded that principals in low SES schools tend to have targeted academic goals for all students where principals in high SES schools tend to have more broad-based goals such as all students achieving at high levels. This conclusion can be linked to Hallinger's more recent research (2005) that provided evidence for the importance of principals' shaping a school mission that communicates the belief that all students can learn

Two additional characteristics of low-SES schools were high teacher turnover and less mentoring and support for teachers. "Recent studies have shown a clear trend in teacher turnover: schools with lower student achievement levels, high poverty, higher rates of behavior problems, and more students of color have higher overall teacher

mobility rates," (Johnson, Berg, & Donaldson, 2005, p. 77). School leaders face significant challenges training and supporting teachers when their teachers have a high turnover rate. On the topic of teacher mentoring, Johnson et al. (2004) found that 91% of new teachers in high-income schools were assigned official mentors while only 65% of new teachers in low-income schools were afforded the same support through mentoring. More specifically, Johnson et al. (2004) concluded:

> Fewer teachers in low-income schools have mentors than their counterparts in high-income schools. Those who do have mentors are less likely to be paired with an experienced teacher in the same school, grade, or subject, and mentoring discussions-when they occur-are less likely to focus on issues of classroom teaching. Many new teachers lack the curricular guidance they desire, which has greater implications in low-income schools where students typically need greater instructional support in order to succeed in all subjects. (p. 15)

Schools with large populations of economically disadvantaged students were often led by newly appointed principals and often staffed by teachers with little experience who were not afforded the opportunity to benefit from mentoring relationships with experienced, successful teachers (Johnson et al., 2004).

The Relationship Between Principal Demographics and Principal Practices

Gates, Ringel, Santibanez, Ross, and Chung (2003) conducted a study to analyze the careers of school administrators. They found that the principal population was aging. The average age of principals increased by almost two years from 47.8 in 1988 to 49.3 in 2000. Additionally, first-time principals were older at the time of the study than 20 years prior. Thirty-eight percent of new principals were 40 or younger in 1988, while only 12% of new principals were under 40 in 2000. This research team also looked at principal exit rates over the past 20 years and found no increase in rates, which fall between 15% and 33% percent.

Similarly, Gates et al. (2003) found no evidence that principals in schools with high percentages of economically disadvantaged, minority, or limited English proficient students were leaving those schools at a higher rate. "On average, principals at schools with observable characteristics typically assumed to pose greater challenges were found to have the same level of experience as principals at other schools did," (p. xvi). However, principals in these schools did report having more problems than principals in schools with lower percentages of students in these subgroups.

Papa, Langford, & Wyckoff (2002) conducted a large-scale study of all principals and certified administrators in the state of New York and found that urban schools are more likely to have principals with less experience and that, "within New York City, schools where students performed poorly on standardized tests are much more likely to have less experienced principals and principals who received their bachelor's degrees from lower ranked colleges," (p. 2). They also found that the notion of a shortage of certified principals is unfounded in New York. In fact, the number of certified principals exceeds the number of current principalships by 50%.

Some researchers have investigated the difference in leadership styles between male and female principals. Before exploring those differences, it should be noted that the percentage of female principals typically was far below the percentage of female teachers and students. Even so, Gates et al. (2003) reported that the percentage of female principals had been increasing over the past 20 years, from 25% in 1988 to 44% in 2000. A 1999 study by Bulach, Booth, and Michael (1999) investigated supervisory behaviors

and the impact of gender on those behaviors. Their study was rooted in the researchbased context that principal behaviors towards teachers shape the school climate. Principal behaviors perceived as negative in terms of teacher interactions would produce a negative school climate while positive principal interactions with teachers would cultivate a positive school climate. Their research concluded that female principals were perceived by teachers as better at instructional leadership than male leaders. In her review of research literature, Cotton (2003) found that female principals have typically been reported in the research as stronger instructional leaders than their male counterparts, having better communication skills, exhibiting more flexibility, and creating more positive learning climates.

<u>Summary</u>

In an age of external accountability from federal and state government as well as increased scrutiny from an informed public, principals face tremendous pressure to ensure the academic achievement of students in their schools. Educational researchers have offered direction for school leaders aspiring to positively impact teacher practices and student achievement. Recommendations from researchers included principals' implementing a standards-based, coherent instructional program, providing teacher support and encouraging teacher collaboration, engaging families, and using assessment to improve student achievement and instruction. The above literature review addressed the aforementioned recommendations and gave special attention to research-based practices specific to principals of schools with a high percentage of economically disadvantaged students. Finally, the research revealing relationships between student

demographics and principal practices as well as connections between principal demographics and principal practices were explored.

In Chapter 3, a detailed description will be given of the methodology used to conduct this research study, including how participants were selected, how data was collected, which instrumentation was used, as well as how the research questions were addressed and what analysis would be conducted to answer the research questions. In Chapter 4, a summary of responses to the survey instrument will be provided as well as a review the results of the statistical tests run on the survey results. Additionally, responses given by principals during the follow-up phone interviews will be detailed. Finally, in Chapter 5, conclusions will be drawn about the results of the research study, and recommendations will be made for further research.

CHAPTER 3 METHODOLOGY

Introduction

To address the purpose of this study and answer its research questions, both quantitative and qualitative data had to be obtained from both the Florida Department of Education's online database and from individual principals who were selected and agreed to participate in this study. Following is a detailed description of the methods employed to gather necessary quantitative and qualitative data as well as the methods used to analyze the data collected. This chapter is divided into the following five sections: (a) selection of participants, (b) data collection, (c) instrumentation, (d) research questions, and (e) data analysis.

Selection of Participants

In order to achieve the primary purpose of this study, to examine the leadership practices of high school principals in the state of Florida who have improved student achievement in schools with a 30% or greater economically disadvantaged student rate, the schools who qualified for this study had to first be identified. To identify qualifying schools, school demographic data, as well as FCAT Reading achievement data, was accessed through the Florida Department of Education's online database at https://app1.fldoe.org/FCATDemographics/. The demographic data helped to narrow the search for schools. Only schools with a 10th grade population, during all three years from 2007 to 2009, which included at least 30% of students on free or reduced lunch, could qualify for the study.

Once the criteria for a 30% or greater economically disadvantaged student rate was met, then 10th grade FCAT Reading achievement data over the years from 2007 to 2009 were examined to determine which schools saw growth over the course of those years. Schools whose scores had improved at least five percentage points over the course of three years qualified for the study. This researcher wanted to make certain the percentage of increase was a viable increase and not just a fluctuation of one percentage point. Additionally, qualifying schools' percentage pass rate for economically disadvantaged students had to reach at least 30% by 2009 in order for the school to be considered for this study. This researcher chose 30% as the lowest percentage pass rate to ensure that all participating schools saw at least one third of the economically disadvantaged student population scoring proficient or above and avoid the problem of a school with only a 15% pass rate being held up as exemplary. Once all of the FCAT Reading achievement data had been examined for economically disadvantaged student populations at the target schools, 78 schools in 31 school districts qualified for participation in this study.

Purposive sampling proved the most appropriate sampling technique to ensure that all potential participants had successfully improved reading achievement of economically disadvantaged students at their schools. One flaw in this sampling procedure stemmed from the lack of guarantee that each principal served all three years, from 2007 to 2009. All principals surveyed did at least serve in the final year (2009) during which FCAT Reading data were considered for this study.

In the state of Florida, most school districts have formal processes in place for researchers requesting permission to conduct research. For the purpose of this study,

only the school districts with at least two qualifying schools were contacted to request research applications. The lengthy application process for each school district prohibited the time expenditure necessary to conduct research in districts where only one school qualified. Therefore, twelve school districts, all of which had at least two high schools qualifying for the study, were contacted with a request to conduct research. The following school districts contained at least two high schools that met the criteria for this study: Brevard, Broward, Columbia, Dade, Escambia, Hillsborough, Lee, Orange, Osceola, Palm Beach, Pinellas, and Polk.

Nine of the above twelve school districts had applications for conducting research, as well as instructions for submitting those applications posted online at their district websites. The applications for those nine school districts were completed and mailed during the first week of May 2010, between the dates of Monday, May 3rd and Friday, May 7th, 2010. The other three school districts were contacted via phone and/or email during that same week to determine how permission could be obtained to conduct research in their districts. Response times varied from the districts which did not post research applications online. Columbia County Public Schools responded that the two qualifying schools in their district could be contacted immediately; there was no need for a formal application to conduct research. After numerous phone calls and email contacts, district level personnel from Escambia County Public Schools gave consent after being emailed the survey instrument and a research proposal. Escambia County Public Schools did, however, require that their two, qualifying schools, not be contacted until the first of July, 2010. Even after numerous email and phone contacts, Osceola County Public Schools did not send their application for several months. Received and submitted in

September of 2010, the application to conduct research in Osceola County Public Schools was not approved until December of the same year.

Of the nine remaining school districts, two responded right away. Both Palm Beach County Public Schools and Pinellas County Public Schools denied the applications to conduct research. Responses from the seven other school districts trickled in over the next several months. Brevard, Hillsborough, Lee, Orange, and Polk County School Districts approved the research applications fairly quickly. Hillsborough County Public Schools, however, gave a narrow timeline for approval. Principals could only be contacted through June 15, 2010. Broward County Public Schools gave consent but required that their principals not be contacted until September 20th, 2010 – after their school year was well underway. Dade County Public Schools provided no response, and once contacted, revealed that they were under research blackout until the end of September and would not be considering any requests until that time. Dade County Public Schools did finally give consent in October and required that the study be completed by December 31, 2010. The following table displays a summary of the research application process and its results in each school district.

School District **Result of Application** Mode of Application to Response Rate of Contacted Conduct Research to Conduct Research Principals 0 out of 2: $0\overline{\%}$ Brevard Application posted online -Approved to be submitted via mail Broward Application posted online -Approved to contact 2 out of 10: 20% to be submitted via mail principals beginning September 20th, 2010 Columbia 2 out of 2: 100% No formal application -Approved permission granted from district personnel once requests were met 3 out of 17: 12% Dade Online application. Strict Approved to contact dates for considering principals via letter research applications. dated October 13, 2010 Escambia No formal application -Approved at end of 1 out of 2: 50% permission granted from June, 2010 district personnel once requests were met Hillsborough Application posted online -Approved with 0 out of 2: 0% to be submitted via mail narrow window to conduct research 2 out of 4: 50% Lee Application posted online -Approved to be submitted via mail Orange Application posted online -Approved 6 out of 7: 86% to be submitted via mail Osceola 1 out of 2: 50% Application emailed upon Approved request Palm Beach Application posted online -**Application Denied Application Denied** to be submitted via mail Pinellas Application posted online -**Application Denied Application Denied** to be submitted via mail Polk Application posted online -1 out of 2: 50% Approved to be submitted via mail

Table 1Results of applications to conduct research in targeted school districts

Data Collection

Both quantitative and qualitative data were collected to satisfy the purpose of this study. Quantitative data were collected through 50 questions of the survey instrument. Qualitative data were collected through three open-ended response questions included in the survey instrument as well as through follow-up phone interviews. The data collection procedures for both the quantitative and qualitative data will be addressed independently.

Quantitative

Quantitative data were collected through an online survey instrument. The survey instrument was developed for use with this study and granted IRB approval by UCF. The contents of the survey instrument are discussed in more detail in the section titled *Instrumentation*. Once the survey was approved, it was given to a statistics consultant to be transformed into an online survey so that potential participants could select a link sent via email, enter a secure username and password, and complete the survey online. Of the 53 questions included on the survey, 50 were quantitative.

On July 26, 2010, the first round of emails was sent out to the potential participants. A series of three email requests and one personal phone call were made between July 26, 2010 and October 12, 2010. The content of each email is detailed in Appendix D. Each of the three emails contained a letter of consent, describing to potential participants that by logging in to the online survey with their secure username and password, they would be giving consent to participate in the study. The email also guaranteed the confidentiality of participant responses. Only the researcher and statistics consultant would have access to the database of responses that could link specific responses to individual participants.

By the beginning of October, the response rate after two email requests was very low. Only five of the 31 potential participants had responded. Therefore, personal phone calls were made to the remaining 25 (permission had expired for two participants). The phone calls were followed immediately by another email. This push resulted in seven more responses, for a total of 12. Four of the twelve agreed to a follow-up phone interview.

Because of the late approval from Dade County Public Schools, the first communication was not sent out until the third week in October. The 17 potential participants were first contacted via regular mail with a personal letter requesting their participation. While email addresses from participants in other school districts were all found on either district or school-based web sites, the email addresses for principals in Dade County Public Schools were not readily publicized on web sites. Therefore, personal calls were made to the principals (or their secretaries) in order to obtain their email addresses. Next, an email containing a letter of consent and log in information was sent out.

By the time the Dade County Public School principals received their first email, they had already received a personal letter and phone call. When none of the 17 potential participants responded by completing the survey, another round of personal phone calls was made to all 17 principals and another email immediately followed. After one personal letter, two phone calls, and two emails, only two Dade County Public School principals had participated in the online survey with one principal agreeing to a follow-up phone interview. A third and final email resulted in one more principal completing the survey.

Osceola County Public Schools was the last to grant permission to contact principals. Approval was received in December of 2010. The two Osceola County Public School principals were called and sent a series of emails in January of 2011. One of the two principals completed the survey and agreed to participate in the follow-up phone interview. The other did not respond. At the conclusion of all attempts to contact potential principal respondents, 18 principals out of 50 potential respondents had completed the survey.

Qualitative

Once all of the online survey results had been received, the six principals who agreed to a follow-up interview were contacted by email to find a convenient time for the phone interview. Five of the six principals from varying school districts responded in a variety of time intervals with convenient times and contact information. The interview questions were emailed to the participants ahead of their scheduled interview appointment. At the time of the appointment, the participating principals were contacted via the phone number provided and asked 10 questions in the same order that had been emailed ahead of time. The phone interviews took between 30 and 40 minutes and sought to collect further qualitative data on the domains addressed by the survey instrument.

Instrumentation

In order to sufficiently answer the research questions posed by this study, an appropriate survey instrument should (1) question principals on research-based leadership practices, (2) collect principal demographic data, and (3) provide principals opportunity

to describe their practices. A survey instrument utilized during a large-scale research study in California in 2004 met these requirements. The California study titled, "Similar Students, Different Results: Why Do Some Schools Do Better," (Williams, Kirst, Haertel, et al., 2005) focused on principal leadership practices that impact student achievement. A team of researchers from EdSource, Stanford University, University of California, Berkeley and American Institutes for Research (AIR) developed the initial survey and analyzed the results.

The survey included questions from seven sub-domains: "implementing a coherent, standards-based instructional program; involving and supporting parents; using assessment data to improve student achievement and instruction; encouraging teacher collaboration and professional development; insuring instructional resources; enforcing high expectations for student behavior; and prioritizing student achievement," (Williams et al, 2005, p. 2). The survey used response scales from two to four possible responses such as Strongly Agree, Agree, Disagree, Strongly Disagree; For Every Student, For Some Student, Service Not Provided; and High Priority, Moderate Priority, Low Priority, Not a Priority. A few, open-ended questions required respondent to describe strategies that respondents felt had the most significant impact on student achievement.

Validity and reliability tests were conducted on the original survey instrument by EdSource. The researchers calculated reliabilities for each item and dropped any items with reliability below 0.25. From the remaining survey items, the researchers created "composite variables (scales) representing school qualities, policies or practices potentially related to academic success . . . these were referred to as sub-domains," (Williams et al, 2005, p. 11). Researchers then conducted an analysis of these domains to

determine internal consistency reliability. Finally, "the internal consistency of the set of items in each subdomain was checked by evaluating Cronbach's alpha and checking the dimensionality of each set using factor analytic techniques," (Appendix B). After developing the survey questions from the research literature on effective schools, "these surveys underwent review by academics who commented on their relevance to previous research; by state policymakers to ensure we had captured the state's policies accurately; and by K-12 educators to get feedback on the survey's focus and wording," (Williams et al, 2005, p. 9). After being reviewed, the revised surveys were then field tested with principals, and cognitive interviews were conducted to make certain the questions were asking what the researchers intended. The Executive Director of EdSource, Trish Williams, granted permission (see Appendix G) to modify the survey for use with secondary school principals and for relevance in the Florida accountability system.

While the original survey contained 36 multi-part questions totaling 442 items, the revised survey, for the purpose of this study, contained 53 total items. The revised instrument addressed four of the seven sub-domains measured in the original instrument. The subdomains addressed in the revised survey instrument included: Implementing a standards-based, coherent instructional program; Providing teacher support and encouraging teacher collaboration; Engaging families; Using Assessment to Improve Student Achievement and Instruction. The survey took approximately 15 to 20 minutes for respondents to complete.

Once the original survey instrument had been revised for use in this study, the revised instrument was administered in paper and pencil format to fifteen doctoral students in the field of educational leadership. A retrospective interviewing technique

(Dillman, Smyth, & Christian, 2009) was utilized. This technique asked respondents to complete the survey silently then respond to several debriefing questions after the completion of the survey. The interviewer observed the answering process and noted any mistakes or hesitations. Cognitive interview instructions and questions were provided to the participants and are included in Appendix H. After the cognitive interviews were completed, appropriate revisions were made to the survey instrument.

Following initial revisions to the instrument, the survey was reviewed by the researcher's doctoral committee and further revisions completed. Finally, the survey was digitally created using a free online service and was then emailed to ten sitting high school administrators. The administrators were asked to complete the survey, and then email the researcher with feedback as to the usability of the survey. After receiving feedback from the sample online survey, the researcher made final revisions to the instrument before applying for IRB approval from the IRB office at UCF. Approval was granted on April 13, 2010 and can be found in Appendix D. The final survey instrument can be found in Appendix A.

Once final revisions to the survey instrument had been completed, the survey questions were given to a research consultant who created the online survey so that responses would be stored in a secured database, accessible only to the researcher and the research consultant. Additionally, the consultant created unique usernames and passwords for each potential participant as well as a web link that participants used to access the survey. The web link and individual login information were included in each of the email requests sent to potential participants. Finally, the research consultant provided an email link and login to an administrative page that allowed the researcher to

track which participants had completed the survey and which participants agreed to participate in a follow-up phone interview.

The research questions were addressed by data collection from a number of sources. The following table shows the sources of data collected to answer each question.

Table 2Description of Data Collected to Answer each Research Question

Research Question	Data Collected
1. What practices do principals implement to	Survey Questions 1-43
improve student achievement in Florida high	Responses to follow-up phone interviews
schools with a 30% or greater economically	
disadvantaged rate?	
2. What is the relationship between principal	Survey Questions 1-53
demographics such as gender, ethnicity, and	
years of experience and practices in Florida	
high schools that have shown improved	
student achievement in a student population	
with 30% or greater economically	
disadvantaged rate?	
3. What is the relationship between student	Data collected from the Florida Department of
demographics and principal practices in	Education's online database at
Florida high schools that have shown	https://app1.fldoe.org/FCATDemographics/
improved student achievement in a student	
population with a greater than 30%	Survey responses to questions 1-40
economically disadvantaged rate?	

Data Analysis

The data collected through the survey instrument and through the follow-up phone interviews were analyzed to answer the research questions posed in this study. The first research question sought to determine which leadership practices were most commonly implemented by principals successful in promoting the achievement of disadvantaged student populations. Therefore, descriptive statistics, including means, standard deviations, and percentage agreement were run. Descriptive statistics were chosen as the method of analysis for this research question because the goal was not to establish significant differences in responses, but rather to establish a picture of the level of endorsement of each of the items within a group of practice. The qualitative data collected from the open-ended response questions included in the survey, as well as from the follow-up phone interviews, served to provide more detailed data regarding the individual practices that principals reported had the most impact on their ability to effect change in the reading performance of their disadvantaged student population.

The second research question, which asked about the relationship between principal demographics and principal practices, was addressed through three different statistical procedures, according to the demographic being investigated. The first demographic, gender, was addressed by running a Mann-Whitney test. The Mann-Whitney was selected because the goal was to search for differences between two groups in a continuous, but not necessarily normally distributed, variable. With an *N* of 18, it is difficult to prove normality, and therefore it was deemed most appropriate to run a test that was not based off the normal distribution. In this test, the independent variable was gender (male or female), and the dependent variable was the total average of all items

within the given practice (Implementing a Standards-Based Curriculum, Teacher Support, Engaging Families, and Assessment). In other words, the scores associated with the ten items within the given practice were summed and divided by 10 to obtain an average for the overall group of practices. Because the Mann-Whitney determines the difference in mean ranks between the values in the dependent variable of the two groups, a lower number in mean rank will equate to a lower (worse) score while a higher number in mean rank will equate to a higher (better) score.

The second demographic characteristic, ethnicity, was handled differently. The intent was to run inferential statistics on this variable; however, the variability was extremely low. Out of the 18 respondents, only 4 (22.2%) were not White; these respondents were Hispanic. In the interest of appropriate statistical testing, it was decided to simply describe this occurrence and not run testing for this demographic variable.

The third demographic characteristic, years of experience, was analyzed by a Spearman correlation between each of the different practices and years of experience. Separate analyses were run for each of the four practice types. The Spearman correlation was selected instead of Pearson because of the small sample size. Pearson is appropriate when the relationship of the variables can be proved to follow a normal distribution. In this case, with an N of 18, it is difficult to accurately prove normality, so the Spearman correlation (interpreted the same way as Pearson) was the more viable choice. For this test, the independent variable was years as principal (the sum of years as principal at current school and years as principal at previous schools). The dependent variable was the total average of all items within the given practice (Implementing a Standards-Based

Curriculum, Teacher Support, Engaging Families, and Assessment). In other words, the scores associated with the ten items within the given practice were summed and divided by 10 to obtain an average for the overall group of practices. A negative correlation would mean that as the years of serving as principal decrease, implementation of the practices addressed by this instrument increases. A positive correlation means that as years of serving as principal increase, implementation of the practices addressed by this instrument increase, implementation of the practices addressed by this instrument increase.

Research question 3 addressed the relationship between student demographics and principal practices in the schools studied. The Spearman correlation was run for three different student demographics: percentage of disadvantaged students at the school, percentage of minority students at the school, and percentage of disadvantaged students passing FCAT Reading. Again, the Spearman correlation was selected instead of Pearson because of the small sample size which resulted in difficulty proving a normal distribution. As with the statistical analysis run to answer the second research question, the independent variable was the specific demographic, and the dependent variable was the total average of all items within the given practice. In the following table, the statistical tests run to analyze data and answer each of the three research questions is summarized.

Research Question	Statistical Tests
What practices do principals implement to	Descriptive statistics including means, standard
improve student achievement in Florida high	deviations, and percentage agreements.
schools with a 30% or greater economically	
disadvantaged student rate?	
What is the relationship between principal	For the gender demographic, the Mann-
demographics such as gender, ethnicity, and	Whitney was run.
years of experience and practices in Florida	For ethnicity, the variability was extremely
high schools that have shown improved student	low; therefore, it was decided to simply
achievement in a student population with 30%	describe this occurrence.
or greater economically disadvantaged rate?	For years of experience, the Spearman
	Correlation was run.

Table 3 Summary of Statistical Tests Run to Address each Research Question

What is the relationship between student demographics and principal practices in Florida high schools that have shown improved student achievement in a student population with a greater than 30% economically disadvantaged rate?

For all three demographics: percentage of disadvantaged students at school, percentage of minority students at school, and percentage of students passing FCAT reading, the Spearman Correlation was run.

Summary

This section first described how participants were selected for this study. High schools with a 30% or greater disadvantaged student population who had improved scores on the 10th FCAT Reading at least five percentage points between 2007 and 2009 were considered. Districts with at least two high schools fitting the research requirement were contacted with requests to conduct research. Twelve Florida school districts met the research study requirements. Over the course of the next six months, research applications were submitted to qualifying districts, and upon approval, principals were contacted with a request to complete the survey instrument and possibly participate in a follow-up phone interview. The survey instrument consisted of 50 quantitative items and three open-responses, or qualitative, items. This chapter has also presented the three research questions addressed through this study as well as the data collected and statistical tests run in order to answer the research questions. In the subsequent chapter, the results of the data analysis will be presented.

CHAPTER 4 ANALYSIS OF DATA AND RESULTS

Introduction

The purpose of this study was to examine the leadership practices of high school principals in the state of Florida who have improved student achievement in schools with a 30% or greater economically disadvantaged student population. A second purpose was to examine principal and student demographics of the identified schools and determine what relationship, if any, existed between student demographics, principal demographics, and principal practices. The purpose of this study was achieved by capturing principal responses on a 53 item survey instrument as well as by conducting follow-up phone interviews with self-selected principals. This chapter provides the quantitative results of the data analysis for the three stated research questions provided by the first 50 items of the survey instrument as well as the qualitative results of the first research question provided by the open-ended survey responses and follow-up phone interviews.

This chapter will begin by presenting descriptive data about the students in the eighteen schools whose principals participated in this study. Next, research questions one through three will be answered through the analysis of the data collected and the results of appropriate statistical tests. Research Question One was addressed through descriptive statistics. Research Question Two was addressed through the results of both a Mann-Whitney test and a Spearman correlation. Research Question Three was addressed through the results of three separate Spearman correlations. Then, the results of the qualitative analysis of open-ended survey question 41 will be presented. Additionally, the results of the five principal interviews will each be presented and analyzed separately.

Finally, additional analysis of the open-ended responses to survey question 42 will be provided.

Descriptive Data

All of the schools targeted for this study showed a 30% or greater free and reduced lunch rate for the 2007-2009 school years. In Florida, the group of students on free and reduced lunch comprises the subgroup known as economically disadvantaged. 50 schools in 10 school districts comprised the approved target population for this study. 18 schools in 8 school districts participated in the study. For each of the 18 participating schools, Table 4 shows relevant data regarding student demographics in the participating schools as well as the size of the school and size of the school district. Data provided in Table 4 show the percent of economically disadvantaged (ED) students, the percent of minority (non-White) students, the total number of students in the school, as well as the school district. These data are displayed for each of the 18 schools participating in the study.

School	% ED	% Minority (non- White)	Total 10 th Graders in School	Total 10 th Graders in School District
1	37	63	147	18,324
2	39	56	544	18,324
3	46	29	414	609
4	47	20	180	609
5	64	93	618	24,806
6	53	91	745	24,806
7	47	91	823	24,806
8	45	47	474	2,705
9	45	36	423	5,483
10	44	36	387	5,483
11	48	66	464	12,505
12	41	62	669	12,505
13	55	80	955	12,505
14	40	59	701	12,505
15	52	83	828	12,505
16	46	70	680	12,505
17	43	48	483	3,748
18	46	48	449	6,320

Table 4Demographic Information of Participating Schools

Source: https://app1.fldoe.org/FCATDemographics/ Numbers represented for 2009 In summarizing the data from the above table, three of the eight school districts represented were considered large school districts; in other words, they had more than 10,000 students in the 10th grade. Additionally, nine of the 11 schools in the three large school districts were considered large schools, with more than 500 students in the 10th grade. None of the small school districts had schools with over 500 students in the 10th grade. All schools had an economically disadvantaged student rate above 30%. However, the rate of minority, or non-white, students spanned from 20% to 93%, which meant that the economically disadvantaged student rate did not necessarily correspond to the minority, or non-White student rate.

Student achievement data were collected for this study as a means of targeting schools where economically disadvantaged students were improving their reading achievement. The eighteen participating schools' economically disadvantaged subgroups of students showed growth on 10th grade FCAT Reading each of the three years between 2007 and 2009. Table 5 shows the percent of economically disadvantaged (ED) students who scored proficient and above on the 10th grade FCAT Reading test for each year from 2007 to 2009 as well as the change in percent proficient on FCAT Reading over the three years presented.

Table 5

School	% Proficient 2007	% Proficient 2008	% Proficient 2009	Change in % Proficient
1	75	88	95	20
2	39	49	51	12
3	37	41	42	5
4	38	50	53	15
5	38	47	54	16
6	45	49	52	7
7	41	51	48	7
8	39	39	45	6
9	35	43	54	19
10	42	43	51	9
11	26	33	38	12
12	36	37	48	12
13	27	35	39	12
14	32	42	43	11
15	39	44	45	6
16	33	43	55	22
17	29	36	45	16
18	28	33	40	12

Percentage of economically disadvantaged students scoring proficient and above on FCAT Reading from 2007 to 2009

Source: https://app1.fldoe.org/FCATDemographics/

In summarizing the demographic data from the above table, all schools represented showed growth in the percentage of economically disadvantaged (ED) students scoring proficient and above on 10th grade FCAT Reading over a three year period from 2007-2009. The percentage of ED students scoring proficient in 2007 ranged from 26% to 75% while the percent of ED students scoring proficient in 2009 ranged from 38% to 90%. The change in percentage of students scoring proficient and above ranged from 5% to 22%.

Testing the Research Questions

Each of this study's three research questions was tested using data collected from the 53 item survey instrument. In the following section, each research question will be addressed separately and the results of the statistical procedures utilized to answer each question will be presented.

Research Question 1: What practices do principals implement to improve student achievement in Florida high schools with a 30% or greater economically disadvantaged rate?

This research question was addressed through descriptive statistics, including means, standard deviations, and percentage agreement. Descriptive statistics were chosen as the analytical method for this question, as the aim was not to establish significant differences but rather to get a view of the level of endorsement of the particular items within each subgroup of practices. The results will be presented according to each subgroup of survey questions which correspond to research-based effective principal practices.

The first subgroup of survey questions / principal practices asked respondents about implementing a standards-based instructional program. Table 6 contains the means, standard deviations, and the percentage of agreement (agree and strongly agree) for each of the 10 items in this section. The minimum score for each item was 1 (strongly disagree) and the maximum was 4 (strongly agree).

Table 6

Survey Item	% Agreement	М	SD
Clear vision on student learning outcomes	100.0	3.89	0.32
Set high standards for student learning	100.0	3.83	0.38
Formally evaluate teachers	100.0	3.78	0.43
Well-defined plans for instructional improvement communicated	100.0	3.72	0.46
Regularly assess effectiveness of improvement plans	100.0	3.67	0.49
Expect classroom instruction to be guided by state standards	100.0	3.67	0.49
Implement, monitor, adjust school plan addressing achievement gaps	100.0	3.67	0.49
Act as knowledgeable source on standards and curriculum	100.0	3.61	0.50
Conduct weekly classroom walk-throughs	94.4	3.44	0.62
Model exemplary instructional strategies	83.3	3.11	0.68

Descriptive statistics for Implementing a Standards-Based Instructional Program (N=18)

In the descriptive statistics presented in Table 6, all means were 3 or above (agree). The highest mean responses were associated with Clear vision on student learning outcomes (M = 3.89, SD = 0.32) and Set high standards for student learning (M = 3.83, SD = 0.38). The lowest mean responses were associated with Conduct weekly classroom walkthroughs (M = 3.44, SD = .062) and Model exemplary instructional

strategies (M = 3.11, SD = 0.68). All items other than the ones mentioned above as having the lowest mean responses showed 100% of the respondents with a minimum response of Agree.

The second subgroup of survey questions, which corresponded to a group of principal practices, was *Providing Teacher Support and Encouraging Teacher Collaboration*. Ten questions relating to this topic were included in the survey. Table 7 presents the results of the descriptive statistics for each question. It contains means, standard deviations, and the percentage of agreement (Agree and Strongly Agree) for each of the 10 items in this section. The minimum score for each item was 1 (Strongly Disagree) and the maximum score was 4 (Strongly Agree).

Table 7
Descriptive Statistics for Providing Teacher Support and Encouraging Teacher
Collaboration $(N = 18)$

Survey Item	% Agreement	М	SD
Expect teachers to take responsibility for student achievement	94.4	3.83	0.71
Expect teachers to be committed to improving student achievement	94.4	3.78	0.73
Involve teachers in using data to make important school decisions	94.4	3.78	0.73
Expect teachers to collaborate with and support struggling teachers	94.4	3.72	0.75
Provide and participate in professional development	94.4	3.67	0.77
Expect teachers to communicate to students' education improvement	88.9	3.56	0.98
Challenge faculty to review and implement current research	88.9	3.44	0.86
Provide teachers with adequate classroom materials	88.9	3.39	0.85
Remove teachers not committed to improving student achievement	88.9	3.33	0.84
Prompt teachers to discuss assumptions about poverty status	66.7	2.89	0.90

In the descriptive statistics presented in Table 7, all means were 3 or above (Agree) other than the lowest rated item, Prompt teachers to discuss assumptions about poverty status (M = 2.89, SD = 0.90). The highest mean responses were associated with Expect teachers to take responsibility for student achievement (M = 3.83, SD = 0.71) and Expect teachers to be committed to improving student achievement (M = 3.78, SD = 0.71) and Expect teachers to be committed to improving student achievement (M = 3.78, SD = 0.73). The lowest mean responses were associated with the aforementioned Prompt teachers to discuss assumptions about poverty status and Remove teachers not committed to improving student achievement (M = 3.33, SD = 0.84). The top four items featured 94.4% of the respondents having a minimum response of Agree; the following four had slightly lower agreement rates of 88.9%. The lowest-rated item had an agreement level of 66.7%.

The third subgroup of survey questions, which corresponded to a group of principal practices, was *Engaging Families*. Ten questions relating to this topic were included in the survey. Table 8 presents the results of the descriptive statistics for each question. It contains percentage of endorsement for each of the 10 items in this section. This was a binary item (Yes or N0), so means and standard deviations would not serve any meaningful purpose. Instead, the percentage of those answering Yes to the item provides the most information.

Table 8Descriptive Statistics for Engaging Families (N = 18)

Survey Item	% Endorsed
Maintain and monitor outreach efforts to families	100.0
Provide services to support family participation	100.0
Organize support and educative experiences	100.0
Expect teachers to regularly communicate student progress	100.0
Assign staff to facilitate family involvement	94.4
Provide translator for families at school meetings and conferences	94.4
Participate in family-teacher student conferences	88.9
Facilitate opportunities for family education classes	88.9
Ensure families are engaged in subject-area events	83.3

In the results presented in Table 8, four items featured 100% endorsement: Maintain and monitor outreach efforts to families; Provide services to support family participation; Organize support and educative experiences; and Expect teachers to regularly communicate student progress. The lowest endorsed item was Ensure families are engaged in subject-area events, which had 83.3% of the sample answering Yes.

The fourth subgroup of survey questions, which corresponded to a group of principal practices, was *Using Assessment to Improve Student Achievement*. Ten questions relating to this topic were included in the survey. Table 9 presents the results of the descriptive statistics for each question. It contains means, standard deviations, and

the percentage of weekly usage for each of the 10 items in this section. The minimum score for each item was 1 (Never), and the maximum was 5 (Weekly), with values of Once a Year, Each Semester, and Quarterly in between.

Survey Item	% Weekly	М	SD
Expect staff to adjust instruction based on various data	50.0	4.22	0.94
Ensure implementation of progress monitoring instruments	38.9	4.17	0.86
Independently review assessment data	27.8	4.11	0.76
Review assessment data with teachers in small groups	33.3	4.06	0.80
Use various assessment data to follow up on student progress	16.7	4.06	0.54
Discuss assessment practices and expectations with teachers	33.3	4.00	0.97
Use assessment data to help teachers set instructional goals	27.8	3.56	1.20
Plan professional development opportunities to explore assessment	11.1	3.56	0.98
Review assessment data with individual teachers	16.7	3.44	1.10
Use assessment data to determine professional development	5.6	3.22	0.94

Table 9 Descriptive Statistics for Using Assessment to Improve Student Achievement (N = 18)

Descriptive statistics run for the fourth subgroup of survey questions revealed that six out of the ten items had a mean of 4 or above (quarterly to weekly), while the other four items had a mean between 3 and 4 (each semester to quarterly). The highest mean responses were associated with Expect staff to adjust instruction based on various data (M = 4.22, SD = 0.94) and Ensure implementation of progress monitoring instruments (M= 4.17, SD = 0.86). The lowest mean responses were associated with Review assessment data with individual teachers (M = 3.44, SD = 1.10) and Use assessment data to determine professional development (M = 3.22, SD = 0.94). The top item Expect staff to adjust instruction based on various data had 50% of the respondents claiming to utilize the practice weekly, whereas the lowest-rated item, Use assessment data to determine professional development, only had 5.6% of the respondents claiming weekly use.

Research Question 2: What is the relationship between principal demographics such as gender, ethnicity, and years of experience and practices in Florida high schools that have shown improved student achievement in a student population with 30% or greater economically disadvantaged rate?

The second research question was posed with the intent of finding whether a relationship existed between principal demographics and principal practices for the participants of this study. Data on three principal demographics, gender, ethnicity, and years of experience, was collected through the survey instrument. The relationship between each of the three aforementioned demographics and the principal practices identified through the first 40 questions of the survey instrument will be addressed separately.

The Mann-Whitney test was chosen to analyze any potential relationship between gender and principal practices. The Mann-Whitney test was selected because the goal was to search for differences between two groups (male and female) in a continuous, but not necessarily normally distributed, variable. With an N of 18, it is difficult to prove normality, and therefore it was deemed most appropriate to run a test that was not based off the normal distribution. The independent variable for this test was gender, male or female. The dependent variable was the total average of all items within each of the four subgroups of survey questions (Standards, Teacher Support, Engaging Families, and

Assessment). The scores within each subgroup of principal practices were summed and divided by 10 to obtain an average for the overall group of practices. The Standards subgroup of survey items had a minimum score of 1 and a maximum score of 4. The Teacher Support subgroup had a minimum score of 1 and a maximum score of 4. The Engaging Families subgroup had a minimum score of 0 and a maximum score of 1. The Assessment subgroup had a minimum score of 1 and a maximum score of 5. Because the Mann-Whitney test determines the difference in mean ranks between the values of the dependent variable in two groups, a lower number in mean ranks equates to a lower, or worse, score while a higher number in mean ranks equates to a higher, or better, score. The results of the Mann-Whitney test for differences in practice by gender are displayed in Table 10.

Practice	Male M_r (n = 7)	Female M_r (n = 11)	Z	р
Standards	9.29	9.64	-0.14	.89
Teacher Support	6.21	11.59	-2.11	.04*
Engaging Families	8.79	9.95	-0.52	.60
Assessment	9.29	9.64	-0.14	.89

Table 10
Mann-Whitney Test for Differences in Practices by Gender $(N = 18)$

Note. Standards = Implementing a Standards-Based Program. Teacher Support = Providing Teacher Support and Encouraging Teacher Collaboration. Assessment = Using Assessment to Improve Student Achievement.

p* < .05. *p* < .01.

The results of the Mann-Whitney test are as follows. For the Standards subgroup, no significant difference was found in mean rank (Z = -0.14, p = .89). The males ($M_r = 9.29$) did not score significantly lower than females ($M_r = 9.64$). For the Teacher Support subgroup, a significant difference was found in mean rank (Z = -2.11, p = .04). The males ($M_r = 6.21$) scored significantly lower than the females ($M_r = 11.59$). For the Engaging Families subgroup, no significant difference was found in mean rank (Z = -0.52, p = .60). The males ($M_r = 8.79$) did not score significantly lower than females ($M_r = 9.95$). In the Assessment subgroup, no significant difference was found in mean rank (Z = -0.14, p = .89). The males ($M_r = 9.29$) did not score significantly lower than females ($M_r = 9.64$).

For the ethnicity demographic, the intent was to run inferential statistics on this variable; however, the variability was extremely low. Out of the 18 respondents, only 4 (22.2%) were not White; these respondents were Hispanic. In the interest of appropriate statistical testing, it was decided to simply describe this occurrence and not run testing for this demographic variable.

For the years of experience demographic, the Spearman correlation was selected to determine if a relationship existed between years of experience and principal practices. The Spearman correlation was selected instead of Pearson because of the small sample size. Pearson is appropriate when the relationship of the variables can be proved to follow a normal distribution. In this case, with an N of 18, it was difficult to accurately prove normality, so the Spearman correlation (interpreted the same way as Pearson) was the more viable choice. For this test, the independent variable was years of experience. This variable was formed by summing the Years as Principal at Current School with the Years as Principal at Other Schools. The independent variable was the total average of all items within the given practice (Standards, Teacher Support, Engaging Families, and Assessment). A negative correlation means that, as years as principal decrease, standards increase. A positive correlation means that, as years as principal increase, standards increase as well. The results of the Spearman correlation are represented in Table 11.

Table 11 Spearman Correlations Between Practices and Years as Principal (N = 18)

Practice	r	р
Implementing Standards-Based Program	37	.13
Providing Teacher Support	17	.50
Engaging Families	37	.13
Using Assessment to Improve Achievement	.14	.58

Note. Providing Teacher Support = Providing Teacher Support and Encouraging Teacher Collaboration. *p < .05. **p < .01.

The results of the Spearman correlation are as follows. For the Standards subgroup, no significant correlation was found (r = -.37). The correlation was negative. For the Teacher Support subgroup, no significant correlation was found (r = -.17, p = .50). The correlation was negative. For the Engaging Families subgroup, no significant correlation was found (r = -.37, p = .13). Again, the correlation was negative. For this subgroup, the correlation was positive.

Research Question 3: What is the relationship between student demographics and principal practices in Florida high schools that have shown improved student achievement in a student population with a greater than 30% economically disadvantaged rate?

The third research question was posed with the intent of finding whether a relationship existed between student demographics and principal practices for the participants of this study. Data on three student demographics, percentage of economically disadvantaged (ED) students, percentage of minority students, and percentage of ED students scoring proficient and above on the 10th grade FCAT Reading test, was collected from the Florida Department of Education FCAT Demographics database at https://app1.fldoe.org/FCATDemographics/. The relationship between each of the three aforementioned student demographics and the principal practices identified through the first 40 questions of the survey instrument will be addressed separately.

The relationship between the percentage of economically disadvantaged students, as defined by the percentage of students who qualify for free and reduced lunch, and principal practices was addressed by running a Spearman correlation. Again, the Spearman correlation was selected because, with an *N* of 18, the data could not be expected to be normally distributed. In this test, the first independent variable was the percentage of economically disadvantaged students at the school while the second independent variable was the total average of all items within each subdomain of principal practices (Standards, Teacher Support, Engaging Families, and Assessment) represented in the survey instrument. A negative correlation meant as the percentage of disadvantaged students decreased, the standards increased. A positive correlation meant

that as the percentage of disadvantaged students increased, the standards increased as well. The results of the Spearman correlation are presented in Table 12.

Table 12Spearman Correlations Between Practices and Percentage of ED Students (N = 18)

Principal Practice	r	р
Implementing Standards-Based Program	40	.10
Providing Teacher Support	70	.001**
Engaging Families	26	.29
Using Assessment to Improve Achievement	02	.93

Note. Providing Teacher Support = Providing Teacher Support and Encouraging Teacher Collaboration. *p < .05. **p < .01.

The results of the Spearman correlations were as follows. For the Standards subdomain of questions, there was no significant correlation (r = -.40, p = .10). The correlation was negative. For the Teacher Support subdomain of questions, there was a significant negative correlation (r = -.70, p < .001). In other words, as percentage of economically disadvantaged students in the school decreased, the higher principals rated Teacher Support and related leadership behaviors as important. For the Engaging Families subdomain of questions, there was no significant correlation (r = -.26, p = .29). The correlation was negative. For the Assessment subdomain of questions, there was no significant correlation (r = -.02, p = .93). The correlation was negative but essentially zero.

The second student demographic addressed by Research Question 3 was percentage of minority students at the school. Again, the Spearman correlation was used because, with an N of 18, it would be difficult to prove normality so it was necessary to run a test not based off of the normal distribution. The first independent variable was the percentage of minority students at the school while the second independent variable was the total average of all items within each subdomain of principal practices. See Table 13 for the results of the Spearman correlation.

Table 13 Spearman Correlations Between Practices and Percentage of Minority (non-White) Students (N = 18)

Principal Practice	r	р
Implementing Standards-Based Program	.03	.91
Providing Teacher Support	24	.33
Engaging Families	.02	.93
Using Assessment to Improve Achievement	.06	.82

Note. Providing Teacher Support = Providing Teacher Support and Encouraging Teacher Collaboration.

*p < .05. **p < .01.

In all four of the Spearman correlations run between percentage of minority students and the four subdomains of principal practices, no significant correlation was found. With the Standards subdomain, the correlation was positive but essentially zero. For the Teacher Support subdomain, the correlation was negative. For both the Engaging Families and Assessment subdomains, the correlations were positive but negligible. The third and final demographic explored through Research Question 3 was the percentage of economically disadvantaged (ED) students scoring proficient or above on the 10th grade FCAT Reading test. A Spearman correlation was again used to determine if a relationship existed between the percent of ED students scoring proficient on FCAT Reading and the four subdomains of principal practices. For this test, the first independent variable was the percentage of 10th grade students receiving free or reduced lunch who passed 10th grade FCAT Reading, and the second independent variable was the total average of all items within a subdomain of principal practices. The results of the correlations are found in Table 14.

Table 14

Spearman Correlations between Practices and Percentage of Economically Disadvantaged Students Scoring Proficient on FCAT Reading (N = 18)

Practice	r	р
Implementing Standards-Based Program	10	.69
Providing Teacher Support	.43	.07
Engaging Families	.14	.57
Using Assessment to Improve Achievement	.03	.92

Note. Providing Teacher Support = Providing Teacher Support and Encouraging Teacher Collaboration.

*p < .05. **p < .01.

The results of the Spearman correlations showed that there was no significant correlation between the percentage of disadvantaged students scoring proficient or above on FCAT Reading and any of the four subdomains of principal practices addressed through the survey instrument. For the Standards subdomain, the correlation was negative. For all three other subdomains, Teacher Support, Engaging Families, and Assessment, the correlations were positive, but not positive enough to be considered significant.

Qualitative Analysis

Although all three research questions could be answered through analyzing the quantitative data collected through the survey instrument and an online, FCAT demographics database, a more complete picture of effective principal practices was gained through adding an analysis of qualitative data collected through open-ended response questions on the survey instrument and follow-up phone interviews. This section will first present results of the open-ended survey item 41 which asked principals to identify the practices they felt had the most impact on student achievement. Then, the results of the five principal interviews will be presented.

Open-Ended Responses to Survey Questions

Question 41 of the survey instrument asked respondents to identify the three most effective things they had done to improve student achievement. Through this question, respondents had opportunity to share a leadership practice not addressed through the survey instrument. This question also gave opportunity for respondents to underscore the importance of some of the principal practices that were included in the survey instrument. The responses of all 18 survey respondents are included in Table 15. Each response was labeled according the appropriate subdomain if the practice listed fit into that subdomain. Responses labeled SD 1 represented a practice in the first subdomain of principal practices: Implementing a standards-based, coherent instructional program. Responses labeled SD 2 represented practices in the subdomain of Providing teacher support and encouraging teacher collaboration. Responses labeled SD 4 represented principal practices in the subdomain of Using assessment to improve student achievement and instruction. There were no responses that fell into the category of subdomain 3: Engaging families. Practices that did not fit into one of the subdomains of principal practices addressed through the survey instrument were not labeled.

Table 153 Most Effective Practices that Improve Student Achievement

3 Most Effective Practices that Improve Student Achievement				
1	Formed 9th grade academies	Mandatory FCIM instruction: SD 1	Leveling of students based on FCAT scores: SD 4	
2	Prompt teachers to think critically about data: SD 4	Formed Curriculum Council for shared decision making: SD 2	Focus on research based instructional strategies: SD 1	
3	Progress monitoring: SD 4	Data chats with students: SD 4	Professional development: SD 2	
4	Maintain vision that all students can learn: SD 1	Focus on data driven decisions: SD 4	Professional development for teachers: SD 2	
5	School plan: SD 1	Instructional calendar: SD 1	Progress monitoring plan: SD 4	
6	Establish collaborative teacher groups: SD 2	Focus teaching staff on assessment data: SD 4	Inject relevancy into curriculum: SD 1	
7	Insist teachers use data to drive instruction: SD 4	Insist teachers work collaboratively: SD 2	Walk classrooms frequently: SD 1	
8	Visibility in classrooms: SD 1	Teacher accountability for instruction: SD 1	Progress monitoring: SD 4	
9	Professional Learning Communities for teachers: SD 2	Common lesson plans & assessments through PLCs: SD 2	Learning Focused Strategies (Max Thompson): SD 1	

10	Data Analysis: SD 4	Teacher Assessment Practices: SD 4	Use of "common board" in classrooms: SD 1
11	Standards based instruction: SD 1	Aligned curriculum: SD 1	Use of Pinnacle analytics: SD 4
12	Focus on academics: SD 1	Ensure resources are available: SD 2	Build relationships
13	Rigor and Relevance frameworks in place: SD 1	Academic check-ups for communication: SD 4	Develop reading culture and higher order thinking
14	Professional Development: SD 2	Personalization	Data driven decisions: SD 4
15	Meet with ayp groups about assessment data: SD 4	Work with teachers on data interpretation SD: 4	Provide teachers resources they need: SD 2
16	Assign teachers based on their data	Monitor student progress: SD 4	Conduct data chats with teachers: SD 4
17	Create a culture of post secondary importance: SD 2	Provide staff development: SD 2	Meet with students to discuss progress & postsecondary options: SD 4
18	Provide teacher development on using data with students: SD 4		ha aukdomain into ukiak saak

Note: SD refers to the subdomain of principal practices and represents the subdomain into which each principal practice was categorized. SD 1 refers to *Implementing a Standards-Based, Coherent Instructional Program;* SD 2 refers to *Providing Teacher Support and Encouraging Teacher Collaboration;* SD 4 refers to *Using Assessment to Improve Student Achievement and Instruction.*

Most of the above responses provided by survey respondents were categorized into the four subdomains of principal practices addressed through the survey instrument. The results were as follows: Fifteen responses fell under the subdomain of *Implementing a Standards-Based, Coherent Instructional Program.* Twelve of the responses fell under the subdomain of *Providing Teacher Support and Encouraging Teacher Collaboration.* 20 of the responses fell under the subdomain of *Using Assessment to Improve Student Achievement and Instruction.* No responses fell under the final subdomain of *Engaging Families.* The responses that could not be categorized under the four subdomains addressed through the survey instrument were as follows: formed 9th grade academies, build relationships, personalization, and assign teachers based on their data.

Principal 17 Interview

Principal 17 leads a midsized, suburban school of roughly 2,000 students. Fiftytwo percent of the students are White, 34% are Hispanic, and 5% are Black. This is a Title 1 school with 40% of the students receiving free or reduced lunch. This school has a long history; it was first established in 1909, and the principal spends much time promoting the school's vision to different community groups, such as Rotary and the Chamber of Commerce, in order to get support from all stakeholders.

One of Principal 17s more notable principal practices is her philosophy towards classroom observations. She stated, "I like to hear what's going on in the room. I like to have a feel for what's going on in the room. I ask students what they're learning. I listen to questions, and I like to hear dialogue among kids." She continued to explain that she looks for more than posted objectives or word walls. She looks for how teachers transition knowledge to students, and she looks for evidence of student ownership of

knowledge. "Normally, my discussion with teachers centers around what I hear. Anyone could read a resource book and have all the qualities in a very unproductive room. How do you get kids to do the work?"

Principal 17 also expressed very distinct beliefs about distributing leadership at her school and getting all teachers on board to ensure the success of all students. Her reading teachers are engaged in a Professional Learning Community that spends considerable time addressing how to get their students more engaged. They schedule Saturday Academies for struggling students and offer ACT preparation twice a week after school. When students experience success on ACT, they make a big deal of the success, bringing in balloons to recognize students. Principal 17 bragged, "My teachers are fabulous and take ownership!" Principal 17 went on to explain that she makes certain every teacher gets a piece of the pie when it comes to working with struggling students. "FCAT 9th and 10th is not for new teachers. Advanced Placement is not for teachers who have been here 25 years. Everyone has a piece. Every teacher is teaching in core academics and FCAT testing." She said the transition to this way of assigning teachers was initially tough, but now the teachers get it. She needs the best teachers with the students who need the most. Principal 17 also distributes leadership roles. She does not leave any one person as a department chair for more than two years, and she always has someone who is being mentored for a leadership role.

Principal 18 Interview

Principal 18 leads a school with just over 1,500 students. The school has a Black population of 33%, and a Hispanic population of 14%, with most of the Black students from Haitian Creole descent. Forty-six percent of the students receive free or reduced

lunch. Being the only high school in its city, the school is given urban designation; however, the host city has just over 33,000 residents.

Principal 18 attributes much of her success with her disadvantaged student population to her efforts towards building relationships with her students. She stated, "I'm lucky because the majority of our kids like me. They like me because I listen to them. I'm always at lunch duty so we talk; if they need private space, I call them up." She relayed a story of when, as an assistant principal, she was applying for the position of principal. Her students campaigned for her, printing stickers to wear to support her selection as principal. She also described how she engages students in helping other struggling students succeed. Just this year, she asked a group of students who passed FCAT Reading Retakes to put together a presentation about what their high school could do to help struggling students pass FCAT. She commented, "I want to hear from the students . . . what we can do to help them."

Upon being selected to her position, Principal 18 had two issues she felt needed to be addressed immediately in order to help students focus on their learning. Those issues were attendance and discipline. In addressing attendance, she assigned an attendance dean to work on unexcused absences among lower quartile students. She also assigned mentors to chronically absent and struggling students. Even administrators got involved; each administrator was assigned 10 students in the lower quartile to mentor. Principal 18 also addressed discipline by taking a tough stance on fighting. She enforced a mandatory 10 day suspension for the first fight and alternative placement for the second. In her first year as principal, she reduced fighting incidents from 67 during the previous year to 20.

A final area where Principal 18 felt particularly successful was through implementing Professional Learning Communities by subject area and prompting teachers to create common lesson plans and assessments. She also recruited two of her expert math teachers to teach lower quartile students. In one year, those two teachers averaged 79% of their students experiencing learning gains on FCAT math. Lastly, Principal 18 implemented a Fast Forward lab for students needing reading remediation. The program, in its second year of implementation, addressed gaps in students' previous reading knowledge.

Principal1 Interview

Principal 1 leads a magnet school in one of Florida's largest school districts. The school itself has a relatively small, but diverse, student population. Thirty-eight percent of its 600 students are black and 23% are Hispanic. The school has consistently been given an A rating and boasts accolades such as one of the top 15 high school in Florida, Silver Medal with *US News & World Report*, nationally recognized Model School, and High School for Urban Success. Principal 1 expressed the school's vision as preparing students to succeed in a global high school. She stated that, by the time students leave her school, they have a college ready diploma and the possibility of a career; they are ready for the world.

Principal 1 stated that at her school, teachers are forever progress monitoring. They have benchmark assessment tests that predict proficiency on FCAT. Ninety-three percent of their students tested college-ready in reading last year. They make certain every student takes College Board tests. They have also implemented a literacy initiative called Reading Explosion. Teachers present articles related to content and develop

FCAT and SAT style questioning. They do 11 sessions of that each year. Also, they implement a PSAT prep Reading Explosion before the PSAT each Fall. They offer reading tutorial, SAT/ACT prep, and academic support after school for all students.

Principal 1 relies heavily on Professional Learning Communities (PLCs) to advise her on school policy, make recommendations for curriculum development, and mentor students. She meets with the full community, or entire staff, to discuss schoolwide issues and any other issues teachers wish to bring to the table. She has grade level PLCs that focus on monitoring student effort. Her content area communities work on vertical teaming, and her five different R and R (Review and Revise) committees examine school policy. Most recently, she started cohort groups to support 9th and 10th graders in a different way. These advisories meet once a month for 40 minutes and provide mentoring to students.

Principal 7 Interview

Principal 7 leads a school of roughly 3,000 students in the most densely populated school district in the state of Florida. Eighty percent of the students in this school are Hispanic, and just over 50% receive free or reduced lunch. When asked how she promotes the school's vision, Principal 7 replied, "I walk the talk. I do what I believe in. It's published everywhere. We can be an A school, and I believe it." She also believes in her administrative team having a visible presence in their classrooms. Principal 7 is a Classroom Walkthrough trainer, so she has trained all of her administrators. They designed forms to fit their school context, and they bring those forms to the table once a week to discuss their observations.

Principal 7 makes certain her administrators and teachers are well versed in using data to inform instruction. Her teachers refer to a collaboration web site to pull reports. The administrators have data chats with teachers, and the teachers have data chats with students and parents. Principal 7 notes that her teachers are very data savvy. "We can ask them who the lowest 25% are, and they are expected to know it." Principal 7 has charged her social studies teachers with FCAT Reading preparation, in part because the FCAT 2.0 reading selections will come from public domain. Social studies teachers are also charged with taking kids to computer labs to use the Reading Plus program.

Principal 7 has a strategic plan for promoting literacy. Her reading teachers all plan together; her writing teachers have the same focus. They have a word of the day and an idiom of the week. Core classes get all nonfiction magazines, and they put together readings and questions for each department so that every subject has an FCAT 2.0 action plan. Principal 7 finds ways for teachers in all departments to plan together. In math, they have common assessments. In 9th and 10th grade classes, core teachers all have a crunch time calendar. About her teachers, she commented, "They're on the same page, and the students know it."

Principal 7 faces a difficult challenge in a school of 3,000 students with an administrative team that totals four people (the principal and three assistants). One way she overcomes the challenge of communicating with her whole school community is by maintaining a blog. She takes pictures and gets students to check the blog to look for their pictures. She admits that parent involvement is not big at her school; however, she gets lots of hits on her blog, so her hope is that they are staying in touch virtually.

Principal 15 Interview

Principal 15 leads an urban school of over 3,000 students in another of Florida's large school districts. Fifty-seven percent of the school's students are Hispanic; 17% are White; and 14% are Black. Fifty-two percent of students receive free or reduced lunch. In her school, Principal Five promotes a vision of student success. Her vision for the school is that every student is going to graduate and go on to a future. She achieves this vision through collaboration. She builds teacher capacity, keeping teachers positive, and hopes that her teachers will do the same thing with their students.

Principal 15 drives all teachers to look at data to determine student needs. She recently implemented benchmark testing through Edusoft. Her reading teachers give diagnostic tests through Reading Edge and progress monitoring through FAIR testing. She commented that her reading teachers are very comfortable looking at data. They look at student strengths and weaknesses to determine what they can do to help. The assistant principal over reading attends all their meetings to stay apprised of and provide input into their work. This school is a small learning communities school, and as such, the principal rejects faculty meetings with 200 teachers. She promotes smaller group setting and prompts her assistant principals to provide Professional Development on such topics as disaggregating data. She believes administrators have to walk the talk. Her administrators meet with teachers individually to review their student data, and she expects her teachers to meet individually with students to review their data.

Principal 15 values personal relationships and prefers to manage her teachers by walking around and having face to face conversations. With her administrative team, she developed a classroom walkthrough form appropriate to her school. Her team uses the

forms, which sometimes lead to more conversations with teachers as well as recommendations for professional development. Principal 15 has also benefitted from the feedback provided by a district walkthrough team. They have visited her school several times throughout the school year and provided feedback to inform their instructional goals. As a result of their work with the district walkthrough team, her administrative team has written an action plan that focuses on three things: higher order thinking, implementation of common boards (posting lesson objectives, standards, and assignments), and Response to Intervention (RTI).

Principal 15 promotes teacher collaboration through Professional Learning Communities (PLCs) and through the implementation of Lesson Study as a way to structure PLCs. Every Wednesday, teachers engage in some sort of collaborative work, whether through small learning communities, PLCs, or Lesson Study teams. This principal also promotes schoolwide literacy through an instructional focus calendar. She writes a Monday Message to faculty each week, and she uses that message to keep a focus on literacy. She is most proud of her promotion of student independent reading by exposing students to the Florida Teen Reads books. Each small learning community chooses a book for all students to read. In the spring of each year, they have a round table event for many of the books on the Teen Reads list. She has personally participated in the round table event and found her book discussions with students among the most rewarding of her activities for the school year.

Additional Analyses

Beyond the results presented in the above section, there is one additional piece of data that adds another layer of insight into what makes a principal successful in leading a school with a large population of disadvantaged students. These data were collected through respondents' open-ended responses to survey question 43. That question asked, "What life experiences have influenced your work with economically disadvantaged students?"

Based on their responses to the above question, 11 of the 18 respondents either grew up economically disadvantaged or had close family who struggled with poverty. All of the remaining 7 respondents claimed that either their personal work with economically disadvantaged students or their professional training towards working with disadvantaged students contributed to their success. Two respondents specifically referenced the Ruby Payne training; two others came from immigrant families. All respondents were able to articulate a specific reason, related to their family or subsequent work or educational experiences, which influenced their success with disadvantaged populations.

<u>Summary</u>

In this chapter, the results of both quantitative and qualitative data analysis were presented in order to answer the three research questions that guided this study. Research question one was addressed through the quantitative analysis of responses to survey questions 1-40 as well as the qualitative data collected through responses to survey

question 41 and follow-up phone interviews. Research question two was addressed through survey responses 1 - 40 as well as principal demographic data collected through survey questions 44, 45, 51, and 52. Research question three was addressed through survey responses 1 - 40 as well as data collected at the Florida Department of Education's FCAT demographics online database.

The descriptive statistics run to address research question one revealed the highest means responses associated with the following practices: have a clear vision on student learning outcomes, set high standards for student learning, expect teachers to take responsibility for student achievement, expect teachers to be committed to improving student achievement, maintain and monitor outreach efforts to families, provide services to support family participation, organize support for educative experiences, expect teachers to regularly communicate student progress, expect staff to adjust instruction based on various data, and ensure implementation of progress monitoring instruments. The lowest mean responses were associated with conduct weekly classroom walkthroughs, model exemplary instructional strategies, prompt teachers to discuss assumptions about poverty status, remove teachers not committed to improving student achievement, ensure families are engaged in subject-area events, review assessment data with individual teachers, and use assessment data to determine professional development.

The results of statistical tests run to address research question two found a significant difference between males and females in the category of teacher support. In the areas of ethnicity and years of experience, no significant difference was found. The results of statistical tests run to address research question three found a significant negative correlation between the percentage of disadvantaged students at the school and

the ratings of teacher support on the survey instrument. No other statistically significant results were found in response to research question three.

Qualitative data collected through the open-ended survey question 41 as well as the follow-up phone interviews were also presented in this chapter. Finally, the additional analyses of data collected through survey question 43 were addressed. The next chapter will provide a summary of the research findings as well as draw conclusions from the research and recommendations for future research.

CHAPTER 5 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The primary purpose of this study was to examine the leadership practices of high school principals in the state of Florida who improved student achievement in schools with a 30% or greater economically disadvantaged student rate. The secondary purpose of this study was to examine principal and student demographics of the identified schools and determine what relationship existed between student demographics, principal demographics, and principal practices. The previous chapter detailed the quantitative results of the data analysis for the three stated research questions provided by the first 50 items of the survey instrument as well as the qualitative results of the first research question provided by the open-ended survey question responses and follow-up phone interviews. This chapter will first provide a summary of the findings. Then, conclusions will be drawn from the findings and implications for practice will be addressed. Finally, recommendations for future research will be made.

Summary of the Findings

This section presents a summary of the study and its major findings as they relate to principal leadership practices. Research Question One asked what practices principals implemented to improve student achievement in Florida high schools with a 30% or greater economically disadvantaged student rate. Research Question Two explored the relationship between principal demographics such as gender, ethnicity, and years of experience and principal practices in high schools that have shown improved student achievement in an economically disadvantaged student population of over 30%. Research Question Three explored the relationship between student demographics and principal practices in the same Florida high schools. The results of this study offer guidance for principals across the state of Florida who strive to close the achievement gap.

This study began with the development of an appropriate survey instrument, one that questioned the frequency with which principals engaged in research-based practices and solicited information from principals regarding their own perceived best practices as well as demographic information about themselves. The survey instrument used in this study was adapted from one used in a large-scale California study titled, "Similar Students, Different Results: Why Do Some Schools Do Better," (Williams, Kirst, Haertel, et al., 2005). Validity and reliability tests for the initial instrument were conducted by EdSource, whose director, Trish Williams, granted permission to modify the instrument for use with secondary school principals in the Florida accountability system (Appendix G). Cognitive interviews, content reviews, and field tests were conducted on the revised instrument. The final survey contained 53 items and addressed four subdomains of principal practice: Implementing a standards-based, coherent instructional program; Providing teacher support and encouraging teacher collaboration; Engaging families; Using assessment to improve student achievement and instruction.

Once the survey instrument was finalized, data from the 10th grade FCAT Reading test for three consecutive years (2007-2009) was collected from the Florida Department of Education's FCAT demographics online database at https://app1.fldoe.org/FCATDemographics/. School districts with at least two high

schools where economically disadvantaged student populations over 30% had increased the percentage of students passing the 10th grade FCAT Reading over three years were selected for participation. Applications to conduct research were sent to twelve Florida school districts. Ten of those districts gave permission to conduct research. Once permission was granted, emails were sent to all 50 potential respondents. The emails included a letter of informed consent and gave potential respondents a unique and secure username and password with which they could access the survey instrument and participate in the study. After four follow-up email requests and two personal phone calls, 18 respondents had completed the survey. Six principals agreed to a follow-up phone interview, and five of those principals actually participated in an interview.

Research Question One asked what practices principals implemented to improve student achievement in Florida high schools with a 30% or greater economically disadvantaged student rate. The research question was first addressed through descriptive statistics gathered from questions 1-40 of the survey instrument. The descriptive statistics were reported according to the four subdomains of principal practices represented in the survey instrument. In the *Implementing a Standards-Based Instructional Program* subdomain, all means were above 3 (agree). The highest mean responses were associated with "Clear vision on student learning outcomes" and "Set high standards for student learning". The lowest mean responses were associated with "Conduct weekly classroom walkthroughs" and "Model exemplary instructional practices." In the *Providing Teacher Support and Encouraging Teacher Collaboration* subdomain, all means were above 3 (agree) except for the lowest rated item, "Prompt teachers to discuss assumptions about poverty status." The highest mean responses were

associated with "Expect teachers to take responsibility for student achievement" and "Expect teachers to be committed to improving student achievement." The lowest mean responses were associated with the aforementioned and "Remove teachers not committed to improving student achievement." In the *Engaging Families* subdomain, four items featured 100% endorsement. The lowest endorsed item was "Ensure families are engaged in subject-area events." In the *Using Assessment to Improve Student Achievement* subdomain, the highest mean responses were associated with "Expect staff to adjust instruction based on various data" and "Ensure implementation of progress monitoring instruments." The lowest mean responses were associated with "Review assessment data with individual teachers" and "Use assessment data to determine professional development."

Research Question One was also addressed through the open-ended responses to survey question 41. Respondents were asked to describe the three most effective things they had done to improve student achievement. Seventeen respondents listed three practices while the 18th respondent listed only one. Of the 52 effective practices listed by respondents, 15 fell under the subdomain of *Implementing a Standards-Based Coherent Instructional Program*. Twelve responses fell under the subdomain of *Providing Teacher Support and Encouraging Teacher Collaboration*. Twenty of the responses fell under the subdomain of *Using Assessment to Improve Student Achievement and Instruction*. No responses fell under the subdomain of *Engaging Families*. Other practices noted were formed 9th grade academies, build relationships, personalization, and assign teachers based on their data.

Finally, Research Question One was addressed through five principal interviews. As a result of the interviews, a number of principal best practices surfaced repeatedly. Developing student relationships and celebrating student success were highlighted in four of the five interviews. The practice of principals and their administrative teams conducting classroom walkthroughs in a purposeful and meaningful way also surfaced in four of the interviews. In fact, two of the five principals described creating a walkthrough form specific to their needs. Four of the five principals also discussed implementing Professional Learning Communities as a way to foster teacher collaboration. Three of the five principals talked extensively about their strategic plan for teachers to review student assessment data as a means of informing instruction. Two principals discussed assigning all teachers to work with students in the lower quartile. Two principals also discussed the practices of continually promoting their vision for their schools as well as distributing leadership to teachers.

Research Question Two explored the relationship between principal demographics such as gender, ethnicity, and years of experience and principal practices in Florida high schools that have shown improved student achievement in a student population with 30% or greater economically disadvantaged rate. The results of a Mann-Whitney test for differences in practices by gender found no significant differences in the *Standards, Engaging Families,* and *Assessment* subdomains. However, a significant difference was found in the *Teacher Support* subdomain. Males scored significantly lower than females in ranking practices related to *Providing Teacher Support and Encouraging Teacher Collaboration*. No statistical procedure was run to test differences in practices by ethnicity because only 22% of the respondents were not white. The

results of Spearman correlations run between each of the different practices and years of experience found no significant correlation.

Research Question Three explored the relationship between student demographics and principal practices in Florida high schools that have shown improved student achievement in a student population with a greater than 30% economically disadvantaged rate. Spearman correlations were run between each of the different practices and three student demographics: percentage of disadvantaged students at school, percentage of minority students at school, and percentage of disadvantaged students passing the 10th grade FCAT Reading test. The only significant correlation found was between practices in the subdomain of *Teacher Support* and the percentage of disadvantaged students at school. A significant negative correlation was found, meaning that as the percentage of disadvantaged students decreased in a school, the rankings of the *Teacher Support* subdomain increased.

Conclusions

A number of conclusions were drawn from the results of this study. Additionally, these conclusions were translated into implications for future principal practices. It should be considered, however, that the small number of survey respondents proved to be a limitation to this study and further limited the generalizability of the results. Even so, conclusions from this study will be detailed from both the quantitative analysis of the survey responses and the qualitative data collected through the open-ended response questions as well as the follow-up phone interviews. The conclusions presented in this section were organized according to each research question and may provide direction for

principals who face challenges closing the achievement gap between their economically disadvantaged and advantaged student populations.

Research Question 1

What practices do principals implement to improve student achievement in Florida high schools with a 30% or greater economically disadvantaged rate?

Because the targeted population of principals for this study represented those who had proven to be successful leaders in schools with significant economically disadvantaged student populations, it would be reasonable to expect that, on the survey instrument, they would agree to having implemented most of the researched best practices. Therefore, the highest means associated with the survey responses, as well as the self-identified best practices revealed through the open-ended survey question and the principal interviews, provided the best indication of practices that led to these principals' successes and would provide the best direction for principals leading schools with similar student populations. In the first two subdomains addressed in the instrument, the three practices that stood out, with a mean above 3.8 out of a possible 4, were "Clear vision on student learning outcomes," "Set high standards for student learning," and "Expect teachers to take responsibility for student achievement." The importance of these practices was underscored by the principal interviews where all five respondents discussed having and communicating a clear vision for what is expected of students and teachers in their high schools.

As early as 1979, Sergiovanni was arguing the importance of a principals' mission and vision. He wrote that leadership behavior "involves the supervisor's own beliefs about and vision of the dramatic possibilities inherent in all educational activity.

The vision or set of beliefs provides the substance of supervisory leadership," (p. 394). Six years later, the importance of a principal's vision was underscored by Hallinger and Murphy's (1985) framework for instructional leadership which included *Defining the School's Mission* as one of three dimensions paramount to the success of an instructional leader. Most recently, research by Taylor and LaCava (2011) has legitimized the second order change leadership behavior of focusing the school's culture on all students achieving at a high level. Their findings, as well as the findings of this study, have provided guidance to principals who aspire to provide strong leadership in schools with a high population of disadvantaged students. First and foremost, leaders must have a vision for their school that includes high expectations for all students. Additionally, school leaders should develop a school mission, based on that vision, and promote their vision and mission to all teachers, students, and stakeholders.

The lowest mean responses on the survey instrument also provided important insight into effective principal practices. The only survey item with a mean below 3 (agree) was "Prompt teachers to discuss assumptions about poverty status." This was an unexpected result, particularly in light of the responses to survey question 43 which asked what life experiences influenced the respondents' work with economically disadvantaged students. Eleven of the 18 respondents either grew up economically disadvantaged or had close family who struggled with poverty. The remaining 7 respondents claimed that either their personal work with disadvantaged students or something in their education sensitized them to poverty populations. The results from these two questions were incongruous and presented implications for further investigation into the degree in which principals leading schools with disadvantaged students assumed their faculty were as

sensitized as themselves to assumptions about poverty. Principals in schools with a high percentage of economically disadvantaged students should address the impact of poverty with teachers, students, and community members. According to Payne (1996), "For our students to be successful, we must understand their hidden rules and teach them the rules that will make them successful at school and at work," (p. 3).

One other incongruity that surfaced between the quantitative responses to survey items and the qualitative responses on the open-ended survey question 41 as well as through subsequent interviews was in the area of using assessment data. In the subdomain of *Using Assessment to Improve Student Achievement*, the lowest mean responses were associated with "Review assessment data with individual teachers," and "Use assessment data to determine professional development." The qualitative data, however, did not support the findings from the survey instrument. In the open-ended responses to survey question 41, the most prevalent practice noted was reviewing assessment data with teachers in expectation of data-based instructional decisions. Research supports the need for principals to stimulate the use of student data among teachers as well as the need for principals to use data to develop school improvement plans and inform instructional decisions (Creighton, 2005; Halverson et al., 2005; Mandinach et al., 2006b).

The second most prevalent practice noted in response to survey question 41 was providing professional development opportunities to teachers. These results were underscored in the principal interviews where three of the five principals cited strategic plans for reviewing assessment data with teachers and discussed the impact of teacher data chats on schoolwide instructional plans and professional development. One possible

explanation for the incongruity between the survey results and the interview results was that, while principals engaged in, and noted the importance of using data to inform instruction, they did not engage in these practices with the frequency they would like. According to the research, principals should effect change in instructional practices by facilitating persistent teacher analysis of student achievement data (Protheroe, 2009; Reeves, 2006).

Two other conclusions of note were drawn from the results of Research Question One. First of all, while all respondents gave strong endorsement to the subdomain of Engaging Families, not one principal highlighted family engagement as a best practice through the responses to survey question 41 or through the interviews. One might conclude that while the principals endorsed family engagement as a practice they facilitated, none ranked it at the top of practices that best served their students. This result may have occurred from the difficulty often associated with engaging families who struggle with poverty (Cotton & Wikelund, 2000). The result is consistent with the findings of Taylor & LaCava (2011) who concluded that the leadership behavior of engaging families in learning may not be as important to second order change as other leadership behaviors. However, Taylor (2010) concluded that "substantive parental or family involvement . . . involvement in the learning," (p. 82) was required for a positive impact on student achievement. It is possible that none of the 18 participants in this study had engaged families in a substantive manner.

The second conclusion of note was drawn from the principal interviews where four of the five principals described specific practices they implemented for developing personal relationships with students and celebrating student successes. Nothing that this

researcher could find in the literature included building student relationships among principal practices associated with successfully improving student achievement. On the contrary, for the principal interviewees in this study, making personal connections with students was very important to them feeling they were having a positive impact.

Research Question 2

What is the relationship between principal demographics such as gender, ethnicity, and years of experience and practices in Florida high schools that have shown improved student achievement in a student population with a 30% or greater economically disadvantaged rate?

The statistical procedures run to address Research Question Two found significance in only one subdomain of principal practices as a result of testing the relationship between principal demographics and principal practices. In fact, no procedures could be run for the ethnicity demographic because only 4 of the 18 respondents were not White. Those four were Hispanic. The one significant difference found was in the subdomain of *Providing Teacher Support and Encouraging Teacher Collaboration*. Females were found to give a significantly higher rating to practices in this subdomain. This finding supported research on gender differences in leadership practices that reported female principals to be perceived as stronger instructional leaders with better communication skills, more flexibility, and increased ability to create a positive learning climate (Bulach, Booth, & Michael, 1999; Cotton, 2003; Hallinger, 1983). This finding was also supported by Taylor and LaCava (2011) who found a negative relationship between male elementary principals in non-Title 1 schools and an emphasis on intellectual stimulation or professional learning. Finally, it was interesting

to note that all five of the principals who participated in the follow-up phone interview were female.

Research Question 3

What is the relationship between student demographics and principal practices in Florida high schools that have shown improved student achievement in a student population with a greater than 30% economically disadvantaged student rate?

To answer Research Question Three, Spearman correlations were run between three student demographic characteristics (percentage of disadvantaged students at school, percentage of minority students at school, percentage of disadvantaged students passing FCAT Reading) and principal practices. Very little significance was found as a result of these tests. The only statistically significant correlation surfaced as a negative correlation between the percentage of disadvantaged students at school and the ratings given to practices in the subdomain of Providing Teacher Support and Encouraging Teacher Collaboration. This finding would suggest that principals in schools with higher populations of disadvantaged students gave less importance to teacher support and collaboration. This reason for this finding was difficult to determine, particularly considering the fact that the principal responses to survey question 41, where principals reported their own best practices, as well as the input given during the interviews, would suggest otherwise. Eighteen of the 52 self-reported best practices focused on teacher support. Four of the five principals interviewed detailed specific strategies for providing teacher support and facilitating teacher collaboration. Again, the limitation of the number of respondents to this survey may have impacted this result.

As a result of this study, new findings included a significant difference in the teacher support subdomain of principal practices. Males scored significantly lower than

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females in ranking practices related to Providing Teacher Support and Encouraging Teacher Collaboration. Also, a significant negative correlation was found between principal practices in the subdomain of teacher support and the percentage of disadvantaged students at the school. One additional new finding was the self-reporting of principals, through their interviews, of developing student relationships and celebrating student successes as a key principal practice leading to the success of disadvantaged populations.

A final and important point should be made regarding the conclusions drawn from the results of each of the three research questions. Overall, the principals who participated in this survey indicated a high level of endorsement for all of the practices included in the survey instrument. Additionally, their responses to the open-ended survey question that asked them to describe their own best practices underscored the importance of the principal practices included on the survey instrument, leading one to conclude that at least part of the success of these principals was due to their knowledge of researched best practices. This conclusion was further supported by the phone interviews. All five of the principal respondents were passionate about their work and were able to discuss, in great detail, specific practices in the areas of implementing a coherent instructional program, providing teacher support and encouraging collaboration, and using assessment to improve student achievement.

Implications for Principal Practice

The results and conclusions from this study have implications for principal best practices. Following is a list of recommended principal practices supported by this study:

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- 1. School leaders should have a vision and mission for their students that includes high expectations for the achievement of all students.
- 2. School leaders should address with their school staff their assumptions about the effects of poverty.
- 3. School leaders should consistently review student assessment data with teachers as a means for addressing instructional decisions and recommending instructional strategies.
- 4. School leaders should use student assessment data to drive decisions about professional development opportunities for teachers.
- School leaders should explore ways to engage families in increasing student achievement beyond the traditional practices of open houses, parent conferences, and parent newsletters.
- 6. School leaders should develop personal relationships with students and create avenues for celebrating student successes in a variety of endeavors.
- 7. School leaders should plan for frequent, meaningful opportunities for teachers to collaborate on facilitating student achievement. Leaders in schools with high percentages of economically disadvantaged students should give particular effort towards this task.
- 8. School leaders should ensure that all teachers take responsibility for the achievement of all students.

Recommendations for Future Research

As a result of conducting this research study and analyzing the findings, further avenues for and extensions of research on this topic have surfaced. Following is a list of recommendations for future research.

- This study could be extended to include high schools with a low percentage of economically disadvantaged students in order to compare the practices of principals in diverse settings.
- 2. This study could also be extended to include schools with high economically disadvantaged student populations where students in this subgroup have shown no growth in reading achievement, or have even regressed in their achievement scores, in order to determine where principal practices differ.
- This study could further be extended to include principals in elementary and middle school settings.
- A similar study should be conducted where a few, outstanding high school programs serving high percentages of disadvantaged students are investigated using more in-depth case studies.
- 5. A similar study should be conducted that investigates principal practices in schools showing success raising the achievement of economically disadvantaged student populations over a longer period of time, possibly five or more years.
- 6. A similar study should be conducted that includes the perceptions of teachers towards leadership behaviors that facilitate achievement among economically disadvantaged student populations.

- A study of gender differences may further explore this study's finding of female principals giving higher ratings to Providing Teacher Support and Encouraging Teacher Collaboration.
- 8. A study should be conducted to investigate the impact of the following principal practices: building relationships with students and celebrating student successes.
- A study should be conducted to determine the impact of principals who address assumptions about poverty on the achievement of disadvantaged student populations

Summary

Chapter 5 first provided a summary of the findings presented in Chapter 4. New findings included a significant difference in the teacher support subdomain of principal practices. Males scored significantly lower than females in ranking practices related to Providing Teacher Support and Encouraging Teacher Collaboration. Also, a significant negative correlation was found between principal practices in the subdomain of teacher support and the percentage of disadvantaged students at the school. One additional new finding was the self-reporting of principals, through their interviews, of developing student relationships and celebrating student successes as a key principal practice leading to the success of disadvantaged populations. Also in Chapter 5, conclusions were drawn in response to the findings that answered all three of the research questions presented in this study and implications for principal practices were addressed. Finally, recommendations were made as to further research that could be conducted to extend and expand upon this study.

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APPENDIX A SURVEY INSTRUMENT

An Analysis of Principal Practices in High Schools that have Improved Reading Achievement among Economically Disadvantaged Students

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I have a clear vision that is focused on student				
learning outcomes and communicated to stakeholders.				
2. I have well-defined plans for instructional				
improvement that are communicated to stakeholders.				
3. I regularly assess the effectiveness of my plans for				
instructional improvement and make revisions.				
4. I expect classroom instruction to be guided by state				
standards, and I monitor implementation of those				
standards.				
5. I formally evaluate teachers.				
6. I conduct weekly classroom walk-throughs.				
7. I model exemplary instructional strategies for				
teachers.				
8. I act as a knowledgeable source concerning standards				
and curriculum.				
9. I implement, monitor, and adjust a school plan that				
addresses gaps in student achievement.				
10. I set high standards for all student learning.				

Section 1: Implementing a Standards-Based, Coherent Instructional Program

	Strongly Disagree	Disagree	Agree	Strongly Agree
11. I expect teachers to take responsibility for student				
achievement and intervene as needed.				
12. I expect teachers to be committed to improving				
student achievement and differentiate instruction as				
needed.				
13. I expect teachers to communicate to students that				
education is important.				
14. I expect teachers to collaborate with and provide				
support to struggling teachers.				
15. I prompt teachers to discuss their assumptions				
about poverty status and student achievement.				
16. I remove teachers who are not committed to				
improving student achievement and not performing at				
an acceptable level.				
17. I challenge the faculty to review and implement				
current research and expect them to implement				
evidence-based instruction and assessment.				
18. I involve teachers in using data to make important				
decisions about this school.				
19. I provide teachers with adequate classroom				
materials.				
20. I provide and participate in professional				
development to improve instruction.				

Section 2: Providing Teacher Support and Encouraging Teacher Collaboration

Section	3:	Enga	ging	Families	3
Section	\mathcal{I}	Lingu	Sing	I uninted	,

	No	Yes
21. I participate in family-teacher student conferences.		
22. I ensure families are engaged in subject-area events (e.g. science fair,		
art show, drama performance).		
23. I facilitate opportunities for family education classes (e.g. academic		
expectations, graduation requirements, instructional strategies, ELL		
support systems).		
24. I assign staff to facilitate family involvement.		
25. I maintain and monitor a variety of outreach efforts to families (e.g.		
newsletter, phone system, email).		
26. I provide services to support family participation (e.g. child care on		
site, transportation).		
27. I provide a translator for families at school meetings and teacher		
conferences.		
28. I organize support and educative experiences for families from a		
variety of backgrounds.		
29. I expect teachers to regularly communicate student progress to families		
in a comprehensible manner.		
30. I expect faculty, staff, and administrators to personally communicate		
with families.		

	Never	Once a Year	Each Semester	Quarterly	Weekly
31. I independently review assessment data.					
32. I review assessment data with individual					
teachers and expect data-based instructional					
decisions.					
33. I review assessment data with teachers in					
small groups and expect data-based					
instructional decisions.					
34. I use assessment data to help teachers set					
instructional goals.					
35. I use various assessment data to follow up					
on progress of selected students.					
36. I use assessment data to determine					
professional development needs in a particular					
area.					
37. I expect staff to adjust instruction based on					
various data.					
38. I ensure implementation of progress					
monitoring instruments and use of results in					
instruction.					
39. I plan professional development					
opportunities for teachers to explore					
assessment practices.					
40. I discuss assessment practices and					
expectations with individual teachers.					

Section 4: Using Assessment to Improve Student Achievement and Instruction

Section 5: Principal Experiences

41. In your opinion, what are the three most effective things you have done to improve student achievement?

42. What are the top three barriers you have experienced in your efforts to achieve the educational goals you have set for your school?

43. What life experiences have influenced your work with economically disadvantaged students?

Section 6: Principal Demographic Data

44. How many years have you served as principal at this school?

45. How many years have you served as principal at other schools?

46. How many years did you serve in an administrative position other than principal?

47. How many years did you serve as a classroom teacher?

48. What subjects have you taught?_____

- 49. What levels have you taught?
 - o Elementary
 - o Middle
 - o High
 - o College
- 50. What is the highest degree of formal education you have completed?
 - o Master's
 - o Specialist
 - o Doctorate
- 51. What is your gender?
 - o Male
 - o Female
- 52. What is your ethnicity?
 - o African American
 - o Asian
 - o Hispanic/Latino
 - o Multi-racial
 - o White
 - Other, please specify _____
- 53. What is your age?
 - Fewer than 30 years
 - o 30-39
 - o 40-49
 - o 50-59
 - o 60+

If you would be willing to participate in a follow-up interview to further discuss your leadership practices, please provide the following information:

Name:			

Phone:

Email:

School:

Thank you for completing this survey!

APPENDIX B QUESTIONS FOR FOLLOW UP PHONE INTERVIEW

Follow up Phone Interview Questions

- 1. In what ways do you promote your school's vision?
- 2. How is progress monitoring data utilized by reading teachers? By reading students? By content teachers?
- 3. In what ways do you promote literacy schoolwide?
- 4. Describe your personal practice for classroom walkthroughs and observations.
- 5. In what ways do you prompt teacher collaboration? How has teacher collaboration impacted student achievement, specifically with struggling readers.
- 6. How do you assign teachers to work with economically disadvantaged students? If you had no obstacles, how would you assign teachers?
- 7. In what ways do you distribute leadership at your school?
- 8. Share how you have engaged families in the learning experiences at your school.
- 9. What ways have you creatively used funds to develop teachers? To meet needs of students? If you had more funds, what additional resources would you purchase? What additional training would you provide? How else would you improve your reading program?
- 10. How would you allocate time differently if you could?
- 11. How do you address teacher resistance to change?

APPENDIX C 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 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From:	UCF Institutional Review Board #1 FWA00000351, IRB00001138
To:	Donna M. Reynolds
Date:	April 13, 2010

Dear Researcher:

On 4/13/2010, the IRB approved the following activity as human participant research that is exempt from

-	Type of Review:	Exempt Determination
	Project Title:	An Analysis of Principal Practices in Schools that have Improved
		Reading Achievement Among Economically Disadvantaged
		Students
	Investigator:	Donna M. Reynolds
	IRB Number.	SBE-10-06882
	Funding Agency:	
	Grant Title:	
	Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. <u>When you have completed your research</u>, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 04/13/2010 03:50:15 PM EDT

grame punatori

IRB Coordinator

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APPENDIX D PUBLIC SCHOOLS RESEARCH REQUEST APPROVAL FORMS

School Board Susan Valdes, Chair Doretha W. Edgecomb, Vice Chair Jennifer Faliero April Griffin Carol W. Kurdell Jack R. Lamb, Ed.D. Candy Olson



Superintendent of Schools MaryEllen Elia Deputy Superintendents Kenneth R. Otero Daniel J. Valdez Chief Information and Technology Officer David J. Steele, Ph.D. Assistant Director Assessment and Accountability Samuel R. Whitten

Mickey Reynolds 128 Bristol Forest Trail Sanford, Florida 32771

Dear Mrs. Reynolds:

The Hillsborough County Public School district has agreed to participate in your research proposal, An Analysis of Principal Practices in High Schools Improving Reading Achievement Among Economically Disadvantaged Students. A copy of this letter **MUST** be presented to the principals at Armwood and Brandon High School to assure them your research has been approved by the district. **Your approval number is RR10166.** You must refer to this number in all correspondence. Approval is given for your research under the following conditions:

- Participation by the schools is to be on a voluntary basis. That is, participation is <u>NOT</u> MANDATORY and you must advise <u>ALL PARTICIPANTS</u> that they are not obligated to participate in your study.
- 2) If a principal agrees the school will participate, it is up to you to find out what rules the school has for allowing people on campus and you must abide by the school's check-in policy. You will **NOT BE ALLOWED** on any school campus without first following the school's rules for entering campus grounds.
- 3) You must notify us if other schools are added to your sample.
- 4) Confidentiality must be assured for all. That is, <u>ALL DATA MUST BE AGGREGATED SUCH</u> <u>THAT THE PARTICIPANTS CANNOT BE IDENTIFIED</u>. Participants include the district, principals, administrators, teachers, support personnel, students and parents.
- 5) Research approval does not constitute the use of the district's equipment, software, email, or district mail service. In addition, requests that result in extra work by the district such as data analysis, programming or assisting with electronic surveys, may have a cost borne by the researcher.

Raymond O. Shelton School Administrative Center 901 East Kennedy Boulevard Tampa, Florida 33602 School District Main Office: 813-272-4000 P.O. Box 3408 Tampa, Florida 33602 website: <u>www.sdhc.k12.fl.us</u> Assessment and Accountability Office: 813-272-4341 Fax: 813-272-4340 e-mail: samuel.whitten@sdhc.k12.fl.us فنحت

May 11, 2010 Page 2

- This approval <u>will EXPIRE on 6/15/2010</u>. You will have to contact us at that time if you feel your research approval should be extended.
- A copy of your research findings must be sent to us for our files and must be submitted to this department **BEFORE ANY DATA IS PUBLISHED IN ANY FORM.**

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 Theodere Dwyer

Manager of Evaluation Assessment and Accountability

TD/dsr

cc: Marc Hutek, Principal, Armwood High School (8) Carl Green, Principal, Brandon High School (8)



Superintendent of Schools Alberto M. Carvalho

Office of Program Evaluation Jerome L. Levitt

October 13, 2010

EXPEDITED - APPROVAL

Miami-Dade County School Board Dr. Solomon C. Stinson, Chair Perla Tabares Hantman, Vice Chair Agustin J. Barrera Renier Diaz de la Portilla Dr. Lawrence S. Feldman Dr. Wilbert "Tee" Holloway Dr. Martin Stewart Karp Ana Rivas Logan Dr. Marta Pérez

Mrs. Donna Reynolds 128 Bristol Forest Trail Sanford, Florida 32771

Dear Mrs. Reynolds:

I am pleased to inform you that the Research Review Committee (RRC) of the Miami-Dade County Public Schools (MDCPS) has granted you a **special** approval for your request to conduct the study."An Analysis of Principal Practices in High Schools that have Improved Reading Achievement among Economically Disadvantaged Students" in order to fulfill the requirements of your Dissertation at the University of Central Florida.

The approval is granted with the following conditions:

- 1. Participation of the schools targeted in this study is at the discretion of each principal. Please note that even with the approval of the RRC, it is still the responsibility of the Principal as the gatekeeper of the school to decide whether to participate or not. As stated in the Board rule, "... the principal of the individual school has the privilege of deciding if RRC-approved research will be conducted within his/her school." A copy of this approval letter must be presented to each principal.
- 2. The participation of all subjects (such as students, faculty, or staff) is voluntary.
- 3. The anonymity and/or confidentiality of all subjects must be assured.
- 4. The study will involve surveying approximately 17 high school Principals.
- Disruption of the school's routine by the data collection activities of the study must be kept at a minimum. Data collection activities must not interfere with the district's testing schedule.

It should be emphasized that the approval of the Research Review Committee does not constitute an endorsement of the study. It is simply a permission to request the voluntary cooperation in the study of individuals associated with MDCPS.

It is your responsibility to ensure that appropriate procedures are followed in requesting an individual's cooperation, and that all aspects of the study are conducted in a professional manner. With regard to the latter, make certain that all documents and instruments distributed within MDCPS as a part of the study are carefully edited.

Office of Program Evaluation • 1500 Biscayne Boulevard • Suite 224 • Miami, FL 33132 305-995-7529 • 305-995-2691(FAX) • www.dadeschools.net The approval number for your study is **1681**. This number should be used in all communications to clearly identify the study as approved by the Research Review Committee. The approval expires on **12/31/2010**. During the approval period, the study must adhere to the design, procedures and instruments which were submitted to the Research Review Committee.

Finally, as indicated in your application, please submit to the RRC an abstract of the research findings by 12/31/2010

If there are any changes in the study as it relates to MDCPS, the RRC must be notified in writing. Substantial changes may necessitate resubmission of the request. Failure to notify me of such a change may result in the cancellation of the approval.

If you have any questions, please call me at 305-995-7529. On behalf of the Research Review Committee, I want to wish you every success with your study.

Sincerely,

Ru

Tarek Chebbi, Ed. D. Chairperson Research Review Committee

TC:bf

APPROVAL NUMBER: 1681

APPROVAL EXPIRES: 12/31/2010

Note: The researcher named in this letter of approval will be solely responsible and strictly accountable for any deviation from or failure to follow the research study as approved by the RRC. M-DCPS will NDT be held responsible for any claim and/or damage resulting from conducting this study.

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

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District 3 -	Cindy Lou Hartig, Chair
	407-832-3999
District 4 -	Barbara Horn
	407-744-3009
District 5 -	Tom Long
	407-892-5836



Superintendent of Schools Michael A. Grego, Ed.D.

December 13, 2010

Ms. Donna Reynolds 128 Bristol Forest Trail Sanford, FL 32771

Dear Ms. Reynolds:

This letter is to inform you that we have received your request to conduct research in our School District. Based on the description of the research you intend to conduct, I am pleased to inform you that you may proceed with your work as you have outlined.

I will remind you that all information obtained for the purpose of your research must be dealt with in the strictest of confidentiality. At no time is it acceptable to release any student or staff identifiable information.

I wish you the best of luck in your future endeavors. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

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Angela Marino Director Research Evaluation & Accountability

Student Achievement – Our Number One Priority Districtwide Accreditation by the Southern Association of Colleges and Schools An Equal Opportunity Agency



THE SCHOOL DISTRICT OF PALM BEACH COUNTY, FLORIDA JEFFREY HERNANDEZ CHIEF ACADEMIC OFFICER ARTHUR C. JOHNSON, Ph.D. SUPERINTENDENT OF SCHOOLS

Dean Stecker Director of Research and Evaluation 3370 Forest Hill Boulevard, Suite B244 West Palm Beach, FL 33406-5871 Phone (561) 432-6376 Fax (561) 963-3842

http://www.palmbeachschools.org/dre/

May 11, 2010

Donna Reynolds 128 Bristol Forest Tr. Sanford, FL 32771

Dear Ms. Reynolds:

The Superintendent's Research Review Committee has denied your research request to conduct the *Analysis of Principal Practices in High Schools Improving Reading Achievement among Economically Disadvantaged Students* in the School District of Palm Beach County (the District). The purpose of your study was to examine the leadership practices of high school principals in the State of Florida who have improved student achievement in schools with a 30% or greater economically disadvantaged student rate.

You have chosen the following high schools for your research, and unfortunately all those listed below fall into the prohibited category, therefore we must deny research to be conducted at any of these schools:

- · Forest Hill High School,
- · John I. Leonard High School,
- · Palm Beach (no school within the District with that name),
- Inlet Grove High School,
- South Technical Academy,
- Pahokee Middle/Senior High School.

Thank you for your interest in our District.

Sincerely,

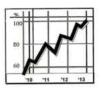
Dean Stecker Director of Research and Evaluation

DS:RP:pl

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Rob Campbell

Testing & Data Analysis Senior Coordinator (863) 647-4895 68246

Eileen Schofield Administrative

Secretary (863) 534-0688 51488

"The Mission of Polk County Public Schools is to ensure rigorous, relevant learning experiences for our students that result in high achievement."

ASSESSMENT, ACCOUNTABILITY AND EVALUATION

SCHOOL BOARD OF POLK COUNTY 1915 SOUTH FLORAL AVENUE BARTOW, FLORIDA 33830 PHONE (863) 534-0688 FAX (863) 534-0770



June 9, 2010

Donna M. Reynolds 128 Bristol Forest Trail Sanford, FL 32771

Topic: Principal Leadership for Disadvantaged Students

The Polk County Public Schools Research Review Board has **approved** your "Analysis of Principal Practices in High Schools that have Improved Reading Achievement among Economically Disadvantaged Students" research proposal for the period of June 2, 2010 to September 30, 2010. Approval is contingent on:

- Notifying the school district of any major changes to the protocols or project.
- Providing a copy of your final and any supplemental reports to the district.

Please submit copies of your final reports to my attention at the Office of Research and Evaluation upon dissemination of the report.

If you have any questions, or if I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

Yakup Bilgili, Ph.D. Chair, Research Review Board Polk County Public Schools P: 863-534-0736 (51534) F: 863-534-0770 Yakup.Bilgili@polk-fl.net

APPENDIX E LETTER OF INFORMED CONSENT

Dear

Congratulations on your success as a high school principal! Because of the positive FCAT Reading results you have facilitated with your economically disadvantaged student population, I am inviting you to participate in a research study to examine the leadership practices of Florida high school principals who have improved student achievement in schools with a 30% or greater poverty rate.

The results of this study will be published in my dissertation, but neither schools nor principals will be identified. All data will be reported in aggregates without identifiable information. Through your participation I hope to understand why some Florida principals experience greater success leading schools with 30% or greater economically disadvantaged student populations. The results of the survey will be useful for informing the practices of other high school principals.

There are no known risks to you if you decide to participate in this survey, and I guarantee that your responses will not be identified with you personally. No information that identifies you will be shared, and your participation is voluntary. You can withdraw from this research study at any time without penalty.

Thank you for considering participation in this study. The electronic survey linked in this invitation should take you about fifteen minutes to complete. For security and confidentiality, you have been assigned a unique username and password. Please go to the link: http://www.surveyhelpers.com/MR51410

Enter username: and password:

By entering your username and password you are giving your informed consent to participate in this study.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at <u>mickey.reynolds@scps.k12.fl.us</u> or 407.687.4639

My major professor, Dr. Rosemarye Taylor, may be contacted at <u>rtaylor@mail.ucf.edu</u>.

The Institutional Review Board (IRB) at the University of Central Florida has approved this study. If you have any concerns about your rights as a participant in this study you may contact the UCF IRB Office, University of Central Florida, Office of Research and Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246. The telephone numbers are 407.882.2276 or 407.823.2901.

Thank you for your service as an effective principal and for your participation in this research study.

Sincerely,

Mickey Reynolds Doctoral Candidate, University of Central Florida

APPENDIX F FOLLOW UP EMAIL AND MAIL CONTACTS TO PARTICIPANTS

Dear Principal,

I emailed several weeks ago requesting your participation in a doctoral study that seeks to capture the practices of successful principals. I would still really appreciate your input and expertise. I have copied the original email below and hope that you will take 15 minutes to complete the online survey. Thank you for your consideration!

Mickey Reynolds Doctoral Student, University of Central Florida

Principals,

I would like to offer a clarification regarding my recent request for you to participate in a research study on Principal Leadership for Disadvantaged Students. Please know that I did complete the Broward County application to conduct research, and the study was approved by your school district. I was granted permission to contact you beginning September 20th and request that you complete an online survey.

I would sincerely appreciate your participation in this study. There are a very limited number of high school principals in the state who have shown improved FCAT reading statistics with a large economically disadvantaged student population. All principals in the state would benefit from your feedback!

Please consider completing the survey. Feel free to email me back if you need me to resend the survey link and your login information.

Thank you for your support and your willingness to expand the field of knowledge in principal leadership!

Sincerely,

Mickey Reynolds

Assistant Principal, Seminole High School Doctoral Student, University of Central Florida Dear Principal,

I left a phone message for you today requesting your participation in a research study approved by Orange County Public Schools. I would sincerely appreciate receiving input from a principal with your success. I have copied my original request below, but for the short version, please access the following link and input your username and password to participate:

Thank you for your participation!

Mickey Reynolds Assistant Principal, Seminole High School Doctoral Student, University of Central Florida Dear Principal,

I am still hoping you will participate in my research study on effective principals. Miami-Dade has approved the research (#1681), and I feel certain that principals throughout the state of Florida will find the results helpful as they try and bridge the gap between advantaged and disadvantaged students. Please take 15 minutes to complete the online survey. Following is your login information:

Sincerely,

Mickey Reynolds

Doctoral Student, University of Central Florida

APPENDIX G PERMISSION TO MODIFY PRINCIPAL LEADERSHIP SURVEY

Printed by: Mick Title: Re: Reque	ey Reynolds est to use survey : FirstClass	Monday, July 20, 2009 11:16:07 PM Page 1 of 2
From:	Trish Williams <twilliams@edsource.org></twilliams@edsource.org>	Tuesday, June 16, 2009 1:17:53 PM 👀
Subject:	Re: Request to use survey	
To:	Mickey Reynolds <mickey_reynolds@scps.k12< td=""><td>2.fl.us></td></mickey_reynolds@scps.k12<>	2.fl.us>
Bcc:	Mickey Reynolds	

Dear Mickey,

The SSDR instruments were developed for the elementary grades in California. I just want to make sure you know that before you consider the appropriateness of the survey questions for high school principals.

If you still want to use it, you have my permission. I only request that EdSource be appropriately cited either in your final instrument and/or in your study. Also, we would appreciate getting a copy of your final research proposal/plan for our records, if you don't mind.

Please confirm.

Also, I want you to know that we are now in the middle of another such study this time for the middle grades. We are finishing the survey retrieval and data entry now and will start the analysis in August. We plan to release those results the first week in January 2010. The middle grades principal survey instrument may in fact be more helpful to you -- but I can't release it to you until August or so. Let me know if you'd be interested.

Best wishes, and good luck with your research proposal.

TRISH WILLIAMS Executive Director EdSource

- >><<u>Mickey_Reynolds@cait.sops.k12.ft.us</u>>Date: Tue, 16 Jun 2009 11:41:55 -0400
 >> To: "edsource@edsource.org" <<u>edsource@edsource.org</u>> Subject: Request to use >> survey

- >> Dear EdSource representative, I am writing to request the use of the
- >> principal survey instrument developed for your Similar Students, Different
- >> Results (SSDR) study. I am a doctoral student in educational leadership at
- >> the University of Central Florida in Orlando, Florida and am currently
- >> writing a research proposal for my dissertation study. I would like to
- >> propose using portions of your instrument in a survey of high school >> principals whose student achievement data show success with free and reduced
- >> lunch populations. I am also requesting your permission to modify the
- >> Assessment and Data section to ask principals how they receive and use FCAT

⁻ Forwarded Message From: Mickey Reynolds >> -

APPENDIX H INSTRUCTIONS FOR COGNITIVE INTERVIEW

Dear Educational Leader,

Thank you for your willingness to complete the attached survey and answer a few questions regarding the survey instrument. The survey is being proposed for use in a research study designed by a University of Central Florida doctoral student. The primary purpose of this study is to examine the leadership practices of high school principals in the state of Florida who have improved student achievement in schools with a substantial free and reduced lunch student population. The attached survey has been adapted from a survey used in a large-scale study conducted in California, and the original version is available on online at www.edsource.org.

Please read the instructions and complete the survey, then respond to the questions below.

- 1. What is your current position?_____
- 2. How many years have you served as an educational leader?
- 3. Were the survey instructions clear?_____
- 4. If no, what part of the instructions was unclear or confusing?
- 5. Were all of the questions easy to understand? ______ If no, then please indicate which questions were not easy to understand and why.
- 6. Were there any questions you felt were not appropriate for this survey? ______ If yes, which ones?

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